

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-0112500

Owner: IsoNova Technologies LLC
Address: 3801 East Sunshine, Springfield, MO 65809

Continuing Authority: Same as above
Address: Same as above

Facility Name: IsoNova Technologies LLC
Facility Address: 18184 Highway P, Verona, MO 65769

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

Facility type is a no-discharge storage and land application system for year round flows. No Certified Operator Required.
All Permitted Features – SIC code #2015

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

August 1, 2014
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

September 30, 2017
Expiration Date

John Madras, Director, Water Protection Program

FACILITY DESCRIPTION (continued)

Wastewater flows to a concrete storage tank underdrain and stored in a concrete storage basin and removed by contract hauler. Overflow from concrete storage tank flows to the concrete storage basin. A portion of the wastewater is applied on company owned fields which are included in this permit. Sludge is removed by contract hauler. During periods of inclement weather wastewater is hauled to Springfield WWTF.

Design flow is 32,900 gallons per day (1-in-10 year design including net rainfall minus evaporation).
Average design flow is 32900 gallons per day (dry weather flows).

Receiving Stream Watershed: A losing stream setting that flows into Spring River.

Facility Type:

A no-discharge wastewater irrigation system for annual flow.

Concrete Storage Basin:

Maximum operating level (ft. below spillway): 1 ft.
Minimum operating level (ft. below spillway): 11 ft.
Storage volume (minimum to maximum water levels): gallons
Storage Capacity (in Days): days

Land Application:

Irrigation Volume/year: 12,008,500 gallons at design loading (including 1-in-10 year flows)
Irrigation areas: 177 owned acres
Application rates: 0.5 inch/hour; 1.0 inches/week; 24 inches/year
Field slopes: less than 20 percent
Equipment type: Pump truck
Vegetation: Cool season grass hay and pasture.
Application rate is based on: Plant Available Nitrogen.

Permitted Feature #001 – Eliminated.

Outfall #002 – North Plant – aerated process wastewater concrete storage basin

Legal Description: SW ¼, Sec. 28, T27N, R26W, Lawrence County
UTM Coordinates: X = 429975 Y = 4096918
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #003 – North Plant – concrete storage tank underdrain

Legal Description: SW ¼, SW ¼, Sec. 28, T27N, R26W, Lawrence County
UTM Coordinates: X = 430024 Y = 4096927
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #004 –Eliminated. This outfall is now permitted under MO-0136760 as Outfall #001.

Permitted Feature #005 –Eliminated. This outfall is now permitted under MO-0136760 as Outfall #002.

Permitted Feature #006 –Eliminated. This outfall is now permitted under MO-0136760 as Outfall #003.

Permitted Feature #007 – North Plant – Storm water runoff

Legal Description: SW ¼, Sec. 28, T27N, R26W, Lawrence County
UTM Coordinates: X = 429969, Y = 4096902
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #008 – North Plant – Storm water runoff

Legal Description: SW ¼, Sec. 28, T27N, R26W, Lawrence County
UTM Coordinates: X = 429966, Y = 4096819
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #009 – Land application field Hwy P North #1, 18 acres.

Legal Description: NW ¼, SW ¼, Sec. 28, T27N, R26W, Lawrence County
UTM Coordinates: X = 429938, Y = 4097270
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #010 – Eliminated. This outfall is now permitted under MO-0136760 as Outfall #004.

Permitted Feature #011 – Land application field Hwy P North #2, 5 acres.

Legal Description: SW ¼, NW ¼, Sec. 28, T27N, R26W, Lawrence County
UTM Coordinates: X = 430132, Y = 4097620
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #012 – Land application field Hwy P North #3, 16 acres.

Legal Description: SE ¼, SW ¼, Sec. 28, T27N, R26W, Lawrence County
UTM Coordinates: X = 430338, Y = 4096948
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #013 – Land application field Hwy P North #4, 8 acres.

Legal Description: SE ¼, SW ¼, Sec. 28, T27N, R26W, Lawrence County
UTM Coordinates: X = 430543, Y = 4096925
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #014 – Land application field Hwy P North #5, 3 acres.

Legal Description: NE ¼, SW ¼, Sec. 28, T27N, R26W, Lawrence County
UTM Coordinates: X = 430271, Y = 4097403
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #015 – Land application field Hwy P North #6, 14 acres.

Legal Description: SE ¼, NW ¼, Sec. 28, T27N, R26W, Lawrence County
UTM Coordinates: X = 430432, Y = 4097620
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #016 – Land application field Hwy P North #7, 50 acres.

Legal Description: W ½, NW ¼, Sec. 33, T27N, R26W, Lawrence County
UTM Coordinates: X = 429977, Y = 4096320
Receiving Stream: Tributary to Spring River (U), Losing
First Classified Stream and ID: Spring River (P) (03165) 303(d)
USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #017– Land application field Hwy P North #8, 50 acres.

Legal Description: E ½, SW ¼, Sec. 33, T27N, R26W, Lawrence County

UTM Coordinates: X = 430343, Y = 4095482

Receiving Stream: Tributary to Spring River (U), Losing

First Classified Stream and ID: Spring River (P) (03165) 303(d)

USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #018– Land application field P West A, 16 acres.

Legal Description: SE ¼, SE ¼, Sec. 29, T27N, R26W, Lawrence County

UTM Coordinates: X = 429688, Y = 4096865

Receiving Stream: Tributary to Spring River (U), Losing

First Classified Stream and ID: Spring River (P) (03165) 303(d)

USGS Basin & Sub-watershed No.: (11070207-0104)

Permitted Feature #019– Land application field P West B, 15 acres.

Legal Description: NE ¼, NE ¼, Sec. 32, T27N, R26W, Lawrence County

UTM Coordinates: X = 429710, Y = 4096531

Receiving Stream: Tributary to Spring River (U), Losing

First Classified Stream and ID: Spring River (P) (03165) 303(d)

USGS Basin & Sub-watershed No.: (11070207-0104)

PERMITTED FEATURE #002	TABLE A-1. IRRIGATION SYSTEM LIMITATIONS AND MONITORING REQUIREMENTS	PAGE 5 of 10
		PERMIT NUMBER MO-0112500

The permittee is authorized to conduct land application of wastewater as specified in the application for this permit. The final limitations shall become effective **August 1, 2014**, and remain in effect until expiration of the permit. The land application of wastewater shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETER(S)	UNITS	FINAL LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Storage Basin Operational Monitoring						
Storage Basin Freeboard (Note 1)	Feet	*			once/month	measured
Precipitation	Inches	*			daily	total

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE JANUARY 28, 2015.

Wastewater Land Applied (Note 2)						
Total Kjeldahl Nitrogen as N (Note 3)	mg/L	*			once/quarter****	grab
Nitrate Nitrogen as N (Note 3)	mg/L	*			once/quarter****	grab
Total Phosphorus as P	mg/L				once/quarter****	grab
Fecal Coliform (Note 4)	#/100mL	200		200	once/month	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE JANUARY 28, 2015.

PERMITTED FEATURES - #009, #011 - #019	TABLE A-2. LAND APPLICATION MONITORING REQUIREMENTS					
	The permittee is authorized to conduct land application of wastewater as specified in the application for this permit. The final limitations shall become effective August 1, 2014 , and remain in effect until expiration of the permit. The land application of wastewater shall be controlled, limited and monitored by the permittee as specified below:					

Wastewater Land Application Operational Monitoring -

Irrigation Period	Hours	*			daily	total
Volume Irrigated	Gallons	*			daily	total
Application Area	Acres	*			daily	total
Application Rate	Inches/acre	*			daily	total

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE JANUARY 28, 2015.

The permittee is authorized to conduct land application of wastewater as specified in the application for this permit. The final limitations shall become effective **August 1, 2014**, and remain in effect until expiration of the permit. The land application of wastewater shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETER(S)	UNITS	FINAL LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Storm Water Operational Monitoring (Note 5)						
Flow	GPD	*			once/quarter****	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L	*			once/quarter****	grab
Total Suspended Solids	mg/L	*			once/quarter****	grab
pH	SU	**			once/quarter****	grab
Ammonia as N	mg/L	*			once/quarter****	grab
Nitrate as NO ₃	mg/L	*			once/quarter****	grab
Oil & Grease	mg/L	*			once/quarter****	grab
Rainfall***	Inches	*			once/quarter****	measured

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE OCTOBER 28, 2014.

- * Monitoring only
- ** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
- *** The total precipitation for the event sampled shall be reported.
- **** See table below for quarterly sampling.

Minimum Sampling Requirements			
Quarter	Months	Parameters	Report is Due
First	January, February, March	Sample at least once during any month of the quarter	April 28 th
Second	April, May, June	Sample at least once during any month of the quarter	July 28 th
Third	July, August, September	Sample at least once during any month of the quarter	October 28 th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28 th

- Note 1 - Storage Basin freeboard shall be reported as Storage Basin water level in feet below the overflow level.
- Note 2 - Wastewater that is applied shall be sampled at the irrigation pump, wet well, or application vehicle. If no land application occurred during the report period, report as "No Application."
- Note 3 - Wastewater irrigation rates shall not exceed a nitrogen application rate of 150 pounds total nitrogen per acre per year, and the applied wastewater shall not exceed ten (10) mg/l of nitrate nitrogen as N. If the nitrogen application exceeds a rate of 150 pounds total nitrogen per acre per year, and/or the applied wastewater exceeds ten (10) mg/l of nitrate nitrogen as N, see Special Condition #21 d for additional requirements.
- Note 4 - Required only for irrigation to public use areas. Report as "Not Applicable" if no irrigation occurs to public use areas during the report period. The Monthly Average Limit for Fecal Coliform is a geometric mean.
- Note 5 - All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measureable precipitation event. The following Benchmark Values is considered necessary to protect existing water quality and should not be exceeded during discharges resulting from a precipitation event exceeding 0.1 inches during a 24 hour period. The BMPs at the facility should be designed to meet this value during rainfall event up to the 10 year, 24 hour rain event. The benchmark does not constitute numeric effluent limitations. **A benchmark exceedance alone, therefore, is not a permit violation.** If a sample exceeds a benchmark concentration a review of the facilities SWPPP and BMPs shall take place to determine whether any improvement or additional controls are needed to reduce that pollutant in the storm water discharge. The facility may demonstrate via a Corrective Action Report that the benchmark value cannot be achieved through the application of BMPs representing the available

technology and the benchmark is not feasible because no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice. Upon concurrence with a Corrective Action report by the Department, the facility may return to normal quarterly reporting. This evaluation must be kept on file with the SWPPP. Failure to evaluate and improve BMPs to address benchmark value exceedances is a permit violation.

Parameter	Benchmark
Biochemical Oxygen Demand ₅	30 mg/L
Total Suspended Solids	100 mg/L
Ammonia as N	12.1 mg/L
Nitrate as NO ₃	10 mg/L
Oil & Grease	15 mg/L

B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Part I standard conditions dated November 1, 2013 and hereby incorporated as though fully set forth herein.

C. SPECIAL CONDITIONS

1. Emergency Discharge. An emergency discharge from wastewater storage basin may only occur if rainfall exceeds the 10 year (Data taken from the Missouri Climate Atlas) or the 24 hour, 25 year (Data taken from NRCS Urban Hydrology for Small Watersheds) rainfall events. **Discharge for any other reason or from land application sites shall constitute a permit violation and shall be reported in accordance with Standard Conditions, Part 1, Section B.2.b.** Monitoring shall take place once per day while discharging. Test results are due on the 28th day of the following month after the cessation of the discharge. Permittee shall monitor for the following constituents:

Constituent	Units
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

2. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - a. Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - 1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - 2) controls any pollutant not limited in the permit.
 - b. Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri’s Water Quality Standards.
 - c. Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri’s list of waters of the state not fully achieving the state’s water quality standards, also called the 303(d) list.
 - d. Incorporate the requirement to develop a pretreatment program pursuant to 40 CFR 403.8(a) when the Director of the Water Protection Program determines that a pretreatment program is necessary due to any new introduction of pollutants into the Publically Owned Treatment Works or any substantial change in the volume or character of pollutants being introduced.

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

3. All permitted features s must be clearly marked in the field.
4. Water Quality Standards
 - a. To the extent required by law, discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - b. General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

C. SPECIAL CONDITIONS (continued)

- 1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - 2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - 3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - 4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - 5) There shall be no significant human health hazard from incidental contact with the water;
 - 6) There shall be no acute toxicity to livestock or wildlife watering;
 - 7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - 8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
5. Public access to storage areas and land application sites must be controlled by either positive barriers or remoteness of site.
 6. 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.
 7. 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.
 8. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).
 9. Hazardous waste regulated under the Missouri Hazardous Waste Law and regulations shall not be land applied under this permit.
 10. All paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) shall be stored so that these materials are not exposed to stormwater. Spill prevention, control, and/or management shall be provided sufficient to prevent any spills of these pollutants from entering a water of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 11. 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.
 12. The permittee shall implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must be prepared and implemented upon permit issuance and kept on-site and should not be sent to the department unless specifically requested. The SWPPP must be reviewed and updated, if needed, every five (5) years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in the following document:

Developing Your Storm Water Pollution Prevention Plan, A Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.
The SWPPP must include the following:
 - a. A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter stormwater.
 - b. The SWPPP must include a schedule for twice per month site inspections and brief written reports. The inspections must include observation and evaluation of BMP effectiveness. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Any corrective measure that necessitates major construction may also need a construction permit. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to department personnel upon request.

C. SPECIAL CONDITIONS (continued)

- c. A provision for designating an individual to be responsible for environmental matters.
 - d. A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.
13. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
- a. Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of storm water from these substances.
 - b. Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - c. Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - d. Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
 - e. Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
14. The purpose of the SWPPP and the BMPs listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.
15. Release of a hazardous substance must be reported to the department in accordance with 10 CSR 24-3.010. A record of each reportable spill shall be retained with the SWPPP and made available to the department upon request.
16. 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.
17. Land Application System.
- a. This special condition does not apply to fertilizer products that are exempted under the Missouri Clean Water Law and regulations, 10 CSR 20-6.015(3)(B)8.
 - b. Permitted Sites. This permit authorizes land application of wastewater by the permittee to those sites listed in the "Facility Description" of this permit. Land application of wastewater by a contract hauler to sites owned, rented, or leased by the permittee must also be listed in the "Facility Description" unless, the contract hauler is permitted. Land application by contract hauler to sites that are not owned, rented, or leased by the permitted are not required to be listed in this permit. Only those pollutants listed in the permit application may be land applied. Permittee requests for additional sites must follow permit modification procedures prior to land application.
 - c. Storage Basin Operating Levels. 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 one foot below the emergency spillway.
 - d. Public Access Restrictions. Public access shall not be allowed to public use application sites when application is occurring. Wastewater shall be disinfected prior to land application (not storage) to public use areas.
18. Land Application Requirements.
- a. Wastewater shall be land applied at agronomic rates to ensure agricultural use of nutrients and prevent contamination of surface and ground water. Agronomic rate (i.e. fertilizer recommendation) is defined as the amount of nutrients needed by the planned crop to produce the expected yield. The wastewater application rate is the amount of wastewater needed to meet the agronomic rate.
 - b. No land application shall occur during frozen, snow covered, or saturated soil conditions. There shall be no application if precipitation event that is likely to create runoff is forecasted to occur within 24 hours of a planned application.
 - c. Sludge shall not be applied to slopes exceeding twenty (20%) percent. For 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.

C. SPECIAL CONDITIONS (continued)

- d. Land application shall occur only during daylight hours.
- e. Setback distances from sensitive features. There shall be no land application within:
 - 1) 300 feet of any well, including unplugged abandoned well, sinkhole, losing stream, or cave entrance;
 - 2) 300 feet of a down gradient public or privately owned drinking water impoundment or intake;
 - 3) 150 feet of an occupied residence, public building, or public use area;
 - 4) 100 feet of gaining perennial or intermittent stream, public or privately owned pond or lake; not in reg, can be flexible
 - 5) 50 feet of property line or public road.
- f. The perimeter of land application fields shall be checked daily during land application to check for runoff. Sites that utilize spray irrigation shall monitor for the drifting of spray.

19. Nutrient Management

Land application fields listed in this permit shall use the following protocols to determine the agronomic rates and wastewater application rates to ensure appropriate agricultural utilization of nutrients.

a. Agronomic rate shall be based on the following:

- (1) Crop nutrient removal rate estimates in MU Guide EQ202 Land Application Considerations for Animal Manure 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

b. Nitrogen based management application rate calculation.

The application rates for nitrogen in any given year or growing season must be adjusted based on the most current sludge and soil test results, and the planned crop's nitrogen recommendation. Plant Available Nitrogen (PAN) from the wastewater/sludge must be calculated using the results of the most recent sludge analysis.

$$\text{PAN} = [\text{Ammonia Nitrogen} \times 0.6] + [\text{Organic Nitrogen} \times 0.6] + [\text{Nitrate Nitrogen} \times 0.9]$$

- c. Alternate nitrogen availability factors may be considered. Alternate factors shall be submitted to the department for approval.

d. Other Pollutant Limitations and Loading Rates

Oil and grease application shall not exceed 10,000 pounds oil/acre/year for subsurface injection or soil incorporation. For surface application to growing vegetation, the sludge shall not exceed 15% oil & grease content and shall not exceed 1,000 pounds oil/acre. Avoid heavy application of oil and grease within 30 days before planting of row crops.

20. Record Keeping

- a. A daily land application log shall be prepared and kept on file at the permittee office location for each application site showing dates of application, weather condition (sunny, overcast, raining, below freezing etc...), soil moisture condition, application method.
- b. A record of monthly visual storage structure inspections shall be maintained.
- c. A record of field perimeter inspections shall be maintained.
- d. All records and monitoring results shall be maintained for at least five years and shall be made available to the department upon request.

21. 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 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, corrective action taken and improvements planned.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0112500
ISONOVA TECHNOLOGIES LLC**

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

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

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

This Factsheet is for Industrial Land Application

Part I – Facility Information

Facility Type: NON-POTW – Industrial no-discharge, land application – SIC #2015

A facility name change and ownership transfer has been included in the renewal of this permit. The facility was formerly named American Dehydrated Foods. The facility has obtained the services of a contract hauler to remove wastewater and sludge. Some wastewater may be applied to company owned fields which are included in this permit.

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?

- No.

Application Date: 06/24/13

Expiration Date: 10/23/13

PERMITTED FEATURE(S) TABLE:

PERMITTED FEATURE	TREATMENT LEVEL	EFFLUENT TYPE
#002, #009, #011-#019	Land Application	Industrial wastewater
#003, #007, #008	BMP	Stormwater

Facility Performance History:

This facility was last inspected in September 2010 and was found to be in compliance. The Discharge Monitoring Reports (DMRs) were reviewed for the last five years. Biochemical Oxygen Demand₅, Total Suspended Solids and pH limits were exceeded.

Part II – Receiving Stream Information

Receiving Water Body’s Water Quality

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

As per Missouri’s Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall’s Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

- Missouri or Mississippi River [10 CSR 20-7.015(2)]:
- Lake or Reservoir [10 CSR 20-7.015(3)]:
- Losing [10 CSR 20-7.015(4)]:
- Metropolitan No-Discharge [10 CSR 20-7.015(5)]:
- Special Stream [10 CSR 20-7.015(6)]:
- Subsurface Water [10 CSR 20-7.015(7)]:
- All Other Waters [10 CSR 20-7.015(8)]:

10 CSR 20-7.031 Missouri Water Quality Standards, the Department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1st classified receiving stream’s beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

RECEIVING STREAM(S) TABLE:

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	DISTANCE TO CLASSIFIED SEGMENT	12-DIGIT HUC**
Tributary to Spring River	U	N/A	General Criteria	3.0	11070207-0104
Spring River	P	3165	AQL, LWW, SCR		

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

** - Hydrologic Unit Code

Part III – Rationale and Derivation of Effluent Limitations & Permit Conditions

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:

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

Not Applicable; The facility does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], or is an existing facility.

ANTI-BACKSLIDING:

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

- Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.

- The Department determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b). The previously calculated water quality based effluent limits were established using EPA’s Technical Support Document for Water Quality Based Toxics Control (TSD). The statistics used in developing the TSD method were written with continuous discharges in mind. For this reason the Department does not believe that this method for developing water quality based effluent limitations is always appropriate or applicable to intermittent discharges.

ANTIDegradation:

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

- No degradation proposed and no further review necessary. Facility did not apply for authorization to increase pollutant loading or to add additional pollutants to their discharge.

AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

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

BIOSOLIDS & SEWAGE SLUDGE:

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

<http://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

- Permittee is not authorized to land apply biosolids. Sludge/biosolids are removed by contract hauler.

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.

NUTRIENT MANAGEMENT

For more information or examples on calculating nitrogen application rates and PAN consult MU Guide 9186 Calculating Plant-Available Nitrogen and Residual Nitrogen Fertilizer Value in Manure.

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

<u>Unit Volume</u>	<u>Conversion Factors</u>
lbs./acre inch	0.226
lbs./1,000 gallons	0.0083
lbs./100 cubic feet	0.0062
lbs/ton (wet weight)	0.002

Oil and grease sludges with low nitrogen content, more than 20:1 Carbon to Nitrogen ratio, may require supplemental nitrogen application to provide proper decomposition of the oil content and prevent nitrogen deficiencies for the crop.

Agronomic rate can also be obtained by using the University of Missouri Extension online fertilizer recommendation calculator at <http://soilplantlab.missouri.edu/soil/scripts/manualentry.aspx>.

SCHEDULE OF COMPLIANCE (SOC):

Per 644.051.4 RSMo, a permit may be issued with a Schedule of Compliance (SOC) to provide time for a facility to come into compliance with new state or federal effluent regulations, water quality standards, or other requirements. Such a schedule is not allowed if the facility is already in compliance with the new requirement, or if prohibited by other statute or regulation. A SOC includes an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit. *See also* Section 502(17) of the Clean Water Act, and 40 CFR §122.2. For new effluent limitations, the permit includes interim monitoring for the specific parameter to demonstrate the facility is not already in compliance with the new requirement. Per 40 CFR § 122.47(a)(1) and 10 CSR 20-7.031(10), compliance must occur as soon as possible. If the permit provides a schedule for meeting new water quality based effluent limits, a SOC must include an enforceable, final effluent limitation in the permit even if the SOC extends beyond the life of the permit.

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 that was 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 to Permit Writers in developing SOCs, and attain a greater level of consistency, on October 25, 2012 the department issued a policy on development of SOCs. This policy provides guidance to Permit Writers on the standard time frames for schedules for common activities, and guidance on factors that may modify the length of the schedule such as an affordability analysis.

Not Applicable ; This permit does not contain a SOC.

SPILL REPORTING:

Per 10 CSR 24-3.010, 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.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

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

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

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

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

VARIANCE:

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

Not Applicable ; This operating permit is not drafted under premises of a petition for variance.

WATER QUALITY STANDARDS:

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

40 CFR 122.41(M) - BYPASSES:

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

Not Applicable ; This facility does not anticipate bypassing.

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

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

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Applicable ; Spring River or is listed on the 2012 Missouri 303(d) List for *E. coli*.

– This facility is not considered to be a source of the above listed pollutant(s) or considered to contribute to the impairment of Spring River.

Part IV – Permit Limits Determination

Permitted Feature #002 – Emergency Discharge

There are no effluent limits associated with Permitted Feature #002 for the no-discharge facility. However, the following is required for an emergency discharge. Monitoring requirement only based on best professional judgment.

EMERGENCY DISCHARGE TABLE:

PARAMETER	UNIT	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Flow	MGD	*			NO	*
Biochemical Oxygen Demand ₅	mg/L	*			NO	*
Total Suspended Solids	mg/L	*			NO	*
Ammonia as N	mg/L	*			NO	*
pH	SU	*			NO	*
Oil & Grease	mg/L	*			YES	***
E.coli	**	*			YES	***
Monitoring Frequency	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.					

* - Monitoring requirement only
 ** - # of colonies/100mL; the Monthly Average for E. coli is a geometric mean.
 *** - Parameter not established in previous state operating permit.

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each Permitted Feature is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

- **Biochemical Oxygen Demand (BOD₅)**. Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream's Water Quality. Therefore, effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.
- **Total Suspended Solids (TSS)**. Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream's Water Quality. Therefore, effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.
- **Total Ammonia Nitrogen**. Monitoring only from the previous state operating permit was reassessed and verified that they are still protective of the receiving stream's Water Quality. Therefore, effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.
- **pH**. Effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.
- **Oil & Grease**. Monitoring only in case of an emergency discharge.
- **Escherichia coli (E. coli)**. Monitoring only in case of an emergency discharge.

Minimum Sampling and Reporting Frequency Requirements.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Flow	once/day while discharging	Test results are due on the 28 th day of the month after the cessation of the discharge
Biochemical Oxygen Demand ₅	once/day while discharging	
Total Suspended Solids	once/day while discharging	
Ammonia as N	once/day while discharging	
pH	once/day while discharging	
Oil & Grease	once/day while discharging	
E.coli	once/day while discharging	

PERMITTED FEATURE #002 – STORAGE BASIN

Irrigation limitations derived and established in the below Irrigation 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 OPERATIONAL MONITORING:

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Freeboard	feet	1	*			NO	*
Precipitation	inches	1	*			NO	*
Monitoring Frequency	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* - Monitoring requirement only.

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

Basis for Limitations Codes:

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

PERMITTED FEATURE #002 – DERIVATION AND DISCUSSION OF LIMITS:

- **Freeboard.** Monitoring requirement only.
- **Precipitation.** Monitoring requirement only.

Minimum Sampling and Reporting Frequency Requirements.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Freeboard	once/month	once/year
Precipitation	once/day	once/year

PERMITTED FEATURE #002 – IRRIGATED WASTEWATER

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
Irrigation Period	hours	1	*			NO	*
Volume Irrigated	gallons	1	*			NO	*
Application Area	acres	1	*			NO	*
Application Rate	inches	1	*			NO	*
Total Kjeldahl Nitrogen	mg/L	1	*			NO	*
Nitrate Nitrogen as N	mg/L	1	*			NO	*
Fecal Coliform	***	1	200		200	YES	***
Monitoring Frequency	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* - Monitoring requirement only.

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

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

Basis for Limitations Codes:

- | | |
|--|------------------------------------|
| 1. State or Federal Regulation/Law | 7. Antidegradation Policy |
| 2. Water Quality Standard (includes RPA) | 8. Water Quality Model |
| 3. Water Quality Based Effluent Limits | 9. Best Professional Judgment |
| 4. Lagoon Policy | 10. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy | 11. WET Test Policy |
| 6. Antidegradation Review | |

- **Irrigation Period.** Monitoring requirement only. Monitoring for the Irrigation Period is included to determine if proper application is occurring on the land application fields.
- **Volume Irrigated.** Monitoring requirement only. Monitoring for the Volume Irrigated is included to determine if proper application is occurring on the land application fields.
- **Application Area.** Monitoring requirement only. Monitoring for the Application Area is included to determine if proper application is occurring on the land application fields.
- **Application Rate.** Monitoring requirement only. Monitoring for the Application Rate is included to determine if proper application is occurring on the land application fields.

- **Total Kjeldahl Nitrogen.** Monitoring requirement only. Monitoring for Total Kjeldahl Nitrogen as N is included to determine nutrient loading rates on the land application fields. [10 CSR 20-8.020(15)(F)7.]
- **Nitrate Nitrogen as N.** Monitoring requirement only. Monitoring for Nitrate Nitrogen as N is included to determine nutrient loading rates on the land application fields. [10 CSR 20-8.020(15)(F)7.]
- **Fecal Coliform.** 200#/100mL Daily Maximum and Monthly Average in accordance with 10 CSR 20-8.020(15)(F)9.A.

Minimum Sampling and Reporting Frequency Requirements.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Irrigation Period	once/day	once/year
Volume Irrigated	once/day	once/year
Application Area	once/day	once/year
Application Rate	once/day	once/year
Total Kjeldahl Nitrogen	once/quarter	once/year
Nitrate Nitrogen as N	once/wuarter	once/year
Fecal Coliform	once/year	once/year

Permitted Features #003, #007, #008 – Stormwater Discharge

Effluent limitations derived and established in the below Effluent 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.

STORMWATER EFFLUENT LIMITATIONS TABLE:

PARAMETER	UNIT	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	*			NO	*
BOD ₅	MG/L	*			YES	40/20
TSS	MG/L	*			YES	100/50
pH**	SU	*			NO	6.5-9.0
AMMONIA AS N	MG/L	*			YES	12.1/4.6
OIL & GREASE	MG/L	*			YES	15/10
NITRATE AS NO ₃	MG/L	*			YES	16.4/8.2
RAINFALL	***				NO	

* - Monitoring requirement only
 ** - pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units..
 *** - The total precipitation for the event sampled shall be reported.

Permitted Features #003, #007, #008 – DERIVATION AND DISCUSSION OF LIMITS:

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

- **pH.** pH is addressed in two main sections of the Missouri Clean Water Law that influence permit parameters. In accordance with 10 CSR 20-7.015(8)(A)2., pH shall be maintained in the range of 6.0-9.0 standard pH units. In accordance with 10 CSR 20-7.031(5)(E), water contaminants shall not cause pH to be outside of the range of 6.5 -9.0 standard pH units. pH is also address in 40 CFR 426 – Subpart H, which states water contaminants shall not cause pH to be outside of the range of 6.0 to 9.0 standard pH units. However, 40 CFR 122.44(b)(1) and 40 CFR 122.44(d) require that the permit contain the most stringent requirement for a parameter. Therefore, the facility shall be required to maintain a range of 6.5-9.0 standard pH units.

Permitted Features #003, #007, #008 – DERIVATION AND DISCUSSION OF BENCHMARK LIMITS DETERMINATION:

Benchmarks. The Clean Water Act requires that all NPDES discharges to Waters of the U.S. contain technology-based or water-quality based effluent limitations, whichever is more stringent. Missouri uses the TSD method for establishing reasonable potential and calculating site-specific water quality based effluent limitations. The TSD method is based on assumptions and statistics that apply to continuous discharges, not intermittent stormwater discharges and thus do not apply to this permit. However, the permit writer did use previously submitted data to conduct an RPA and calculate water quality based effluent limitations for comparison. The benchmark values established by this permit are the more stringent effluent limitation.

Benchmark concentrations are **not** effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective action(s) may be necessary to comply with the technology based effluent limitations (TBEL). Failure to take corrective action is a violation of the permit.

- **Oil & Grease.** Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L daily maximum.
- **Nitrate as NO₃.** Protection of Drinking Water Supply and Ground Water Chronic Criteria = 10 mg/L
- **Ammonia as N.** Protection of Aquatic Life Acute Criteria = 12.1 mg/L
- **Biochemical Oxygen Demand₅ (BOD₅).** Limits for this permit were derived from EPA’s Multi-Sector General Permit (MSGP) Subsector U2. It is the permit writer’s best professional judgment that these values have been demonstrated attainable with existing technology and is protective of in-stream water quality. A benchmark value of 30 mg/L was established because it is technologically achievable and consistent with requirements for this type of facility throughout the country.
- **Total Suspended Solids (TSS).** Limits for this permit were derived from EPA’s Multi-Sector General Permit (MSGP) Subsector U2. It is the permit writer’s best professional judgment that these values have been demonstrated attainable with existing technology and is protective of in-stream water quality. A benchmark value of 100 mg/L was established because it is technologically achievable and consistent with requirements for this type of facility throughout the country.

Minimum Sampling and Reporting Frequency Requirements.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Freeboard	once/week	once/quarter
Precipitation	once/day	once/quarter
Flow	once/quarter	once/quarter
BOD ₅	once/quarter	once/quarter
TSS	once/quarter	once/quarter
pH	once/quarter	once/quarter
AMMONIA AS N	once/quarter	once/quarter
Oil & Grease	once/quarter	once/quarter
NITRATE AS NO ₃	once/quarter	once/quarter
Rainfall	once/quarter	once/quarter

Part V – Finding of Affordability

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

Not Applicable; The Department is not required to determine findings of affordability because the permit contains no new conditions or requirements that convey a new cost to the facility.

Part VI – Administrative Requirements

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

PERMIT SYNCHRONIZATION:

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is that all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the department to explore a watershed based permitting effort at some point in the future. 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 4 years old, that 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.

PUBLIC NOTICE:

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

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

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

- The Public Notice period for this operating permit was from May 16, 2014 to June 16, 2014. One response received.

DATE OF FACT SHEET: JUNE 18, 2014

COMPLETED BY:

**GREG CALDWELL, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION – INDUSTRIAL PERMITS UNIT
(573) 526-1426
greg.caldwell@dnr.mo.gov**



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
NOVEMBER 1, 2013

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(a)(1);
 - 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. **Twenty-Four Hour 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.



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- 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. **Sanitary Sewer Overflow Reporting.** The following requirements solely reflect reporting obligations, and reporting does not necessarily reflect noncompliance, which may depend on the circumstances of the incident reported.
- a. **Twenty-Four Hour (24-Hour) Reporting.** The permittee or owner shall report any incident in which wastewater escapes the collection system such that it reaches waters of the state or it may pose an imminent or substantial endangerment to the health or welfare of persons. 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 incident. A written submission shall also be provided within five (5) business days of the time the permittee or owner becomes aware of the incident. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The five (5) day reports may be provided via the current electronic method approved by the Department.
 - b. **Incidents Reported via Discharge Monitoring Reports (DMRs).** The permittee or owner shall report any event in which wastewater escapes the collection system, which does not enter waters of the state and is not expected to pose an imminent or substantial endangerment to the health or welfare of persons, which occur typically during wet weather events. Relevant information shall be provided with the permittee's or owner's DMRs.
4. **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.
5. **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.
6. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, 4, and 7 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.
7. **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.
8. **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.
 - 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.



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Section D – Administrative Requirements

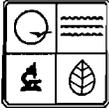
1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; 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.



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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.
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 15748 C11675



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
FORM A - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT
 UNDER MISSOURI CLEAN WATER LAW

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED 6/24/13	FEE SUBMITTED \$ 83

Note PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.

1. This application is for:

- An operating permit and antidegradation review public notice
- A construction permit following an appropriate operating permit and antidegradation review public notice
- A construction permit and concurrent operating permit and antidegradation review public notice
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required)
- An operating permit for a new or unpermitted facility Construction Permit # _____
- An operating permit renewal: permit # MO- 0112500 Expiration Date 10/23/13
- An operating permit modification: permit # MO- _____ Reason: _____

1.1 Is the appropriate fee included with the application? (See instructions for appropriate fee) YES NO

2. FACILITY

NAME American Dehydrated Foods, Inc.		TELEPHONE WITH AREA CODE (417) 498-2221	
		FAX (417) 498-6788	
ADDRESS (PHYSICAL) 18184 Hwy. P	CITY Verona	STATE MO	ZIP CODE 65769

3. OWNER

NAME Darrco, L.L.C.		E-MAIL ADDRESS	TELEPHONE WITH AREA CODE (417) 881-7755	
			FAX (417) 881-4963	
ADDRESS (MAILING) P.O. Box 4087	CITY Springfield	STATE MO	ZIP CODE 65808	

3.1 Request review of draft permit prior to public notice? YES NO

4. CONTINUING AUTHORITY

NAME Same as above		TELEPHONE WITH AREA CODE		
		FAX		
ADDRESS (MAILING)	CITY	STATE	ZIP CODE	

5. OPERATOR

NAME Dani Robinson		CERTIFICATE NUMBER	TELEPHONE WITH AREA CODE (417) 498-2221	
			FAX (417) 498-6788	
ADDRESS (MAILING) P.O. Box 96	CITY Verona	STATE MO	ZIP CODE 65769	

6. FACILITY CONTACT

NAME Dani Robinson		TITLE QA / Environmental Manager	TELEPHONE WITH AREA CODE (417) 498-2221	
			FAX (417) 498-6788	

7. ADDITIONAL FACILITY INFORMATION

7.1 Legal Description of Outfalls. (Attach additional sheets if necessary.) *See attached.*

001 _____ 1/4 _____ 1/4 _____ Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____
 For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

002 _____ 1/4 _____ 1/4 _____ Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____

003 _____ 1/4 _____ 1/4 _____ Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____

004 _____ 1/4 _____ 1/4 _____ Sec _____ T _____ R _____ County _____
 UTM Coordinates Easting (X): _____ Northing (Y): _____

7.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.

001 - SIC 2015 and NAICS 311111 002 - SIC _____ and NAICS _____
 003 - SIC _____ and NAICS _____ 004 - SIC _____ and NAICS _____

FORM A - ATTACHMENTS TO APPLICATION

Section 7.10

Outfall Number	_____ 1/4	_____ 1/4	SEC	T	R	County
002		SW 1/4	28	27N	26W	Lawrence
003		SW 1/4	28	27N	26W	Lawrence
007		SW 1/4	28	27N	26W	Lawrence
008		SW 1/4	28	27N	26W	Lawrence
009		SW 1/4	28	27N	26W	Lawrence

8. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION
 (Complete all forms that are applicable.)

A.	Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? If yes, complete Form C (unless storm water only, then complete U.S. Environmental Protection Agency Form 2F per Item C below).	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
B.	Is your facility considered a "Primary Industry" under EPA guidelines: If yes, complete Forms C and D.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
C.	Is application for storm water discharges only? If yes, complete EPA Form 2F.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
D.	Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.		
E.	Is wastewater land applied? If yes, complete Form I.	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
F.	Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

9. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary. See Instructions.
 (PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).

NAME Roy Conrad, Jr.			
ADDRESS 17835 Hwy. P	CITY Verona	STATE MO	ZIP CODE 65769

10. I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law to the Missouri Clean Water Commission.

NAME AND OFFICIAL TITLE (TYPE OR PRINT) Brad Friend - VP of Manufacturing	TELEPHONE WITH AREA CODE (417) 881-7755
SIGNATURE 	DATE SIGNED 6-17-13

MO 780-1479 (01-09)

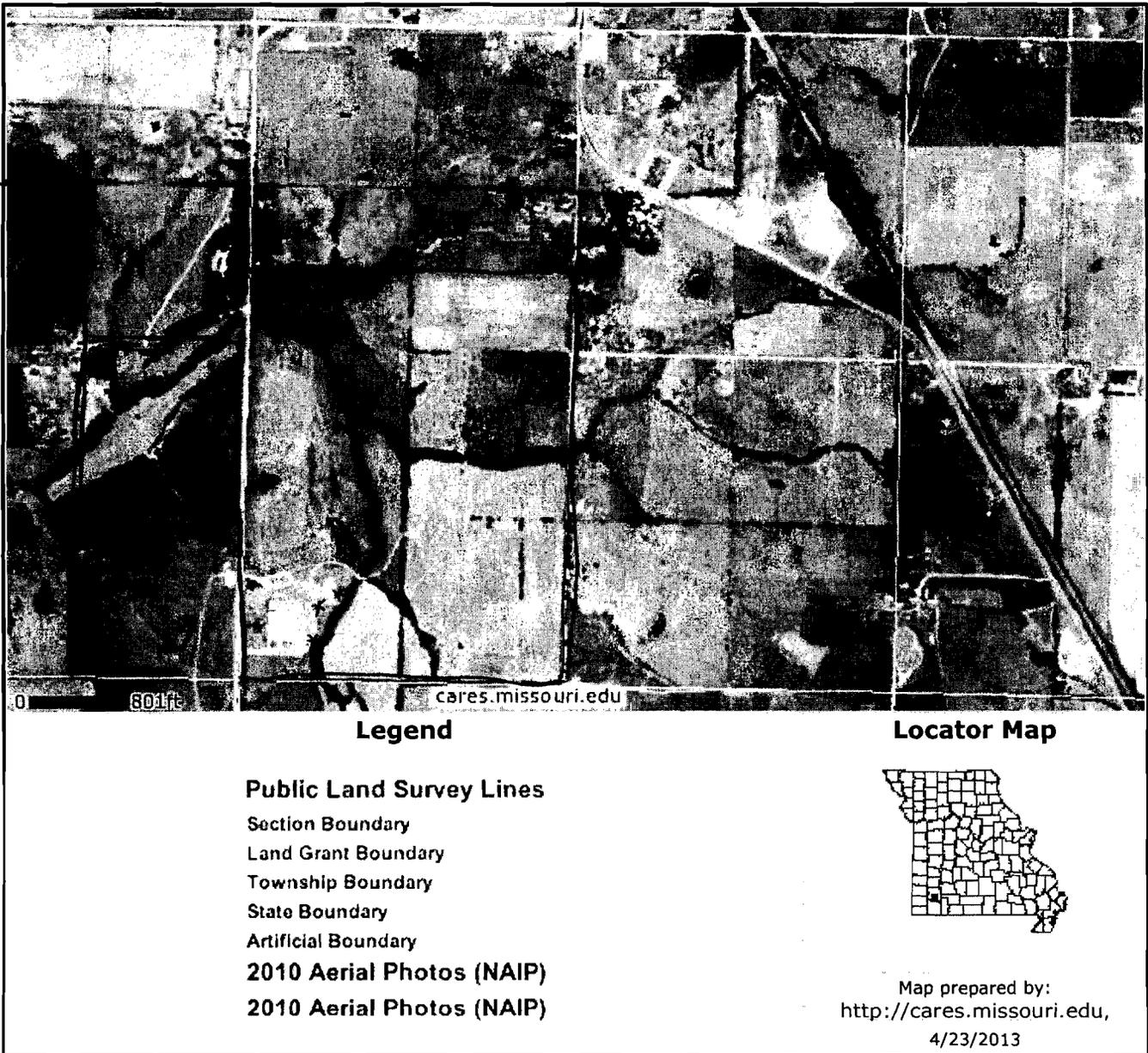
BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.

Submittal of an incomplete application may result in the application being returned.

HAVE YOU INCLUDED:

- Appropriate Fees?
- Map at 1" = 2000' scale?
- Signature?
- Form C, if applicable?
- Form D, if applicable?
- Form 2F, if applicable?
- Form I (Irrigation), if applicable?
- Form R (Sludge), if applicable?

Map



* Stormwater outfalls 003, 007, 008 as listed in Current permit

— Area marked in red is Conrad property.

North Plant Storm Water Outfalls

This map makes use of SENSITIVE and/or PROVISIONAL data and is NOT INTENDED FOR DISTRIBUTION outside the Missouri Department of Natural Resources.



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- Legend**
- ▲ NPDES Outfalls
 - ▲ CAFO
 - ▲ MUNICIPAL
 - ▲ NON MUNICIPAL
 - ▲ WQS Table E (FI)
 - ▲ WQS Table E (L)
 - ▲ WQS Table D
 - Biological Reference Stream Segments
 - Losing Streams
 - Dye Path
 - Sinkholes
 - MoDOT Interstate Highways
 - MoDOT US Highways
 - 8 Digit Watershed Boundary
 - 14 Digit Watershed Boundary
 - Public Land Survey System
 - County Boundary

View Scale 1:2,532

Disclaimer: Although this map has been compiled by the Missouri Department of Natural Resources, no warranty, expressed or implied, is made by the department as to the accuracy of the data and related materials. The act of distribution shall not constitute any such warranty, and no responsibility is assumed by the department in the use of these data or related materials.

