

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

The Missouri Department of Natural Resources hereby issues a permit to:

Gilster-Mary Lee Corporation
1037 State Street
Chester, Il 62233

for the construction of (described facilities):

See attached.

Permit Conditions:

See attached.

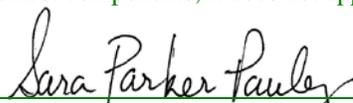
Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department).

As the department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

A representative of the department may inspect the work covered by this permit during construction. Issuance of a permit to operate by the department will be contingent on the work substantially adhering to the approved plans and specifications.

This permit applies only to the construction of water pollution control components; it does not apply to other environmentally regulated areas.

October 16, 2015
Effective Date


Sara Parker Pauley, Director, Department of Natural Resources

October 15, 2017
Expiration Date


John Madras, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

This project consists of a dump station for wastewater, three basins (aerated, settling, holding), and a land application system with a center pivot. Up to five truckloads of wastewater will be hauled to the facility from other Gilster-Mary Lee food processing facilities for a maximum daily flow of 26,250 gallons per day (gpd). The project will include general site work and all necessary appurtenances appropriate to the scope and purpose of the project.

This facility is located near McBride, Missouri in Perry County and will not discharge. The new construction is adjacent to an existing lagoon wastewater treatment system that treats similar industrial wastes and both are expected to be permitted under Missouri State Operating Permit MO-0119580.

II. COST ANALYSIS FOR COMPLIANCE

Pursuant to Section 644.145, RSMo, when issuing permits under this chapter that incorporate a new requirement for discharges from publicly owned combined or separate sanitary or storm sewer systems or publicly owned treatment works, or when enforcing provisions of this chapter or the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., pertaining to any portion of a publicly owned combined or separate sanitary or storm sewer system or [publicly owned] treatment works, the Department of Natural Resources shall make a “finding of affordability” on the costs to be incurred and the impact of any rate changes on ratepayers upon which to base such permits and decisions, to the extent allowable under this chapter and the Federal Water Pollution Control Act. This process is completed through a cost analysis for compliance. Permits that do not include new requirements may be deemed affordable.

The department is not required to complete a cost analysis for compliance because the facility is not a combined or separate sanitary sewer system for a publically-owned treatment works.

III. CONSTRUCTION PERMIT CONDITIONS

The permittee is authorized to construct subject to the following conditions:

1. This construction permit does not authorize discharge.
2. All construction shall be in accordance with the plans and specifications submitted by Schultz Surveying and Engineering on April 28, 2015.
3. The department must be contacted in writing prior to making any changes to the approved plans and specifications that would directly or indirectly have an impact on the capacity, flow, system layout, or reliability of the proposed wastewater treatment facilities or any design parameter that is addressed by 10 CSR 20-8, in accordance with 10 CSR 20-8.110(8).

4. State and federal law does not permit bypassing of raw wastewater; therefore steps must be taken to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the department's Southeast Regional Office per 10 CSR 20-7.015(9)(E)2.
5. This construction permit is invalid for projects required to comply with the requirements contained in 10 CSR 20-4, "Grants and Loans"
6. Protection of drinking water supplies shall be in accordance with 10 CSR 20-8.120(10). "There shall be no physical connections between a public or private potable water supply system and a sewer, or appurtenance thereto which would permit the passage of any wastewater or polluted water into the potable supply. No water pipe shall pass through or come in contact with any part of a sewer manhole."
7. Sewers in relation to water works structures shall meet the requirements of 10 CSR 23-3.010 with respect to minimum distances from public water supply wells or other water supply sources and structures.
 - A. Sewer mains shall be laid at least 10-feet horizontally from any existing or proposed water main. The distances shall be measured edge-to-edge. In cases where it is not practical to maintain a 10-foot separation, the department may allow a deviation on a case-by-case basis, if supported by data from the design engineer. Such a deviation may allow installation of the sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on either side of the sewer and at an elevation so the bottom of the water main is at least 18-inches above the top of the sewer. If it is impossible to obtain proper horizontal and vertical separation as described above for sewers, the sewer must be constructed of slip-on or mechanical joint pipe or continuously encased and be pressure tested to 150-pounds per square inch to assure water tightness.
 - B. Manholes should be located at least 10-feet horizontally from any existing or proposed water main.
 - C. Manholes shall be located with the top access at or above grade level.
 - D. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18-inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. When it is impossible to obtain proper vertical separation as stipulated above, one of the following methods must be specified:
 - a. The sewer shall be designed and constructed equal to the water pipe and shall be pressure tested to assure water tightness prior to backfilling; or
 - b. Either the water main or sewer line may be continuously encased or enclosed in a watertight carrier pipe which extends 10-feet on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the department for use in water main construction.

8. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one acre or more to obtain a Missouri state operating permit to discharge stormwater. The permit requires best management practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits will only be obtained by means of the department's ePermitting system available online at www.dnr.mo.gov/env/wpp/epermit/help.htm. See www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm for more information.
9. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of jurisdictional waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the department's Water Protection Program at 573-751-1300 for more information. See www.dnr.mo.gov/env/wpp/401/ for more information.
10. Upon completion of construction;
 - A. Gilster-Mary Lee Corporation will become the continuing authority for operation, maintenance, and modernization of these facilities;
 - B. Submit the enclosed form Statement of Work Completed to the department in accordance with 10 CSR 20-6.010(5)(D);
 - C. Submit an electronic copy of the as built if the project was not constructed in accordance with previously submitted plans and specifications; and
 - D. The facility has already applied for their next operating permit renewal. The department expects to include an updated facility description on their renewed and modified Missouri State Operating Permit.

IV. REVIEW SUMMARY

1. AMMONIA

The Water Protection Program is providing this notice to inform permittees that EPA's published ammonia criteria for aquatic life protection is lower than the current Missouri criteria. The department has initiated stakeholder discussions on this topic and at this time, there is no firm target date for starting the rulemaking to adopt new standards. More information can be found at <http://dnr.mo.gov/pubs/pub2481.pdf>.

No ammonia limits are proposed for this facility because it is a land application system/

2. CONSTRUCTION PURPOSE

The wastewater treatment facility near the Gilster-Mary Lee, McBride Plant is not large enough to process all of the wastewater generated by other Gilster-Mary Lee facilities in Perryville, Missouri, and Chester and Steelville, Illinois. Truckloads of wastewater from these facilities are being transported to other municipalities for treatment. Treating the wastewater at McBride will be a savings for the corporation.

3. FACILITY DESCRIPTION

The current wastewater treatment facility consists of three lagoons and a land application site. Both sanitary and process flows from the McBride facility are treated. The new facility will add capacity to treat only process wastewater from the other Gilster-Mary Lee Corporation plants. There will be a dump station to receive process wastewater. This new facility will have an average design flow of 26,250 gallons per day process wastewater and 31,712 gallons per day including the rainfall minus evaporation.

4. COMPLIANCE PARAMETERS

This construction will not discharge. Influent flow is from a dump station only, so that if the lagoons are nearly full, influent flow can be stopped and the process water can be trucked to other municipal treatment facilities.

5. REVIEW of MAJOR TREATMENT DESIGN CRITERIA

The dump station will be able to pump one truck load (5,250 gallons) in one hour and accept up to five trucks per day. Pumps are capable of pumping 90 gallons per minute through a force main to the aerated lagoon

The new aerated lagoon is similar to an existing aerated lagoon and will treat high-strength process wastewater to a level which avoids nuisance conditions and is suitable for land application. The lagoon system will have storage capacity of 238 days, including rainwater flows.

Land application will be to 32.5 acres of row crops at an application rate up to 24 inches per year.

The lagoon site is behind a levee system rated for a 1-in-50-year flood and the lagoons will be submerged when the levee is overtopped. Missouri's design regulation requires protection for a 1-in 100year flood. A public notice of the draft operating permit was competed which includes operating conditions to address imminent flooding. A deviation for the site location is hereby approved

6. OPERATING PERMIT MODIFICATION

Operating permit MO-0119580 will be issued with changes to reflect the construction activities when the permit is renewed.

RECEIVED

CP 0001750

C 140

AP 21061



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
APPLICATION FOR CONSTRUCTION PERMIT -
WASTEWATER TREATMENT FACILITY

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED	CHECK NO.
\$1000.00	33242
DATE RECEIVED	
4/22/15	SP

APPLICATION OVERVIEW
The Application for Construction Permit - Wastewater Treatment Facility form has been developed in a modular format and consists of Part A and B. All applicants must complete Part A. Part B should be completed for applicants who currently land-apply wastewater or propose land application for wastewater treatment. Please read the accompanying instructions before completing this form. Submittal of an incomplete application may result in the application being returned.

PART A - BASIC INFORMATION

1.0 APPLICATION INFORMATION (Note - If any of the questions in this section are answered NO, this application may be considered incomplete and returned.)

- 1.1 Is this a Federal/State funded project? YES N/A Funding Agency: _____ Project #: _____
- 1.2 Has the Missouri Department of Natural Resources approved the proposed project's antidegradation review?
 YES Date of Approval: _____
- 1.3 Has the department approved the proposed project's facility plan*?
 YES Date of Approval: 6/9/14 NO N/A (If Not Applicable, complete No. 1.4.)
- 1.4 [Complete only if answered Not Applicable on No. 1.3.] Is a copy of the engineering report* for wastewater treatment facilities with a design flow less than 22,500 gpd included with this application?
 YES NO
- 1.5 Is a copy of the appropriate plans* and specifications* included with this application?
 YES Denote which form is submitted: Hard copy Electronic copy (See instructions.) NO
- 1.6 Is a summary of design* included with this application? YES NO
- 1.7 Has the appropriate operating permit application (A, B, or B2) been submitted to the department?
 YES Date of submittal: _____
 Enclosed is the appropriate operating permit application submittal. Denote which form: A B B2
 N/A Please explain: _____
- 1.8 Is the facility currently under enforcement with the department or the Environmental Protection Agency? YES NO
- 1.9 Is the appropriate fee included with this application? YES NO (See instructions for appropriate fee.)

* Must be affixed with a Missouri registered professional engineer's seal, signature and date.

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT

Gilster-Mary Lee McBride Treatment Plant B

2.2 PROJECT DESCRIPTION

Terminal dump station, 3 cell aerated non-discharging lagoon, center pivot land application

2.3 SLUDGE HANDLING, USE AND DISPOSAL DESCRIPTION

Sludge is retained in lagoon

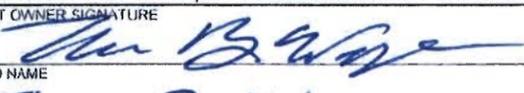
2.4 DESIGN INFORMATION

A. Current population: _____; Design population: _____

B. Actual Flow: _____ gpd; Design Average Flow: 26250 gpd;
Actual Peak Daily Flow: _____ gpd; Design Maximum Daily Flow: _____ gpd; Design Wet Weather Event: _____

2.5 ADDITIONAL INFORMATION

- A. Is a topographic map attached? YES NO
- B. Is a process flow diagram attached? YES NO

3.0 WASTEWATER TREATMENT FACILITY				
NAME Gilster-Mary Lee McBride Treatment Plant B		TELEPHONE NUMBER WITH AREA CODE 573-547-1083		E-MAIL ADDRESS shadler@gilstermarylee.com
ADDRESS (PHYSICAL) PCR 236		CITY McBride	STATE MO	ZIP CODE 63776
COUNTY Perry				
Wastewater Treatment Facility: Mo- (Outfall Of)				
3.1 Legal Description: _____ 1/4, _____ 1/4, _____ 1/4, Sec. 1879, T 36N, R 11E (Use additional pages if construction of more than one outfall is proposed.)				
3.2 UTM Coordinates Easting (X): 779300 Northing (Y): 4193433 For Universal Transverse Mercator (UTM), Zone 15 North referenced to North Ame.				
3.3 Name of receiving streams: <u>Bois Brule</u>				
4.0 PROJECT OWNER				
NAME Gilster-Mary Lee Corporation		TELEPHONE NUMBER WITH AREA CODE (618) 826-2361		E-MAIL ADDRESS marylee.com
ADDRESS P.O. Box 227		CITY Chester		
5.0 CONTINUING AUTHORITY: Permanent organization that will serve as the authority for construction, operation, maintenance and modernization of the wastewater collection system.				
NAME Same as owner		TELEPHONE NUMBER WITH AREA CODE		E-MAIL ADDRESS
ADDRESS		CITY	STATE	ZIP CODE
5.1 A letter from the continuing authority, if different than the owner, is included with this application. <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A				
5.2 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A MISSOURI PUBLIC SERVICE COMMISSION REGULATED ENTITY.				
A. Is a copy of the certificate of convenience and necessity included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
5.3 COMPLETE THE FOLLOWING IF THE CONTINUING AUTHORITY IS A PROPERTY OWNERS ASSOCIATION.				
A. Is a copy of the as-filed restrictions and covenants included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
B. Is a copy of the as-filed warranty deed, quitclaim deed or other legal instrument which transfers ownership of the land for the wastewater treatment facility to the association included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
C. Is a copy of the as-filed legal instrument (typically the plat) that provides the association with valid easements for all sewers included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
D. Is a copy of the Missouri Secretary of State's nonprofit corporation certificate included with this application? <input type="checkbox"/> YES <input type="checkbox"/> NO				
6.0 ENGINEER				
ENGINEER NAME / COMPANY NAME Tim Southards/SSE		TELEPHONE NUMBER WITH AREA CODE (573) 686-0806		E-MAIL ADDRESS tjsouthards@sseeng.com
ADDRESS 4482 Highway PP		CITY Poplar Bluff	STATE MO	ZIP CODE 63901
7.0 PROJECT OWNER: I hereby certify that I am familiar with the information contained in this application and 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 Missouri Clean Water Law. I also understand the issuance of the construction permit does not guarantee the proposed wastewater treatment will meet the required effluent limitations of the issued Missouri State Operating Permit for this facility.				
PROJECT OWNER SIGNATURE 				
PRINTED NAME Thomas B Welge			DATE 4/13/15	
TITLE OR CORPORATE POSITION VP Tech Sales & Gen'l Counsel		TELEPHONE NUMBER WITH AREA CODE 618 826 2361		E-MAIL ADDRESS twelge@gilstermarylee.com
Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176				
END OF PART A. REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHETHER PART B NEEDS TO BE COMPLETE.				

Lat/Long
37.845594°
-89.82586°

PART B – LAND APPLICATION ONLY
 (Submit only if the proposed construction project includes land application of wastewater.)

8.0 FACILITY INFORMATION

8.1 Type of wastewater to be irrigated: Domestic State/National Park Seasonal business
 Municipal Municipal with a pretreatment program or significant industrial users
 Other (explain) Process Wastewater

8.2 Months when the business or enterprise will operate or generate wastewater:
 12 months per year Part of the year (list months): _____

8.3 This system is designed for:
 No-discharge.
 Partial irrigation when feasible and discharge rest of time.
 Irrigation during recreational season, April – October, and discharge during November – March.
 Other (explain) _____.

9.0 STORAGE BASINS

9.1 Number of storage basins: 3 (Use additional pages if greater than three basins.)

9.2 Type of basins: Steel Concrete Fiberglass Earthen Earthen with membrane liner

9.3 Storage basin dimensions at inside top of berm (feet). Report freeboard as feet from top of berm to emergency spillway or overflow pipe.
 Basin #1: Length 402 Width 227 Depth 17 Freeboard 0.5 Depth _____ Safety _____ % Slope 3:1
 Basin #2: Length 234 Width 112 Depth 17 Freeboard 0.5 Depth _____ Safety _____ % Slope 3:1
 Basin #3: Length 162 Width 112 Depth 17 Freeboard 0.5 Depth _____ Safety _____ % Slope 3:1

9.4 Storage Basin operating levels (report as feet below emergency overflow level).
 Basin #1: Maximum operating water level 1.5 ft Minimum operating water level 14.5 ft
 Basin #2: Maximum operating water level 1.5 ft Minimum operating water level 14.5 ft
 Basin #3: Maximum operating water level 1.5 ft Minimum operating water level 14.5 ft

9.5 Design depth of sludge in storage basins.
 Basin #1: 2 ft Basin #2: 2 ft Basin #3: 2 ft

9.6 Existing sludge depth, if the basins are currently in operation.
 Basin #1: _____ ft Basin #2: _____ ft Basin #3: _____ ft

9.7 Total design sludge storage: _____ dry tons and _____ cubic feet

10.0 LAND APPLICATION SYSTEM

10.1 Number of irrigation sites 1 Total Acres 32.5 Maximum % field slopes 0
 Location: _____ ¼, _____ ¼, _____ ¼, _____ ¼, _____ Sec. 36N T 11E R Perry County 32.5 Acres
 Location: _____ ¼, _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
 Location: _____ ¼, _____ ¼, _____ ¼, _____ ¼, _____ Sec. _____ T _____ R _____ County _____ Acres
 (Use additional pages if greater than three irrigation sites.)

10.2 Type of vegetation: Grass hay Pasture Timber Row crops
 Other (describe) _____

10.3 Wastewater flow (dry weather) gallons per day: Average annual _____ Seasonal _____ Off-season _____

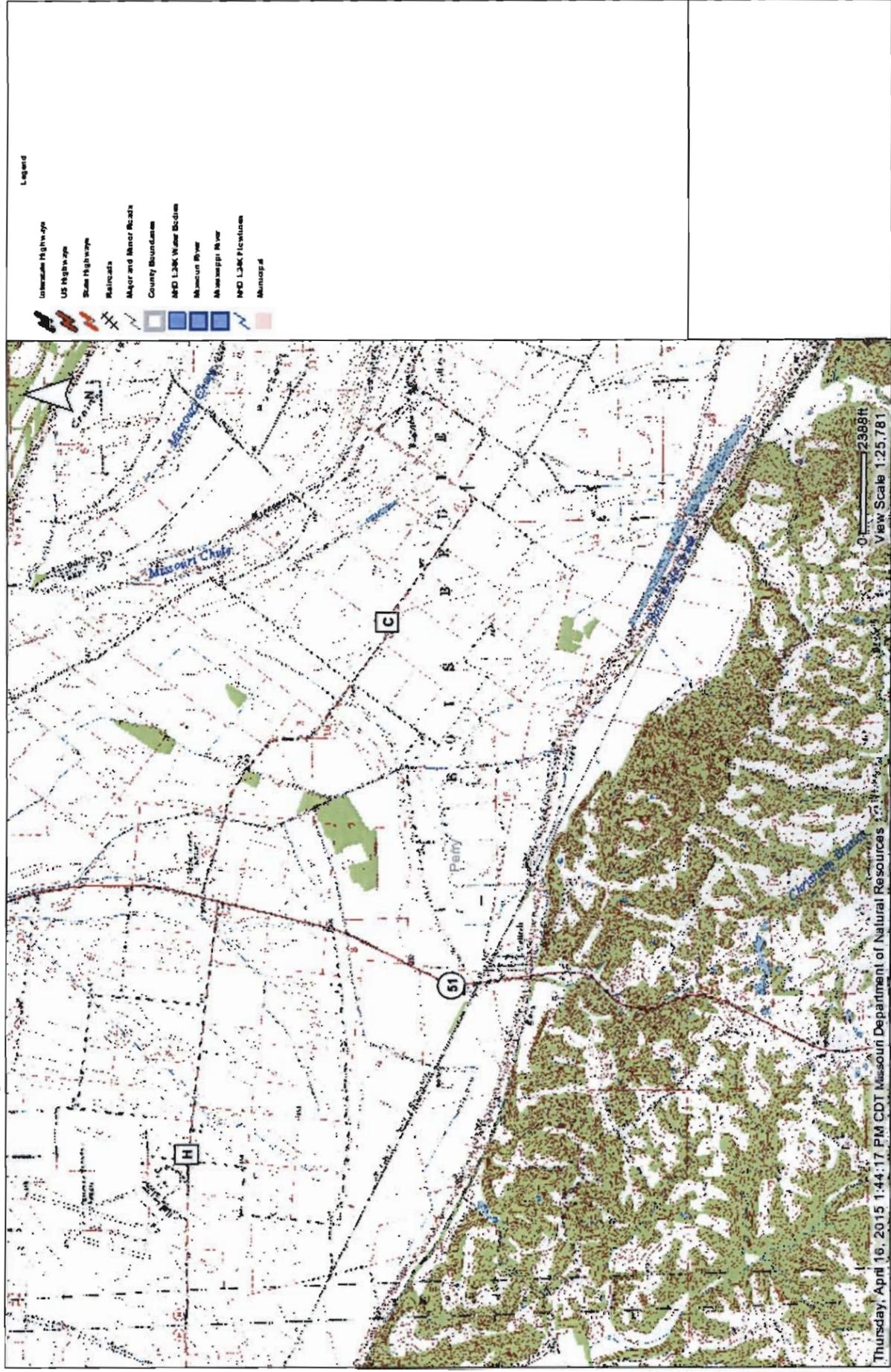
10.4 Land application rate (design flow including 1-in-10 year storm water flows):
 Design: 24 inches/year _____ inches/hour 0.38 inches/day 2.66 inches/week
 Actual: _____ inches/year _____ inches/hour _____ inches/day _____ inches/week

10.5 Total irrigation per year (gallons): Design: 21,200,000 gal Actual: 14,800,000 gal

10.6 Actual months used for irrigation (check all that apply):
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

10.7 Land application rate is based on:
 Hydraulic Loading Other (describe) _____
 Nutrient Management Plan (N&P) If N&P is selected, is the plan included? YES NO

Advanced Map Viewer



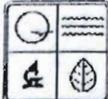
**Missouri
Department of
Natural Resources**

This timestamp indicates the date and time the map was generated. Data layers in the map are updated at a variety of intervals and may not reflect current conditions. 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.

RECEIVED

APR 22 2015

AP 21172



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

FOR AGENCY USE ONLY	
CHECK NUMBER	378996
DATE RECEIVED	May 1, 2015
FEE SUBMITTED	1050

Note ► PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.

1. This application is for:

An operating permit for a new or unpermitted facility:
Please indicate the original Construction Permit # _____

An operating permit renewal:
Please indicate the permit # MO- _____ Expiration Date _____

An operating permit modification:
Please indicate the permit # MO- 0119580 Modification Reason: Add capacity (WAP 4-28-15)

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

2. FACILITY

NAME		TELEPHONE NUMBER WITH AREA CODE	
Gilster-Mary Lee McBride Treatment Plant B		(573) 547-1083	
ADDRESS (PHYSICAL)		CITY	STATE
PCR 236		McBride	MO
		ZIP CODE	
			63776

3. OWNER

NAME		EMAIL ADDRESS		TELEPHONE NUMBER WITH AREA CODE	
Gilster-Mary Lee Corporation		jhutchinson@gilstermarylee.com		(618) 826-2361	
ADDRESS (MAILING)		CITY	STATE	ZIP CODE	
P.O. Box 227		Chester	IL	62233	

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

4. CONTINUING AUTHORITY

NAME		EMAIL ADDRESS		TELEPHONE NUMBER WITH AREA CODE	
Same as Owner					
ADDRESS (MAILING)		CITY	STATE	ZIP CODE	

5. OPERATOR

NAME		CERTIFICATE NUMBER		TELEPHONE NUMBER WITH AREA CODE	
ADDRESS (MAILING)		CITY	STATE	ZIP CODE	

6. FACILITY CONTACT

NAME		TITLE		TELEPHONE NUMBER WITH AREA CODE	
Stan Hadler				(573) 547-1083	
E-MAIL ADDRESS		FAX			
shadler@gilstermarylee.com		(573) 547-1083 x4197			

7. ADDITIONAL FACILITY INFORMATION

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

001 _____ 1/4 _____ 1/4 Sec 1879 T 36N R 11E Perry 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 3119 and NAICS _____ 002 - SIC _____ and NAICS _____
003 - SIC _____ and NAICS _____ 004 - SIC _____ and NAICS _____

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 or 2F. (2F is the U.S. EPA's Application for Storm Water Discharges Associate with Industrial Activity.)	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
B.	Is application for storm water discharges only? If yes, complete Form C or 2F.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
C.	Is your facility considered a "Primary Industry" under EPA guidelines: If yes, complete Forms C or 2F and D.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
D.	Is wastewater land applied? If yes, complete Form I.	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
E.	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"/>
F.	If you are a Class IA CAFO, please disregard part D and E of this section. However, please attach any revision to your Nutrient Management Plan.		
F.	Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.		
9. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary. See Instructions. (PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).			
NAME <i>Heartland Farm and Land</i>			
ADDRESS <i>311 PCR 804</i>		CITY <i>Perryville</i>	STATE <i>MO</i> ZIP CODE <i>63775</i>
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) <i>Thomas B. Welge</i>		TELEPHONE NUMBER WITH AREA CODE <i>618 826 2361</i>	
SIGNATURE <i>Thomas B. Welge</i>		DATE SIGNED <i>4/13/15</i>	

MO 780-1479 (07-14)

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 or 2F, if applicable?
- Form D, if applicable?
- Form I (Irrigation), if applicable?
- Form R (Sludge), if applicable?
- Revised Nutrient Management Plan, if applicable?

RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C - APPLICATION FOR DISCHARGE PERMIT -
MANUFACTURING, COMMERCIAL, MINING,
SILVICULTURE OPERATIONS, PROCESS AND STORMWATER

APP 9 9 2015

FOR AGENCY USE ONLY	
CHECK NO.	
DATE RECEIVED	FEE SUBMITTED

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY
Gilster-Mary Lee McBride Treatment Plant B

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 3119 B. SECOND _____

C. THIRD _____ D. FOURTH _____

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) _____ 1/4 _____ 1/4 SEC 1879 T 36N R 11E Perry COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)	RECEIVING WATER
001	Trib to Bois Brule Ditch

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

Food Manufacturing of breakfast cereal, bake mix products, marshmallow and frosting

Category: 40 CR R 406 WWP

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO SECTION 2.50)

1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				C. DURATION (in days)
				A. FLOW RATE (in mgd)		B. TOTAL VOLUME (specify with units)		
		A. DAYS PER WEEK (specify average)	B. MONTHS PER YEAR (specify average)	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	4. LONG TERM DAILY	3. MAXIMUM AVERAGE	

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?
 YES (COMPLETE B.) NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?
 YES (COMPLETE c.) NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B. LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

1. MAXIMUM QUANTITY			2. AFFECTED OUTFALLS (list outfall numbers)
A. QUANTITY PER DAY	B. UNITS OF MEASURE	C. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET, ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.
 YES (COMPLETE THE FOLLOWING TABLE) NO (GO TO 3.00)

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

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

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) NO (GO TO 3.20)

3.20 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.) NO (GO TO 3.30)

A. NAME	B. ADDRESS	C. TELEPHONE (area code and number)	D. POLLUTANTS ANALYZED (list)
Environmental Analysis South	4000 E. Jackson Blvd., Jackson, MO 63755	573-204-8817	TSS, Ca, Mg, K, Na, BOD5, COD, pH, Chloride, Ammonia as N, TKN, P, Nitrate/Nitrite, Oil and Grease

3.30 CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS APPLICATION AND ALL ATTACHMENTS AND THAT, BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

NAME AND OFFICIAL TITLE (TYPE OR PRINT) <i>Thomas B. Welge</i>	TELEPHONE NUMBER WITH AREA CODE <i>618 826 2361</i>
SIGNATURE (SEE INSTRUCTIONS) <i>Thomas B. Welge</i>	DATE SIGNED <i>4/13/15</i>

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet (Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)				4. INTAKE (optional)			
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)										14399 mg/L		23
B. Chemical Oxygen Demand (COD)										108648mg/L		23
C. Total organic Carbon (TOC)												
D. Total Suspended Solids (TSS)										17783 mg/L		23
E. Ammonia (as N)										2 mg/L		23
F. Flow	VALUE				VALUE					VALUE		23
G. Temperature (winter)	VALUE				VALUE					10500 gpd		23
H. Temperature (summer)	VALUE				VALUE				°C	VALUE		
I. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	VALUE				°C	VALUE		

PART B - Mark "X" in column 2A for each pollutant you know or have reason to believe is present. Mark "X" in column 2B for each pollutant you believe to be absent. If you mark column 2A for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS				5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (1) CONCENTRATION	B. MAXIMUM 30 DAY VALUE (if available) (2) MASS CONCENTRATION	C. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	D. NO. OF ANALYSES (2) MASS	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE (1) CONCENTRATION	B. NO. OF ANALYSES (2) MASS				
	CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS													
A. Bromide (24959-67-9)		X												
B. Chlorine, Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate - Nitrate (as N)	X									304 mg/L		23		

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)			B. NO. OF ANALYSES
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)	D. NO. OF ANALYSES	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES	
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS		
G. Nitrogen, Total Organic (as N)	X									155 mg/L		23
H. Oil and Grease	X									403 mg/L		23
I. Phosphorus (as P), Total (7723-14-0)	X									21 mg/L		23
J. Sulfate (as SO ₄) (14808-79-8)		X										
K. Sulfide (as S)		X										
L. Sulfite (as SO ₃) (14265-45-3)		X										
M. Surfactants		X										
N. Aluminum, Total (7429-90-5)		X										
O. Barium, Total (7440-39-3)		X										
P. Boron, Total (7440-42-8)		X										
Q. Cobalt, Total (7440-48-4)		X										
R. Iron, Total (7439-89-6)		X										
S. Magnesium, Total (7439-95-4)	X									19 mg/L		23
T. Molybdenum, Total (7439-98-7)		X										
U. Manganese, Total (7439-96-5)		X										
V. Tin, Total (7440-31-5)		X										
W. Titanium, Total (7440-32-6)		X										

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)	
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (if available)	B. MAXIMUM 30 DAY VALUE (if available)	C. LONG TERM AVRG. VALUE (if available)		A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE (1)	B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(2) MASS	
METALS, AND TOTAL PHENOLS										
1M. Antimony, Total (7440-36-9)		X								
2M. Arsenic, Total (7440-38-2)		X								
3M. Beryllium, Total (7440-41-7)		X								
4M. Cadmium, Total (7440-43-9)		X								
5M. Chromium III (16065-83-1)		X								
6M. Chromium VI (18540-29-9)		X								
7M. Copper, Total (7440-50-8)		X								
8M. Lead, Total (7439-92-1)		X								
9M. Mercury, Total (7439-97-6)		X								
10M. Nickel, Total (7440-02-0)		X								
11M. Selenium, Total (7782-49-2)		X								
12M. Silver, Total (7440-22-4)		X								
13M. Thallium, Total (7440-28-0)		X								
14M. Zinc, Total (7440-66-6)		X								
15M. Cyanide, Amenable to Chlorination		X								
16M. Phenols, Total		X								
RADIOACTIVITY										
(1) Alpha Total		X								
(2) Beta Total		X								
(3) Radium Total		X								
(4) Radium 226 Total		X								



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
FORM I - PERMIT APPLICATION FOR
OPERATION OF WASTEWATER IRRIGATION SYSTEMS

APR 22 2015

FOR AGENCY USE ONLY	
PERMIT NUMBER	MO -
DATE RECEIVED	

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

1. FACILITY INFORMATION

1.1 Facility Name Gilster-Mary Lee McBride Treatment Plant B	1.2 Permit Number MO- _____
1.3 Type of wastewater to be irrigated: <input type="checkbox"/> Domestic <input type="checkbox"/> Municipal <input type="checkbox"/> State/National Park <input type="checkbox"/> Seasonal business <input type="checkbox"/> Municipal with Pretreatment Program or Significant Industrial Users <input checked="" type="checkbox"/> Other (explain) <u>Process Wastewater</u> SIC Codes (list all that apply, in order of importance) _____	
1.4 Months when the business or enterprise will operate or generate wastewater: <input checked="" type="checkbox"/> 12 months per year <input type="checkbox"/> Part of year (list Months): _____	
1.5 This system is designed for: <input checked="" type="checkbox"/> No-discharge <input type="checkbox"/> Partial irrigation when feasible and discharge rest of time. <input type="checkbox"/> Irrigation during recreation season (April - October) and discharge during November - March. <input type="checkbox"/> Other (explain) _____	
1.6 List the Facility outfalls which will be applicable to the irrigation system. Outfall Numbers: <u>001</u>	

2. STORAGE BASINS

2.1 Number of storage basins: <u>3</u> Type of basin: <input type="checkbox"/> Steel <input type="checkbox"/> Concrete <input type="checkbox"/> Fiberglass <input type="checkbox"/> Earthen <input checked="" type="checkbox"/> Earthen with membrane liner

3. LAND APPLICATION SYSTEM

3.1 Number of irrigation sites <u>1</u> Total Acres <u>32.5</u> Location: ___ 1/4, ___ 1/4, ___ 1/4, Sec <u>3163</u> T <u>36N</u> R <u>11E</u> <u>Perry</u> County <u>32.5</u> Acres Location: ___ 1/4, ___ 1/4, ___ 1/4, Sec ___ T ___ R ___ County ___ Acres Attach pages as needed.
3.2 Attach a site map showing topography, storage basins, irrigation sites, property boundary, streams, wells, roads, dwellings, and other pertinent features.
3.3 Type of vegetation: <input type="checkbox"/> Grass hay <input type="checkbox"/> Pasture <input type="checkbox"/> Timber <input checked="" type="checkbox"/> Row crops <input type="checkbox"/> Other (describe) _____
3.4 Wastewater flow (dry weather) gallons/day: Average annual: <u>26250</u> Seasonal _____ Off-season _____ Months of seasonal flow: <u>12</u>

3. LAND APPLICATION SYSTEM (continued)

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

Design: 24 inches/year _____ inches/hour 0.38 inches/day 2.66 inches/week

Actual: _____ inches/year _____ inches/hour _____ inches/day _____ inches/week

Total Irrigation per year (gallons): 21.2M Design 11.8M Actual

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

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

3.6 Land Application Rate is based on:

Nutrient Management Plan (N&P)

Hydraulic Loading

Other (describe) _____

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

Equipment Flow Capacity: 42000 Gallons per hour 280 Total hours of operation per year

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

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

Other (describe): _____

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

_____ Permanent flowing stream _____ Losing Stream _____ Intermittent (wet weather) stream _____ Lake or pond

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

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

Date of O&M Plan: _____

4. CERTIFICATION

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

<p>OWNER OR AUTHORIZED REPRESENTATIVE</p> <p><u>Thomas B. Welge</u></p>	<p>OFFICIAL TITLE</p> <p><u>VP Tech Sales & General Counsel</u></p>
<p>EMAIL ADDRESS</p> <p><u>twelge@gilstermaytee.com</u></p>	<p>TELEPHONE NUMBER WITH AREA CODE</p> <p><u>618 826 2361</u></p>
<p>SIGNATURE</p> <p><u>Thomas B. Welge</u></p>	<p>DATE SIGNED</p> <p><u>4/13/15</u></p>

780-1686 (08-14)