

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

MISSOURI CLEAN WATER COMMISSION



**MISSOURI STATE OPERATING PERMIT**

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

Permit No. MO-0137316

Owner: Village of Guilford  
Address: P.O. Box 63, Guilford, Missouri 64457

Continuing Authority: Same as above  
Address: Same as above

Facility Name: Village of Guilford Wastewater Treatment Facility  
Facility Address: Highway M and Guilford, Guilford, Missouri 64457

Legal Description: SE $\frac{1}{4}$ , SW $\frac{1}{4}$ , Sec. 16, T62N, R34W, Nodaway County  
UTM Coordinates: X= 352147, Y= 4448102

Receiving Stream: Tributary to Platte River  
First Classified Stream and ID: Platte River (P) (00312) 303 (d) List  
USGS Basin & Sub-watershed No.: (10240012-0206)

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

**FACILITY DESCRIPTION**

Outfall #001 – POTW Wastewater Treatment Facility - SIC #4952  
Design population equivalent is 87 w/48 service connections  
Design flow is 8700 gallons per day.  
Actual flow is 4500 gallons per day.  
Design sludge production is 5.3 dry tons/year.

This permit authorizes only land application of wastewater 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.

September 1, 2016  
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

December 31, 2019  
Expiration Date

John Madros, Director, Water Protection Program

**FACILITY DESCRIPTION (continued):**

Permitted Feature #001 – POTW – SIC #4952

Legal Description: SE¼, SW¼, Sec. 16, T62N, R34W, Nodaway County  
UTM Coordinates: X= 352147, Y= 4448102  
Receiving Stream: Tributary to Platte River  
First Classified Stream and ID: Platte River (P) (00312) 303 (d) List  
USGS Basin & Sub-watershed No.: (10240012-0206)

**Facility Type:**

Recirculating Sand Filter with Subsurface Drip Irrigation System

**Design Basis:**

Design dry weather flows: 8700 gpd  
Design PE: 87

**Septic Tank:**

Volume: 13,100 gallons

**Recirculating Sand Filter:**

Surface Area: 1440 ft<sup>2</sup>/bed (2880 ft<sup>2</sup> total)  
Depth: 54 in  
Recirculation Ratio: 4:1  
Maximum Application Rate: 5 gallons/day/ft<sup>2</sup>

**Storage Tank:**

Storage volume (minimum to maximum water levels): 8700 gallons

Permitted Feature #002 -- Subsurface Drip Irrigation Field

Legal Description: SE¼, SW¼, Sec. 16, T62N, R34W, Nodaway County  
UTM Coordinates: X= 352147, Y= 4448102  
Receiving Stream: Tributary to Platte River  
First Classified Stream and ID: Platte River (P) (00312) 303 (d) List  
USGS Basin & Sub-watershed No.: (10240012-0206)

**Land Application:**

Irrigation Volume/year: 3,175,500 gallons at design loading  
Irrigation areas: 1.4 acres at design loading (1.4 acres total available)  
Application rates: 0.01 inch/hour; 0.24 inch/day; 1.68 inches/week; 88 inches/year  
Field slopes: less than 5 percent  
Equipment type: Buried Drip Irrigation  
Vegetation: Pasture  
Application rate is based on: Hydraulic loading rate

PERMITTED FEATURE #002	TABLE A.1. LAND APPLICATION LIMITATIONS AND EFFLUENT 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 upon issuance 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 PARAMETERS	UNITS	FINAL LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Irrigation Field Operational Monitoring (Notes 1)						
Irrigation Period	hours	*			daily	total
Volume Irrigated	gallons	*			daily	total
Application Area	acres	*			daily	total
Application Rate	inches	*			daily	total
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2017</u> .						

\* Monitoring requirement only.

Note 1 - Records shall be maintained and summarized into an annual operating report, which shall be submitted by January 28th of each year for the previous calendar year period using report forms approved by the Department. Details of what to include in the annual report can be found in Special Condition #2.

## B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Parts I, II, and III standard conditions dated October 1, 1980 and August 15, 1994, and hereby incorporated as though fully set forth herein.

## C. SPECIAL CONDITIONS

1. Facility Supervision: The facility will be monitored on a weekly basis (minimum) to ensure treatment efficacy and proficient operation. The following must be checked on a weekly basis to ensure the facility is operating correctly. If so desired, the facility may retain the services of a certified wastewater operator to perform the following checks:
  - (a) Monitoring equipment is working properly. Relevant physical parameters are being recorded.
  - (b) Overall pump appearance and pump operation will be noted. Pump operational data for the previous week will be recorded (Pump Runtime, Pump Load)
  - (c) Septic tank is working efficiently; the level of sludge in the septic tank will be monitored and recorded on an annual basis. The septic tank should be cleaned on an as-needed basis, but the interval of time between cleaning/flushing of the septic tank should not exceed ten (10) years.
  - (d) Overall appearance of the sand filter will be noted. In particular, the supervisor will note if the filter appears overly dry or cracked, or if any vegetation is seen growing from the filter itself.
  - (e) The condition of the sand filter distribution lines will be recorded. Any plugged orifices or cracked distribution lines will be of particular note
  - (f) Dosing of the sand filter will be noted. The total dosing time for the previous week will be recorded
  - (g) The condition of the irrigation distribution lines will be noted. Any cracks or plugged orifices will be recorded.
  - (h) Any ponding or standing surface water on any part of the wastewater treatment site will be recorded. Any flowing water will be noted, as well as the direction of flow.
  - (i) The ambient weather conditions will be recorded.
2. Annual Facility Report: The facility will submit an annual report detailing the operation of the treatment facility for the previous year. The report will contain following:
  - (a) The quarterly and annual flow rates
  - (b) The results of the sampling for the year
  - (c) The level of sludge in the septic tank
  - (d) A description of any aberrant conditions noted during the weekly facility inspections, as described above
  - (e) A description of any instances of unusual odors emanating from the site
  - (f) A description of any and all maintenance and repair work performed at the facility
  - (g) Any other information which the facility supervisor may deem relevant to an understanding of the operation of the facility for the previous year
3. Operation and Maintenance Manual. 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. The O&M Manual shall be reviewed and updated when there is a change in equipment and at least every five years.
4. All emergency outfalls must be clearly marked in the field.
5. Permittee will cease operation by connection to a facility with an area-wide management plan per 10 CSR 20-6.010(3)(B) within 90 days of notice of its availability.

C. SPECIAL CONDITIONS (Continued)

6. Changes in Discharges of Toxic Substances

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

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
    - (1) One hundred micrograms per liter (100 µg/L);
    - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
    - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
    - (4) The level established in Part A of the permit by the Director.
  - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
7. This permit authorizes the land application of domestic wastewater only. There shall be no land application of any pollutant in sufficient amounts to cause harm to the soil structure or productivity, or cause stress or toxicity to plant life.
  8. There shall be no discharge of any material from this facility to waters of the state. Wastewater shall be stored and land applied during suitable conditions so that there is no-discharge from the storage basins or irrigation sites.
  9. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).
  10. Bypasses are not authorized at this facility and are subject to 40 CFR 122.41(m). If a bypass occurs, the permittee shall report in accordance to 40 CFR 122.41(m)(3)(i), and with Standard Condition Part I, Section B, subsection 2. Bypasses are to be reported to the appropriate Department of Natural Resources Regional Office. Any release from storage structures not associated with the designed land application system shall be reported as a bypass within 24 hours, whether or not the permittee believes such discharges reach waters of the state.
  11. Land application, whether surface or subsurface, shall not occur within 300 feet of a well, rim of a sinkhole, or losing stream; within 150 feet of a dwelling; or within 50 feet of the permitted facility's property line.
  12. Wastewater may be land applied to hay, row crop or timber. Surface application rates shall not exceed 1.0 inch per day, 3.0 inches per week, or 24 inches per year. Subsurface application rates shall be determined through the construction permit process, and shall not exceed the soil permeability rate at the time of application. Subsurface application shall not cause surfacing of wastewater.
  13. Facilities desiring coverage under this permit shall be constructed and operated in accordance with 10 CSR 20-8. Exceptions or deviations may be considered by the department when appropriate, and authorized in writing (such as in a construction permit). Facilities not constructed in accordance with current design standards may be required to obtain a site specific permit, or upgrade to meet current design standards, when determined necessary to protect waters of the state.
  14. Public access to surface land application area must not be allowed by the permittee due to the lack of disinfection requirements in this permit. Access to subsurface distribution areas must be controlled to prevent damage from heavy vehicles or digging.
  15. Surface and subsurface systems and application sites shall be visually inspected at least once/day when wastewater irrigation occurs to check for equipment malfunctions and runoff from the irrigation site.
  16. Subsurface dispersion systems under this permit are Class V wells if they have the capacity to serve 20 or more people and shall comply with the reporting requirements of 40 CFR 144.26. In addition, an inventory form shall be submitted to the Department of Natural Resources' Missouri Geological Survey for these wells, as required under Federal regulations. Questions about whether a subsurface dispersion system is a Class V well can be directed to the Missouri Geological Survey's Energy Resources Unit at 573-368-2100.
  17. A construction permit is required to build a subsurface system, including installation of any tanks and distribution lines associated with a subsurface system.

REQUIREMENTS (continued)

18. For subsurface systems, vegetation such as grasses or other non-food crops must be grown over the system. The only equipment allowed on the area with the subsurface system is equipment used to maintain the vegetation. No livestock shall be allowed to use the area with the subsurface system.
19. Subsurface systems are allowed to operate when soil is not frozen at the depth of dispersion. Additionally, subsurface dispersion is allowed during snow covered conditions.
20. Records of maintenance for subsurface systems must be maintained for at least 5 years. Examples include filter replacement, pumping (removal) of sludge from tanks, etc. These records shall be made available during inspection, or upon request to the department.
21. A least one gate, constructed of materials comparable to the fence, must be provided to access any storage basin and provide for maintenance and mowing. The gate shall remain locked except when opened by the permittee to perform maintenance or mowing.
22. At least one sign shall appear on the fence on each side of each facility. Minimum wording shall be "SEWAGE TREATMENT FACILITY – KEEP OUT", in letters at least 2 inches high.
23. 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:
    - (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;
    - (1) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
    - (2) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
    - (3) There shall be no significant human health hazard from incidental contact with the water;
    - (4) There shall be no acute toxicity to livestock or wildlife watering;
    - (5) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
    - (6) 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.

**Missouri Department of Natural Resources**  
**FACT SHEET**  
**FOR THE PURPOSE OF PERMIT ISSUANCE**  
**OF**  
**MO-0137316**  
**VILLAGE OF GUILFORD**

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 a Major , Minor , Industrial Facility ; Variance .

**Part I – Facility Information**

Facility Type: POTW Facility SIC Code(s): 4952

Facility Description:

Septic tank/Recirculating sand filter/Subsurface Drip Irrigation

Comments:

The Village of Guilford has a population of 87 individuals that is currently using a system of individual septic tanks to treat the city wastewater. The facility has applied for and been granted a loan to construct a communal wastewater treatment system that will serve the entire village. Given the desire for a low-maintenance system that will provide a level of treatment equivalent to secondary, a system comprised of septic tank followed by a recirculating sand filter was selected as the best candidate from the other available options (lagoon, vegetative submerged bed). The Village of Guilford will dispose of the treated wastewater by land application. The permit contains effluent limitations for the regulated pollutants, as well as limitations on how to best manage the disposal of wastewater by land application.

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

- Yes; (please provide simple description or reference appropriate location in the Fact Sheet.  
 - No.

Application Date: 04/01/2012  
Expiration Date: 04/01/2013

**PERMITTED FEATURE(S) TABLE:**

PERMITTED FEATURE	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE
#001	0.0135	Storage Basin	Domestic
#002	--	Subsurface irrigation	Domestic

PF #001

Legal Description: SW¼, NE¼, NW¼, Sec. 21, T62N, R34W, Nodaway County  
 UTM Coordinates:X= 352147, Y= 4448102

Receiving Water Body’s Water Quality & Facility Performance History:

This is a new facility that will not drain to a stream or a tributary to a stream.

**Part II – Operator Certification Requirements**

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation. As per [10 CSR 20-9.010(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Check boxes below that are applicable to the facility;

- Owned or operated by or for:
  - Municipalities
  - Public Sewer District:
  - County
  - Public Water Supply Districts:
  - Private sewer company regulated by the Public Service Commission:
  - State or Federal agencies:

Each of the above entities are only applicable if they have a Population Equivalent greater than two hundred (200) and/or fifty (50) or more service connections.

Not Applicable : This facility is not required to have a certified operator; the population is less than 200 with less than 50 service connections as stipulated in 10 CSR 20-9.020(2)(A). The facility has demonstrated a willingness to ensure proper operation of the wastewater treatment facility. However, the Department is recommending that the Village of Guilford retain the services of a certified operator on a part-time basis, or obtain the proper certification for a resident of the Village of Guilford.

**Part III – Receiving Stream Information**

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

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

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

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

**RECEIVING STREAM(S) TABLE:**

WATERBODY NAME	CLASS	WBID	DESIGNATED USES*	8-DIGIT HUC	ECOLOGICAL DRAINAGE UNIT:
Platte River	P	00312	IRR, LWW, AQL, WBC(B), HHP, SCR, DWS	10240012	PLATTE

\* - 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).

**RECEIVING STREAM MONITORING REQUIREMENTS:**

No receiving water monitoring requirements recommended at this time.

**Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions**

**ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

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

Not Applicable ;

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

**ANTI-BACKSLIDING:**

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

Not Applicable : New Facility, backsliding does not apply

**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 will have no discharge with subsurface irrigation.

**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.

**BIO-SOLIDS, SLUDGE, & SEWAGE SLUDGE:**

Bio-solids are solid materials resulting from wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sludge is any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works.

Applicable ; 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.

**PRETREATMENT PROGRAM:**

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Pretreatment programs are required at any POTW (or combination of POTW operated by the same authority) and/or municipality with a total design flow greater than 5.0 MGD and receiving industrial wastes that interfere with or pass through the treatment works or are otherwise subject to the pretreatment standards. Pretreatment programs can also be required at POTWs/municipals with a design flow less than 5.0 MGD if needed to prevent interference with operations or pass through.

Several special conditions pertaining to the permittee's pretreatment program may be included in the permit, and are as follows:

- Implementation and enforcement of the program,
- Annual pretreatment report submittal,
- Submittal of list of industrial users,
- Technical evaluation of need to establish local limitations, and
- Submittal of the results of the evaluation

Not Applicable ;

The permittee, at this time, is not required to have a Pretreatment Program or does not have an approved pretreatment program.

**REASONABLE POTENTIAL ANALYSIS (RPA):**

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard.

In accordance with [40 CFR Part 122.44(d)(iii)] if the permit writer determines that any given pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

Not Applicable ;

A RPA was not conducted for this facility.

**REMOVAL EFFICIENCY:**

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD<sub>5</sub>) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals. Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ [www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm](http://www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm).

Not Applicable ; The facility is a no-discharge facility

**Sanitary Sewer Overflows (SSOs), Bypasses, Inflow & Infiltration (I&I) – Prevention/Reduction:**

Sanitary Sewer Systems (SSSs) are municipal wastewater collection systems that convey domestic, commercial, and industrial wastewater, and limited amounts of infiltrated groundwater and storm water (i.e. I&I), to a POTW. SSSs are not designed to collect large amounts of storm water runoff from precipitation events.

Untreated or partially treated discharges from SSSs are commonly referred to as SSOs. SSOs have a variety of causes including blockages, line breaks, sewer defects that allow excess storm water and ground water to overload the system, lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. A SSOs is defined as an untreated or partially treated sewage release from a SSS. SSOs can occur at any point in an SSS, during dry weather or wet weather. SSOs include overflows that reach waters of the state. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations. SSSs can back up into buildings, including private residences. When sewage backups are caused by problems in the publicly-owned portion of an SSS, they are considered SSOs.

Not Applicable ;

This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri State Environmental Laws and Regulations to allow untreated wastewater to discharge to waters of the state. It is highly recommended that the facility utilize the guidance contained in the US EPA's Guide for Evaluating Capacity, Management, Operation and Maintenance (CMOM) Programs of Sanitary Sewer Collection Systems (Document # EPA 305-B-05-002). The CMOM identifies some of the criteria used by the EPA to evaluate a collection system's management, operation, and maintenance, and is applicable to small, medium, and large systems.

**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.

Not Applicable ;

At this time, the permittee is not required to develop and implement a SWPPP.

**VARIANCE:**

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

Not Applicable ;

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

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

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

Not Applicable ;

Wasteload allocations were not calculated.

**WLA MODELING:**

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used. WQBELs are determined through a Waste Load Allocation (WLA) study.

Not Applicable ;

A WLA study was either not submitted or determined not applicable by Department staff.

**WATER QUALITY STANDARDS:**

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

**WHOLE EFFLUENT TOXICITY (WET) TEST:**

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

Not Applicable ;

At this time, the permittee is not required to conduct a WET test for this facility.

**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 ;

Platte River is listed on the 2014 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 Platte River.

## **Part V – Effluent Limits Determination**

### **PERMITTED FEATURE #002 – IRRIGATION FIELD**

- **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.

### **Minimum Sampling and Reporting Frequency Requirements.**

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
IRRIGATION PERIOD	DAILY	ONCE/YEAR
VOLUME IRRIGATED	DAILY	ONCE/YEAR
APPLICATION AREA	DAILY	ONCE/YEAR
APPLICATION RATE	DAILY	ONCE/YEAR

## **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.

### **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 began on April 19, 2013 and ended May 20, 2013. No comments were received.

## **Part VII – 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.

Applicable; The Department is required to determine findings of affordability because the permit applies to a **combined or separate sanitary sewer system for a publically-owned treatment works**.

**Finding of affordability** - The Department has made a reasonable search for empirical data indicating the permit is affordable. The search consisted of a review of Department records that might contain economic data on the community and a review of information provided by the applicant as part of the application. If the empirical cost data was used by the permit writer, this data may consist of median household income, any other ongoing projects that the Department has knowledge, and other demographic financial information that the community provided as contemplated by Section 644. 145.3. See **Appendix B – Affordability Analysis**

DATE OF FACT SHEET: FEBRUARY 15, 2013

COMPLETED BY:  
SCOTT HONIG AND MATT ARNOLD  
KANSAS CITY REGIONAL OFFICE  
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FINALIZED BY TODD BLANC, WPP, WPCB ENGINEERING SECTION  
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**APPENDIX B - Affordability Analysis**

**Missouri Department of Natural Resources  
Water Protection Program  
Affordability Determination and Finding  
(In accordance with RSMo 644.145)**

**Village of Guilford  
Hwy M and Guilford  
Guilford, MO 64457**

Section 644.145 RSMo requires DNR to make a “finding of affordability” when “issuing permits under” or “enforcing provisions of” state or federal clean water laws “pertaining to any portion of a combined or separate sanitary sewer system for publicly-owned treatment works.”

**Facility Description:**

Septic Tank/ Recirculating Sand Filter / Subsurface Drip Irrigation/ sludge disposal by contract hauler.

Receiving Stream: Unnamed Tributary to Platte River  
**First Classified Stream and ID:** Platte River (P) (00312)  
USGS Basin & Sub-watershed No.: (102400120206)

Residential Connections: 49  
Commercial Connections: 0  
Total Connections: 49

The facility currently does not have a wastewater treatment facility or collection system. The city voluntarily applied for, and received, grants and loans for the purpose of installing a centralized collection and treatment facility. Once the collection and treatment facility is installed, an operating permit will be issued for the facility.

**Range of Anticipated Costs Associated with Complying with the New Requirements:**

The Department estimates the cost for adding collection and treatment is between \$811,000 and \$1,075,000, with an annual operation and maintenance cost between \$20,000 and \$50,000 (*CAPDEWORKS cost estimator was used*). This cost, if financed through user fees, might cost each household between \$183 and \$225 per month. However, the Village of Guilford has secured grants and loans to assist in covering the cost of the project.

**(1) A community’s financial capability and ability to raise or secure necessary funding;**

The community initially proposed a user rate of \$36.27 for the first 2,000 gallons of water usage and an additional charge of \$4.31 per 1,000 gallons. The expected monthly water usage is 2,850 gallons, which would create an average sewer bill of \$39.92/month. This corresponds to 1.26% of the 2009 median household income of \$38,096.

The Village applied for and received a Missouri Department of Economic Development Community Development Block Grant of \$245,000. They also applied for and received a Rural Development Grant of \$618,500, a second PPG Grant of 10,100 and a Loan of \$245,000 from the US Department of Agriculture. The city plans on funding at least \$4,900 of the cost directly.

**(2) Affordability of pollution control options for the individuals or households of the community;**

Estimated capital cost of pollution control options:	\$1,113,500
Annual Cost of Additional (Operating Costs & Debt Service):	\$10,000
Estimated Resulting User Rate and/or Cost per Household:	About \$40/month
Median Household Income	\$38,096

Check Appropriate Box	Financial Impact	Residential Indicator (Usage Rate as a percent of MHI = annual cost/MHI)
<input type="checkbox"/>	Low	Less than 1% MHI
<input checked="" type="checkbox"/>	Medium	Between 1% and 2% MHI
<input type="checkbox"/>	High	Greater than 2% MHI

**(3) An evaluation of the overall costs and environmental benefits of the control technologies;**

The cost of the upgrades to the collection and treatment facility are encapsulated in the above figures. The benefits include both environmental and economic benefits. The Village of Guilford currently does not have a collection and treatment system. This severely limits the growth potential of the city, and installation of the proposed system should create a more hospitable environment for both residential and commercial influx and improvement. In addition, the Village of Guilford currently uses individual septic tanks to treat their waste. They have no secondary treatment available, nor do they have a more suitable method of disposing of their treated wastewater. Installation of the proposed collection and treatment facility will provide a level of treatment and disposal that is considerably more sanitary, as well as being consistent with the level of treatment stipulated by the water pollution regulations for the state of Missouri.

**(4) An assessment of any other relevant local community economic condition.**

The community did not report any other relevant local economic conditions.

**Conclusion and Finding**

The Village of Guilford has voluntarily requested funding to upgrade their wastewater collection and treatment capability. They have received such funding, and are in a position to honor the terms of the received grants and loans. In order to ensure that the facility could meet the financial burden of the proposed improvements, the Department considered four (4) of the seven (7) criteria presented in subsection 644.145.3 when evaluating the affordability of the relevant actions. Given the status of the project as a voluntary undertaking on the part of the Village of Guilford, the remaining three (3) criteria were deemed not applicable, and were not included. Taking into consideration these criteria, this analysis examined whether the above referenced improvements would not be unduly financially burdensome. As a result of reviewing the above criteria, the Department hereby finds that the action described above will likely result in a reasonable burden with regard to the community's overall financial capability and a medium financial impact for most individual customers/households.

**STANDARD CONDITIONS FOR NPDES PERMITS  
ISSUED BY  
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION  
AUGUST 15, 1994**

**PART III – SLUDGE & BIOSOLIDS FROM DOMESTIC WASTEWATER TREATMENT FACILITIES**

**SECTION A – GENERAL REQUIREMENTS**

1. This permit pertains to sludge requirements under the Missouri Clean Water Law and regulation and incorporates applicable federal sludge disposal requirements under 40 CFR 503. The Environmental Protection Agency (EPA) has principal authority for permitting and enforcement of the federal sludge regulations under 40 CFS 503 until such time as Missouri is delegated the new EPA sludge program. EPA has reviewed and accepted these standard sludge conditions. EPA may choose to issue a separate sludge addendum to this permit or a separate federal sludge permit at their discretion to further address federal requirements.
2. These PART III Standard Conditions apply only to sludge and biosolids generated at domestic wastewater treatment facilities, including public owned treatment works (POTW) and privately owned facilities.
3. Sludge and Biosolids Use and Disposal Practices.
  - a. Permittee is authorized to operate the sludge and biosolids treatment, storage, use, and disposal facilities listed in the facility description of this permit.
  - b. Permittee shall not exceed the design sludge volume listed in the facility description and shall not use sludge disposal methods that are not listed in the facility description, without prior approval of the permitting authority.
  - c. Permittee is authorized to operate the storage, treatment or generating sites listed in the Facility Description section of this permit.
  - d. A separate operating permit is required for each operating location where sludge or biosolids are generated, stored, treated, or disposed, unless specifically exempted in this permit or in 10 CSR 20, Chapter 6 regulations. For land application, see section H, subsection 3 of these standard conditions.
4. Sludge Received From Other Facilities
  - a. Permittees may accept domestic wastewater sludge from other facilities including septic tank pumpings from residential sources as long as the design sludge volume is not exceeded and the treatment facility performance is not impaired.
  - b. The permittee shall obtain a signed statement from the sludge generator or hauler that certifies the type and source of the sludge.
  - c. Sludge received from out-of-state generators shall receive prior approval of the permitting authority and shall be listed in the facility description or special conditions section of the permit.
5. These permit requirements do not supersede nor remove liability for compliance with county and other local ordinances.
6. These permit requirements do not supersede nor remove liability for compliance with other environmental regulations such as odor emissions under the Missouri Air Pollution Control Law and regulations.
7. This permit may (after du process) be modified, or alternatively revoked and reissued, to comply with any applicable sludge disposal standard or limitation issued or approved under Section 405(d) of the Clean Water Act or under Chapter 644 RsMo.
8. In addition to the STANDARD CONDITIONS, the department may include sludge limitations in the special conditions portion or other sections of this permit.
9. Alternate Limits in Site Specific Permit.

Where deemed appropriate, the department may require an individual site specific permit in order to authorize alternate limitations:

  - a. An individual permit must be obtained for each operating location, including application sites.
  - b. To request a site specific permit, an individual permit application, permit fees, and supporting documents shall be submitted for each operating location. This shall include a detailed sludge/biosolids management plan or engineering report.
10. Exceptions to these Standard Conditions may be authorized on a case-by-case basis by the department, as follows:
  - a. The department will prepare a permit modification and follow permit public notice provisions as applicable under 10 CSR 20-6.020, 40 CFR 124.10, and 40 CFR 501.15(a)(2)(ix)(E). This includes notification of the owners of property located adjacent to each land application site, where appropriate.
  - b. Exceptions cannot be granted where prohibited by the federal sludge regulations under 40 CFR 503.
11. Compliance Period  
Compliance shall be achieved as expeditiously as possible but no later than the compliance dates under 40 CFR 503.2.

## **SECTION B – DEFINITIONS**

1. Biosolids means an organic fertilizer or soil amendment produced by the treatment of domestic wastewater sludge. Untreated sludge or sludge that does not conform to the pollutants and pathogen treatment requirements in this permit is not considered biosolids.
2. Biosolids land application facility is a facility where biosolids are spread onto the land at agronomic rates for production of food or fiber. The facility includes any structures necessary to store the biosolids until soil, weather, and crop conditions are favorable for land application.
3. Class A biosolids means a material that has met the Class A pathogen reduction requirements or equivalent treatment by a Process to Further Reduce Pathogens (PFRP) in accordance with 40 CFR 503.
4. Class B biosolids means a material that has met the Class B pathogen reduction requirements or equivalent treatment by a Process to Significantly Reduce Pathogens (PFRP) in accordance with 40 CFR 503.
5. Domestic wastewater means wastewater originating from the sanitary conveniences of residences, commercial buildings, factories and institutions; or co-mingled sanitary and industrial wastewater processed by a public owned treatment works (POTW) or privately owned facility.
6. Mechanical treatment plants are wastewater treatment facilities that use mechanical devices to treat wastewater, including septic tanks, extended aeration, activated sludge, contact stabilization, trickling filters, rotating biological discs, and other similar facilities. It does not include unaerated wastewater treatment lagoons and constructed wetlands for wastewater treatment.
7. Operating location as defined in 10 CSR 20-2.010 is all contiguous lands owned, operated or controlled by one (1) person or by two (2) or more persons jointly or as tenants in common.
8. Plant Available Nitrogen (PAN) is the nitrogen that will be available to plants during the next growing season after biosolids application.
9. Sinkhole is a depression in the land surface into which surface water flows to join an underground drainage system.
10. Site Specific Permit is a permit that has alternate limits developed to address specific site conditions for each land application site or storage site.
11. Sludge is the solid, semisolid, or liquid residue removed during the treatment of wastewater. Sludge includes septage removed from septic tanks.
12. Sludge lagoon is an earthen basin that receives sludge that has been removed from a wastewater treatment facility. It does not include a wastewater treatment lagoon or sludge treatment units that are not a part of a mechanical wastewater treatment facility.
13. Wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamp, marshes, bogs, and similar areas. Wetlands do not include constructed wetlands used for wastewater treatment.

## **SECTION C – MECHANICAL WASTEWATER TREATMENT FACILITIES**

1. Sludge shall be routinely removed from the wastewater treatment facilities and handled according to the permit facility description and sludge conditions in this permit.
2. The permittee shall operate the facility so that there is no sludge loss into the discharged effluent in excess of permit limits, no sludge bypassing, and no discharge of sludge to waters of the state.
3. Mechanical treatment plants shall have separate sludge storage compartments in accordance with 10 CSR 20, Chapter 8. Failure to remove sludge from these storage compartments on the required design schedule is a violation of this permit.

## **SECTION D – SLUDGE DISPOSED AT OTHER TREATMENT FACILITY OR CONTRACT HAULER**

1. This section applies to permittees that haul sludge to another treatment facility for disposal or use contract haulers to remove and dispose of sludge.
2. Permittees that use contract haulers are responsible for compliance with all the terms of this permit including final disposal, unless the hauler has a separate permit for sludge or biosolids disposal issued by the department; or the hauler transports the sludge to another permitted treatment facility.
3. The permittee shall require documentation from the contractor of the disposal methods used and permits obtained by the contractor.
4. Testing of sludge, other than total solids content, is not required if sludge is hauled to a municipal wastewater treatment facility or other permitted wastewater treatment facility.

## **SECTION E – WASTEWATER TREATMENT LAGOONS AND STORMWATER RETENTION BASINS**

1. Sludge that is retained within a wastewater treatment lagoon is subject to sludge disposal requirements when the sludge is removed from the lagoon or when the lagoon ceases to receive and treat wastewater.
2. If sludge is removed during the year, an annual sludge report must be submitted.
3. Storm water retention basins or other earthen basins, which have been used as sludge storage for a mechanical treatment system is considered a sludge lagoon and must comply with Section G of this permit.

## **SECTION F – INCINERATION OF SLUDGE**

1. Sludge incineration facilities shall comply with the requirements of 40 CFR 503 Subpart E; air pollution control regulations under 10 CSR 10; and solid waste management regulations under 10 CSR 80.
2. Permittee may be authorized under the facility description of this permit to store incineration ash in lagoons or ash ponds. This permit does not authorize the disposal of incineration ash. Incineration ash shall be disposed in accordance with 10 CSR 80; or if the ash is determined to be hazardous waste, shall be disposed in accordance with 10 CSR 25.
3. In addition to normal sludge monitoring, incineration facilities shall report the following as part of the annual report, quantity of sludge incinerated, quantity of ash generated, quantity of ash stored; and ash use or disposal method, quantity, and location. Permittee shall also provide the name of the disposal facility and the applicable permit number.
4. Additional limitations, monitoring, and reporting requirements may be addressed in the Special Conditions sections of this permit.

## **SECTION G – SURFACE DISPOSAL SITES AND SLUDGE LAGOONS**

1. Surface disposal sites shall comply with the requirements in 40 CFR 503 Subpart C, and solid waste disposal regulations under 10 CSR 80.
2. Additional limitations, monitoring, and reporting requirements may be addressed in the Special Conditions section of this permit.
3. Effective February 19, 1995, a sludge lagoon that has been in use for more than two years without removal of accumulated sludge, or that has not been properly closed shall comply with one of the following options:
  - a. Permittee shall obtain a site specific permit to address surface disposal requirements under 40 CFR 503, ground water quality regulations under 10 CSR 20, Chapter 7 and 8, and solid waste management regulations under 10 CSR 80;
  - b. Permittee shall clean out the sludge lagoon to remove any sludge over two years old and shall continue to remove accumulated sludge at least every two years or an alternate schedule approved under 40 CFR 503.20(b). In order to avoid damage to the lagoon seal during cleaning, the permittee may leave a layer of sludge on the bottom of the lagoon, upon prior approval of the department; or
  - c. Permittee shall close the lagoon in accordance with Section 1.

## **SECTION H – LAND APPLICATION**

1. The permittee shall not land apply sludge or biosolids unless land application is authorized in the Facility Description or special conditions section of the permit.
2. This permit replaces and terminates all previous sludge management plan approvals by the department for land application of sludge or biosolids.
3. Land application sites within a 20 mile radius of the wastewater treatment facility are authorized under this permit when biosolids are applied for beneficial use in accordance with these standard conditions unless a site specific permit is required under Section A, Subsection 9.
4. Biosolids shall not be applied unless authorized in this permit or exempted under 10 CSR 20, Chapter 6.
  - a. This permit does not authorize the land application of sludge except when sludge meets the definition of biosolids.
  - b. This permit authorizes “Class A or B” biosolids derived from domestic wastewater sludges to be land applied onto grass land, crop land, timber land or other similar agricultural or silviculture lands at rates suitable for beneficial use as organic fertilizer and soil conditioner.
5. Public Contact Sites.  
Permittees who wish to apply Class A biosolids to public contact sites must obtain approval from the department. Applications for approval shall be in the form of an engineering report and shall address priority pollutants and dioxin concentrations. Authorization for land applications must be provided in the special conditions section of this permit or in a separate site-specific permit.

6. Agricultural and Silvicultural Sites.

In addition to specified conditions herein, this permit is subject to the attached Water Quality Guides numbers WQ 422 through 426 published by the University of Missouri, and hereby incorporated as though fully set forth herein. The guide topics are as follows:

WQ 422	Land Application of Septage
WQ 423	Monitoring Requirements for Biosolids Land Application
WQ 424	Biosolids Standards for Pathogens and Vectors
WQ 425	Biosolids Standards for Metals and Other Trace Substances
WQ 426	Best Management Practices for Biosolids Land Applications

### SECTION I – CLOSURE REQUIREMENTS

1. This section applies to all wastewater treatment facilities (mechanical and lagoons) and sludge or biosolids storage and treatment facilities and incineration ash ponds. It does not apply to land application sites.
2. Permittees who plan to cease operation must obtain department approval of a closure plan which addresses proper removal and disposal of all residues, including sludge, biosolids, and ash. Permittee must maintain this permit until the facility is properly closed per 10 CSR 20-6.010 and 10 CSR 20-6.015.
3. Residuals that are left in place during closure of a lagoon or earthen structure shall not exceed the agricultural loading rates as follows:
  - a. Residuals shall meet the monitoring and land application limits for agricultural rates as referenced in Section H of these standard conditions.
  - b. If a wastewater treatment lagoon has been in operation for 15 years or more, the sludge in the lagoon qualifies for Class B with respect to pathogens (see WQ 424, Table 3), and testing for fecal coliform is not required. For other lagoons, testing for fecal coliform is required to show compliance with Class B limitations. See WQ 423 and 424.
  - c. The allowable nitrogen loading that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. See WQ 426 for calculation procedures. For a grass cover crop, the allowable PAN is 300 pounds/acre.
4. When closing a wastewater treatment lagoon with a design treatment capacity equal or less than 150 persons, the residuals are considered “septage” under the similar treatment works” definition. See WQ 422. Under the septage category, residuals may be left in place as follows:
  - a. Testing for metals or fecal coliform is not required.
  - b. If the wastewater treatment lagoon has been in use for less than 15 years, mix lime with the sludge at the rate of 50 pounds of hydrated lime per 1000 gallons (134 cubic feet) of sludge.
  - c. The amount of sludge that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. 100 dry tons/acre of sludge may be left in the basin without testing for nitrogen. If more than 100 dry tons/acre will be left in the lagoon, test for nitrogen and determine the PAN in accordance with WQ 426. Allowable PAN loading is 300 pounds/acre.
5. Residuals left within the lagoon shall be mixed with soil on at least a 1 to 1 ratio, the lagoon berms shall be demolished, and the site shall be graded and vegetated so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion.
6. Lagoon closure activities shall obtain a storm water permit for land disturbance activities that equal or exceed five acres in accordance with 10 CSR 20-6.200.
7. If sludge exceeds agricultural loading rates under Section H or I, a landfill permit or solid waste disposal permit shall be obtained to authorize on-site sludge disposal under the Missouri Solid Waste Management Law and regulations per 10 CSR 80, and the permittee must comply with the surface disposal requirements under 40 CFR 503, Subpart C.

### SECTION J – MONITORING FREQUENCY

1. At a minimum, sludge or biosolids shall be tested for volume and percent total solids on a frequency that will accurately represent sludge quantities produced and disposed.
2. Testing for land application is listed under Section H, Subsection 6 of these standard conditions (see WQ 423). Once per year is the minimum test frequency. Additional testing shall be performed for each 100 dry tons of sludge generated or stored during the year.
3. Additional testing may be required in the special conditions or other sections of the permit. Permittees receiving industrial wastewater may be required to conduct additional testing upon request from the department.
4. Monitoring requirements shall be performed in accordance with, “POTW Sludge Sampling and Analysis Guidance Document”, United States Environmental Protection Agency, August 1989, and subsequent revisions.

## SECTION K – RECORD KEEPING AND REPORTING REQUIREMENTS

1. The permittee shall maintain records on file at the facility for at least five years for the items listed in these Standard Conditions and any additional items in the Special Conditions section of this permit. This shall include dates when the sludge facility is checked for proper operation, records of maintenance and repairs and other relevant information.
2. Reporting Period
  - a. By January 28<sup>th</sup> of each year, an annual report shall be submitted for the previous calendar year period for all mechanical wastewater treatment facilities, sludge lagoons, and sludge or biosolids disposal facilities.
  - b. Permittees with wastewater treatment lagoons shall submit the above annual report only when sludge or biosolids are removed from the lagoon during the report period or when the lagoon is closed.
3. Report Forms. The annual report shall be submitted on report forms provided by the department or equivalent forms approved by the department.
4. Report shall be submitted as follows:  
Major facilities (those serving 10,000 persons or 1 million gallons per day) shall report to both the department and EPA. Other facilities need to report only to the department. Reports shall be submitted to the addresses listed as follows:

DNR regional office listed in your permit  
(See cover letter of permit)

EPA Region VII  
Water Compliance Branch (WACM)  
Sludge Coordinator  
901 N 5<sup>th</sup> Street  
Kansas City, KS 66101

5. Annual Report Contents. The annual report shall include the following:
  - a. Sludge/biosolids testing performed. Include a copy or summary of all test results, even if not required by this permit.
  - b. Sludge or Biosolids quantity shall be reported as dry tons for quantity generated by the wastewater treatment facility, the quantity stored on site at end of year, and the quantity used or disposed.
  - c. Gallons and % solids data used to calculate the dry ton amounts.
  - d. Description of any unusual operating conditions.
  - e. Final disposal method, dates, and location, and person responsible for hauling and disposal.
    - (1) This must include the name, address and permit number for the hauler and the sludge facility. If hauled to a municipal wastewater treatment facility, sanitary landfill, or other approved treatment facility, give the name and permit number of that facility.
    - (2) Include a description of the type of hauling equipment used and the capacity in tons, gallons, or cubic feet.
  - f. Contract Hauler Activities.  
If contract hauler, provide a copy of a signed contract or billing receipts from the contractor. Permittee shall require the contractor to supply information required under this permit for which the contractor is responsible. The permittee shall submit a signed statement from the contractor that he has complied with the standards contained in this permit, unless the contract hauler has a separate sludge disposal or biosolids use permit.
  - g. Land Application Sites.
    - (1) Report the location of each application site, the annual and cumulative dry tons/acre for each site, and the landowners name and address. The location for each spreading site shall be given as legal description for nearest ¼, ¼, Section, Township, Range, and County, or as latitude and longitude.
    - (2) If biosolids application exceeds 2 dry tons/acre/year, report biosolids nitrogen results. Plant Available Nitrogen (PAN) in pounds/acre, crop nitrogen requirement, available nitrogen in the soil prior to biosolids application, and PAN calculations for each site.
    - (3) If the “Low Metals” criteria is exceeded, report the annual and cumulative pollutant loading rates in pounds per acre for each applicable pollutant, and report the percent of cumulative loading which has been reached at each site.
    - (4) Report the method used for compliance with pathogen and vector attraction requirements.
    - (5) Report soil test results for pH, CEC, and phosphorus. If none was tested during the year, report the last date when tested and results.

**STANDARD CONDITIONS FOR NPDES PERMITS  
ISSUED BY  
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION**

**Revised  
October 1, 1980**

**PART I - GENERAL CONDITIONS  
SECTION A - MONITORING AND REPORTING**

1. **Representative Sampling**
  - a. Samples and measurements taken as required herein shall be representative of the nature and volume, respectively, of the monitored discharge. All samples shall be taken at the outfall(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
  - b. Monitoring results shall be recorded and reported on forms provided by the Department, postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the respective Department Regional Office, the Regional Office address is indicated in the cover letter transmitting the permit.
2. **Schedule of Compliance**

No later than fourteen (14) calendar days following each date identified in the "Schedule of Compliance", the permittee shall submit to the respective Department Regional Office as required therein, either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements, or if there are no more scheduled requirements, when such noncompliance will be corrected. The Regional Office address is indicated in the cover letter transmitting the permit.
3. **Definitions**

Definitions as set forth in the Missouri Clean Water Law and Missouri Clean Water Commission Definition Regulation 10 CSR 20-2.010 shall apply to terms used herein.
4. **Test Procedures**

Test procedures for the analysis of pollutant shall be in accordance with the Missouri Clean Water Commission Effluent Regulation 10 CSR 20-7015.
5. **Recording of Results**
  - a. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:
    - (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. 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 this permit 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 both.
  - c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
6. **Additional Monitoring by Permittee**

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monitoring Report Form. Such increased frequency shall also be indicated.

7. **Records Retention**

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this 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.

**SECTION B - MANAGEMENT REQUIREMENTS**

1. **Change in Discharge**
  - a. All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant not authorized by this permit or any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.
  - b. Any facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants shall be reported by submission of a new NPDES application at least sixty (60) days before each such change, or, if they will not violate the effluent limitations specified in the permit, by notice to the Department at least thirty (30) days before such changes.
2. **Noncompliance Notification**
  - a. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Department with the following information, in writing within five (5) days of becoming aware of such conditions:
    - (i) a description of the discharge and cause of noncompliance, and
    - (ii) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.
  - b. Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally with 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided with five (5) days of the time the permittee becomes aware of the circumstances. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
3. **Facilities Operation**

Permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions. Operators or supervisors of operations at publicly owned or publicly regulated wastewater treatment facilities shall be certified in accordance with 10 CSR 209.020(2) and any other applicable law or regulation. Operators of other wastewater treatment facilities, water contaminant source or point sources, shall, upon request by the Department, demonstrate that wastewater treatment equipment and facilities are effectively operated and maintained by competent personnel.
4. **Adverse Impact**

The permittee shall take all necessary steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit or set forth in the Missouri Clean Water Law and Regulations (hereinafter the Law and Regulations), including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

- a. Any bypass or shut down of a wastewater treatment facility and tributary sewer system or any part of such a facility and sewer system that results in a violation of permit limits or conditions is prohibited except:
    - (i) where unavoidable to prevent loss of life, personal injury, or severe property damages; and
    - (ii) where unavoidable excessive storm drainage or runoff would catastrophically damage any facilities or processes necessary for compliance with the effluent limitations and conditions of this permit;
    - (iii) where maintenance is necessary to ensure efficient operation and alternative measures have been taken to maintain effluent quality during the period of maintenance.
  - b. The permittee shall notify the Department in writing of all bypasses or shut down that result in a violation of permit limits or conditions. This section does not excuse any person from liability, unless such relief is otherwise provided by the statute.
6. **Removed Substances**  
Solids, sludges, filter backwash, or any other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutants from entering waters of the state unless permitted by the Law, and a permanent record of the date and time, volume and methods of removal and disposal of such substances shall be maintained by the permittee.
  7. **Power Failures**  
In order to maintain compliance with the effluent limitations and other provisions of this permit, the permittee shall either:
    - a. in accordance with the "Schedule of Compliance", provide an alternative power source sufficient to operate the wastewater control facilities; or,
    - b. if such alternative power source is not in existence, and no date for its implementation appears in the Compliance Schedule, halt or otherwise control production and all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.
  8. **Right of Entry**  
For the purpose of inspecting, monitoring, or sampling the point source, water contaminant source, or wastewater treatment facility for compliance with the Clean Water Law and these regulations, authorized representatives of the Department, shall be allowed by the permittee, upon presentation of credentials and at reasonable times;
    - a. to enter upon permittee's premises in which a point source, water contaminant source, or wastewater treatment facility is located or in which any records are required to be kept under terms and conditions of the permit;
    - b. to have access to, or copy, any records required to be kept under terms and conditions of the permit;
    - c. to inspect any monitoring equipment or method required in the permit;
    - d. to inspect any collection, treatment, or discharge facility covered under the permit; and
    - e. to sample any wastewater at any point in the collection system or treatment process.
  9. **Permits Transferable**
    - a. Subject to Section (3) of 10 CSR 20-6.010 an operating permit may be transferred upon submission to the Department of an application to transfer signed by a new owner. Until such time as the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
    - b. The Department, within thirty (30) days of receipt of the application shall notify the new permittee of its intent to revoke and reissue or transfer the permit.
  10. **Availability of Reports**  
Except for data determined to be confidential under Section 308 of the Act, and the Law and Missouri Clean Water Commission Regulation for Public Participation, Hearings and Notice to Governmental Agencies 10 CSR 20-6.020, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by statute, effluent data shall not be considered confidential. Knowingly making any false statement on any such report shall be subject to the imposition of criminal penalties as provided in Section 204.076 of the Law.
  - 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) violation 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 and 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.
12. **Permit Modification - Less Stringent Requirements**  
If any permit provisions are based on legal requirements which are lessened or removed, and should no other basis exist for such permit provisions, the permit shall be modified after notice and opportunity for a hearing.
  13. **Civil and Criminal Liability**  
Except as authorized by statute and provided in permit conditions on "Bypassing" (Standard Condition B-5) and "Power Failures" (Standard Condition B-7) nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.
  14. **Oil and Hazardous Substance Liability**  
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act, and the Law and Regulations. Oil and hazardous materials discharges must be reported in compliance with the requirements of the Federal Clean Water Act.
  15. **State Laws**  
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state statute or regulations.
  16. **Property Rights**  
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of or violation of federal, state or local laws or regulations.
  17. **Duty to Reapply**  
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit 180 days prior to expiration of this permit.
  18. **Toxic Pollutants**  
If a toxic effluent standard, prohibition, or schedule of compliance is established, under Section 307(a) of the Federal Clean Water Act for a toxic pollutant in the discharge of permittee's facility and such standard is more stringent than the limitations in the permit, then the more stringent standard, prohibition, or schedule shall be incorporated into the permit as one of its conditions, upon notice to the permittee.
  19. **Signatory Requirement**  
All reports, or information submitted to the Director shall be signed (see 40 CFR-122.6).
  20. **Rights Not Affected**  
Nothing in this permit shall affect the permittee's right to appeal or seek a variance from applicable laws or regulations as allowed by law.
  21. **Severability**  
The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

**STANDARD CONDITIONS FOR NPDES PERMITS  
ISSUED BY  
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES  
MISSOURI CLEAN WATER COMMISSION  
Revised  
October 1, 1980**

**PART II - SPECIAL CONDITIONS - PUBLICLY OWNED  
TREATMENT WORKS  
SECTION A - MAJOR CONTRIBUTING INDUSTRY**

**1. Definitions**

Definitions as set forth in the Missouri Clean Water Laws and Missouri Clean Water Commission Definition Regulation 10 CSR 20-2.010 shall apply to terms used herein, in addition to the following:

- a. A "major contributing industry" to a publicly owned treatment facility is a wastewater source that meets any one of the following criteria:
  - (1) has a flow of 50,000 gallons or more per average workday;
  - (2) has an average daily flow greater than five percent (5%) of the flow carried by the system receiving the waste;
  - (3) has in its waste a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Federal Water Pollution Control Act (hereinafter the Act), or
  - (4) has significant impact, either singly or in combination with other contributing industries, on the treatment works or in the quality of its effluent.
- b. "Compatible pollutants" are biochemical oxygen demand, suspended solids, pH, and fecal coliform bacteria, plus additional pollutants, e.g., nitrogen or phosphorus, identified in the NPDES permit, if the publicly owned treatment facility was designed to treat such pollutants, approved by the Department and in fact does remove such pollutants to design specifications.
- c. An "incompatible pollutant" is any pollutant which is not a compatible pollutant as defined above.

**2. Industrial Effluent Monitoring**

The permittee shall establish and implement a procedure to periodically or regularly obtain monitoring data on the quality and quantity of all effluents introduced by each major contributing industry. Frequency of monitoring shall be subject to approval by the Department.

**3. Industrial Users Report**

Each permittee which has a major contributing industry shall also submit to the permit-issuing authority semi-annual reports summarizing all major contributing industries subject to the pretreatment requirements of the Missouri Clean Water Law and Regulations (hereinafter the Law and Regulations), or Section 307 of the Act. These reports must be filed with the Department of Natural Resources, PO Box 176, 205 Jefferson Street, Jefferson City,

Missouri 65102 by January 1 and July 1 of each year. Such a report shall include at least the following information:

- a. name and number of major contributing industries using the treatment works and the waste type, raw materials usage (lbs/day or kg/day), and average daily flow for each industry;
- b. summary of monitoring data obtained in accordance with Standard Conditions Part II, Section A.2 above, detailing the quality and quantity of all effluents introduced by each major contributing industry, and the frequency of monitoring performed;
- c. number of major contributing industries in full compliance with the requirements of the Law and Regulations and Section 307 of the Act or not subject to these requirements (e.g., discharge only compatible pollutants), and
- d. a list identifying by name those major contributing industries presently in violation of the requirements of the Law and Regulations and Section 307 of the Act (e.g., discharges pollutant which interferes with, passes through or is incompatible with the municipal treatment works).

**4. Report on Pollutant Introduction**

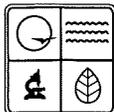
The permittee shall give notice to the department of any new introduction of pollutants or any substantial change in the character or volume of pollutants already being introduced. Such notice shall include:

- a. the origin, quality, and quantity of pollutants to be introduced into the publicly owned treatment works; and
- b. any anticipated impact on the quality and quantity of the effluent to be discharged by such treatment works;
- c. any anticipated impact on the quality of sludge produced by such treatment works causing the sludge to be hazardous under Federal and State Law.

**5. Industrial Users Compliance Schedules**

The permittee shall identify any introduction of pollutants into the facility subject to pretreatment standards under Section 307(b) of the Federal Clean Water Act. In addition, the permittee shall require any industrial user of such treatment works to comply with the requirements of Section 204(b), 307, and 308 of the Federal Clean Water Act. As a means of compliance from each industrial user, subject to the requirements of Section 307 of the Federal Clean Water Act and shall forward to the Department a copy of periodic notice, over intervals not to exceed nine (9) months, of progress towards full compliance with Section 307 requirements.

JUN 22 2016



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL  
 FORM B - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT FOR  
 FACILITIES WHICH RECEIVE PRIMARILY DOMESTIC WASTE (≤100,000 gallons per  
 day) UNDER MISSOURI CLEAN WATER LAW

## FOR AGENCY USE ONLY

CHECK NUMBER

DATE RECEIVED

FEE SUBMITTED

6/22/16

\$200.00

88

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 a 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 # CP0001129  
 An operating permit renewal: Permit #MO- 0137316 Expiration Date \_\_\_\_\_  
 An operating permit modification: Permit #MO- Reason: \_\_\_\_\_

1.1 Is this a Federal/State Funded Project?  YES  NO Funding Agency/Project #: RD1.2 Is the appropriate fee included with the application (See instructions for appropriate fee)?  YES  NO

2. FACILITY (Outfall of )

NAME VILLAGE OF GUILFORD SANITARY SEWER SYSTEM TELEPHONE WITH AREA CODE

ADDRESS (PHYSICAL) HWY M AND GUILFORD CITY GUILFORD STATE MO ZIP CODE 64507

2.1 LEGAL DESCRIPTION: SW ¼, NE ¼, NW ¼, Sec. 21, T 62N, R 34W NODAWAY County

2.2 UTM Coordinates Easting (X):352147 Northing (Y): 4448102  
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

2.3 Name of receiving stream: NONE (NO-DISCHARGE TREATMENT SYSTEM)

3. OWNER

NAME VILLAGE OF GUILFORD E-MAIL ADDRESS TELEPHONE WITH AREA CODE

ADDRESS P.O. BOX 63 CITY GUILFORD STATE MO ZIP CODE 64457

3.1 Request review of draft permit prior to Public Notice?  YES  NO

4. CONTINUING AUTHORITY: Permanent organization which will serve as the continuing authority for the operation, maintenance and modernization of the facility.

NAME SAME AS OWNER TELEPHONE WITH AREA CODE

ADDRESS CITY STATE ZIP CODE

5. OPERATOR

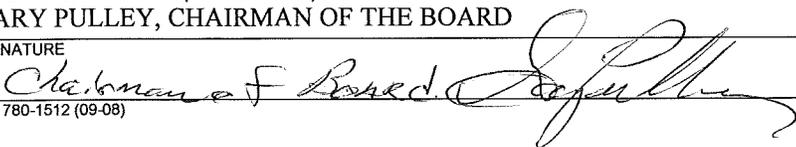
NAME WHITE CLOUD ENGINEERING AND CERTIFICATE NUMBER 4217 TELEPHONE WITH AREA CODE 660-582-4111

6. FACILITY CONTACT

NAME GARY PULLEY TITLE CHAIRMAN OF THE BOARD TELEPHONE WITH AREA CODE 660-652-3539

**7.0 ADDITIONAL FACILITY INFORMATION**

- 7.1 Description of facilities (Attach additional sheet if required). Attach a 1" = 2,000' scale U.S. Geological Survey topographic map showing location of all outfalls and downstream landowners. (See Item 9.)
- 7.2 Facility SIC code: 1521; Discharge SIC code: \_\_\_\_\_; Facility NAICS code: \_\_\_\_\_; Discharge NAICS code: \_\_\_\_\_.
- 7.3 Number of people presently connected or population equivalent (P.E.) 87 Design P.E. 87  
Number of units presently connected: Homes 0 Trailers 0 Apartments 0 Other \_\_\_\_\_  
Design flow for this outfall: 0 Total design flow for the facility: 8,700GPD Actual flow for this outfall: 0  
Commercial Establishment: Daily number of employees working \_\_\_\_\_ Daily number of customers/guests \_\_\_\_\_
- 7.4 Length of pipe in the sewer collection system? 6659 feet/miles (Please denote which unit is appropriate.)
- 7.5 Does any bypassing occur in the collection system or at the treatment facility?  Yes  No (If yes, attach explanation.)
- 7.6 Does significant infiltration occur in the collection system?  Yes  No (If yes, attach explanation and proposed repair.)
- 7.7 Is industrial waste discharged to the facility identified in Item 2?  Yes  No (If yes, see instructions.)
- 7.8 Will the discharge be continuous through the year?  Yes  No  
a. Discharge will occur during the following months: JANUARY-DECEMBER  
b. How many days of the week will the discharge occur? 7
- 7.9 Is wastewater land applied?  Yes  No (If yes, attach Form I.)
- 7.10 Will chlorine be added to the effluent?  Yes  No  
a. If chlorine is added, what is the resulting residual? \_\_\_\_\_ µg/l (micrograms per liter)
- 7.11 Does this facility discharge to a losing stream or sinkhole?  Yes  No
- 7.12 Attach a flow chart showing all influents, treatment facilities and outfalls.
- 7.13 Has a waste load allocation study been completed for this facility?  Yes  No
- 7.14 List all permit violations, including effluent limit exceedances in the last five years. Attach a separate sheet if necessary.  
If none, write none. NONE

8. SLUDGE HANDLING, USE AND DISPOSAL			
8.1	Is the sludge a hazardous waste as defined by 10 CSR 25? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
8.2	Sludge Production, including sludge received from others:    5.3 Design Dry Tons/Year	TBD_ Actual Dry Tons/Year	
8.3	Capacity of sludge holding structures: Sludge storage provided: _____ cubic feet; 370 days of storage; _____ average percent solids of sludge; <input type="checkbox"/> No sludge storage is provided.		
8.4	Type of Storage: <input checked="" type="checkbox"/> Holding tank <input type="checkbox"/> Building <input type="checkbox"/> Basin <input type="checkbox"/> Other (Please describe) _____ <input type="checkbox"/> Concrete Pad		
8.5	Sludge Treatment: <input type="checkbox"/> Anaerobic Digester <input type="checkbox"/> Lagoon <input type="checkbox"/> Composting <input checked="" type="checkbox"/> Storage Tank <input type="checkbox"/> Aerobic Digester <input type="checkbox"/> Other (Attach description) <input type="checkbox"/> Lime Stabilization <input type="checkbox"/> Air or Heat Drying		
8.6	Sludge Use or Disposal: <input type="checkbox"/> Land Application <input type="checkbox"/> Surface Disposal (Sludge Disposal Lagoon, Sludge held for more than two years) <input type="checkbox"/> Contract Hauler <input type="checkbox"/> Incineration <input checked="" type="checkbox"/> Hauled to Another <input type="checkbox"/> Sludge Retained in Wastewater treatment lagoon Treatment Facility <input type="checkbox"/> Other _____ Attach explanation sheet. <input type="checkbox"/> Solid Waste Landfill		
8.7	<b>PERSON RESPONSIBLE FOR HAULING SLUDGE TO DISPOSAL FACILITY</b> <input checked="" type="checkbox"/> By Applicant <input type="checkbox"/> By Others (complete below)		
NAME			
ADDRESS		CITY	STATE    ZIP CODE
CONTACT PERSON		TELEPHONE WITH AREA CODE	PERMIT NO. MO-
<b>8.8 SLUDGE USE OR DISPOSAL FACILITY</b>			
<input checked="" type="checkbox"/> By Applicant <input type="checkbox"/> By Others (Please complete below.)			
NAME			
ADDRESS		CITY	STATE    ZIP CODE
CONTACT PERSON		TELEPHONE WITH AREA CODE	PERMIT NO. MO-
8.9	Does the sludge or biosolids disposal comply with federal sludge regulations under 40 CFR 503? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Please attach explanation)		
<b>9. DOWNSTREAM LANDOWNER (S). ATTACH ADDITIONAL SHEETS AS NECESSARY. SEE INSTRUCTIONS.</b>			
NAME			
ADDRESS		CITY	STATE    ZIP CODE
<b>10. DRINKING WATER SUPPLY INFORMATION</b>			
10.1	WHAT IS THE SOURCE OF YOUR DRINKING WATER SUPPLY: A. Public supply (municipal or water district water) NODAWAY COUNTY If public, please give name of the public supply PUBLIC WATER DISTRICT #1 B. Private well _____ C. Surface water (lake, pond or stream) _____		
10.2	Does your drinking water source serve at least 25 people at least 60 days per year (not necessarily consecutive days)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
10.3	Does your supply serve housing which is occupied year round by the same people? This does not include housing which is occupied seasonally? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
11.	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.		
NAME AND OFFICIAL TITLE (TYPE OR PRINT) GARY PULLEY, CHAIRMAN OF THE BOARD		TELEPHONE WITH AREA CODE 816-390-6501	
SIGNATURE 		DATE SIGNED 4-4-2016	