Kuhle H2O, Incorporated, (Smithview):

- Current Deficiencies – Missouri Department of Natural Resources (MDNR) has cited Smithview for 33 deficiencies, a sampling of which are below.
    - There are openings in the wellhead for the airline and electrical service to the pump that are not adequately sealed which could allow contamination into the well.
    - The system does not have an up-to-date lead ban ordinance that takes into account the January 4, 2014, revisions to the Lead-Copper Regulations.
    - The system does not have back-up power. System personnel should have two contacts of suppliers that rent adequately-sized generators to provide power to the system's well. The system should also install, at the well house, electric conversion equipment needed to switch over to the generator when needed to provide an adequate primary source of power.
    - The system currently does not have a Wellhead Protection Plan.
    - Currently, there appears to be a dent in the eastern side of the standpipe near the top. In 2008 when the standpipe was constructed the dent was not visible but a photo in 2010 shows the damage. This may have been caused by ice formation or a plugged overflow or vent. This issue needs to be thoroughly examined the next time the standpipe is inspected to verify the structural integrity of the tank and to determine the cause of damage.
    - The well house does not meet the minimum sanitary construction standards.
        - The concrete foundation is cracked, and boards and siding are missing on the eastern side of the building.
        - The chlorine injection and associated ball valve are being held in place by a piece of scrap pipe and is not a long-term solution for installation.
        - Some of the wiring is hanging from the ceiling and is exposed and not enclosed in conduit. Something could have caught on this wire and cause potentially damage or be life threatening through electrocution.
        - The roof has been without soffit and facia and has been exposed to the environment for an extended period of time causing wood rot.
        - From the inside of the building, sunlight can easily shine in through various holes in the building. This hinders the chance of climate control and causes heaters to overwork in the winter months. Potentially not allowing the heaters to keep up similar to last winter that the pipes froze, and a boil water advisory placed on the system.

See attached – MDNR Significant Deficiency Report – 2/16/17

Mill Creek Sewers, Incorporated (Mill Creek):

- Current Deficiencies – Mill Creek's MDNR Operating Permit has expired. Under its expired permit, Mill Creek is currently under a MDNR schedule of compliance and has MDNR violations for three issues.
    - The existing plant is required by MDNR to treat waste for human pathogens (disinfection) and ammonia as nitrogen, which the existing operation cannot treat. Mill Creek is currently not meeting effluent limitations for e coli.
    - Mill Creek is currently not meeting effluent limitations for ammonia.
    - Mill Creek currently has sewer surcharge issues. These surcharges are the result of ground water infiltration and inflow (I&I) and the community's sewer usage. After rain events the WWTP is washed out into the receiving stream sending undertreated waste into the environment. Also, during peak usage, the combined waste generated by the community washes out the plant into the creek.
    - Mill Creek is behind on paying MDNR fees.

See attached – MDNR Notice of Violation 9.15.15, MDNR Notice of Violation 10.27.17

M.P.B. Sewers, Incorporated (Villa Ridge):

- Current Deficiencies – Villa Ridge's MDNR Operating Permit has expired. Under its expired permit, Villa Ridge is currently under an MDNR schedule of compliance and has MDNR violations for three issues. The plant's receiving creek has visible sludge deposits. One of the two residential pump stations is not currently functional and seems to drain directly into a lake located in the center of the residential subdivision. The existing collection system has rain and groundwater infiltration and inflow problems (I&I) with the plant experiencing wash outs during rain events.
    - Villa Ridge is currently not meeting effluent limitations for e coli.
    - Villa Ridge is currently not meeting effluent limitations for ammonia.
    - Villa Ridge currently has sewer surcharge issues. These surcharges are the result of ground water I&I and the community's sewer usage. After rain events the WWTP is washed out into the receiving stream sending undertreated waste into the environment. Additionally, the collection system experiences backups and discharges at manholes as well as one of the collection system aerial creek crossings.

See attached – MDNR Notice of Violation – 6/26/17

Majestic Lakes Homeowners Association (Majestic Lakes):

- Current Deficiencies - The Majestic Lakes Sewer is currently under a Missouri Attorney General enforcement action on the WWTP. This enforcement action is due to the insufficient structural integrity of the waste water treatment plant. CSWR has a settlement agreement with MDNR and the MO Attorney General. A quote from MDNR regarding Majestic Lakes states: "During the inspection, staff observed that the headworks bar screen concrete box was leaking around the base; wastewater was leaking from the cracks in the concrete walls, both of which are bypasses of the treatment process; and a metal plate had been installed between the outside wall and the aeration tank wall for temporary reinforcement. Staff also observed that the recirculation pump was nonoperational; the transducer for measuring flow was also nonoperational and in need of repair; the emergency generator at the WWTF had been removed; and the generator at the lift station had not been repaired since it was flooded in 2008." Additionally, many internal equipment components have failed and have not been operational for a number of years. Pumps, valves, transducers, and actuators are in need of replacement to render the SBR WWTF fully operational as originally designed.

See attached – MDNR Settlement Agreement – 5/24/17, MDNR Moratorium Letter 2008

- The Majestic Lakes water system has existing structural repair needs. The tank sprung a leak at the edge of a panel and many more panels are nearing failure. Based on a structural engineering inspection numerous bolts and some complete panels need replacement. At the base of the tank missing bolts need to be installed and excessively corroded bolts replaced. The well starter is out and must be operated by hand to keep the tank full. The system does not have a redundant chlorine pump and needs one to meet DNR compliance.

Evergreen Lakes:

- Current Deficiencies - The Evergreen Lakes system needs a backup chlorine pump, separate chlorine containment room, building repairs, fencing for security, and install an all-weather access road.

Roy – L Utilities, Incorporated (Roy L):

- Current Deficiencies - The Roy - L waste system is currently under a MDNR schedule of compliance and has violations for one issue. However, the lagoon also lacks the two feet of freeboard of storage above the operating level required by Missouri DNR.
  1. Roy - L system is currently under a Schedule of Compliance (SOC) with the MDNR to meet its effluent limitations for ammonia.
  2. Roy – L has extensive I & I that must be repaired to complete the waste water treatment upgrades. See below picture of I & I
  3. The Roy-L drinking water system does not have a back-up chlorination pump or backup booster pump for service stability or separate storage for the existing chlorination system.
  4. The Roy-L drinking water tank

M.P.B. Sewers, Incorporated (Lake Virginia):

- Current Deficiencies – Lake Virginia's MDNR operating permit has expired. The system is currently not meeting is effluent limits for its expired permit and has a failing lagoon berm. The system has a second lagoon system of which the lagoon system which we feel has an expired permit but is no longer listed on Missouri DNR's permit list. Therefore, the amount and type of compliance issues can't even be speculated at this time. In the MDNR 2017 inspections, both lagoons were found to be in "Significant Noncompliance" with the Missouri Clean Water Law and the Missouri Clean Water Commission with waste potentially discharging into the creek and the existing lagoon berms potentially and (NOVs) Notices of Violation were issued.

See attached – MDNR Notice of Violation for West Lagoon – 3/23/17, MDNR Notice of Violation for East Lagoon – 3/23/17

The Willows

- Current Deficiencies - The utility is under Attorney General enforcement action with the MDNR for compliance issues violating the Missouri Clean Water Law including causing pollution to a tributary of Pond Creek both in the form of undertreated waste and sanitary sewer overflows presenting a public health risk to nearby residents. The drinking water system has a history of unreported low-pressure events presenting a potential imminent health risk to customers. Both the water and waste water systems are in need of upgrades for reliability and compliance.

See attached – MDNR Referral to Attorney General – 10/27/15, PSC Formal Complaint Case, June 2017, MO AG Lawsuit 2017

Port Perry.

- Current improvement areas – Waste water operational improvements include access to a redundant effluent booster pump that pumps water to surface application site, repair of dilapidated fencing, installation of all-weather access road, and I and I repairs on the collection system. **See attached – MDNR Letter of Warning – 10/15/12, Finding of Complicance 12/16/16**
- Water-Improvements will include installation of chlorine equipment for improved monitoring, all weather access road improvements at the two well heads and one storage tank sites, replace heater inside of building, roof repairs, modify backup well to prevent water hammering and improve operational viability. Pump test results on primary well indicate loss of pump performance which needs to be further investigated.

Gladlow Water and Sewer

- Current Deficiencies – The water system is in non-compliance for inadequate hyropneuamatic storage, inadequate back up electric, no flush hydrants, and excessive water loss.

See attached – MDNR Compliance and Operations Inspection Report – 7/31/15

- Sewer deficiencies include insufficient freeboard in the 2nd lagoon. Inadequate chlorine contact time, and inability to meet ammonia limits.

STATE OF MISSOURI
Eric R. Greitens, Governor • Carol S. Comer, Acting Director
DEPARTMENT OF NATURAL RESOURCES
dnr.mo.gov

3.200 Kuhle H20
Boone County
PWS ID #3036153

February 16, 2017

Mr. Josiah Cox
President of Central States Water Resources
Kuhle H20
500 Northwest Plaza Drive
Suite 500
St. Ann, MO 63074

SIGNIFICANT DEFICIENCY
RESPONSE REQUIRED

Dear Mr. Cox:

An inspection was conducted by Department of Natural Resources staff pursuant to the Missouri Safe Drinking Water Law on January 3, 2017. The enclosed report is being issued with Significant Deficiencies for the violations identified.

Please refer to the enclosed report for details on finding and required actions. **A written response concerning the correction of the violations is required by the date specified in the report.**

If you have any questions or would like to schedule a time to meet with department staff to discuss compliance requirements, please contact Mr. Richard Morrow at (660) 385-8000 in our Northeast Regional Office, 1709 Prospect Drive, Macon, MO 63552.

Sincerely,

NORTHEAST REGIONAL OFFICE

Irene Crawford
Regional Director

IC/raml

Enclosures: Report of Inspection, Model Emergency Operations Plan, Newly Revised Model Lead Ban Policy, EPA Lead Guidance document, Newly Revised Model Cross Connection policy, Model Valve Record form, End Clean-Out Record form, Model Leak Repair Record form, Model Customer Complaint form

c: Mr. Gary Lutz, Chief Distribution Operator
Mr. Ben Kuenzel, PE, Principal, 21 Design Group Engineering & Surveying

Missouri Department of Natural Resources
Northeast Regional Office
Report of Inspection
Kuhle H20
708 Cunningham Drive, Columbia, MO 65202, Boone County
MO3036153
February 16, 2017

Introduction

Pursuant to Section 640.120.5 of the Missouri Safe Drinking Water Law, a routine Compliance and Operations Inspection of the Kuhle H20 public drinking water system was conducted by the Northeast Regional Office on January 3, 2017. This inspection was conducted to determine the facility's compliance with the Missouri Safe Drinking Water Statutes and the Missouri Safe Drinking Water Regulations. This report presents the findings and observations made during the inspection and covers all eight (8) critical components applicable to the public drinking water system.

The following people were present at the time of the inspection:

Kuhle H20
Mr. Josiah Cox, President of Central States Water Resources
Mr. Ben Kuenzel, PE, Principal, 21 Design Group Engineering & Surveying
Mr. Gary Lutz, Chief Distribution Operator
Mr. Todd Thomas, with Central States Water Resources

Missouri Department of Natural Resources (department)
Mr. Richard Morrow, Environmental Specialist
Mr. Mike Smith, Environmental Specialist

Entity Description and History

Kuhle H20 (PWS# 3036153), formerly Smithview H20 Company, was issued a permit to dispense on January 1, 1988, and has been classified by the department as a community public drinking water system requiring a certified operator with a minimum DS-I level distribution certification. The current designated chief operator for distribution is Mr. Gary Lutz who is certified as an "A3" level operator. The designated back-up chief operator for distribution has been Mr. Matt Eaton who is certified as a DS-II level operator. Kuhle H20 is currently serving approximately 105 service connections. The system is a primary ground water that provides chlorination. The system includes one well and a 41,000 gallon standpipe.

The UTM coordinates for the well house at Kuhle H20 are UTM Zone 15 N [556399.5, 4321061.3].

The Northeast Regional Office previously conducted a sanitary survey of the facility on December 5, 2013. The following items from the previous inspection have been addressed: The system has acquired a certified chief operator and back-up operator for distribution. The system is currently collecting monthly routine bacteriological samples as required to verify water quality. System personnel have a map of the system and have agreed to submit a copy to our office for review. The prompt actions taken to address these issues are commendable.

The system received several Maximum Contaminant Level (MCL), Total Coliform Rule (TCR) violations, TCR Monitoring violations, Groundwater Rule Monitoring violations, Consumer Confidence Reporting (CCR) violations, and Public Notice (PN) violations since January, 2014. The system needs to provide the annual CCR's to its customers and return the report forms on time to the department and collect the required number of bacteriological samples to obtain compliance with these rules.

Our office has agreed to allow the system to collect daily chlorine readings once every two days temporarily.

Discussion of Inspection and Observations

I contacted Mr. Ben Kuenzel on December 19, 2016, to schedule a compliance and operations inspection and we agreed to schedule the inspection for January 3, 2017. Prior to conducting the inspection, I created an inspection report on the Safe Water Information Field Tool (SWIFT) database.

The inspection was conducted during normal business hours. The scope and purpose of the inspection was outlined. I completed a review of the systems records and completed the inventory portion of the checklist. Mr. Ben Kuenzel, Mr. Josiah Cox, Mr. Todd Thomas, and Mr. Gary Lutz accompanied Mr. Smith and me throughout the entire inspection including a tour of the well house and standpipe.

Mr. Mike Smith and I initially met with Mr. Ben Kuenzel, Mr. Josiah Cox, Mr. Todd Thomas, and Mr. Gary Lutz at the well house at Kuhle H20 on January 3, 2016. Mr. Smith and I inspected the well house and standpipe. We then collected a bacteriological sample from an outside tap at 7001 A Moberly Drive and finished the SWIFT checklist and record review.

Proper sampling procedures were followed for collecting a bacteriological sample. Photos were collected using an Olympus Stylus SP-820UZ camera. Mr. Smith and I delivered the bacteriological sample to the Randolph County Health Department so the courier service could deliver it to the State Health laboratory to be analyzed.

We thanked everyone present for meeting with us and explained that the report would be sent to the system once the report has been reviewed and finalized.

Sampling and Monitoring

The appropriate sampling materials were taken on the inspection, including Department of Health and Senior Services approved bacteriological sample bottles, a Hach HQ30d probe to test for pH and/or temperature, and the necessary equipment and reagents needed to conduct the sampling and monitoring. All instruments were properly calibrated according to manufacturer's recommendations and all reagents were used prior to the stated expiration date. QA/QC data for all field equipment is maintained at the regional office.

The results of the samples are as follows:

Distribution System-The bacteriological sample we collected on January 3, 2016 tested absent for Total Coliform.

Compliance Determination and Required Actions

This facility was found to be in **non-compliance** with the Missouri Safe Drinking Water Regulations based on observations made at the time of the inspection.

Significant Deficiencies

1. There are openings in the wellhead for the airline and electrical service to the pump that are not adequately sealed which could allow contamination into the well. Missouri Public Drinking Water Regulation 10 CSR 60 4.025(4)(A)4.A. states that a significant deficiency effecting the sanitary condition is present for a source if there are any improperly constructed, sealed, or inadequately screened opening in the well head. The use of caulking compound to plug openings in a wellhead is temporary only and is not an acceptable method for a permanent seal in the wellhead. The openings need to be properly sealed with threaded connections or rubber grommet pipe seals. Any opening in the wellhead is considered a significant deficiency.

The system must consult with the department about a corrective action plan to address these deficiencies within 30 days and has up to 120 days to correct the deficiency or to be on schedule with a department approved corrective action plan.

REQUIRED ACTIONS: The facility shall consult with the Northeast Regional Office **within 30 days**, explaining what actions will be taken to correct the significant deficiencies or be following a department approved corrective action plan.

Recommendations

1. During the compliance and operation inspection, a current up-to-date copy of the emergency operations plan was not available. Missouri Public Drinking Water Regulation 10 CSR 60-12.010 requires all community public water systems to have an updated written plan for assuring continued water service under emergency conditions. A copy of the plan must be made available to all key operating personnel and for review by department personnel during inspections. During an emergency, the system operators must know what they are supposed to do and when to do it. The system needs to develop and implement an emergency operations plan, submit a copy of the plan to our office, and continually update the plan as needed. A model emergency operations plan is attached.

2. The system does not have an up-to-date lead ban ordinance that takes into account the January 4, 2014, revisions to the Lead-Copper Regulations. A newly revised model lead ban policy that takes into account the reduced lead standards in distribution and residential fittings is attached for the system to review and consider for adoption. Also attached is an EPA guidance document concerning the reduced lead standard.

3. Reportedly, the system may not have a cross-connection policy that meets the department's requirements. A newly revised model cross-connection policy is attached for the system to review and consider for adoption.

4. Reportedly, system personnel will meet with the Public Service Commission and there will be a written rate structure with fees and shut-off fees if or when the system is purchased. The system should submit a copy of the written rate structure to our office for review.

5. An operational management plan (OMP) should be completed by the chief distribution operator detailing daily procedures conducted to operate and maintain the distribution system. This plan would serve as a checklist and guide for the backup operator. OMP's should include a unidirectional flushing plan capturing flow, pressures, and disinfectant residuals, valve exercising, main and service line installation/repair and disinfection procedures, scheduled flushing of dead ends, master meter readings and record keeping, frequency and methods of lab equipment calibration, testing procedures, and any other functions that are required to keep the system running in a safe and efficient manner.

6. The system does not have back-up power. System personnel should have two contacts of suppliers that rent adequately-sized generators to provide power to the system's well. The system should also install at the well house electric conversion equipment needed to switch over to the generator as the primary source of power. A procedure for the safe installation and fueling of the generator should be made part of the system's emergency operations plan.

7. Reportedly, the system is not calculating water loss on a monthly basis. The system needs to calculate water loss on a monthly basis. Water loss should be maintained well below 10%. The department recommends an accounting method be developed to better determine water loss in the distribution system. This needs to include water used in system services, flushing the system, and any other known water use during the month. Finally, a leak detection and location program should be implemented.

8. The system currently does not have a Wellhead Protection Plan. System officials should take action to start the development of a wellhead protection plan for the system. If you have any questions concerning source water protection or the make-up of a source water protection plan, please contact Mr. Ken Tomlin at the Public Drinking Water Branch at (573) 751-5331.

9. The well house does not meet the minimum sanitary construction standards. The concrete foundation is cracked and boards and siding are missing on the eastern side of the building. Additionally, the chlorine injection and associated ball valve are being braced with a piece of pipe and some of the wiring is not in conduit and exposed, which is a safety issue. The system should contract an engineering firm to prepare plans and specifications for a new well house.

10. Reportedly, the electrical service for the well pump is not provided with lightning protection. System officials should consider the installation of some form of lightning protection to help protect the well pump and control systems from loss of service.

11. The current well vent installation is improperly constructed. The well vent needs to be modified or replaced with an adequately sized vent (at least 1.5 inches in diameter) that is screened with 18-mesh screen and turned in the downward position to ensure contamination is not pulled into the well. The current vent needs to be modified to extend at least 12" above the sanitary seal and away from the wellhead and discharge piping. It should terminate in an inverted "U" and be properly screened.

12. Reportedly, there is no sampling tap provided inside the well house prior to treatment. As required by Missouri's Ground Water Rule, the system needs to install a sampling tap inside the well house before chlorination to verify source water quality in case of a Coliform present sample.

13. The hypochlorite tank is not vented to the outside. The chlorine tank needs to be vented to the outside to prevent further corrosion to the piping and metal works inside the well house.

14. Reportedly, there is no safety equipment for the hypochlorite solution being fed. The system needs to provide at least the minimum safety equipment such as a face shield, safety goggles or glasses, smock, chemical gloves, etc.

15. An air/vacuum release is not provided at the well. This device acts as a safeguard against system damage in the event of a foot valve failure. Given the capacity of the well, it is recommended that a 2-inch air vacuum release be installed. The device's vent should terminate in a downward position and be screened in the same manner as a well casing vent.

16. Draw down, yield, and static water level tests should be performed and recorded once every month on the system's well. Drawdown tests provide information regarding 1) potential well maintenance issues and 2) aquifer conditions and characteristics. The tests will alert the system officials to pump problems or a low water level in the well before pump failure occurs or the well's specific capacity changes and leaves the system out of water.

17. Reportedly, there is a mechanical issue with the spare chlorination pump and there is only one operating pump. The system should maintain disinfection redundancy by having two pumps available in case the lead pump becomes inoperable. This way the system is not pumping untreated or improperly treated water into the distribution system.

18. There was no Safety Data Sheet (SDS) provided for the hypochlorite solution. The system needs to acquire a SDS for the chlorine being fed and maintain a copy inside the well house to provide information in case of an emergency.

19. A written spill response plan needs to be provided for the hypochlorite feed system. The plan needs to be available to all operators, and the operators need to be trained to respond. The plan should also be included in the system's Emergency Operations Plan.

20. Reportedly, the system does not check the output of the chlorination pump. The department recommends that system personnel verify the output of the pump on a routine basis to ensure an accurate dosage is being delivered.

21. No information was provided to verify that the standpipe had been inspected since its construction. The department recommends that all storage facilities be inspected every (2) to (5) years to determine the structural and sanitary condition and verify water quality to ensure no contamination is present.

22. Currently, there appears to be a bulge in the eastern side of the standpipe near the top. In 2008 when the standpipe was constructed the bulge was not visible but a photo in 2010 shows the damage. This may have been caused by ice formation or a plugged overflow or vent. This issue needs to be thoroughly examined the next time the standpipe is inspected to verify the structural integrity of the tank and to determine the cause of damage.

23. The exterior paint is faded and peeling on the outside of the standpipe. The system needs to contact their tank inspection company in regards to maintenance, power washing, sandblasting, and painting of the storage facility.

24. There is tall grass and weedy vegetation inside the fenced area around the standpipe. The area should be maintained and kept mowed so a visual inspection can be made of the standpipe.

25. The chief operator collects the majority of the system's monthly routine bacteriological samples from one site (7001 A Moberly Drive) for convenience. The operator should rotate through the list of approved routine sampling sites so sampling is representative of water quality throughout the entire distribution system.

26. There are only two low pressure reports on file for the system. Anytime the pressure in the distribution system drops below 20 psi, the system must notify affected customers, issue a boil water advisory until further notification for the affected area, and send our office a low pressure report within 48 hours of discovery. If a leak is determined as the reason for the low pressure event, the system should repair the leak as soon as possible following procedures for properly disinfecting the repair area, repair components, and affected sections of the distribution system. This should be followed by unidirectional flushing and confirmation bacteriological sampling upstream and downstream of the break area before lifting the boil water notification. Failure to do so can be construed as a violation.

27. Reportedly, the system does not maintain individual water meter records. Meter records should include meter type, serial number, size, location, calibration data, year installed, and any maintenance activities or related information. The system should continue creating individual records for each meter in the distribution.

28. The system needs to develop individual valve records that include valve exercising and maintenance information. Pertinent records would include manufacturer, model and type, valve size, direction and number of turns required to fully open the valve, date installed, depth of valve, valve box type, triangulated or GPS location, and any completed operation or maintenance activities. The department recommends all system valves be exercised annually to identify maintenance or replacement requirements. A model valve record form is attached.

29. The water system does not have a routine valve operation and maintenance program. Reportedly, there are valves in the distribution system that cannot be located or do not work properly. A routine valve operation and maintenance program should be developed to ensure all valves in the distribution system are located, exercised, will fully open and

close, and will work properly when needed. System officials should budget to repair, replace, or install a certain number of valves annually until all areas of the distribution system have functional valves that allow operation and maintenance to be performed with minimal interruption of service.

30. Reportedly, the system does not maintain flushing device records. The system needs to develop individual flushing device records. These records should include information on routine flushing, maintenance, pressure and flow testing and of chlorine residuals prior to and following flushing. An end clean-out record form is attached.

31. The system needs to develop a written unidirectional flushing plan with procedures to ensure proper flushing is performed in the absence of the chief operator. This plan should be made part of the system's Operational Management Plan. Additionally, system personnel should number each flushing device in the system to aid in developing the written flushing plan.

32. The department recommends the entire distribution system be flushed once per year to remove accumulated sediment. Additionally, dead end lines need to be flushed at least twice a year or more as needed. Chlorine residuals should be measured and recorded initially and after flushing is completed.

33. Water systems need to meet the minimum technical, managerial and financial capacity requirements to operate a viable public water system. The system was meeting most of the managerial capacity requirements except that it did not have written consumer complaint procedures for receiving, investigating, resolving and recording customer complaints. A customer complaint form is attached.

Additional Comments/Conclusion

None

SUBMITTED BY:

Richard Morrow
Environmental Specialist
Northeast Regional Office

REVIEWED BY:

John Gibson
Environmental Supervisor
Northeast Regional Office

RAM/lk

Attachments

Attachment #1 – Photos #1-8

Attachment #1
Kuhle H20
February 16, 2017
Page 1

	Photo #: 1 Date/Time Taken: 01/03/2017 at approx. 0914 hours By: Richard Morrow Program: PDW Unit File: 3.200 Facility: Kuhle H20 Location: Well House Description: The well vent installation is improperly constructed. The vent needs to be modified to extend at least 12" above the sanitary seal and away from the discharge piping. It should terminate in an inverted "U" and be properly screened.
	Photo #: 2 Date/Time Taken: 01/03/2017 at approx. 0915 hours By: Richard Morrow Program: PDW Unit File: 3.200 Facility: Kuhle H20 Location: Wellhead Description: There are openings in the wellhead for the airline and electrical service to the pump that are not adequately sealed. The openings need to be properly sealed with threaded connections or rubber grommet pipe seals.
	Photo #: 3 Date/Time Taken: 01/03/2017 at approx. 0916 hours By: Richard Morrow Program: PDW Unit File: 3.200 Facility: Kuhle H20 Location: Well House Description: The well house does not meet the minimum sanitary construction standards. The chlorine injection and ball valve is being braced with a piece of pipe. The system should contract an engineering firm to prepare plans and specifications for a new well house.

Initials RAM

	Photo #: 4 Date/Time Taken: 01/03/2017 at approx. 0916 hours By: Richard Morrow Program: PDW Unit File: 3.200 Facility: Kuhle H20 Location: Well House Description: The hypochlorite tank is not vented to the outside. The chlorine tank needs to be vented to the outside to prevent further corrosion to the piping and metal works inside the well house.
	Photo #: 5 Date/Time Taken: 01/03/2017 at approx. 0916 hours By: Richard Morrow Program: PDW Unit File: 3.200 Facility: Kuhle H20 Location: Well House Description: There is only one operating chlorination pump. The system should maintain disinfection redundancy by having two pumps available in case the lead pump becomes inoperable.
	Photo #: 6 Date/Time Taken: 01/03/2017 at approx. 0918 hours By: Richard Morrow Program: PDW Unit File: 3.200 Facility: Kuhle H20 Location: Well House Description: The well house does not meet the minimum sanitary construction standards. Some of the wiring is not in conduit and exposed, which is a safety issue.

Initials RAM

	Photo #: 7 Date/Time Taken: 01/03/2017 at approx. 0922 hours By: Richard Morrow Program: PDW Unit File: 3.200 Facility: Kuhle H20 Location: Standpipe Description: There appears to be a bulge in the eastern side of the standpipe near the top. This may have been caused by ice formation or a plugged overflow or vent. This issue needs to be thoroughly examined the next time the standpipe is inspected.
	Photo #: 8 Date/Time Taken: 01/03/2017 at approx. 0927 hours By: Richard Morrow Program: PDW Unit File: 3.200 Facility: Kuhle H20 Location: Well House Description: The well house does not meet the minimum sanitary construction standards. The concrete foundation is cracked and boards and siding are missing on the eastern side of the building.

Initials RAM

Missouri Department of Natural Resources
Water Protection Program
Public Drinking Water Branch
P.O. Box 176
Jefferson City, MO 65102-0176

Notice of Noncompliance
Public Notice Required

Date of Report: May 3, 2016
PWS Name: Kuhle H20
PWS ID: MO3036153
County: Boone

Mail to:
Josiah Cox
500 N West Plaza Dr
Suite 500
Saint Ann, MO 63074

Please notify us of any name or address changes

The following is a summary of the triggered source water bacteriological analysis submitted for the period ending March 31, 2016.

Source Sampling

Sample Type	Number Taken
Source	Zero

Distribution System Sampling

Sample Type	Total Coliform Positive	E coli Positive
RT	1	0

Violation Type: Monitor GWR Triggered/Additonal, Major

This is a violation of 10 CSR 60-4.025. No triggered source water samples were collected or too much time passed before the samples were taken for testing E. coli bacteria.

Required Actions:

1. The following pages give instructions on how to perform public notice and a copy of the public notice itself to distribute, post, and provide to any media.
2. Fill in the appropriate information requested on the certification page and sign where indicated.
3. Make copies of the certification and public notice (as seen by the public) for your files.
4. Send the completed certification and a copy of the public notice (as seen by the public) back to DNR at the address given.

For assistance, contact the Northeast Regional Office at 660-385-8000 or the Public Drinking Water Branch at (573) 526-6925.

Missouri Department of Natural Resources
Water Protection Program
Public Drinking Water Branch
P.O. Box 176
Jefferson City, MO 65102-0176

Instructions for Public Notice
for a Community Water System

DNR Notification Date: May 3, 2016
Date Public Must be Notified by: Within a month of receipt of violation Notice
Date to send Public Notification back to DNR by: Within a week of notifying the public

Overview: Public water systems must provide public notice in a form and manner reasonably calculated to reach persons served in the required time period. DNR provides these instructions and sample notice (next page) to help systems comply with the Public Notice Rule and ensure the public is duly notified. Public water systems must take the following actions:

A. Choose at least two methods of notifying the public, one of which needs to be completed within 30 days of receipt of the violation notice:

1. Cities, water districts, wholesalers and large water companies typically publish the notice in a local newspaper of general circulation. Small community systems, such as subdivisions, mobile home parks and apartments, typically post the notice. If the water system maintains a website, this would also be a good place to post the notice. Posting must be on-going for as long as the violation exists. For violations that have been resolved, the minimum posting period is 7 days. ***And,***
2. The requirement to mail or hand deliver the notice to all customers may be met by including the notice in the system's annual Consumer Confidence Report or other report.

B. AFTER the water system has completed posting the notice, send a copy of the system's version of the public notice ***and*** the completed certification below to:

Missouri Department of Natural Resources
Public Drinking Water Branch
P.O. Box 176
Jefferson City, MO65102-0176

YOU MUST SEND PUBLIC NOTICE DOCUMENTS TO THE DEPARTMENT TO GET CREDIT FOR COMPLETING THIS REQUIREMENT. Otherwise your system will get another violation. Please send us this documentation to us within a week of completion of posting, so it will be received on time. You may fax these documents to 573-751-3110. You also need to make a copy of the completed certification and, along with the public notice, keep this documentation in your files for a minimum of 3 years. Complete federal and state regulations for the public notification of drinking water violations can be found in 40 CFR Part 141.201 Subpart Q and 10 CSR 60-8.010, respectively.

Links:
http://www.access.gpo.gov/nara/cfr/waisidx_05/40cfr141_05.html
http://www.sos.mo.gov/adrules/csr/current/10csr/10c60-8.pdf.

PUBLIC NOTICE
CUSTOMERS OF Kuhle H20
FAILURE TO MEET MICROBIOLOGICAL MONITORING REQUIREMENTS FOR DRINKING WATER-SOURCE WATER

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During **March 2016** we had sample(s) that tested positive for total coliform bacteria and we did not test our source water for fecal indicators, therefore we cannot be sure of the quality of our drinking water during that time.

This is a violation of Missouri Public Drinking Water Regulations. The Missouri Department of Natural Resources requires that drinking water be tested for fecal indicators at the source (well) if total coliform bacteria is detected in the distribution system, by submitting at least one valid sample per source. Bacteriologically-contaminated water can cause a variety of disease symptoms. It is important that drinking water be routinely tested to ensure the safety of those who consume it.

This is not an emergency. If it had been you would have been notified immediately. Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers.

Provide explanation of cause of monitoring failure:

_____

_____

For more information, please contact water system staff indicated below:

_____ at _____ or _____.
(name of water system contact) (phone number) (mailing address)

Additionally you may contact the Missouri Department of Natural Resources' Northeast Regional Office at 660-385-8000 or Public Drinking Water Branch at (573) 526-6925.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by Kuhle H20
State Water System ID#: MO3036153.

Date mailed or hand delivered (if applicable): _____

CERTIFICATION

I certify this public water system notified the people it serves by the methods indicated below:

1. ☐ Posting: or ☐ Publication (please attach affidavit)

   Begin Posting Date: _____ Newspaper: _____

   End Posting Date: _____ Date: _____

   Locations: _____

And ---

2. ☐ Included in Consumer Confidence Report or ☐ Other: _____

   Date of distribution: _____ Date of distribution: _____

_____ _____ _____

(Signature) (Title) (Date)

PWS ID #: MO3036153
System Name: Kuhle H20
County: Boone

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director
www.dnr.mo.gov

September 15, 2015

9171 9690 0935 0051 4360 08

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Jason Williamson, Receiver
Mill Creek Sewer, Inc.
P.O. Box 200595
Denver, CO 80220

NOTICE OF VIOLATION # 4068

Dear Jason Williamson:

A routine compliance inspection of the Castlereagh Estates Subdivision Wastewater Treatment Plant (WWTP), located in St. Louis County, Missouri was conducted on August 11 and 12, 2015. The inspection was conducted by Christopher Maher, with the Missouri Department of Natural Resources' St. Louis Regional Office. Enclosed is a copy of the inspection report.

Please direct your attention to the Required Actions for the Deficiencies and Recommendations sections of the report. These violations are being referred to the Enforcement Section of the Water Pollution Control Branch for progressive enforcement actions. You should coordinate a response to the Deficiencies documented in this report with the Compliance & Enforcement Section at (573) 751-1300.

As you are aware, the facility was referred to the Missouri Attorney General's Office for failure to pay permit fees. You may contact Ms. Sherry Bell at (573) 522-1485 in the Water Protection Program at the Lewis and Clark State Office Building, 1101 Riverside Drive, Jefferson City, Missouri 65101 regarding payment of these outstanding fees and penalties. Your cooperation will be appreciated.

If you have any questions regarding this inspection and Notice of Violation or would like to meet with Department staff, please contact Christopher Maher or me at (314) 416-2960 in the St. Louis Regional Office, 7545 South Lindbergh Blvd., Suite 210, St. Louis, MO 63125.

Sincerely,

ST. LOUIS REGIONAL OFFICE

Dorothy Franklin
Regional Director

DEF/CCM/as
CCM
Enclosures: Report of Inspection
Application for Construction Permit – Wastewater Treatment Facility (MO 780-2189)
Form B – Application for Operating Permit for Facilities That Receive Primarily Domestic Waste and Have A Design Flow Less Than Or Equal to 100,000 Gallons Per Day (MO 780-1512)

Missouri Department of Natural Resources
St. Louis Regional Office/Water Protection Program
Report of Inspection
Castlereagh Estates Subdivision WWTP
Kings Drive/Florissant/St. Louis County, MO
MO-0084484

Introduction

Pursuant to Section 644.026.1, RSMo of the Missouri Clean Water Law, Martha Cruse and I, both of the Missouri Department of Natural Resources' St. Louis Regional Office, conducted a routine compliance inspection of the Castlereagh Estates Subdivision Wastewater Treatment Plant (WWTP) in St. Louis County, Missouri on August 11, 2015. Bob Nier, a maintenance worker for Testing-Analysis & Control, Inc., participated in the inspection. I conducted a second site visit on August 12, 2015 as part of the compliance inspection.

This inspection was conducted to determine the facility's compliance with Missouri State Operating Permit MO-0084484, the Missouri Clean Water Commission Regulations, and the Missouri Clean Water Law. This report presents the findings and observations made during the compliance inspection.

Facility Description and History

Missouri State Operating Permit MO-0084484 was last issued on November 1, 2012, and expires on October 31, 2017. This permit sets forth effluent limitations, monitoring requirements, and permit conditions, both standard and specific, that the permittee is to follow.

The facility is an extended aeration plant with a secondary clarifier and sludge holding tank for the purpose of treating domestic wastewater from the Castlereagh Estates subdivision. The facility is located to the east of Kings Drive in Old Jamestown, an unincorporated portion of St. Louis County. The facility is accessed off of a private driveway at 75 Kings Drive, down an access road, on the western bank of Mill Creek. Heartland Utilities, Inc. is the receiver for the facility, with Mill Creek Sewer, Inc. serving as the continuing authority.

The legal description of the Castlereagh Estates Subdivision WWTP is listed on the permit as Land Grant 361 in St. Louis County. The receiving stream for this facility is Mill Creek, which is located in the Lower Missouri watershed.

On July 29, 2008, Stuart Bean with the Department's St. Louis Regional Office conducted a compliance inspection. On August 8, 2008, the St. Louis Regional Office issued Notice of Violation #2455 SL for failure to apply for permit renewal and failure to operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions. Mr. Bean noted that the facility lacked warning signs, the outfall pipe was not marked, one of the skimmers in the clarifier was apparently clogged, and the sludge blanket in the clarifier was too high. However, he noted that the effluent was clear with no malodor. On-site water quality monitoring and samples collected for analysis were in compliance with the permit conditions. Mr. Tim Allgire with Testing-Analysis & Control, Inc. sent the St. Louis Regional Office a response letter dated August 26, 2008, stating that they would complete and return the operating permit renewal form. The letter also stated that Mr. Jim Holmes paid the fees to the Department, sludge was removed from the clarifier to lower the sludge blanket, the skimmers in the clarifier were cleared and readjusted, the plants growing between structures were removed, the lower section of the enclosure fence would be secured, warning signs were being re-installed, barbed wire would be re-attached at the top of the fence, an outfall sign would be installed, and holes created by burrowing animals would be filled in.

Discussion of Inspection and Observations

Prior to the inspection, I reviewed the files for Castlereagh Estates Subdivision WWTP, including the Permit Conditions of Missouri State Operating Permit MO-0084484, to familiarize myself with the requirements specific to this facility.

As part of the compliance inspection, I reviewed the Discharge Monitoring Reports for the previous two-year period. The facility reported exceedances of the permitted effluent limitations for the following periods.

				Final Effluent Limitations			
Parameter	**Month**	**Year**	**Units**	**Daily Maximum**	**Weekly Average**	**Monthly Average**	**Results**
Flow	January	2015	MGD	*		*	Not Reported
Flow	April	2015	MGD	*		*	Not Reported
pH	November	2013	SU	**		**	6.3
pH	January	2014	SU	**		**	6.0
pH	February	2014	SU	**		**	6.1
pH	March	2014	SU	**		**	6.1

*Monitoring requirement only.
**pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.5 pH units.
Abbreviations: MGD (Million Gallons per Day); **SU** (Standard pH Units)

I checked the fees report for the previous two-year period. The facility has not submitted the most recent permit fees, and, as of August 28, 2015 has an outstanding balance of $13,110.00, including unpaid permit fees and penalties. The most recent fees were due on May 8, 2015. The Water Protection Program's Budget and Fees Unit has issued several Letters of Warning and Notices of Violation over the past few years for failure to pay permit fees. On September 2, 2011, the facility was referred to the Missouri Attorney General's Office for failure to pay permit fees.

I checked the Form S sludge reports for the previous two-year period. The facility has submitted the Form S, Sections 1 and 4 for the calendar years 2013 and 2014. The 2013 Form S indicated that no sludge was removed during that year. The 2014 Form S indicated that 7000 gallons of sludge was removed in that year.

The Schedule of Compliance in Section D (on page 5 of Missouri State Operating Permit MO-0084484) included compliance dates for complying with *E. coli* permit limits. Progress reports were due on May 1, 2013 and November 1, 2013, reporting progress made in attaining compliance with the final effluent limits for disinfection. The St. Louis Regional Office has not received either of these progress reports. The facility was required to comply with the final effluent limits for *E. coli* within two years of the effective date of the permit, which was November 1, 2014.

Per the facility description in the operating permit, the facility is required to be operated under the supervision of a Certified "C" operator. The facility is operated under the supervision of Mr. Tim Allgire with Wastewater Certification #3940 set to expire on August 31, 2018. Mr. Allgire has a Class A Wastewater Certification, which meets the minimum certification level.

The inspection was conducted during normal business hours. Prior notification of the inspection was provided to ensure timely access to the site. Upon arrival at the facility, Ms. Cruse and I met with Bob Nier, a maintenance worker with Testing-Analysis and Control, Inc., and we outlined the purpose and scope of the inspection. Mr. Nier granted permission to access the site and accompanied us throughout the tour of the facility.

We arrived at the facility on August 11 and met with Mr. Nier at about 12:30. We began by collecting the initial grab sample for the modified composite sample (see Sampling and Monitoring section below). Following the sample collection, we conducted the physical inspection of the wastewater treatment plant. The facility had a fence of adequate height, with warning signs, barbed wire, and a locked gate (see Photo #005). We walked in and Mr. Nier showed me the two blowers serving the aeration basin (see Photo #006).

The aeration basin was being aerated while we were present. The contents had an even, chocolate-brown color, with little foam, indicating adequate mixing and oxygen levels (see Photo #008). We observed wastewater entering the aeration basin from the skimmers in the secondary clarifier. The blowers were running the whole time that we were on site. The contents of the clarifier on the eastern side of the plant were somewhat turbid with some scum floating on the surface (see Photo #009). The skimmers were functional and removing floating scum. Water flowing over the effluent weirs into the effluent trough was clear, with a small amount of visible solids in the bottom of the trough (see Photo #011). Solids should regularly be cleaned out of the effluent trough to prevent discharge of solids into the receiving stream. The effluent trough had a single chlorine tablet on the northern end of the trough (away from the effluent line). Mr. Nier stated that the tablet was there to limit algae growth (see Photo #012). On the western end of the plant was the sludge holding tank for the facility (see Photo #007). Just to the east of the sludge holding tank was the bar screen (see Photo #010), where influent enters the extended aeration basin. The bar screen was properly installed. Debris should regularly be removed from the bar screen to prevent material from entering the aeration basin and potentially damaging blowers and other equipment.

I called and spoke with Mr. Tim Allgire, the certified operator with Testing-Analysis & Control, Inc. on August 14, 2015 to inform him of the low pH reading and the high *E. coli* result (see Sampling and Monitoring section below). I informed him that the facility would likely need to have a disinfection system installed. I also recommended that the influent entering the facility be monitored for pH in order to help determine a potential source of acidity.

Sampling and Monitoring

I took the appropriate sampling materials on the inspection, including a copy of the Missouri Department of Natural Resources' Standard Operating Procedures for Sampling. I took instruments for field monitoring that were capable of testing pH, temperature, conductivity, dissolved oxygen, and Total Residual Chlorine. The equipment had been properly calibrated and/or compared to standards, as appropriate, in accordance with the St. Louis Regional Office's Quality Assurance/Quality Control (QA/QC) procedures.

I conducted water quality field monitoring at the following location for the listed parameters. The receiving stream was flowing steadily and was mildly turbid, both upstream and downstream of the outfall pipe (see Photos #001, #002, and #004). A thick layer of sediment was visible on either side of the water flow; recent flooding on the Missouri River may have contributed to the sediment buildup. The water flowing from the outfall pipe was clear with no visible solids in the discharge (see Photo #003). Upon collection, the wastewater discharge had mild turbidity.

Outfall #002		
Parameter	**Result**	**Units**
pH	**4.70**	Standard pH Units
Temperature	23.0	°C
Dissolved Oxygen	6.21	mg/L
Conductivity	440	Microsiemens
Total Residual Chlorine	0.22	mg/L

According to Table A-2 in Missouri State Operating Permit MO-0084484, "The pH is to be maintained at or above 6.5 pH units." The effluent pH result of 4.70 is below the acceptable pH range. The operator needs to identify the source of the low pH and make the appropriate operational adjustments to return the effluent to compliance with the permitted effluent limits. The operator may wish to conduct pH testing on influent entering the plant to determine if an external source is contributing to the low pH. Typically, normal operations of extended aeration plants do not result in low pH.

Furthermore, although Missouri State Operating Permit MO-0084484 does not include permit effluent limits for Total Residual Chlorine, the result of 0.22 mg/L is higher than the Special Criteria for protection of aquatic life in warm-water streams in Table A of 10 CSR 20-7.031. The referenced limit for chlorine (total residual) is 19 µg/L (0.019 mg/L) for the acute criteria, and 10 µg/L (0.010 mg/L) for the chronic criteria. A typical wastewater treatment facility that uses chlorine to disinfect the effluent would be required to dechlorinate the effluent, and would be given an effective permit limit of 0.13 mg/L for Total Residual Chlorine. Given the high toxicity of chlorine to aquatic life, the facility should stop using chlorine tablets unless and until a permitted chlorination/dechlorination disinfection system is installed.

I conducted sampling at the following location and submitted for laboratory analysis. For 5-day Biochemical Oxygen Demand and Total Suspended Solids, I collected a modified composite sample, in which four individual grab samples are collected at least two hours apart within a 24 hour time period. I collected Ammonia as N (Nitrogen) and *E. coli* as grab samples. I made a second collection of the grab sample parameters (Ammonia as N and *E. coli*) for QC purposes. The Department's Environmental Services Program conducted sample analysis of 5-day Biochemical Oxygen Demand, Total Suspended Solids, and Ammonia as N (Nitrogen). The St. Louis Regional Office conducted sample analysis of Total Coliform/*E. coli* using the IDEXX Colilert and Quanti-Tray test method. The Department's Environmental Services Program results of Sample Analysis 150939 and 150940 were not completed at the time of the report. The results will be provided to the facility when they are available.

Outfall #002						
Results of Sample Analyses			**Permit Limits**			
Parameters	**Sample Result[1]**	**Units**	**Daily Max**	**Weekly Average**	**Monthly Average**	**Units**
Sample 150945						
BOD_5	<2	mg/L		45	30	mg/L
Total Suspended Solids	10.0	mg/L		45	30	mg/L
Sample 150939						
Ammonia as N	*	mg/L	**		**	mg/L
Total Coliform	>2419.6	MPN				
E. coli	**2419.6**	MPN	1030		206	#/100 mL
Sample 150940						
Ammonia as N	*	mg/L	**		**	mg/L
Total Coliform	>2419.6	MPN				
E. coli	**2419.6**	MPN	1030		206	#/100 mL

*Sample analysis results not available as of the writing of this report.
**Monitoring requirement only.
[1]Results with "<" symbol are below detection level.
Abbreviations: BOD_5 (5-day Biochemical Oxygen Demand); **MPN** (Most Probable Number per 100 mL)

The *E. coli* results were well above both the Daily Maximum and Monthly Average permitted effluent limits. In order to comply with *E. coli* effluent limits, the facility will need a permitted disinfection system. The most common disinfection systems for wastewater plants are chlorination/dechlorination disinfection (with a chlorine contact chamber), and ultraviolet disinfection. Before installing any disinfection system, the facility owner needs to submit a completed construction permit application along with engineering documents to the Water Protection Program. Following completion of construction, the facility will need to submit a completed Form B to renew the operating permit. Questions regarding construction permit requirements should be sent to the Water Protection Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-1300.

The facility owner should be made aware of proposed limits for Ammonia as N (Nitrogen) for wastewater treatment facilities for the protection of aquatic life. Currently, the facility is only required to monitor ammonia levels in the effluent. The proposed limits are 1.7 mg/L for a Daily Maximum and 0.6 mg/L for a Monthly Average during the summer, and 5.6 mg/L for a Daily Maximum and 2.1 mg/L for a Monthly Average during the winter. Review of the facility's Discharge Monitoring Reports shows that the facility has frequently been able to comply with the proposed ammonia limits. The proposed limits have not been incorporated into the Water Quality Standards, and therefore cannot yet be included in the operating permit's effluent limitations. More information can be found in the "Ammonia Criteria: New EPA Recommended Criteria" fact sheet at http://dnr.mo.gov/pubs/pub2481.htm, or by request from the Department.

Compliance Determination

The facility was found to be in non-compliance with the Missouri Clean Water Law, the Clean Water Commission Regulations, and Missouri State Operating Permit MO-0084484, based upon the observations made at the time of the inspection.

Deficiencies

1. On August 12, 2015, failed to comply with the effluent limits contained in Section "A" of Missouri State Operating Permit MO-0084484 for pH and *E. coli* [Sections 644.051.1(3) and 644.076.1, RSMo].

REQUIRED ACTIONS: The facility shall respond to the Water Protection Program's Compliance & Enforcement Section, explaining what actions will be taken to correct the unsatisfactory feature.

2. Failed to submit progress reports and make appropriate upgrades in order to comply with *E. coli* final effluent limits, as required in Section "A" Subsection "2" of the Standard Conditions Part I, and Section "D", Schedule of Compliance, of Missouri State Operating Permit MO-0084484 [Sections 644.076.1, RSMo, and 10 CSR 20-6.010(7)(A)].

REQUIRED ACTIONS: The facility shall respond to the Water Protection Program's Compliance & Enforcement Section, explaining what actions will be taken to correct the unsatisfactory feature.

3. Failed to operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions [Sections 644.051.1(3) and 644.076.1, RSMo].

REQUIRED ACTION: The facility shall submit a written statement explaining efforts made to adjust operations to meet permit conditions, including final effluent limitations for pH and *E. coli*. The facility shall respond to the Water Protection Program's Compliance & Enforcement Section, explaining what actions will be taken to correct the unsatisfactory feature.

4. Failed to submit annual permit fees for Missouri State Operating Permit MO-0084484 [Section 644.052, RSMo, and 10 CSR 20-6.011(2)].

REQUIRED ACTION: As of August 28, 2015, the facility has a balance due of $13,110.00 for permit fees and late penalties. The facility shall submit the required fees to the Water Protection Program's Budget and Fees Unit.

5. Failed to clearly mark the outfall in the field, as required by Special Condition #2 of Missouri State Operating Permit MO-0084484 [Section 644.076.1, RSMo].

REQUIRED ACTIONS: The facility is to clearly mark the outfall location. The facility shall ensure that the Unsatisfactory Feature will be addressed by 15 days following receipt of this report.

Recommendations

1. Consider using online submission of discharge monitoring reports (eDMRs) to the Department. Log-on to the DNR web page's On-line Services at http://dnr.mo.gov/env/wpp/edmr.htm and download the Facility Participation Package, print it and mail in the notarized application at the end of this document to the Jefferson City office. They will contact the facility owner when they can login using provided Passwords/PINs and begin submitting DMRs for the facility.

Additional Comments/Conclusions

1. Ensure that future applications for renewal of Missouri State Operating Permit MO-0084484 are submitted to the Water Protection Program at least 180 days prior to the expiration date listed on the permit.

Signatures

SUBMITTED BY:

Christopher Maher

Christopher Maher
Environmental Specialist III
St. Louis Regional Office

REVIEWED BY:

Paul Morris
Water Pollution Control Unit Chief
St. Louis Regional Office

CCM/as

Attachments: Attachment 1: Photos #001 - #012
Attachment 2: Site Map
Attachment 3: Notice of Violation # 4068

Photo #: 001
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Western Bank of Mill Creek, East of Wastewater Plant

Description: View upstream from outfall pipe; mildly turbid water flowing from south to north; facing southeast.

Date/Time Taken: August 11, 2015; 13:01
Program: WPC Unit

Photo #: 002
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Western Bank of Mill Creek, East of Wastewater Plant

Description: View upstream from outfall pipe; mildly turbid water flowing from south to north; heavy sediment deposits visible; facing east.

Date/Time Taken: August 11, 2015; 13:01
Program: WPC Unit

Photo #: 003
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Western Bank of Mill Creek, East of Wastewater Plant

Description: Outfall pipe discharging at receiving stream (white object in center of photograph); facing northeast.

Date/Time Taken: August 11, 2015; 13:01
Program: WPC Unit

Initial_CCM_

Photo #: 004
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Western Bank of Mill Creek, East of Wastewater Plant

Description: Downstream view of receiving stream, with heavy debris; water appears mildly turbid; facing north.

Date/Time Taken: August 11, 2015; 13:02
Program: WPC Unit

Photo #: 005
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Wastewater Treatment Plant

Description: Warning sign; fence, barbed wire; facing south.

Date/Time Taken: August 11, 2015; 13:07
Program: WPC Unit

Photo #: 006
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Wastewater Treatment Plant

Description: Blower serving wastewater plant; facing south.

Date/Time Taken: August 11, 2015; 13:08
Program: WPC Unit

Initial_CCM_

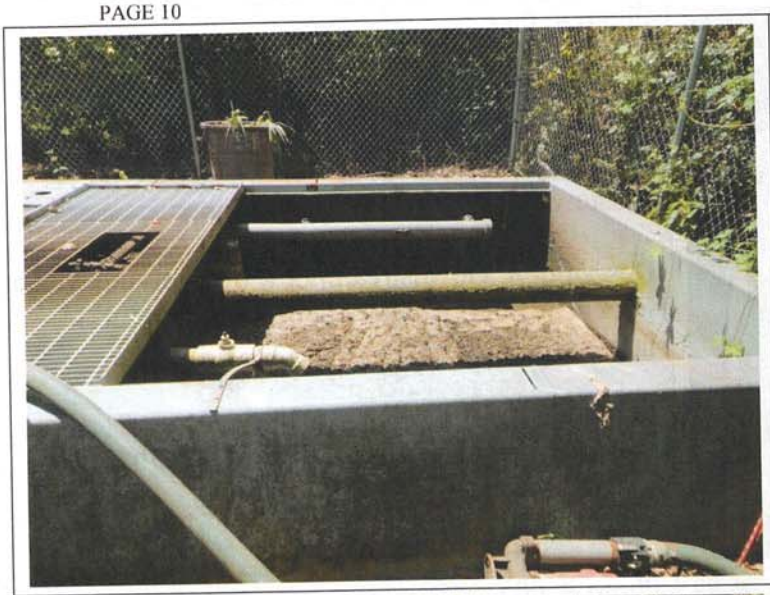


Photo #: 007
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Wastewater Treatment Plant

Description: Sludge holding tank for facility; facing south.

Date/Time Taken: August 11, 2015; 13:09
Program: WPC Unit

Photo #: 008
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Wastewater Treatment Plant

Description: Extended aeration basin; facing southwest.

Date/Time Taken: August 11, 2015; 13:10
Program: WPC Unit

Photo #: 009
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Wastewater Treatment Plant

Description: Secondary clarifier; contents are turbid with floating debris; facing northeast.

Date/Time Taken: August 11, 2015; 13:11
Program: WPC Unit

Photo #: 010
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Wastewater Treatment Plant

Description: Bar screen for removing large material; facing north.

Date/Time Taken: August 11, 2015; 13:12
Program: WPC Unit

Photo #: 011
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Wastewater Treatment Plant

Description: Effluent trough; water is clear with some visible solids on bottom; facing north.

Date/Time Taken: August 11, 2015; 13:16
Program: WPC Unit

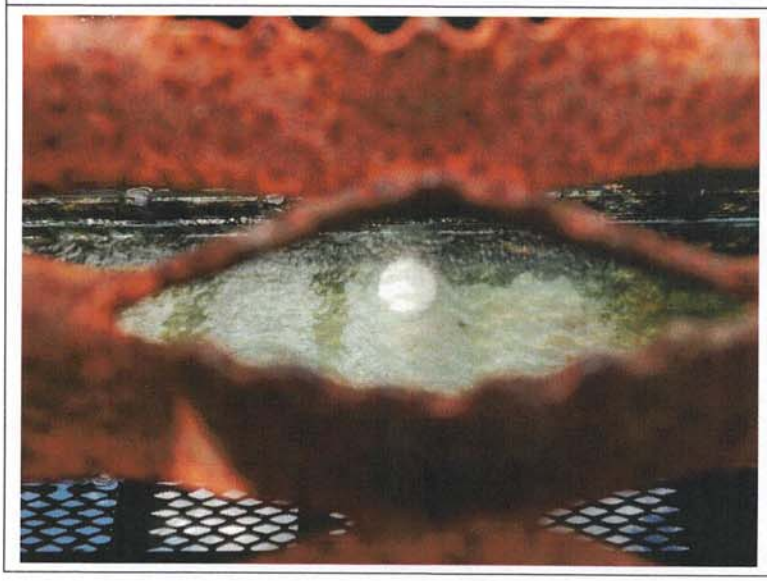


Photo #: 012
By: Christopher Maher
Facility: Castlereagh Estates Subdivision WWTP
Permit: MO-0084484
Location: Wastewater Treatment Plant

Description: Chlorine tablet in effluent trough; facing west.

Date/Time Taken: August 11, 2015; 13:17
Program: WPC Unit

Site map for location of Castlereagh Estates Subdivision Wastewater Treatment Plant

MISSOURI DEPARTMENT OF NATURAL RESOURCES

NOTICE OF VIOLATION

REGION/PROGRAM
☐KC ☐NE ☐SE ☒SL
☐SW ☐DW ☐HWP ☐APCP
☐LRP ☐SWMP ☐WPC

VIOLATION NUMBER
No. 4068

DATE AND TIME ISSUED
August 14, 2015, 08:45 ☒ AM ☐ PM

SOURCE (NAME, ADDRESS, PERMIT NUMBER, LOCATION)
Castlereagh Estates Subdivision WWTP
Kings Drive
Florissant, MO 63034
Missouri State Operating Permit MO-0084484

MAILING ADDRESS	CITY	STATE	ZIP
P.O. Box 200595	Denver	CO	80220

NAME OF OWNER OR MANAGER	TITLE OF OWNER OR MANAGER	COUNTY
Jason Williamson	Receiver	St. Louis

LAW, REGULATION OR PERMIT NUMBER
Missouri Clean Water Law, Sections 644.051.1(3) and 644.076.1, RSMo

Missouri Clean Water Commission Regulation(s) 10 CSR 20-6.010(7)(A)

DATE(S)	TIME(S)
August 11-12, 2015	

NATURE OF VIOLATION

1. On August 12, 2015, failed to comply with the effluent limits contained in Section "A" of Missouri State Operating Permit (MSOP) MO-0084484 for pH and *E. coli*.

2. Failed to submit progress reports and meet *E. coli* final effluent limits, as required in Section "A" Subsection "2" of the Standard Conditions Part I, and Section "D", Schedule of Compliance, of Missouri State Operating Permit (MSOP) MO-0084484.

3. Failed to operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions.

4. Failed to submit annual permit fees for Missouri State Operating Permit (MSOP) MO-0084484.

.

5. Failed to clearly mark the outfall in the field, as required by Special Condition #2 of Missouri State Operating Permit (MSOP) MO-0084484.

SIGNATURE (PERSON RECEIVEING NOTICE) CERTIFIED NUMBER	SIGNATURE (PERSON ISSUING NOTICE)
Sent via Certified Mail	Christopher Maher
NAME, TITLE OR POSITION	NAME, TITLE OR POSITION
	Christopher Maher, Environmental Specialist III

MISSOURI DEPARTMENT OF NATURAL RESOURCES, P.O. BOX 176, JEFFERSON CITY, MO 65102

MO 780-1647 (12-11) **DISTRIBUTION:** CENTRAL OFFICE, REGIONAL OFFICE, SOURCE

Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Eric R. Greitens, Governor
Carol S. Comer, Director

Castlereagh Estates Subdivision
St. Louis County
MO0084484

October 27, 2017

CERTIFIED MAIL #
RETURN RECEIPT REQUESTED

Jason Williamson-Manager
Mill Creek Sewer, Inc
P.O. Box 200595
Denver, CO 80220

NOTICE OF VIOLATION

Dear Permittee:

The Missouri Department of Natural Resources' St. Louis Regional Office is issuing you Notice of Violation (NOV) number SL170219 for significant violations of Missouri State Operating Permit (MSOP) MO0084484 and the Missouri Clean Water Law (MCWL) at Castlereagh Estates Subdivision. The department requests that you take immediate action to correct the violations found on the attached list.

MSOP MO0084484 sets forth specific effluent limitations, monitoring requirements, and permit conditions regarding your facility. Failure to comply with effluent limitations established in part "A" of the MSOP is a violation of Sections 644.051.1(3) and 644.076.1, RSMo. **Failure to address the violation(s) may result in heightened enforcement action.**

By **November 29, 2017**, please submit a written response, to the St. Louis Regional Office, 7545 S. Lindbergh, Ste 210, St. Louis, MO 63125, addressing the above violations and explaining what steps you have taken or will take to prevent future violations. Your facility will be considered not in compliance until the violation(s) is/are addressed. If you have any questions or would like to schedule a meeting in person, please contact Sarah Wright-Aholt at 314-416-2960, sarah.wright-aholt@dnr.mo.gov or the address above. Thank you for your cooperation in this matter.

If you have already provided this information, the department appreciates your efforts to return your facility to compliance.

Sincerely,

ST. LOUIS REGIONAL OFFICE

Dorothy E. Franklin
Regional Director

DF/

c: Kristi Savage-Clarke, Water Protection Program

Castlereagh Estates Subdivision
St. Louis County
MO0084484

Issue	Permitted Feature	Monitoring Period End Date or Event Due Date	Parameter or Event Type
Effluent Violation	002	5/31/2017	(E. Coli)
Effluent Violation	002	6/30/2017	(E. Coli)

Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Eric R. Greitens, Governor
Carol S. Comer, Director

AUG 2 5 2017

NOTICE OF VIOLATION

NOV NUMBER: BFUCWN101772

CERTIFIED MAIL: 7016 0600 0000 2593 8665
RETURN RECEIPT REQUESTED

Heartland Utilities, Inc.
Castlereagh Estates Subdivision, MO0084484
PO Box 200595
Denver, CO 80220

RE: Failure to pay annual operating permit fee

To Whom it May Concern:

The Missouri Department of Natural Resources' Water Protection Program is issuing this Notice of Violation (NOV) as a result of your failure to remit payment of the Missouri State Annual Operating Permit Fee. The Annual Operating Permit fee is required by Section 644.052 and Section 644.055 of the Missouri Revised Statutes and 10 CSR 20-6.011 (1)(G).

The annual fee amount for your facility is $1,500, which was due on May 8, 2017. Penalties have been assessed pursuant to Chapter 644 Section 644.055 of the Missouri Revised Statutes, which is accrued on the entire amount due at a rate of 2 percent for each month that the fee is delinquent until the payment is remitted. The late penalty assessed to date is $60. The total amount due is $1,560.

To avoid escalated enforcement action, your payment must be remitted to the Department's Accounting Program within 15 days of receipt of this certified letter to the address listed below:

Department of Natural Resources
Administrative Support/Accounting
P.O. Box 477
Jefferson City, MO 65102

If you feel you received this NOV in error or have any questions or concerns, please do not hesitate to contact Ms. Sherry Bell at P.O. Box 176, Jefferson City, MO 65102; by e-mail at sherry.bell@dnr.mo.gov or by phone at 573-522-1485.

Thank you in advance for your cooperation and attention to this matter.

Sincerely,

WATER PROTECTION PROGRAM

Chris Wieberg
Director

CW/sb

Enclosures

c: Ms. Dorothy Franklin, Director, St. Louis Regional Director
Water Protection Program Compliance and Enforcement Section

INVOICE

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division Of Environmental Quality / Water Protection Program

Jefferson City, MO 65102

Contact: BUDGET & FEES UNIT
Phone: 573-522-1485
Fax: 573-526-1146

Bill To: HEARTLAND UTILITIES, INC.
P.O. BOX 200595
DENVER, CO 80220

Invoice #: 34601707904
Permit #: MO0084484
Date: 08/04/2017
Date Due: UPON RECEIPT

THIRD AND FINAL NOTICE

Description	Unit	Quantity	Amount	Total
Castlereagh Estates Subdivision * FOR FEE DATE OF: 5 / 2017 CURRENT INVOICE # 34601707904	PERMIT	1.00	$1,500.00	$1,500.00
LATE PENALTIES: CURRENT INVOICE # 34601707904				$60.00
Castlereagh Estates Subdivision * FOR FEE DATE OF: 5 / 2016 PREVIOUS INVOICE # 34601608605	PERMIT	1.00	$1,500.00	$1,500.00
LATE PENALTIES: PREVIOUS INVOICE # 34601608605				$420.00
Castlereagh Estates Subdivision * FOR FEE DATE OF: 5 / 2015 PREVIOUS INVOICE # 34601507606	PERMIT	1.00	$1,500.00	$1,500.00
LATE PENALTIES: PREVIOUS INVOICE # 34601507606				$90.00
Castlereagh Estates Subdivision * FOR FEE DATE OF: 5 / 2014 PREVIOUS INVOICE # 34601407286	PERMIT	1.00	$2,500.00	$2,500.00
LATE PENALTIES: PREVIOUS INVOICE # 34601407286				$1,950.00
Castlereagh Estates Subdivision * FOR FEE DATE OF: 5 / 2013 PREVIOUS INVOICE # 34601307783	PERMIT	1.00	$2,500.00	$2,500.00
LATE PENALTIES: PREVIOUS INVOICE # 34601307783				$2,550.00

**STATE OPERATING PERMIT UNDER THE MISSOURI CLEAN WATER LAW: 10 CSR 20-6.011.*

**STATE OPERATING PERMIT UNDER THE MISSOURI CLEAN WATER LAW: 644.052.2.*

Current Balance Due	$1,500.00
Past Balance Due	$8,000.00
Less Payments Received	$1,200.00
Plus Late Penalties	$5,070.00
Total Due	$13,370.00

Please note that your annual fee may have changed based on revisions to 10 CSR 20-6.011 which is effective January 1, 2015 pursuant to RSMo 644.054.
Payment of your annual operating permit fee does not constitute the renewal of your permit.
Please detach here and return lower portion with your payment.

Permit #: MO0084484
HEARTLAND UTILITIES, INC.
P.O. BOX 200595
DENVER, CO 80220

Please return this remittance advice with your payment to:
Missouri Department Of Natural Resources
Administrative Support / Accounting
Po Box 477, Jefferson City, Mo 65102

Invoice Number:
34601707904
Invoice Date:
08/04/2017

Fee Month/Year: 5 / 2017

Make check payable to *MO DEPT OF NATURAL RESOURCES*

Total Due: $ 13,370.00
Due Date: UPON RECEIPT

Amount Enclosed: _____

Check No: _____
Please include the Permit # on your check.

Per Chapter 37, Section 37.007 RSMo, if paying by electronic method, a transaction fee will be included. The transaction fee is paid to a 3rd party vendor, not the MO Dept of Natural Resources.

Accounting Distribution:

WP 01 DOMESTIC ANNUAL>5000GPD 0568-780-4461-1130-01= $2,500.00/ 34601307783

WP 01 DOMESTIC ANNUAL>5000GPD 0568-780-4461-1130-01= $2,500.00/ 34601407286

WP 01 DOMESTIC ANNUAL>5000GPD 0568-780-4461-1130-01= $300.00 / 34601507606

WP 01 DOMESTIC ANNUAL>5000GPD 0568-780-4461-1130-01= $1,500.00/ 34601608605

WP 01 DOMESTIC ANNUAL>5000GPD 0568-780-4461-1130-01= $1,500.00/ 34601707904

Visa _____ **MC** _____ **Discover** _____

Credit Card # | | | | | | | | | | | | | | | | |

Exp Date: ____ / ____

Signature: _____

Accounting Distribution for Penalties:

WP PERMIT LATE PENALTIES 0568-780-4461-1618-= $2,550.00/ 34601307783

WP PERMIT LATE PENALTIES 0568-780-4461-1618-= $1,950.00/ 34601407286

WP PERMIT LATE PENALTIES 0568-780-4461-1618-= $90.00/ 34601507606

WP PERMIT LATE PENALTIES 0568-780-4461-1618-= $420.00/ 34601608605

WP PERMIT LATE PENALTIES 0568-780-4461-1618-= $60.00/ 34601707904

STATE OF MISSOURI
Jeremiah W. (Jay) Nixon, Governor • Harry Bozoian, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

October 14, 2016

Jason Williamson-Manager
Mill Creek Sewer, Inc
P.O. Box 200595
Denver, CO 80220

Dear Permittee:

Missouri State Operating Permit (MSOP) MO0084484 was issued to Mill Creek Sewer, Inc for the Castlereagh Estates Subdivision in St. Louis County. This permit sets forth specific effluent limitations, monitoring requirements, and specific permit conditions regarding the facility. Review of your Discharge Monitoring Report(s) for the **monitoring period(s) ending in April to June 2016** shows that the effluent limitations established in your MSOP have been exceeded. An exceedance of the effluent limitations established in your permit is a violation of the Missouri Clean Water Law (MCWL), Sections 644.051.1(3) and 644.076.1; Clean Water Commission Regulations 10 CSR 20-7; and your MSOP. The violations are listed on the enclosed Discharge Monitoring Report Exceedance List.

By **November 6, 2016**, please submit a written response to the address below which explains the reason(s) for the violation(s) and what steps you have taken or will take to prevent further violation(s) of the MCWL. As always, the department is willing to meet with you to discuss the violation(s) and the actions necessary to bring your facility into compliance. If you would like to schedule a meeting or have questions, please contact your Case Manager, Water Pollution Enforcement Section at 573-751-1300 in the Lewis and Clark State Office Building, P.O. Box 176, Jefferson City, MO 65102.

If you have already provided this information, the department appreciates your efforts to return your facility to compliance.

Sincerely,

ST. LOUIS REGIONAL OFFICE

Paul Morris
Water Pollution Control Unit Chief

PM/ss

cc: Water Protection Program Compliance and Enforcement Section

Enclosure: Discharge Monitoring Report Exceedance List

Castlereagh Estates Subdivision
St. Louis County
MO0084484

DISCHARGE MONITORING REPORT EXCEEDANCE LIST

Outfall	Monitoring End Date	Parameter	Units	Permit Limitations	Reported Values
002	4/30/2016	pH	SU	6.5 - Minimum	6.2
002	4/30/2016	pH	SU	9.0 - Maximum	6.2
002	5/31/2016	E. coli, colony forming units (CFU)	MPN/100mL	206 - Monthly Avg.	310

STATE OF MISSOURI
Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

NOTICE OF VIOLATION

AUG 18 2016

NOV NUMBER: BFUCWN101185

CERTIFIED MAIL: 7012 2920 0002 0662 3396
RETURN RECEIPT REQUESTED

Castlereagh Estates Subdivision, MO0084484
Mill Creek Sewer, Inc.
7581 E Academy Blvd, Suite 229
Denver, CO 80234

RE: NOTICE OF VIOLATION (NOV) – Castlereagh Estates Subdivision, St Louis County

To Whom It May Concern:

Please find the enclosed NOV number BFUCWN101185 which is being issued to your facility due to nonpayment of the Missouri State Annual Operating Permit Fee. Pursuant to Missouri Revised Statute Chapter 644 Section 644.052. 1. *"Persons with operating permits or permits by rule issued pursuant to this chapter shall pay fees pursuant to subsections 2 to 8 and 12 to 13 of this section. Persons with a sewer service connection to public sewer systems owned or operated by a city, public sewer district, public water district or other publicly owned treatment works shall pay a permit fee pursuant to subsections 10 and 11 of this section."*

The annual fee amount for your facility is $1,500, which was due on May 8, 2016. Penalties have been assessed pursuant to Chapter 644 Section 644.055 of the Missouri Revised Statutes, which is accrued on the entire amount due at a rate of two percent for each month that the fee is delinquent until the payment is remitted. The late penalty assessed to date is $60. The total amount due is $1,560.

Pursuant to the Missouri State Code of State Regulations Title 10, Division 20, Chapter 6, Section 6.011 Subsection (G) *"Annual fees are the responsibility of the permittee. Failure to receive a statement due to mailing errors, change of address, ownership changes or other reason(s) is not an excuse for failure to remit the fees. Penalties shall be charged as provided in section 644.055, RSMo."*

If annual fees and late penalties are not paid promptly, please be advised that the above referenced matter will be referred to the Attorney General's Office for the collection of the annual fee and late penalties. The Department also has the authority to pursue civil penalties of up to $10,000 per day for each day the violation continues to occur. If the case is referred to the Attorney General's Office, that action will be reported to the Missouri Clean Water Commission.

You are invited to notify this office if there is any reason why the Missouri Department of Natural Resources should not refer the matter to the Attorney General's Office for appropriate legal action. We anticipate taking this action on September 15, 2016.

In order to avoid referral to the Attorney General's Office, you must respond to this office within 15 days of receipt of this certified letter with a payment of the outstanding fee referenced above. Enclosed, please find the NOV document and the invoice required to remit the payment to the Department.

If you feel you received this NOV in error or have any questions or concerns, please do not hesitate to contact Ms. Sherry Bell at 573-522-1485.

Thank you in advance for your cooperation and attention to this matter.

Sincerely,

WATER PROTECTION PROGRAM

John Madras

John Madras
Director

JM/sb

Enclosures

c: Ms. Dorothy Franklin, Director, St Louis Regional Director
Water Protection Program Compliance and Enforcement Section

MISSOURI DEPARTMENT OF NATURAL RESOURCES

NOTICE OF VIOLATION

REGION/PROGRAM
☐KC ☐NE ☐SE ☐SL
☐SW ☐DW ☐HWP ☐APCP
☐LRP ☐SWMP ☐WPC

VIOLATION NUMBER
No. BFUCWN101185

DATE AND TIME ISSUED
AUG 1 8 2016 ☐ AM ☐ PM

SOURCE (NAME, ADDRESS, PERMIT NUMBER, LOCATION)
Castlereagh Estates Subdivision, MO0084484

MAILING ADDRESS	CITY	State	ZIP
7581 E AcademyBlvd, Suite 229	Denver	CO	80234

NAME OF OWNER OR MANAGER	TITLE OF OWNER OR MANAGER	COUNTY
Castlereagh Estates Subdivision Mill Creek Sewer, Inc.		St Louis

LAW, REGULATION OR PERMIT VIOLATED
Missouri Revised Statue Chapter 644 Section 644.052.1
Missouri State Code of Regulations Title 10, Division 20, Chapter 6, Section 6.011 Subsection (G)

NATURE OF VIOLATION
Non-Payment of Missouri State Operating Annual Notice - 2016

DATE(S): **May 8, 2016**

TIME(S):

SIGNATURE (PERSON RECEIVEING NOTICE)	SIGNATURE (PERSON ISSUING NOTICE)
	John Madras
TITLE OR POSITION	TITLE OR POSITION
	Director, Water Protection Program

Missouri Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102

AUG 1 8 2016

INVOICE

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Division Of Environmental Quality / Water Protection Program

Jefferson City, MO 65102

Contact: BUDGET & FEES UNIT
Phone: 573-751-1300
Fax: 573-526-1146

Bill To: MILL CREEK SEWER, INC
7581 E ACADEMY BLVD, SUITE 229
DENVER, CO 80234

Invoice #: 34601608605
Permit #: MO0084484
Date: 08/04/2016
Date Due: UPON RECEIPT

THIRD AND FINAL NOTICE

Description	Unit	Quantity	Amount	Total
Castlereagh Estates Subdivision * FOR FEE DATE OF: 5 /2016 CURRENT INVOICE # 34601608605	PERMIT	1.00	$1,500.00	$1,500.00
LATE PENALTIES: CURRENT INVOICE # 34601608605				$60.00
Castlereagh Estates Subdivision * FOR FEE DATE OF: 5 /2015 PREVIOUS INVOICE # 34601507606	PERMIT	1.00	$1,500.00	$1,500.00
LATE PENALTIES: PREVIOUS INVOICE # 34601507606				$90.00
Castlereagh Estates Subdivision * FOR FEE DATE OF: 5 /2014 PREVIOUS INVOICE # 34601407286	PERMIT	1.00	$2,500.00	$2,500.00
LATE PENALTIES: PREVIOUS INVOICE # 34601407286				$1,350.00
Castlereagh Estates Subdivision * FOR FEE DATE OF: 5 /2013 PREVIOUS INVOICE # 34601307783	PERMIT	1.00	$2,500.00	$2,500.00
LATE PENALTIES: PREVIOUS INVOICE # 34601307783				$1,950.00
CASTLEREAGH ESTATES SUBDI * FOR FEE DATE OF: 5 /2012 PREVIOUS INVOICE # 34601207087	PERMIT	1.00	$2,500.00	$2,500.00
LATE PENALTIES: PREVIOUS INVOICE # 34601207087				$2,550.00

**STATE OPERATING PERMIT UNDER THE MISSOURI CLEAN WATER LAW: 10 CSR 20-6.011.*

**STATE OPERATING PERMIT UNDER THE MISSOURI CLEAN WATER LAW: 644.052.2.*

Current Balance Due	$1,500.00
Past Balance Due	$9,000.00
Less Payments Received	$1,200.00
Plus Late Penalties	$6,000.00
Total Due	$15,300.00

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

September 26, 2008

CERTIFIED MAIL #7007 1490 0004 7934 9707
RETURN RECEIPT REQUESTED

Mr. Don Collier, President
Triad Development
135 Triad West Drive
O'Fallon, MO 63366

RE: Majestic Lakes Wastewater Treatment Facility, Lincoln County, MO

Dear Mr. Collier;

I am writing to inform you of serious problems at the Majestic Lakes wastewater treatment facility in Lincoln County and to require that you take action to correct these problems. These problems were found during a recent site visit by Mr. Paul Mueller and Mr. Jim Rhodes of the St. Louis Regional Office on September 23, 2008. The issues that were observed are listed below:

1. There are cracks in every wall in the treatment facility (see attached photographs for examples of such). These cracks indicate severe structural problems and the possibility that the facility may fail catastrophically. If this were to happen, there could be serious pollution of the receiving stream. If the walls would fail, the facility would need to be shut down until it could be reconstructed or otherwise repaired.

2. There is a severe leak between the SBR tank and the flow equalization tank. As the water level rises and falls in the SBR tank, water essentially leaks back and forth between these two tanks. This does two things. First, the effluent quality is degraded by water entering the SBR tank from the flow equalization tank during the decant part of the treatment cycle. Second, it prevents the flow equalization tank from functioning the way it was designed.

3. Due to recent flooding in Crooked Creek, the automatic valve actuators have failed and thus it is not possible for the treatment facility to be operated via the electronic control system that was installed.

4. Also due to the flooding, the emergency generator of the lift station on the west side of Crooked Creek is no longer in operating condition.

To remedy the above issues, you are required to take the following actions:

1. Immediately, cease making new connections to the collection system from new homes unless a house has been sold and closure of the sale has taken place prior to the date of your receiving this letter.

2. By October 17, 2008, provide this office with a structural evaluation of the treatment facility and recommendations as to how to best remedy any issues found during the evaluation. The evaluation must be

STATE OF MISSOURI
Jeremiah W. (Jay) Nixon, Governor Sara Parker Pauley, Director
DEPARTMENT OF NATURAL RESOURCES
dnr.mo.gov

Via: email attachment

To Whom It May Concern:

Residences in the Majestic Lakes subdivision that are connected to the central wastewater collection system are having the wastewater treated at a wastewater treatment facility approved and permitted by the Missouri Department of Natural Resources. The facility has a State Operating Permit, Permit Number MO0130125 with an expiration date of December 1, 2013 and expires on November 30, 2018. A copy of the permit can be obtained from the MDNR website at http://www.dnr.mo.gov/env/wpp/permits/wpcpermits-issued.htm.

Inspections of the facilities by Department personnel have found several structural and mechanical deficiencies. The Department has referred the original developer of the facility to the Missouri Attorney Generals Office (AGO) for enforcement actions. The case is still pending at the AGO.

The wastewater treatment facility is permitted to the Majestic Lakes Homeowners Association. The facility is being operated by the Environmental Management Corporation. The facility is currently meeting permit water quality limits.

Should you have any farther questions or comments, please contact me at the Lincoln County Satellite Office at (636) 528-4779 or email paul.mueller@dnr.mo.gov.

Sincerely,

ST. LOUIS REGIONAL OFFICE
Lincoln County Satellite Office

Paul Mueller
Environmental Specialist

SETTLEMENT AGREEMENT

This Settlement Agreement is made by and among the Missouri Department of Natural Resources (Department) and Central States Water Resources, Inc. (CSWR). This Agreement is deemed to be executed on the date this document is signed and dated by the Department.

WHEREAS, the Department director or his designee, on behalf of the Missouri Clean Water Commission, administers the provisions of the Missouri Clean Water Law (MCWL), Chapter 644, RSMo (as amended).

WHEREAS, CSWR is in the process of acquiring the wastewater treatment facility (WWTF) serving the subdivision, known as Majestic Lakes Subdivision (Subdivision). The Majestic Lakes Subdivision consists of 146 lots with single family homes built on approximately 61 lots and is located in the SE ¼, SE ¼, Section 10, Township 48 North, Range 1 East, Lincoln County, Missouri. The Subdivision is served by the WWTF which consists of a one tank sequencing batch reactor with flow equalization and ultraviolet disinfection. The WWTF has a design population equivalent of 790, a design flow of 79,000 gallons per day (gpd), and an actual flow of 12,800 gpd. The effluent discharges to Class P stream, Crooked Creek (P), pursuant to the conditions and requirements of Missouri State Operating Permit No. MO-0130125 (Permit), which was issued on December 1, 2013.

WHEREAS, according to the Secretary of State's website, the Majestic Lakes Homeowners Association, Inc. (MLHOA) was formed May 24, 2004, and is in good standing. Currently the MLHOA owns the WWTF.

WHEREAS, the Permit, issued December 1, 2013, to the MLHOA, authorized the discharge of wastewater from the WWTF in accordance with the effluent limitations and monitoring requirements set forth in the Permit. The Permit included a Schedule of Compliance (SOC)

requiring the MLHOA to either: 1) connect to another wastewater treatment facility or 2) repair and/or replace the WWTF currently serving the Subdivision. The MLHOA was required to abide by the following schedule:

A. Submit a plan to the Department within 60 days of issuance of the Permit indicating whether the MLHOA plans to connect to another wastewater treatment facility or if the MLHOA plans to repair/replace the entire WWTF currently serving the Subdivision.

Option 1: Connect to another wastewater treatment facility:

a) Within six months, declare connection to another wastewater treatment facility and submit a timeline to eliminate the existing WWTF.

b) By December 1, 2014, connect to another wastewater treatment facility and properly close the existing WWTF.

Option 2: Repair and/or replace existing WWTF:

a) Within six months of the effective date of the Permit, the permittee, MLHOA, shall submit a construction permit to repair and/or replace the WWTF including plans and specifications. This report shall include information as required by special Condition 1 (Ammonia limitations).

b) By December 1, 2014, the permittee shall submit a report detailing progress made in attaining compliance with the final effluent limits.

c) By December 1, 2016, the permittee shall attain full compliance with the final effluent limits for Ammonia.

WHEREAS, Crooked Creek and its tributaries are waters of the state as the term is defined by Section 644.016(27) RSMo.

WHEREAS, domestic wastewater is a water contaminant as the term is defined in Section 644.016(24), RSMo.

WHEREAS, on December 17, 2013, Department staff conducted an inspection of the WWTF. During the inspection, staff observed that the headworks bar screen concrete box was leaking around the base; wastewater was leaking from the cracks in the concrete walls, both of which are bypasses of the treatment process; and a metal plate had been installed between the outside wall and the aeration tank wall for temporary reinforcement. Staff also observed that the recirculation pump was nonoperational; the transducer for measuring flow was also nonoperational and in need of repair; the emergency generator at the WWTF had been removed; and the generator at the lift station had not been repaired since it was flooded in 2008.

WHEREAS, on January 31, 2014, the MLHOA submitted correspondence to the Department stating that the MLHOA had elected to pursue Option No. 2 to repair and/or replace the existing WWTF. To date, the MLHOA has not completed the required repairs or replaced the existing WWTF.

WHEREAS, on June 30, 2016, the MLHOA entered into an agreement with CSWR to transfer all assets of the WWTF serving the Subdivision to CSWR upon approval from the Public Service Commission.

WHEREAS, failure to prevent a bypass of partially treated wastewater through cracks in the headworks bar screen concrete box and the concrete wall of the WWTF's aeration tank, as required by the standard conditions of the Permit, is a violation of Section 644.076.1, RSMo.

WHEREAS, failing to fulfill the requirements of Part "D", SOC, of the Permit, is a violation of Section 644.076.1, RSMo, and 10 CSR 20-6.010(7)(A).

WHEREAS, upon taking ownership of the WWTF, CSWR will assume responsibility to operate the WWTF in compliance with the Permit, the MCWL, and its implementing regulations.

WHEREAS, Section 644.076.1, RSMo, makes it unlawful to violate the MCWL promulgated pursuant thereto and establishes civil penalties of up to $10,000 per day per violation.

WHEREAS, the Department and CSWR desire to amicably resolve all disputes or claims, which could be made against CSWR after acquiring the WWTF for violations of the MCWL and its implementing regulations.

NOW, THEREFORE, in consideration of the mutual promises contained herein and other good and valuable consideration, the Department and CSWR agree as follows:

1. The provisions of this Agreement shall apply to and be binding upon the parties executing this Agreement, their agents, subsidiaries, affiliates, and lessees, including the officers, agents, servants, corporations and any persons acting under, through, or for the parties agreeing hereto.

2. CSWR, in compromise and satisfaction of the allegations or claims relating to the above-referenced claimed violations, agrees, without admitting liability or fault, to the following:

3. Within 30 days of the date the Public Service Commission approves the transfer of the WWTF to CSWR, CSWR agrees to submit to the Department for review and approval, an Engineering Report prepared by a professional engineer licensed to practice in the State of Missouri recommending either connecting the wastewater flow of the Subdivision to an area-wide sewer system or repair/replace the existing WWTF.

4. Within 30 days of receipt of Department comments on the Preliminary Engineering Report, CSWR agrees to respond in writing to the Department addressing all Department comments on the Engineering Report to the Department's satisfaction.

5. Within 365 days of the date the Department approves the Engineering Report, CSWR agrees to complete all improvements recommended in the Engineering Report. CSWR agrees to obtain all permits and approvals necessary to complete the improvements.

6. The Department agrees not to bring, or cause to be brought, any civil action against CSWR for penalties arising out of the above-referenced claimed violations of the MCWL provided that CSWR complies with the terms herein.

7. CSWR agrees to comply with the MCWL and regulations and, in particular, to refrain from further violations of MCWL and regulations for all future operations.

8. The terms stated herein constitute the entire and exclusive agreement of the parties hereto. There are no other obligations of the parties, be they express or implied, oral or written, except those which are expressly set out in this Settlement Agreement. The terms of this Settlement Agreement supersede all previous memoranda of understanding, notes, conversations, and agreements whether express or implied. This Agreement may not be modified orally.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as follows:

MISSOURI DEPARTMENT OF
NATURAL RESOURCES

BY: _____
David J. Lamb, Acting Director
Water Protection Program

DATE: 5/17/17

CENTRAL STATES WATER RESOURCES, INC.

By: _____

Printed Name: Josiah Cox

TITLE: President

DATE: 5/12/17

Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Eric R. Greitens, Governor
Carol S. Comer, Director

CERTIFIED MAIL#
9171 9690 0935 0149 8290 19

June 26, 2017

Mr. Dale Johansen, Receiver
Utility Management of Missouri, LLC
6517 NW Office Center
House Springs, MO 63051

NOTICE OF VIOLATION
NOV #SL170206
RESPONSE REQUIRED

Dear Mr. Johansen:

Staff from the Department of Natural Resources conducted an inspection on June 2nd and 6th, 2017 of the Villa Ridge Estates wastewater treatment facility located at SW Rock Bridge, Villa Ridge, MO in Franklin County.

The enclosed report documents the serious and significant violations that were identified. A Notice of Violation (NOV) is being issued for the violations.

This case has been referred to the department's Water Pollution Control Branch (WPCB) enforcement for further action. If you have questions regarding the status of the enforcement case or would like to meet with department staff to discuss compliance requirements, please contact Ms. Kristi Savage-Clarke by mail at the Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102; by phone at (573) 751-1300; or by email at kristi.savage-clarke@dnr.mo.gov.

Sincerely,

ST. LOUIS REGIONAL OFFICE

Dorothy Franklin
Regional Director

DF/CCM/aa

Enclosures

c: Paul Dickerson, WPCB Compliance and Enforcement Section
Josiah Cox, President, Central States Water Resources

Missouri Department of Natural Resources
St. Louis Regional Office/Water Pollution Control Branch
Report of Inspection
Villa Ridge Estates
371 Rock Bridge Road/Villa Ridge/Franklin County, MO
MO-0038237
June 26, 2017

Introduction

Pursuant to Section 644.026.1 of the Missouri Clean Water Law, I, Christopher Maher of the Missouri Department of Natural Resources (department) St. Louis Regional Office (SLRO) conducted a water pollution inspection in response to an environmental concern regarding the Villa Ridge Estates wastewater treatment facility located at 371 Rock Bridge Road, Villa Ridge, Franklin County, Missouri on June 2nd and 6th, 2017. This water pollution control inspection was conducted to determine the facility's compliance with the Missouri Clean Water Law and the Missouri Clean Water Commission Regulations. This report presents the findings and observations made during the compliance inspection, including file review, site visits, and communications with entity representatives.

Participants included:

Missouri Department of Natural Resources, St. Louis Regional Office
Christopher Maher Environmental Specialist (314) 416-2960 chris.maher@dnr.mo.gov

Entity Description and History

As part of the inspection, I reviewed the files for the Villa Ridge Estates wastewater treatment facility, including previous inspection reports, correspondence, and the permit conditions of Missouri State Operating Permit MO-0038237, to familiarize myself with the requirements specific to this facility.

Missouri State Operating Permit (permit) MO-0038237 was last issued on March 25, 2011, and expired on March 24, 2016. This permit sets forth effluent limitations, monitoring requirements, and permit conditions, both standard and specific, that the permittee is to follow. The facility owner has not submitted a permit renewal application, and is therefore considered to be operating without a permit, in violation of the Missouri Clean Water Law (**Notice of Violation item #3**).

The facility consists of an extended aeration plant with a design flow of 66,600 gallons per day. The original wastewater treatment plant was replaced by a larger extended aeration plant, with the original plant converted to a sludge holding structure. The facility has two extended aeration basins, although past inspection reports indicate that the eastern basin is used for sludge holding. The facility has a chlorine contact chamber for disinfecting the wastewater effluent, and the expired permit required the facility to disinfect during the recreational season (April 1 to October 31). The receiving stream for this facility is a Wet Weather Branch of Pin Oak Creek, which is located in the Bourbeuse watershed (HUC 07140103). Site UTM coordinates for Outfall #001 are Easting 683837, Northing 4258724.

Numerous inspections of the facility have been conducted since 2007 that have reported wastewater sludge in the receiving stream, poor operations, and violations of the permitted effluent limitations, among other violations. The St. Louis Regional Office referred the facility to the Water Pollution Control Branch's Compliance and Enforcement Section for various violations of the Missouri Clean Water Law.

Paul Mueller of the St. Louis Regional Office conducted an investigation of a sanitary sewer overflow from a stream crossing on April 6, 2015. He found the sewer line leaking into the stream below the pipe. In response, the St. Louis Regional Office issued the facility a Notice of Violation dated May 1, 2015. He made a follow-up visit on May 19, 2015 and found the leak repaired, though the aerial crossing was still in noncompliance with designs for aerial crossings. Stephanie Hotard with the St. Louis Regional Office conducted the most recent inspection on September 4, 2015. Ms. Hotard observed sludge accumulation in the clarifier and a strong malodor near the clarifier. She did not observe sludge in the receiving stream. She noted that the sewer aerial crossing was made of PVC pipe that was not in compliance for designs for stream crossings. Her report concluded that the facility remained in noncompliance with the Missouri Clean Water Law.

I checked the Discharge Monitoring Reports for the previous five-year period (see Attachment #3 – Discharge Monitoring Report results). The last Discharge Monitoring Report that the St. Louis Regional Office received was for June 2015. Since then, none of the Discharge Monitoring Reports have been submitted (**Notice of Violation #4**).

The facility is not current on the required permit fees. The facility owner has not submitted any permit fees since March 8, 2012, and the payment on that date did not cover the entire balance. The Water Protection Program's Budget and Fees Unit has issued several Letters of Warning and Notices of Violation, but has not received a response. The St. Louis Regional Office received the Form S sludge reports for calendar years 2015 and 2016, in accordance with the permit conditions.

Discussion of Inspection and Observations

The inspection on June 2, 2017 was conducted during normal business hours. Prior notification was not provided to the facility. Upon arrival at the facility, I did not meet with anybody and conducted the inspection by myself. The inspection was prompted by an anonymous concern regarding a report of sludge in the receiving stream and the facility going septic.

I arrived at the facility shortly before 11:30. I could hear the blowers operating for the facility. The facility was surrounded by a fence of adequate height and topped with barbed wire (except for the northern side of the fence which did not have barbed wire), and it had warning signs visible from each side of the facility (Photo #001). The front entrance was locked, and I did not enter the fenced portion of the facility.

The water level in the eastern extended aeration basin was low (Photo #002). The blowers were only aerating the basin contents near the blowers. I did not observe any significant amount of aeration in the rest of the basin. On a previous inspection, Mr. Jonathan Fribis, an operator for the facility, told Paul Mueller with the St. Louis Regional Office that this basin was being used for sludge holding. The western extended aeration basin was being actively aerated throughout the contents (Photo #003). The basin contents had a dark brown color as well as a mild malodor. The contents should have a lighter chocolate-brown color to indicate adequate biological activity.

The secondary clarifier was located to the west of the extended aeration basin. Sludge was overflowing the central column in the clarifier (Photo #004). The water in the clarifier was turbid with floating balls of sludge on the surface. I observed the skimmer arm in operation;

however, since the scum rake on the skimmer arm was missing, it was not capable of removing floating material. I observed sludge at the edge of the effluent weirs and in the effluent trough leading to the chlorine contact chamber (Photo #005). I was not able to observe the state of the chlorine contact chamber or the original wastewater facility that had been converted to a sludge holding tank. However, I did see the top portion of the chlorine tablet feeder sitting on a grate for the chlorine contact chamber.

There was a clear path to the outfall for conducting sampling. The outfall pipe was actively discharging. It was properly marked to identify it as an outfall (Photo #006). Water discharging was clear with no visible solids. However, I observed substantial sludge solids in the receiving stream downstream of the outfall pipe (Photos #007 through #010). The receiving stream exhibited bottom deposits, turbidity and floating scum in violation of the general criteria in the Missouri Clean Water Commission regulations (**Notice of Violation item #1 and #2**). I also observed the upstream portion of the receiving stream, which was substantially different with no sludge deposits or signs of impact (Photo #011). I conducted on-site water quality monitoring of the effluent discharging (see "Sampling and Monitoring" section below). The Dissolved Oxygen result was 2.00 mg/L; ideally, it should be in the 5 to 10 mg/L range to indicate proper operation. The Total Residual Chlorine result was 0.01 mg/L (10 µg/L), which is considered to be less than the minimum quantification level (0.13 mg/L). Since I did not observe an installed dechlorination system and our files do not indicate that the facility owners installed one, the lack of chlorine residual suggests that the operator is not adequately disinfecting the wastewater effluent.

At the end of the inspection, I observed the aerial sewer crossing over the stream (Photo #012). The pipe was not leaking, but it still did not meet the requirements for stream crossings in the Chapter 8 Design Guides (10 CSR 20-8.120(9)(D)) (**Notice of Violation item #5**). This stream crossing should not be considered permanent.

I left a voicemail message with Mr. Todd Thomas with Central States Water Resources (CSWR) on June 5, 2017. CSWR personnel expressed interest in taking over the facility in the past so I called to find out the current status. Mr. Thomas called and left a voicemail message with me later in the day. The next morning, I called and spoke with him regarding the facility. He stated that, as of June 5, 2017, they had taken over operating responsibilities for Dale Johansen, the court appointed receiver, and CSWR would likely apply to the Missouri Public Service Commission to take over the facility. He also referred me to Darryl Waller, who would be operating the facility. I discussed the facility's deficiencies and what would be required to get the facility into compliance.

I returned to the facility on June 6, 2017 to conduct sampling. The facility had the same appearance and deficiencies as during the June 2 site visit. The extended aeration basin was being aerated but had dark brown contents, which should be lighter to indicate proper biological activity (Photo #013). The clarifier still had floating sludge on the water surface (Photo #014). Also, the receiving stream still had sludge deposits below the outfall pipe (Photo #015). There was still sludge visible in the receiving stream. I collected a grab sample for analysis of 5-day Biochemical Oxygen Demand, Total Suspended Solids, Ammonia as N (Ammonia), and Total Coliform/*E. coli*. I called and spoke with Mr. Thomas later in the day to describe the state of the facility.

Sampling and Monitoring

I took the appropriate sampling materials on the inspection on both days, including a copy of the Missouri Department of Natural Resources' Standard Operating Procedures, as well as instruments for field monitoring that were capable of testing pH, temperature, conductivity, and dissolved oxygen, and Total Residual Chlorine. The field monitoring equipment had been properly calibrated and/or compared to standards in accordance with the St. Louis Regional Office's Quality Assurance/Quality Control procedures. I did not collect samples on June 2, 2017 due to the fact that I would not be able to ship samples for analysis. The on-site quality monitoring can be found in the below table.

Outfall #001 for Villa Ridge Estates						
Results of Sample Analyses			Permitted Effluent Limitations			
Parameter	**Sample Result**	**Units**	**Daily Maximum**	**Weekly Average**	**Monthly Average**	**Units**
pH[1]	7.47	SU	*		*	SU
Temperature[1]	22.0	°C				
Dissolved Oxygen[1]	2.00	mg/L				
Conductivity[1]	1620	µS/cm				
Total Residual Chlorine[1]	0.01**	mg/L	0.017		0.008	mg/L

[1]On-Site Water Quality Monitoring.
*pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
**Total Residual Chlorine result is below the minimum quantification level (ML) of 0.13 mg/L and is therefore considered to be in compliance. See Note 2 on page 3 of the permit for details.
Abbreviations: SU (Standard pH Units)

I conducted on-site water quality monitoring and collected the grab sample at Outfall #001 on June 6, 2017. Since the facility is operating without a permit, the permitted effluent limitations in Table A of the permit that expired on March 24, 2016 are not enforceable; therefore, I collected the sample in order to determine how well the facility was operating. After collection, I packed the sample containers into a cooler with ice. Analysis for Total Coliform/*E. coli* was conducted by St. Louis Regional Office staff. I shipped the sample to the department's Environmental Services Program for analysis of 5-day Biochemical Oxygen Demand, Total Suspended Solids, and Ammonia as N (Nitrogen). As of the writing of this report, the sample analysis results were not available for inclusion. The sample analysis results will be forwarded to the owner when they are available.

Outfall #001 for Villa Ridge Estates						
Results of Sample Analyses			Permitted Effluent Limitations			
Parameter	**Sample Result**	**Units**	**Daily Maximum**	**Weekly Average**	**Monthly Average**	**Units**
Grab Sample; Sample #170658						
pH[1]	7.52	SU	*		*	SU
Temperature[1]	22.6	°C				
Dissolved Oxygen[1]	1.61	mg/L				
Conductivity[1]	1440	µS/cm				
Total Residual Chlorine[1]	0.06**	mg/L	0.017		0.008	mg/L
Total Coliform[2]	>2419.6	MPN				
E. coli[2]	**>2419.6**	MPN	1030		206	MPN

Ammonia as N[3]	***	mg/L	****		****	mg/L
Biochemical Oxygen Demand$_5$[3]	***	mg/L		45	30	mg/L
Total Suspended Solids[3]	***	mg/L		45	30	mg/L

[1]On-Site Water Quality Monitoring.
[2]Total Coliform/*E. coli* analysis conducted by St. Louis Regional Office staff.
[3]Sample analysis conducted by Environmental Services Program staff.
*pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.
**Total Residual Chlorine result is below the minimum quantification level (ML) of 0.13 mg/L and is therefore considered to be in compliance. See Note 2 on page 3 of the permit for details.
***Sample analysis results not available as of the writing of this report.
****Monitoring requirement only.
Abbreviations: MPN (Most Probable Number per 100 mL); **SU** (Standard pH Units)

Compliance Determination

The facility was found to be in noncompliance with the Missouri Clean Water Law, the Missouri Clean Water Commission regulations, and Missouri State Operating Permit MO-0038237, based upon observations made during the inspection, and a **Notice of Violation (NOV)** is being issued for the violations identified below.

Listing of Violations and Required Actions

Notice of Violation (NOV) #SL170206

1. Caused pollution of the Wet Weather Branch of Pin Oak Creek, waters of the state, or placed or caused or permitted to be placed a water contaminant, wastewater sludge, in a location where it is reasonably certain to cause pollution of waters of the state [Sections 644.051.1(1) and 644.076.1, RSMo].

2. The facility discharged water contaminants, wastewater sludge, into waters of the state which reduced the quality of such waters below the Water Quality Standards established by the Missouri Clean Water Commission [Sections 644.051.1(2) and 644.076.1, RSMo, and 10 CSR 20-7.031(4)(A), (B), and (C)].

REQUIRED ACTION for items #1 and #2: The facility owner shall operate the facilities so that there is no sludge discharge from the outfall pipe. The facility owner shall also remove sludge from the receiving stream and dispose of properly, in accordance with the Missouri Clean Water Law and regulations. The facility owner shall coordinate a written response with the St. Louis Regional Office by **July 31, 2017,** stating what actions are being taken to address the violations and prevent a reoccurrence in the future.

3. Since March 25, 2016, operated, used or maintained a water contaminant source, a wastewater treatment facility, which discharges to a Wet Weather Branch of Pin Oak Creek, waters of the state, without a Missouri State Operating Permit (MSOP) [Sections 644.051.2 and 644.076.1, RSMo, and 10 CSR 20-6.010(1)(A) and (5)(A)].

REQUIRED ACTION: The facility owner is to complete and submit the enclosed Form B permit renewal application to the Missouri Department of Natural Resources, Water Protection

Program, P.O. Box 176, Jefferson City, MO 65102. Additional copies of the application can be found at http://dnr.mo.gov/forms/780-1512-f.pdf.

4. Failed to submit timely discharge monitoring reports as required in part "A" of Missouri State Operating Permit (MSOP) number MO-0038237 [Section 644.076.1, RSMo, and 10 CSR 20-7.015(9)(D)].

REQUIRED ACTION: If available, the facility owner shall submit the discharge monitoring reports for May 2015 to March 2016 to the St. Louis Regional Office. The facility shall coordinate a written response with the St. Louis Regional Office by **July 31, 2017**, stating what actions are being taken to address the violations and prevent a reoccurrence in the future.

5. Failed to meet design requirements for aerial stream crossings [Section 644.076.1, RSMo, and 10 CSR 20-8.120(9)(D)].

REQUIRED ACTION: The facility owner shall install an aerial stream crossing that meets the Chapter 8 design guides. The facility shall coordinate a written response with the St. Louis Regional Office by **July 31, 2017**, stating what actions are being taken to address the violations and prevent a reoccurrence in the future.

The written response should be sent to Mr. Christopher Maher with the Missouri Department of Natural Resources, St. Louis Regional Office; 7545 South Lindbergh Blvd., Suite 210, St. Louis, MO 63125; by phone at (314) 416-2960; or by email at chris.maher@dnr.mo.gov. Correspondence should be copied to the WPCB Compliance and Enforcement Section, with the Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102.

Recommendations

1. The facility should begin using the new eDMR system, located at the website listed below. This electronic reporting system will streamline the management of Discharge Monitoring Reports, save money, improve efficiency and accuracy, and improve overall effectiveness. Training classes are being provided by the department for facilities and operators. Use of this reporting system will be mandatory in near future; however, the system is available now for use. The department highly encourages the use of this system early on, rather than later, and appreciates your cooperation.
   http://www.dnr.mo.gov/env/wpp/edmr.htm

2. Tablet feeders for chlorination systems should be checked at least once per week to ensure that the dispensers are adequately stocked and the tablets are contacting the water flow.

Additional Comments/Conclusion

1. Based on the appearance of the facility, the on-site water quality monitoring and the presence of sludge in the receiving stream, the facility is not being adequately operated to meet the permit conditions, prevent pollution to waters of the state, and prevent violations of the water quality criteria. The operator needs to make adjustments to the treatment processes to prevent further impacts to the receiving stream.

2. Beginning March 25, 2014, the facility was required to be able to meet new permitted effluent limitations for Total Residual Chlorine, which would likely require installation of a dechlorination system. Installation of a dechlorination system may be considered a minor modification, which would not require a construction permit prior to installation. The facility operator should contact the Water Protection Program's Engineering Section at (573) 751-1300 for additional information regarding construction permit requirements.

Signatures

SUBMITTED BY:

Christopher Maher

Christopher Maher
Environmental Specialist
St. Louis Regional Office

REVIEWED BY:

Paul Morris
Environmental Supervisor
St. Louis Regional Office

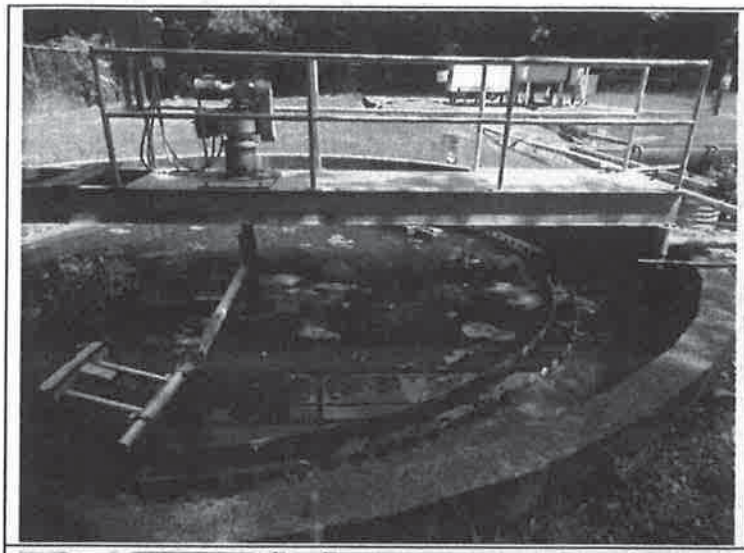
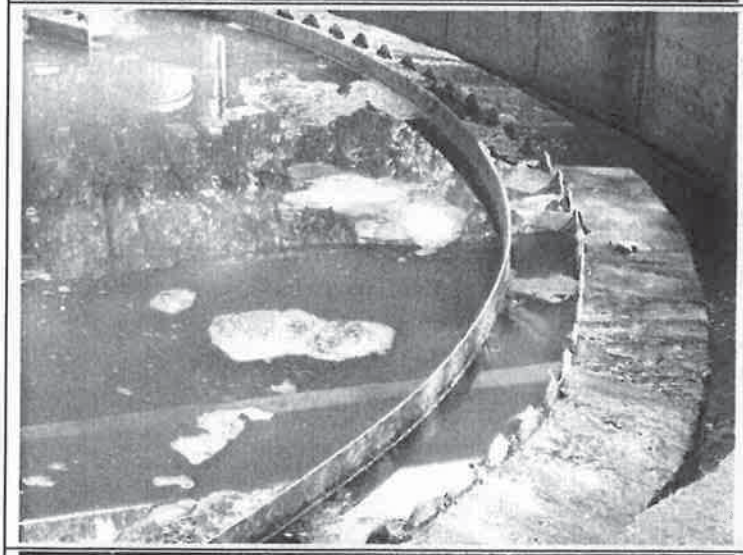
PHM/CCM/AA

Attachments

Attachment # 1 – Photographs (#001 through #015)
Attachment # 2 – Aerial Map
Attachment # 3 – Discharge Monitoring Report Results

	Photograph: #010 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Outfall #001 Description: Sludge deposits visible in receiving stream; Outfall #001 visible in background; facing east. Date Taken: June 2, 2017 Program: WPC Unit
	Photograph: #011 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Receiving Stream Description: View upstream of Outfall #001 with no sludge deposits; facing east. Date Taken: June 2, 2017 Program: WPC Unit
	Photograph: #012 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Stream Crossing for Rock Bridge Road Description: PVC pipe installed at stream crossing; no leakage visible from pipe; facing east. Date Taken: June 2, 2017 Program: WPC Unit

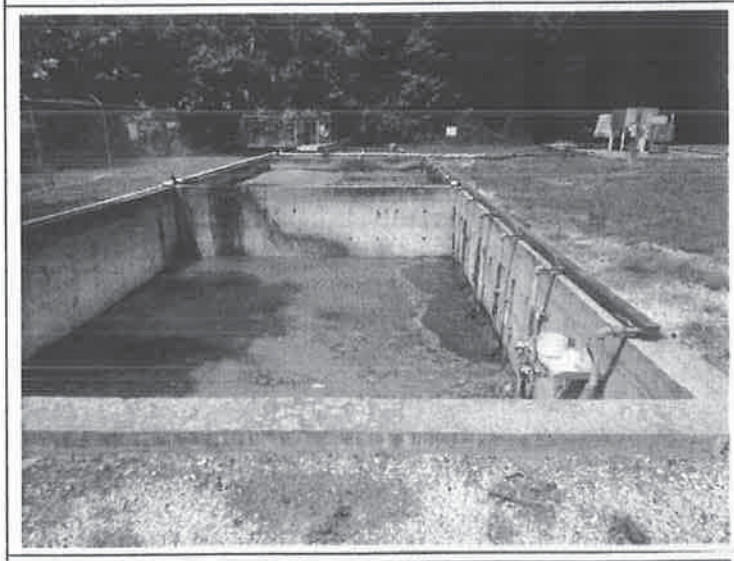
	Photograph: #007 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Outfall #001 Description: Sludge deposits visible in receiving stream; facing west. Date Taken: June 2, 2017 Program: WPC Unit
	Photograph: #008 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Outfall #001 Description: Flow from Outfall #001 to receiving stream, with sludge visible in stream; facing southwest. Date Taken: June 2, 2017 Program: WPC Unit
	Photograph: #009 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Receiving Stream Description: View downstream from where water flow from Outfall #001 meets receiving stream; sludge visible in stream; facing south. Date Taken: June 2, 2017 Program: WPC Unit

	Photograph: #004 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Secondary Clarifier Description: Secondary Clarifier with turbid water and sludge on surface; skimmer arm has missing scum baffle; facing north. Date Taken: June 2, 2017 Program: WPC Unit
	Photograph: #005 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Secondary Clarifier Description: Sludge visible at effluent weirs and in effluent trough; facing northeast. Date Taken: June 2, 2017 Program: WPC Unit
	Photograph: #006 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Outfall #001 Description: Outfall pipe discharging at Outfall #001; facing west. Date Taken: June 2, 2017 Program: WPC Unit

Photograph: #001
Taken By: Christopher Maher
Facility: Villa Ridge Estates
Permit: MO-0038237
Location: Site Entrance to Facility

Description: Entrance to facility; facing west.

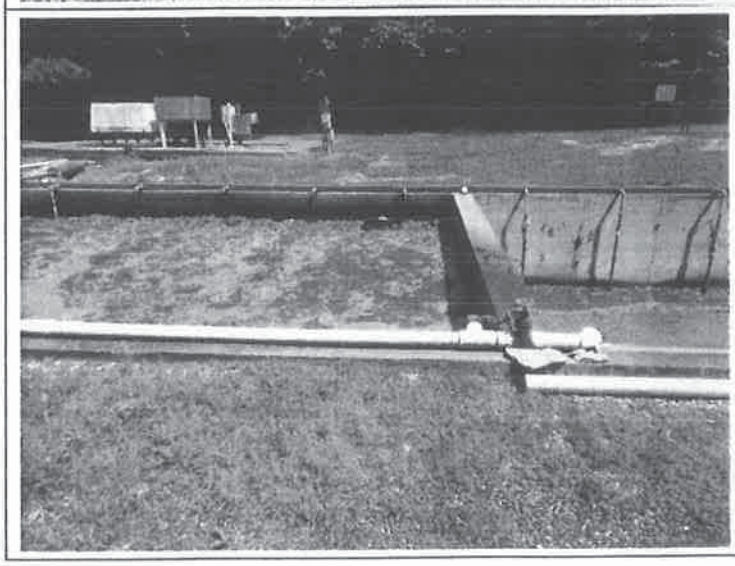
Date Taken: June 2, 2017
Program: WPC Unit



Photograph: #002
Taken By: Christopher Maher
Facility: Villa Ridge Estates
Permit: MO-0038237
Location: Extended Aeration Basins

Description: Eastern extended aeration basin with only small area being aerated; facing west.

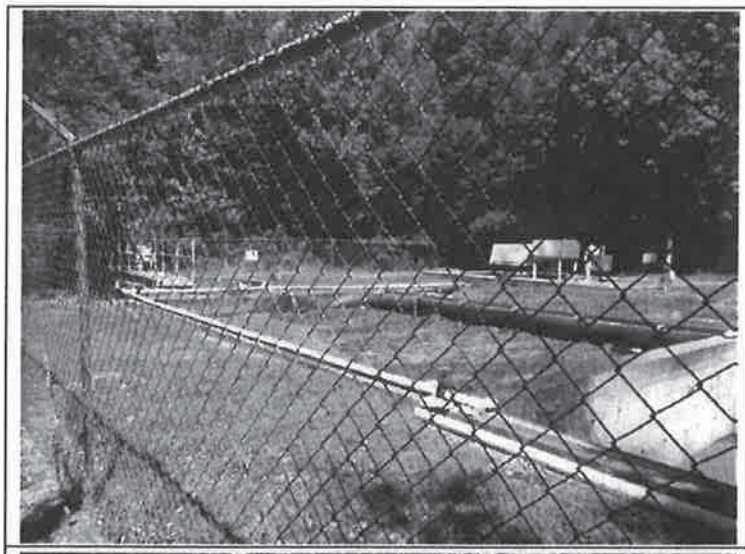
Date Taken: June 2, 2017
Program: WPC Unit



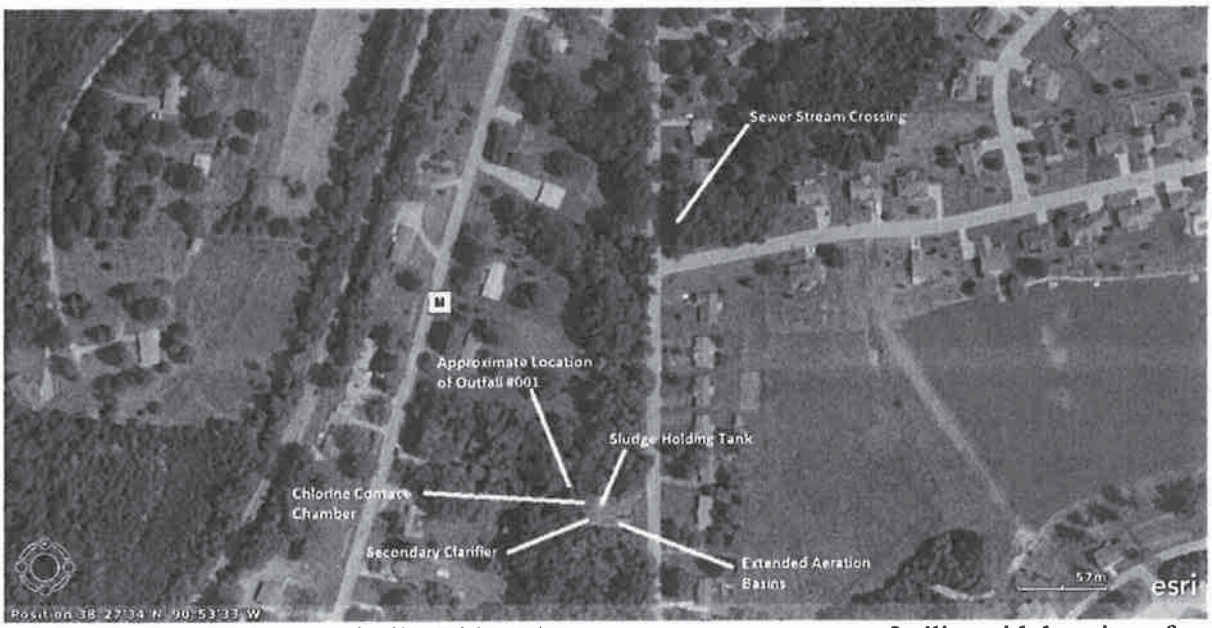
Photograph: #003
Taken By: Christopher Maher
Facility: Villa Ridge Estates
Permit: MO-0038237
Location: Extended Aeration Basins

Description: Western extended aeration basin being aerated with dark, brown color; facing north.

Date Taken: June 2, 2017
Program: WPC Unit

	Photograph: #013 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Extended Aeration Basin Description: View of extended aeration basin being aerated with dark brown contents; facing northwest. Date Taken: June 6, 2017 Program: WPC Unit
	Photograph: #014 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Secondary Clarifier Description: Sludge on surface of secondary clarifier; facing north. Date Taken: June 6, 2017 Program: WPC Unit
	Photograph: #015 Taken By: Christopher Maher Facility: Villa Ridge Estates Permit: MO-0038237 Location: Receiving Stream Description: View of Outfall #001 with sludge in the receiving stream; facing east. Date Taken: June 6, 2017 Program: WPC Unit

Attachment #2 – Aerial Map
Villa Ridge Estates
June 26, 2017



Site Map: General layout of Villa Ridge Estates wastewater treatment facility with location of aerial sewer crossing.

Attachment #3 – Discharge Monitoring Report Results
Villa Ridge Estates
June 26, 2017

	Parameters				
Month	**BOD** (Monthly Average) **30 mg/L**	**TSS** (Monthly Average) **30 mg/L**	**Ammonia** (Monthly Average) **Monitoring mg/L**	**TRC** (Monthly Average) **130 µg/L**	***E. coli*** (Monthly Average) **206/100 ml**
May 2015	8	3	0.87	<10	**248**
June 2015	3	5	0.82	<10	**296**
July 2015	**	**	**	**	**
Aug. 2015	**	**	**	**	**
Sept. 2015	**	**	**	**	**
Oct. 2015	**	**	**	**	**
Nov. 2015	**	**	**	*	*
Dec. 2015	**	**	**	*	*
Jan. 2016	**	**	**	*	*
Feb. 2016	**	**	**	*	*
Mar. 2016	**	**	**	*	*

*Disinfection seasonal and not required during this time period.
**Results not submitted
Abbreviations: Biological Oxygen Demand (BOD); Total Suspended Solids (TSS); Total Residual Chlorine (TRC)
Exceedances are in **bold** text.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

FORM B: APPLICATION FOR OPERATING PERMIT FOR FACILITIES THAT RECEIVE PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW LESS THAN OR EQUAL TO 100,000 GALLONS PER DAY

FOR AGENCY USE ONLY	
CHECK NUMBER	
DATE RECEIVED	FEE SUBMITTED

READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1. THIS APPLICATION IS FOR:

☐ An operating permit for a new or unpermitted facility. Construction Permit # _____
(Include completed antidegradation review or request for antidegradation review, see instructions)

☐ A new site-specific operating permit formerly general permit #MOG _____

☐ A site-specific operating permit renewal: Permit #MO- _____ Expiration Date _____

☐ A site-specific operating permit modification: Permit #MO- _____ Reason: _____

☐ General permit (MOGD – Non POTWs discharging < 50,000 GPD *or* MOG823 – Land Application of Domestic Wastewater):
Permit #MO- _____ Expiration Date _____

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

2. FACILITY

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

2.1 Legal description: ¼, ¼, ¼, Sec. , T , R | County

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

2.3 Name of receiving stream:

2.4 Number of outfalls: Wastewater outfalls: Stormwater outfalls: Instream monitoring sites:

3. OWNER

NAME	EMAIL ADDRESS	TELEPHONE NUMBER WITH AREA CODE	
ADDRESS	CITY	STATE	ZIP CODE

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

3.2 Are you a publicly owned treatment works? ☐ YES ☐ NO
If yes, is the Financial Questionnaire attached? ☐ YES ☐ NO

3.3 Are you a privately owned treatment works? ☐ YES ☐ NO

3.4 Are you a privately owned treatment facility regulated by the Public Service Commission? ☐ YES ☐ NO

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

NAME	EMAIL ADDRESS	TELEPHONE NUMBER WITH AREA CODE	
ADDRESS	CITY	STATE	ZIP CODE

If the continuing authority is different than the owner, include a copy of the contract agreement between the two parties and a description of the responsibilities of both parties within the agreement.

5. OPERATOR

NAME	TITLE	CERTIFICATE NUMBER
EMAIL ADDRESS		TELEPHONE NUMBER WITH AREA CODE

6. FACILITY CONTACT

NAME		TITLE	
EMAIL ADDRESS		TELEPHONE NUMBER WITH AREA CODE	
ADDRESS	CITY	STATE	ZIP CODE

7. DESCRIPTION OF FACILITY

7.1 Process Flow Diagram or Schematic: Provide a diagram showing the processes of the treatment plant. Show all of the treatment units, including disinfection (e.g. – chlorination and dechlorination), influents, and outfalls. Specify where samples are taken. Indicate any treatment process changes in the routing of wastewater during dry weather and peak wet weather. Include a brief narrative description of the diagram.
Attach sheets as necessary.

7.2 Attach an aerial photograph or USGS topographic map showing the location of the facility and outfall.

8. ADDITIONAL FACILITY INFORMATION

8.1 Facility SIC code: _____ Discharge SIC code: _____

8.2 Number of people presently connected or population equivalent (P.E.) Design P.E.

8.3 Connections to the facility:

Number of units presently connected:

Homes _____ Trailers _____ Apartments _____ Other (including industrial) _____

Number of commercial establishments: _____

8.4 Design flow:	Actual flow:

8.5 Will discharge be continuous through the year? ☐Yes ☐ No

Discharge will occur during the following months:

How many days of the week will discharge occur?

8.6 Is industrial wastewater discharged to the facility? ☐Yes ☐ No

If yes, attach a list of the industries that discharge to your facility

8.7 Does the facility accept or process leachate from landfills? ☐Yes ☐ No

8.8 Is wastewater land applied? ☐Yes ☐ No

If yes, is Form I attached? ☐Yes ☐ No

8.9 Does the facility discharge to a losing stream or sinkhole? ☐Yes ☐ No

8.10 Has a wasteload allocation study been completed for this facility? ☐Yes ☐ No

9. LABORATORY CONTROL INFORMATION

LABORATORY WORK CONDUCTED BY PLANT PERSONNEL

Lab work conducted outside of plant. ☐Yes ☐ No

Push-button or visual methods for simple test such as pH, settlable solids. ☐Yes ☐ No

Additional procedures such as dissolved oxygen, chemical oxygen demand, biological oxygen demand, titrations, solids, volatile content. ☐Yes ☐ No

More advanced determinations such as BOD seeding procedures, fecal coliform, nutrients, total oils, phenols, etc. ☐Yes ☐ No

Highly sophisticated instrumentation, such as atomic absorption and gas chromatograph. ☐Yes ☐ No

10. COLLECTION SYSTEM

10.1 Length of pipe in the sewer collection system? _____ Feet, or _____ Miles (either unit is appropriate)

10.2 Does significant infiltration occur in the collection system? ☐Yes ☐ No

If yes, briefly explain any steps underway or planned to minimize inflow and infiltration:

11. BYPASSING

Does any bypassing occur in the collection system or at the treatment facility? ☐Yes ☐ No

If yes, explain:

12. SLUDGE HANDLING, USE AND DISPOSAL

12.1 Is the sludge a hazardous waste as defined by 10 CSR 25? ☐ Yes ☐ No

12.2 Sludge production, including sludge received from others: _____Design dry tons/year _____Actual dry tons/year

12.3 Capacity of sludge holding structures:
Sludge storage provided: _____ cubic feet; _____ days of storage; _____ average percent solids of sludge;
☐ No sludge storage is provided. ☐ Sludge is stored in lagoon.

12.4 Type of Storage:
☐ Holding tank ☐ Building
☐ Basin ☐ Lagoon
☐ Concrete Pad ☐ Other (Describe) _____

12.5 Sludge Treatment:
☐ Anaerobic Digester ☐ Lagoon ☐ Composting
☐ Storage Tank ☐ Aerobic Digester ☐ Other (Attach description)
☐ Lime Stabilization ☐ Air or Heat Drying

12.6 Sludge Use or Disposal:
☐ Land Application ☐ Surface Disposal (Sludge Disposal Lagoon, Sludge held for more than two years)
☐ Contract Hauler ☐ Hauled to Another treatment facility
☐ Incineration ☐ Sludge Retained in Wastewater treatment lagoon
☐ Solid waste landfill

12.7 Person responsible for hauling sludge to disposal facility:
☐ By applicant ☐ By others (complete below)

NAME		EMAIL ADDRESS	
ADDRESS	CITY	STATE	ZIP CODE
CONTACT PERSON	TELEPHONE NUMBER WITH AREA CODE	PERMIT NO. MO-	

12.8 Sludge use or disposal facility
☐ By applicant ☐ By others (Complete below.)

NAME		EMAIL ADDRESS	
ADDRESS	CITY	STATE	ZIP CODE
CONTACT PERSON	TELEPHONE NUMBER WITH AREA CODE	PERMIT NO. MO-	

12.9 Does the sludge or biosolids disposal comply with federal sludge regulations under 40 CFR 503?
☐ Yes ☐ No (Explain)

13. ELECTRONIC DISCHARGE MONITORING REPORT (eDMR) SUBMISSION SYSTEM

Per 40 CFR Part 127 National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Rule, reporting of effluent limits and monitoring shall be submitted by the permittee via an electronic system to ensure timely, complete, accurate, and nationally consistent set of data. **One of the following must be checked in order for this application to be considered complete.** Please visit http://dnr.mo.gov/env/wpp/edmr.htm to access the Facility Participation Package.

☐ - You have completed and submitted with this permit application the required documentation to participate in the eDMR system.

☐ - You have previously submitted the required documentation to participate in the eDMR system and/or you are currently using the eDMR system.

☐ - You have submitted a written request for a waiver from electronic reporting. See instructions for further information regarding waivers.

14. CERTIFICATION

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 (TYPE OR PRINT)	OFFICIAL TITLE	TELEPHONE NUMBER WITH AREA CODE
SIGNATURE		DATE SIGNED

INSTRUCTIONS FOR COMPLETING FORM B: APPLICATION FOR OPERATING PERMIT FOR FACILITIES THAT RECEIVE PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW LESS THAN OR EQUAL TO 100,000 GALLONS PER DAY

(Facilities over 100,000 gallons per day of domestic waste must use FORM B2)
(Facilities that receive wastes other than domestic contact the department)

1. Check the appropriate box. **Do not check more than one item.** Operating permit refers to a permit issued by the Department of Natural Resources' Water Protection Program. If an Antidegradation Review has not been conducted, submit the application located at the following link to the Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102: http://dnr.mo.gov/forms/780-1893-f.pdf

1.1 **Fees Information:**

DOMESTIC OPERATING PERMIT FEES – PRIVATE

Annual operating permit fees are based on flow.

Annual fee/Design flow	Annual fee/Design flow	Annual fee/Design flow
$150.....<5,000 gpd	$1,000.....15,000-24,999 gpd	$4,000.....100,000-249,999 gpd
$300.....5,000-9,999 gpd	$1,500.....25,000-29,999 gpd	$5,000.....≥250,000 gpd
$600.....10,000-14,999 gpd	$3,000.....30,000-99,999 gpd	

New domestic wastewater treatment facilities must submit the annual fee with the original application.

If the application is for a site-specific permit re-issuance, send no fees. You will be invoiced separately by the department on the anniversary date of the original permit. Permit fees must be current for the department to reissue the operating permit. Late fees of two percent per month are charged and added to outstanding annual fees.

PUBLIC SEWER SYSTEM OPERATING PERMIT FEES (city, public sewer district, public water district, or other publicly owned treatment works). Annual fee is based on number of service connections. Fees listings are found in 10 CSR 20-6.011 which is available at http://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-6.pdf. New public sewer system facilities should not submit any fee as the department will invoice the permittee.

OPERATING PERMIT MODIFICATIONS, including transfers, are subject to the following fees:

a. Publicly Owned Treatment Works (POTWs) - $200 each.
b. Non-POTWs – $100 each for a minor modification (name changes, address changes, other non-substantive changes) or a fee equal to 25% of the facility's annual operating fee for a major modification.

2. Name of Facility – Include the name by which this facility is locally known. Example: Southwest Sewage Treatment Plant, Country Club Mobile Home Park, etc. Provide the street address or location of the facility. If the facility lacks a street name or route number, provide the names of the closest intersection, highway, country road, etc.

2.1 Self-explanatory

2.2 Global Positioning System, or GPS, is a satellite-based navigation system. The department prefers that a GPS receiver is used at the outfall pipe and the displayed coordinates submitted. If access to a GPS receiver is not available, use a mapping system to approximate the coordinates; the department's mapping system is available at www.dnr.mo.gov/internetmapviewer/.

2.3-2.4 Self-explanatory

3. Owner – Provide the legal name, mailing address, phone number, and email address of the owner.
Prior to submitting a permit to public notice, the Department of Natural Resources shall provide the permit applicant 15 days to review the draft permit for nonsubstantive drafting errors. In the interest of expediting permit issuance, permit applicants may waive the opportunity to review draft permits prior to public notice.

3.2-3.4 Self-explanatory.

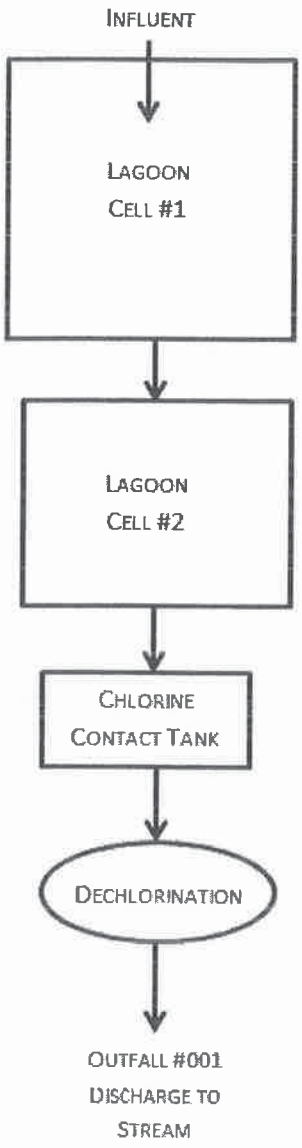
4. Continuing Authority – Include the permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the facility. The regulatory requirement regarding continuing authority is available at http://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-6.pdf or contact the Department of Natural Resources Water Protection Program (see contact information below).

5. Operator – Provide the name, certificate number, title, mailing address, phone number, and e-mail address of the operator of the facility.

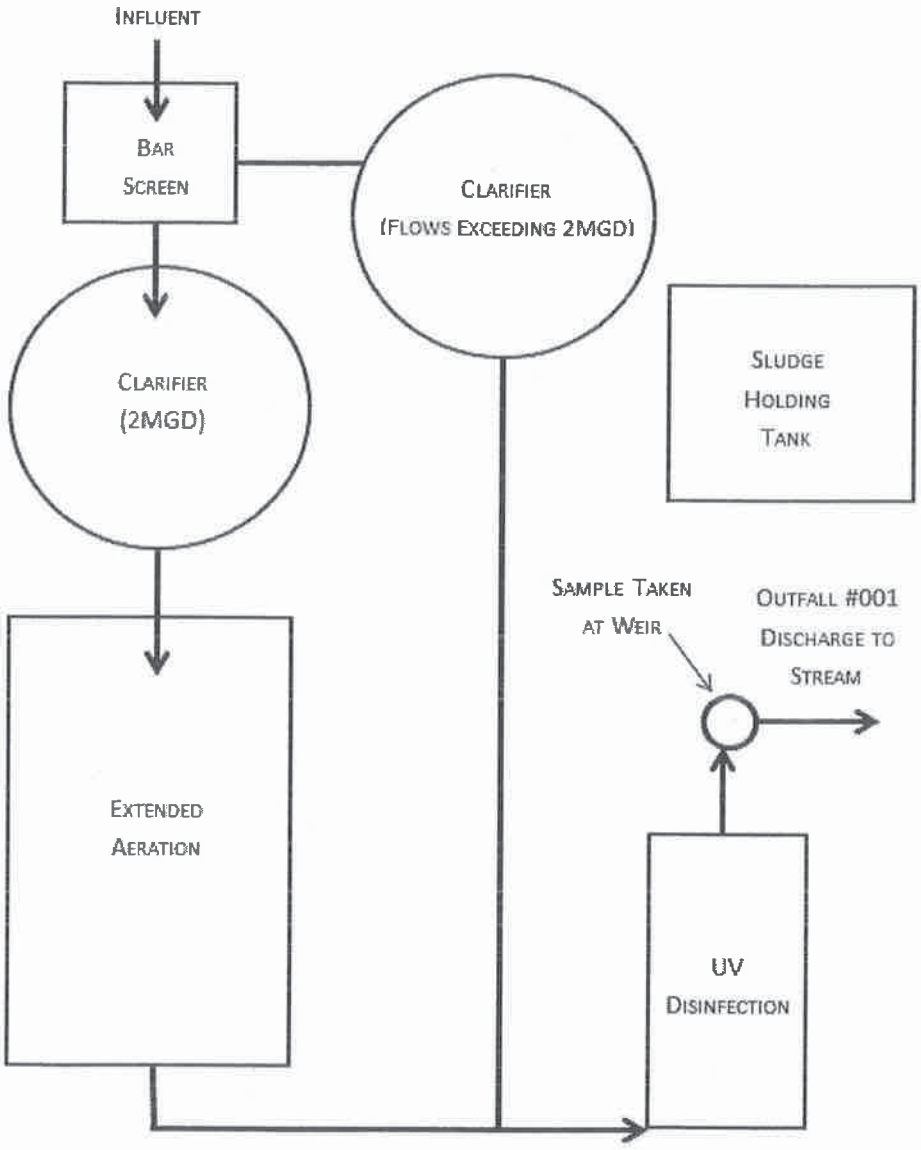
6. Provide the name, title, mailing address, work phone number, and e-mail address of a person who is thoroughly familiar with the operation of the facility and with the facts reported in this application and who can be contacted by the department.

7.1 Process Flow Diagram Examples

WASTEWATER TREATMENT LAGOON



WASTEWATER TREATMENT FACILITY



7.2 A topographic map is available on the Web at www.dnr.mo.gov/internetmapviewer/ or from the Department of Natural Resources' Geological Survey Division in Rolla at 573-368-2125.

8.1 For Standard Industrial Codes visit www.osha.gov/pls/imis/sicsearch.html or contact the Department of Natural Resources' Water Protection Program. For example, a family style restaurant has a Facility SIC code of 5812.

8.2-8.7 Self-explanatory.

8.8 If wastewater is land applied submit for Form I: www.dnr.mo.gov/forms/780-1686-f.pdf.

8.9-8.10 Self-explanatory

INSTRUCTIONS FOR COMPLETING FORM B: APPLICATION FOR OPERATING PERMIT FOR FACILITIES THAT RECEIVE PRIMARILY DOMESTIC WASTE AND HAVE A DESIGN FLOW LESS THAN OR EQUAL TO 100,000 GALLONS PER DAY (continued)

9. Self-explanatory.

10.1 Self-explanatory.

10.2 If Inflow and Infiltration (I&I) is a problem at the facility, list possible actions to be taken to repair the collection and treatment facility.

11. Include overflows of combined sewers and lift stations or bypassing of the wastewater treatment facility. Provide a detailed description of the circumstances that sewage bypassing occurs and the frequency of occurrence.

12. A copy of 10 CSR 25 is available on the Web at www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp#10-25.

12.1-12.9 Self-explanatory.

12.9 Refer to University of Missouri Extension Environmental Quality publications about biosolids (WQ420-WQ426). The documents are available at extension.missouri.edu/main/DisplayCategory.aspx?C=74. In addition, the federal sludge regulations are available through the U.S. Government Printing Office at https://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR.

13. Electronic Discharge Monitoring Report (eDMR) Submission System – Visit the eDMR site at http://dnr.mo.gov/env/wpp/edmr.htm and click on the "Facility Participation Package" link. The eDMR Permit Holder and Certifier Registration Form and information about the eDMR system can be found in the Facility Participation Package. Waivers to electronic reporting may be granted by the Department per 40 CFR 127.15 under certain, special circumstances. A written request must be submitted to the Department for approval. Waivers may be granted to facilities owned or operated by:

   a. members of religious communities that choose not to use certain technologies or
   b. permittees located in areas with limited broadband access. The National Telecommunications and Information Administration (NTIA) in collaboration with the Federal Communications Commission (FCC) have created a broadband internet availability map: http://www.broadbandmap.gov/. Please contact the Department if you need assistance.

14. CERTIFICATION

Signature - All applications must be signed as follows and the signatures must be **original**:

   a. For a corporation, by an officer having responsibility for the overall operation of the regulated facility or activity or for environmental matters.
   b. For a partnership or sole proprietorship, by a general partner or the proprietor.
   c. For a municipal, state, federal or other public facility, by either a principal executive officer or by an individual having overall responsibility for environmental matters at the facility.

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

This completed form and any attachments along with the applicable permit fees, should be submitted to:

Department of Natural Resources
Water Protection Program
ATTN: NPDES Permits and Engineering Section
P.O. Box 176
Jefferson City, MO 65102

Map of regional offices with addresses and phone numbers are available on the web at http://dnr.mo.gov/regions/. If there are any questions concerning this form, contact the appropriate regional office or the Department of Natural Resources, Water Protection Program, Operating Permits Section at 800-361-4827 or 573-751-6825.

Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Eric R. Greitens, Governor
Carol S. Comer, Director

CERTIFIED MAIL 91719690093501498338O1

March 23, 2017

Mr. Dale Johannsen, Receiver
Utility Management of Missouri, LLC
6517 NW Office Center
House Springs, MO 63051

NOTICE OF VIOLATION
NOV#SL170134
RESPONSE REQUIRED

Dear Mr. Johannsen:

Staff from the Department of Natural Resources conducted an inspection on March 8, 2017 of the Lake Virginia Subdivision – East Lagoon located off of Springdale Court, Hematite, MO in Jefferson County.

The enclosed report documents the serious and significant violations that were identified. A Notice of Violation (NOV) is being issued for the violations.

This case has been referred to the department's Water Pollution Control Branch Enforcement Section for further action. If you have questions regarding the status of the enforcement case or would like to meet with department staff to discuss compliance requirements, please contact Kristi Savage-Clarke, Environmental Supervisor, Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102 or by phone at (573) 751-1300.

Sincerely,

ST. LOUIS REGIONAL OFFICE

Dorothy Franklin
Regional Director

DEF/CCM/jws

Enclosures

c: Paul Dickerson, Water Pollution Control Branch