



**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
NASHVILLE ENVIRONMENTAL FIELD OFFICE  
711 R. S. GASS BOULEVARD  
NASHVILLE, TENNESSEE 37243  
PHONE (615) 687-7000 STATEWIDE 1-888-891-8332 FAX (615) 687-7078**

April 8, 2016

**Certified Mail: 7014 2870 0001 3597 0404  
Return Receipt Requested**

Mr. Robert N. Moore, Jr.  
2406 Goose Creek Bypass  
Franklin, TN 37064

Re: **Notice of Violation**  
Compliance Evaluation Inspection  
Goose Creek Inn Wastewater Treatment System  
NPDES # TN0060216, Williamson County

On December 21, 2015, I conducted a Compliance Evaluation Inspection (CEI) of the Goose Creek Inn Wastewater Treatment Plant. I would like to thank Certified Operator Jim Johnson and your Assistant, Kim Craddock, for their assistance during the inspection. The following items are the more significant findings from that inspection. An inspection report is attached which provides details of these and other items noted during the inspection.

**Permit**

- The NPDES Permit expires on June 30, 2016. The Division has received an application for permit renewal. Based on the condition of the treatment system, an engineering evaluation should be conducted to determine whether to seek other options for handling the wastewater generated by the Inn and the other sewer customers, rather than continuing this permit coverage and discharge.
- The City of Franklin extended their wastewater collection system in 2008, making connection to public sewer available for businesses at this location.

**Records and Reports**

- For the period from January 2013 through December 2015, there were violations of permit effluent concentration limits for total residual chlorine (TRC), ammonia as nitrogen, E. coli, carbonaceous biochemical oxygen demand (CBOD), and dissolved oxygen (DO).
- Daily analysis records were not labeled with the facility name, and sludge disposal records were not maintained as required in the permit.

**Facility Site Review - Operation and Maintenance**

- The metal package treatment plant is severely deteriorated and corroded due to inadequate maintenance and age. Piping, metal treatment basins and other structures have corroded, are breaking apart or have failed. It is no longer structurally sound.
- In its current condition, the plant does not meet the Division's engineering design criteria, and as a result it cannot be operated according to normal treatment practices. Processes cannot be properly controlled. The plant can no longer provide consistent wastewater treatment to meet permit conditions and protect water quality.

- There is inadequate equipment to properly control the chlorine and de-chlorination solution feed rates, causing excess amounts of chemicals to be discharged. This has resulted in adverse impact to the receiving stream.
- Electrical wiring and control mechanisms have failed or are inadequate, extension cords are used to provide power for some of the equipment.
- Deterioration of metal structures and walkways, lack of grill covers or safety rails for treatment units, and use of extension cords, pose a safety hazard to the operators when conducting necessary duties at the plant.
- The NPDES permit requires that the permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) used for collection and treatment to achieve compliance with the terms and conditions of the permit (Part II, A. General Provisions, 4. Operation and Maintenance, a.). The system does not meet these requirements of the permit.

#### **Effluent and Receiving Stream**

The effluent was discolored white at the point of discharge and contained a white precipitate. The channel leading to the stream was discolored progressively from white, to gray, to black with precipitate and solids. The discolored effluent was causing a contrasting plume of cloudy water, solids precipitate and deposits where it enters the receiving stream. These conditions do not meet the requirements of the NPDES Permit (Part I, A. Effluent Limitation and Monitoring Requirements) which prohibits any objectionable color contrast in the receiving stream or discharge of any other detrimental materials.

#### **Self-Monitoring Program and Laboratory**

The carbonaceous biochemical oxygen demand sampling point is not the correct location for the samples to be representative of the volume and the nature of the discharge. This does not meet the requirements of the NPDES permit (Part I, B. Monitoring Procedures, 1. Representative Sampling), which states that the samples must be representative of the volume and nature of the discharge.

#### **Conclusions**

The treatment plant is no longer structurally sound, and much of the treatment equipment has failed or is inadequate. The system cannot be properly operated, and cannot consistently meet permit effluent limits.

The treatment system is functioning as a public sewer provider for two other business properties, Mapco and K & T Associates. State law requires such systems to be registered as public utilities and regulated by the Tennessee Regulatory Authority (TRA). Goose Creek Inn is operating without being authorized as a public utility. Personnel at the TRA (1-888-276-0677) should be contacted to obtain information about the proper actions to comply with those regulations.

Discharges that do not meet permit effluent limits, not providing representative effluent sampling, failure to maintain required or adequate records, and not providing proper operation and maintenance of treatment facilities are violations of the NPDES permit. Violations of the Permit are also violations of the *Tennessee Water Quality Control Act* (the *Act*). Not meeting conditions of Division's Engineering Design Criteria are also violations of the rules promulgated under the *Act*.

Please provide a written response **within 30 days of receipt** of this letter stating what actions have been or will be taken to correct the violations listed and other items needing attention. The response should

Mr. Robert N. Moore, Jr.  
April 8, 2016  
Page 3

include specific corrective measures and date of completion, or a scheduled completion date for each item.

Please provide **within 60 days of receipt** of this letter an updated engineering alternatives analysis of your future sewerage service needs and an evaluation of the feasible and practical alternatives to deliver that sewer service in accordance with applicable laws and regulations. At a minimum, the alternatives need to include an engineering evaluation, prepared in accordance with good engineering practice by a registered professional engineer, licensed to practice engineering in Tennessee, and include the following scope at a minimum:

- Feasible alternatives and costs associated with replacing the existing treatment system;
- Feasible alternatives of connecting to the City of Franklin public sewer system; and
- Alternatives and costs associated with the following: (1) arranging for separate sewer service to the properties not owned by you, or (2) costs associated with becoming a privately-owned public utility regulated by the Tennessee Regulatory Authority.

Should you and your neighboring customers wish to discharge to the City of Franklin sewer, each property must connect to the public sewer directly with its own service line, or you will need to make arrangements with the city for public sewer with a public utility easement to which you may all connect.

Again, I would like to thank the facility personnel for their assistance and courtesy. If you have any questions or need additional information, please contact me at 615-687-7123, or e-mail at [Ann.Rochelle@tn.gov](mailto:Ann.Rochelle@tn.gov).

Sincerely,



Ann E. Rochelle, Environmental Consultant  
Division of Water Resources  
Nashville Environmental Field Office

Enclosures

cc: Shiva Bozarth, Tennessee Regulatory Authority, Compliance Division, [shiva.bozarth@tn.gov](mailto:shiva.bozarth@tn.gov)  
Paul Holzen, Director of Engineering, City of Franklin, [paul.holzen@franklintn.gov](mailto:paul.holzen@franklintn.gov)  
Jim Johnson, Certified Operator, [james-johnson@comcast.net](mailto:james-johnson@comcast.net)  
Mapco Family Centers, Inc, 1900 Dalrock Rd, Rowlett, TX 75088  
K & T Associates, PO Box 477, Kingston Springs, TN 37082  
Jessica Murphy, Manager, DWR, Compliance and Enforcement Section, [jessica.murphy@tn.gov](mailto:jessica.murphy@tn.gov)

**Compliance Evaluation Inspection Report  
Goose Creek Inn Wastewater Treatment System  
NPDES # TN0060216, Williamson County**

On December 21, 2015, I conducted a Compliance Evaluation Inspection (CEI) of the Goose Creek Inn Wastewater Treatment Plant. During the inspection I met with the wastewater treatment plant operator Jim Johnson and Kim Craddock, assistant to owner Robert N. Moore. Mr. Johnson assisted with the plant inspection and Ms. Craddock provided assistance with records review. Mr. Johnson was also contacted by telephone, most recently on March 4, 2016, for additional information about the system and the self-monitoring program. The following is a report of the findings of the inspection.

Mr. Johnson holds Grade 4 wastewater treatment plant certification and is the operator in direct responsible charge of the system. Under contract with the owner, he and Robert Schaaf provide day to day plant operations and conduct the sampling for the self-monitoring program.

**Permit**

The NPDES Permit expires on June 30, 2016. The Division has received an application for permit renewal. Discharge is to a wet weather conveyance which flows almost immediately in to Fivemile Creek.

**Records and Reports**

1. A review of monthly operation reports (MORs) submitted by the system for the period from January 2013 through December 2015 found the following violations of permit effluent limits.

<b>Parameter</b>	<b>Daily Maximum or Minimum Concentration</b>	<b>Monthly Average Concentration</b>
Total residual chlorine (TRC), mg/L	<i>16 maximum</i>	<i>N/A</i>
Ammonia as Nitrogen (NH3), mg/L	<i>1 maximum</i>	<i>6</i>
E. coli, cfu/100 ml	<i>2 maximum</i>	<i>2</i>
Carbonaceous Biochemical Oxygen Demand (CBOD), mg/L	<i>2 maximum</i>	<i>1</i>
Dissolved oxygen (DO), mg/L	<i>1 minimum</i>	<i>N/A</i>

2. Records for the facility are maintained on file at the business office of the owner, which is located at the Inn. A review of those records was conducted. A copy of the current permit was on hand and the self-monitoring records are kept on file for three years as required by the permit. Chain of custody forms and reports of results for private laboratory analysis were on file. The facility name was not recorded on the worksheets and raw analysis data conducted at the facility. The operator also runs analysis for and operates other systems and this could result in the records being confused. All the records and documents related to the system must be properly identified.
3. There were no records on hand to document what method of disposal was provided for sludge from the treatment plant. The permit (Part III, Other Requirements, D. Sludge Management Practices) requires that proper sludge disposal be provided in accordance with 40 CFR Part 503, and that documentation be provided on the MORs. The permit requires that if the sludge is transported to a publically owned treatment works (POTW) the permittee shall note on the MOR the amount of sludge wasted in gallons, the percent solids of the sludge that was wasted and the name of the facility where the sludge was taken for disposal. The sludge records must be maintained for a period of five years. Since the inspection the operator has reported that sludge removed recently from the facility was

taken to the Columbia Wastewater Treatment Plant for disposal and that the required records were obtained.

4. The volume of sludge wasted to the sludge holding tank and sludge hauled from the plant should be noted, along with any operational problems or compliance issues, on the MOR in the section labeled "Comments About Operation and Compliance".

#### **Facility Site Review, Operation & Maintenance**

1. The gravel access road to the plant is badly eroded and contains deep gullies that make it difficult to drive into the plant. An all-weather access road must be maintained to the treatment facility.
2. Fencing around the treatment plant has been improved and the gate is now kept locked to prevent unauthorized access. This has improved the safety and security of the plant.
3. The system is a metal package treatment plant that was constructed in the 1960's, with a 30,000 gallon per day design capacity. Treatment includes aeration basin, clarifier, filtration, and disinfection. It has continued to deteriorate due to poor maintenance and age. Much of the plant is no longer structurally sound. Treatment unit walls and structures that are above the usual water level have corroded and the metal is separating into layers and flaking off in sheets. Almost all of the metal piping within the plant that was visible was observed to be severely corroded.
4. The influent structure has corroded through in several places. The metal bars have crumbled apart and pieces have fallen off of the bar screens. From the accumulation of material observed, it seems that more frequent cleaning is needed. The screened material is stored in five gallon plastic buckets beside the intake structure. One of the buckets was full and mounded up, with no covering over the material. The solids and sewage debris should be stored in covered container to prevent it from attracting insects and rodents, and to prevent rainwater runoff from washing bacteria outside the plant grounds. The material can be placed in trash bags and sent for disposal at a permitted landfill.
5. There is only one blower motor to supply aeration. This does not meet the minimum aeration capability required by the Division's Engineering Design Criteria (Chapter 7, Activated Sludge, 7.4 Aeration Equipment, 7.4.2.2 Special Details) or the permit (Part II, General Provisions, 4. Proper Operation and Maintenance, a.). The single motor is located on the grass beside the plant and connected to the piping with rubber hose and metal band clamps. A small wood frame with sheet metal top and one side covered is used to house the motor.
6. The motor runs 24 hours a day, 7 days per week in order to provide aeration throughout the plant, and there is no means to control the volume of air distributed or a timing system. Normal operation of aerated systems should include electrical timers to cycle the air on and off and to alternate between at least two blower motors in order to obtain the most effective treatment. Having two motors, either one of which is adequate to provide aeration for the plant, is needed to allow alternation to prevent overheating and excess wear. If one motor fails, plant operation can continue normally using the other motor until the first is repaired or replaced. With no aeration the plant would go septic, the micro-organisms that provide the biological treatment would die off, and inadequately treated wastewater would be discharged.
7. The uncontrolled air flow results in aeration basin dissolved oxygen (DO) levels much in excess of the range which provides efficient and effective biological treatment, which is no more than 2.0 mg/L. The aeration basin DO levels at this plant are running from 6.0 to 12.0 mg/L, and most frequently 7.0 to 9.0 mg/L. These levels are too high to support the appropriate micro-organisms to provide efficient biological treatment. This also breaks up the biological floc, causing settling problems, which interferes with adequate solids removal. De-nitrification cannot be obtained at these higher DO levels. This excessive aeration can also add significantly to the cost of operation and wastes energy.
8. The decking of the clarifier has corroded through and there was a large open hole in the metal, and the rest of the structure was also corroded. The clarifier weirs did not appear to be uniformly level in all areas. This can affect the overflow rate and allow surface solids to exit the clarifier and pass through the plant. The surface skimmer was not working properly and did not capture all the surface

solids for return to the aeration basin. Clumps of solids were rising in the clarifier and had entered the clarifier weir trough, leaving deposits. The weir trough contained heavy masses of algae growth and some small rooted plants. Some of the weir notches were blocked by this material. More frequent cleaning is needed to prevent buildup of either solids or plant and algae growth.

9. The emergency overflow weir, located in the treatment unit between the clarifier and the filters, is severely corroded and the metal weir box is crumbling apart. It was leaking during the last site visit. Attempts may have been made to seal the remaining metal but the structure is unsound and must be replaced or the pipe sealed off to prevent discharge of wastewater before final treatment is complete. Discharges that occur from this point do not have adequate chlorine contact time, and filtration and de-chlorination is not provided. The operator does not know the discharge point for this emergency overflow line. Any discharges from this emergency overflow weir are not authorized by the permit and would be violations of the permit conditions. Any discharges from this weir must be reported as a bypass of treatment units as required by the permit (Part II, C. Noncompliance. 6. Bypass).
10. The grill walkway used for access over the aeration basin was severely corroded and had a large rusted out area surrounding the opening for the sludge return line.
11. The weirs leading into the filters and the filter plates are severely corroded. The weir trough contained solids, debris and leaves. The material was hanging in the weir notches and clogging the openings. The filters are backwashed every other day using the treated effluent which contains chlorine. The backwash is fed back into the aeration basin. This may lead to adverse impact to the micro-organisms necessary for the treatment process.
12. Many of the metal supports throughout the plant were corroded through and have broken off. Some pipes, connections and valves were supported with a broom handle, galvanized pipe, angle iron or PVC pipe wedged under them. The open top of the sludge return line in the aeration basin extends above the walkway and is covered with a five gallon plastic bucket. A rock is placed on top of the bucket and a 2"x4" board on top of that, with the 2"x4" board wedged under the bottom pipe of the safety rails to hold it down. The grilled access walkway in this area has rusted through and fallen apart leaving a large hole around the sludge return line. This makes it unsafe to access the area to work on this line.
13. The metal air lines to the aeration basin have corroded to the point of being un-useable. These lines have been out of service for many years and the operator has installed PVC piping and flexible hose above the basin in order to maintain necessary aeration for this treatment unit.
14. There are no grills to cover most of the open areas of treatment units, and no safety rails around the outside of the treatment units. The corroded walkways and decking, lack of grill covers or safety rails, and the use of electrical extension cords is unsafe and poses a safety hazard for the operators while conducting normal day to day activities to keep the plant functioning. The system does not meet the safety requirements in the Division's Engineering Design Criteria (Chapter 7, Activated Sludge, 7.5 Additional Details, 7.5.2. Noise and Safety).
15. The piping and structures in the effluent chamber and the effluent weir box are severely corroded and crumbling apart. The surface grillwork of the access platform in the chamber has corroded through and most of it is missing. The metal ladder was also severely corroded. Scrap wire and nylon string are used to hold some of the piping in place.
16. The wiring for the plant is no longer adequate. Much of the original electrical wiring system has failed, and the electrical control panels are in poor condition. Some of the original lines have shorted out and are not in use. There were many points where the outer covering was gone from the wiring. It could not be determined if this wiring was still serviceable or connected. Multiple extension cords run across the ground and over the treatment units to provide power to sump pumps, and the chlorine solution and Captor solution feed pumps. Electrical cord connections were in wet areas exposed to rain and wastewater splash over, with no covers for the connections. These circumstances do not meet the engineering design criteria rules for wastewater systems, and also pose a safety hazard to the operators.

17. The sludge return line in the aeration basin was clogged at the time of the inspection and the operator was attempting to get the line open. This is a recurrent problem. The operator reports that he was able to unclog the line later that day.
18. A 12.5 % solution of sodium hypochlorite solution is used for disinfection of the effluent. A 30% solution of calcium thiosulfate (Captor brand) is used for de-chlorination. There is no way to vary the chemical feed rates to match the flow rates through the plant. This can lead to excess use of either or both chemical solutions. The solution feed pumps are lying on the floor at the edge of an open sided structure and exposed to rain and other weather conditions. The feed lines are of excessive length and tangled. This can cause the lines to kink or clog which would interrupt the solution feed or cause uneven flow.
19. The NPDES permit requires that the permittee shall at all times properly operate and maintain all facilities and systems (and related appurtenances) used for collection and treatment to achieve compliance with the terms and conditions of the permit (Part II, A. General Provisions, 4. Operation and Maintenance, a.).
20. Use of "Liquid Fire" drain cleaner to unclog the main line leading to the treatment plant from the Inn has in the past caused plant upsets and problems with pH levels. Such chemicals can also kill out the micro-organisms that provide biological treatment at the plant and can cause extended periods of inadequate treatment and effluent limit violations. In the future, only methods of unclogging the lines which will not adversely impact the treatment process should be used.
21. The operator mentioned that a methamphetamine lab had been operated in one of the rooms at the Inn and that chemicals had entered the wastewater system from the illegal lab. It was believed this caused treatment problems at the plant. The chemicals and waste materials related to methamphetamine production are very dangerous and hazardous, and require special handling and disposal as hazardous materials. Any suspected illegal activity of this type should be reported the proper law enforcement authorities. Law enforcement agencies will arrange proper clean-up and disposal of the hazardous chemicals and should be advised if these chemicals may have entered the plant. Chris Andel of the TDEC Division of Remediation can also be contacted at 865-594-5444 to discuss any additional measures that might be necessary to prevent a public health, safety, or water quality hazard due to chemicals and wastes.

### **Effluent and Receiving Stream**

1. The effluent appeared clear at the point where it enters the effluent weir box. However, the inside of the weir box was coated with a white precipitate. The weir box is the location where Captor, a de-chlorinating chemical, is added to reduce the total residual chlorine in the effluent before it reaches the receiving stream.
2. The effluent outfall line discharges into a wet weather conveyance leading into Fivemile Creek. The inside and the opening of the discharge pipe were coated with a thick covering of a white precipitate. The effluent discharge was discolored white and was opaque. There were deposits of white material, then progressing to gray and blackish deposits on the bottom of the channel leading down to the receiving stream. The discolored flow and deposits continued into the receiving stream and there was discoloration of the receiving stream at and downstream of the discharge. Despite rain that day, the stream was clear upstream of the discharge point. In the upstream area, there were no deposits or discoloration of the type observed at and downstream of the plant discharge.
3. In addition to the discharge of the solids deposited in the channel and stream, the discoloration of the stream is a violation of the permit conditions which state: There shall be no distinctly visible floating scum, oil or other matter contained in the wastewater discharge. The wastewater discharge must not cause an objectionable color contrast in the receiving stream or discharge of any other detrimental materials (Permit: Part I, A. Effluent Limitation and Monitoring Requirements).
4. It appears that the deposits and discoloration of the effluent and receiving stream are related to the addition of Captor, and that excessive amounts of this de-chlorinating agent are being used. The chemical can cause calcium scale (white deposits) and sulfur precipitate (gray or black deposits)

when it comes in contact with iron and oxygen in the water. Acidic conditions in the effluent help to produce this reaction. Since the inspection the operator has advised the he has reduced both the chlorine and the Captor feed rates. He is also exploring use of a solid Captor tablet for de-chlorination which could reduce the probability of excess Captor reaction in the effluent. These efforts should continue in order to prevent the discoloration of the effluent and deposits being discharged into the stream. If the E. coli and TRC effluent limits cannot be met after making these changes to correct the problems caused by the Captor, then the de-chlorinating agent should be changed to make it possible to meet all permit conditions.

5. Most of the last section of the outfall pipe has over time been exposed due to erosion of the embankment of the wet weather conveyance channel. The pipe is suspended and unsupported, with no structure around it where it exits the embankment. The outfall line should be supported and the embankment should be stabilized to prevent further erosion of the soil. Continued erosion can result in the metal pipe breaking off at the section joint.
6. The discharge point was posted with an appropriate double faced sign that met the permit requirements. This is a wooded area, during the months when foliage is present, limbs and vegetation must be kept cleared to allow an unobstructed view of the signs from the stream and the land.

### **Flow Measurement**

Effluent flow is measured using a stop watch and gallon jug to collect flow at the effluent weir. The flow measurement should be taken during peak flow periods of the day to meet the requirement of the permit which states that self-monitoring data must be representative of the volume and nature of the discharge.

### **Self-Monitoring Program and Laboratory**

1. The operators carry the meters, analytical equipment, and reagents to the plant to conduct analysis for TRC, pH, DO and settleable solids (SS). Due to temperature extremes throughout the year, care should be taken to make sure the calibration standards and other reagents are kept within the proper temperature ranges to meet the requirements of the EPA approved analysis procedures. The Federal Method Update Rule (MUR) procedures are in place for the analysis conducted by the operators at the plant.
2. Microbac Labs conducts the laboratory analysis for the other parameters, CBOD, total suspended solids (TSS), and E. coli. The samples are placed in coolers on ice and transported directly to the private laboratory by the operators on the date of sample collection.
3. There were two separate incidents where samples were collected (NH<sub>3</sub> and TSS) and taken to the contract laboratory, but the laboratory did not conduct the analysis. The operator was not made aware of the failure to conduct the analysis until the next calendar month, and therefore sampling could not be repeated. Regardless of the cause, failure to meet the self-monitoring and reporting requirements is a violation of the permit conditions. Better communication should be worked out with the laboratory in order to allow for repeat sampling if necessary.
4. All the effluent samples were collected from the discharge pipe at the outfall point, except CBOD which was collected at the plant before the addition of Captor (calcium thiosulfate) the de-chlorinating agent used.
5. The CBOD sample location was moved to a point before Captor addition because the private laboratory running the analysis reported interference with the analysis caused by this chemical. In discussing this with the operator it was discovered that the samples had produced extremely high CBOD concentrations if collected at the effluent weir box where Captor is added. The high analysis results were attributed to chemical interference, not additional oxygen demand contributed by the chemical. The sampling point was moved to before Captor addition based on that assumption. Personnel at the MicroBac Labs were contacted to verify the information about the analysis results. Brian Richard at MicroBac Labs confirmed that all the samples are checked for TRC, de-chlorinated if needed, and seeded.



6. Based on information obtained about the chemical nature of the Captor, it appears to be contributing additional oxygen demand to the effluent. Oxygen demand from any source would have the same adverse impact on the receiving stream. The actual CBOD of the effluent discharge must be monitored. Following the inspection, the operator was advised to collect the CBOD samples after the Captor is added and mixing occurs, at the same point as all the other effluent samples. The permit requires that self-monitoring samples must be representative of the volume and nature of the discharge (Part I, B. Monitoring Procedures, 1. Representative Sampling). This situation was cited in a previous inspection report and Notice of Violation in 2011. Nitrification inhibitor must be added to CBOD samples and because of that all CBOD samples must be seeded, so this will not add any additional steps to the analysis procedure.

### **Sludge Handling and Disposal**

Sludge is removed from the treatment plant at a rate of less than once per year. Williamson County Septic Service is the company that hauls the sludge. At the time of the inspection, the operator did not know where the sludge was taken or the means of disposal used by the hauling company (See Records and Reports, item #3 above).

### **Conclusion**

Despite the inventive efforts of the operators to keep the system working, the treatment plant is in severely deteriorated condition and is no longer structurally sound due to age and poor maintenance. As a result the plant cannot provide reliable wastewater treatment in order to consistently meet permit effluent limits and protect water quality. There is adverse impact to the receiving stream. The system does not meet engineering design criteria for structures and equipment necessary for proper operation and maintenance. Severe corrosion, failure of system components, and lack of adequate control equipment, prevents normal operation of the treatment processes. Major rehabilitation and upgrades to the system would be costly and it would be difficult to make sufficient changes or replacement of components to bring the system into compliance. Due to the existing conditions, it appears that construction of a new treatment plant would be necessary if the discharge is to continue. The severely deteriorated condition of the plant and violations of permit effluent limits and conditions have been cited during previous inspections and in a Notice of Violation dated December 2, 2011.

The City of Franklin constructed a sewer main along the west bank of Fivemile Creek in 2008. The project included installation of a manhole directly across the stream from the Goose Creek Inn treatment plant in order to allow for connection of the Inn and other future customers in that vicinity. Considering the poor condition and compliance status of the treatment system, connection to the City of Franklin sewer collection system appears to be the most cost effective and reliable means of providing wastewater treatment for the Inn and its current sewer customers. Personnel in the Engineering Department with the City of Franklin should be contacted to determine what would be necessary to make the sewer service connection. Any plans for sewer connection should be coordinated with officials representing the two other business customers currently served by the treatment plant.

The Goose Creek Inn treatment system is functioning as a public sewer provider for two other business properties, Mapco (2408 Goose Creek Road) and K & T Associates (424 Old Peytonsville Road). State law requires such systems to be registered as public utilities and regulated by the Tennessee Regulatory Authority (TRA). Goose Creek Inn is operating without being authorized as a public utility. Personnel at the TRA (1-888-276-0677) should be contacted to obtain information about the proper actions to comply with those regulations.

Report by Ann Rochelle