

CITY OF OAK RIDGE



POST OFFICE BOX 1 • OAK RIDGE, TENNESSEE 37831-0001

February 1, 2010

Cesar Zapata
United States Environmental Protection Agency - Region 4
West NPDES Enforcement Section, Water Protection Division
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

Re: **Compliance Inspection Report for the October 27-28, 2009 Inspection**
NPDES Permit Nos. TN 0024155

Dear Mr. Zapata:

The City of Oak Ridge staff has received and reviewed the Reconnaissance Inspection Report prepared by Mr. Sayre of your office following his inspection of our system on October 27-28, 2009. We are taking the suggestions and recommendations under heavy consideration and anticipate making changes in several areas soon.

I would like to offer several items of clarification:

1. Section IV, page 2: Oak Ridge also owns and operates a third treatment facility, the Rarity Ridge WWTP. This is a new plant under NPDES Permit No. TN0078051 recently placed in operation to treat flows from a large new residential development, as well as, flows from the neighboring East Tennessee Technology Park operated by the US Department of Energy and the Community Reuse Organization of East Tennessee. This information is offered as a matter of completeness in the summary of our systems. It was not discussed during the inspection.
2. Section V (A): We understand the suggestions regarding needed changes to our Bypass/Overflow Report regarding the various causes and destination of the overflow. We have redesigned the form changing it accordingly to clearly reflect these items and added places for signatures of management personnel indicating their review. A copy is enclosed.
3. Section V, page 4: A clarification is necessary as to our review and reporting of overflows. The copies provided in our 308 Letter response were from our senior engineer's files. His primary focus is knowledge of the overflow, which we thought to be the primary focus of the 308 Letter inquiry. We provided copies of his working files, not the official files located at the treatment plant. Those files include signatures and initials from several management staff (Operations and Maintenance Supervisor and Treatment Plant Manager) indicating their review of the document as well as the pertinent information relating to the notification to TDEC for each report. Each report also has a second sheet attached serving as the fax transmittal receipt documenting the notification.
4. Section V, page 4: Regarding the missing reports; our engineering files had all collection system reports, but no plant reports; hence, no plant reports were included for which we apologize. His records did have the reports identified as missing; we can only assume they got lost in the photocopy process. I am including copies of the official documentation from the WWTP files. These illustrate the supervisory review signoffs as well as the proof of notification to TDEC. Regarding the April 19, 2007 report for 131

Marquette, you will see we did notify TDEC in the prescribed time frame; however, following your report, we discovered that we had in fact failed to include that particular report in that month's DMR. We have since implemented new procedures to insure this oversight does not recur.

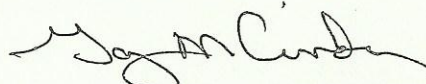
5. Section V (B), page 5: Daily work activities are assigned and reviewed by the Operations and Maintenance Supervisor (Operations). These work activities include cleaning, TV inspection and minor repairs. The crews work results are shared with engineering in areas that major rehabilitation or repairs are indicated. Engineering then directs contractor efforts to effect prompt repairs when necessary or programs others for a subsequent rehab contract. The methodology for contract repairs is discussed in Sections 2K, 3 and #A of the December 15, 2008 letter to EPA. Since the inception of the City's sanitary sewer rehabilitation program in 1994, the City Engineering Department has let for bid 18 contracts for the purpose of reducing I/I into the City collection system. Those contracts have resulted in 211,248 feet of sewer line being renewed or replaced. A summary of those contracts was provided as enclosure D to the City's letter of December 15, 2008 to EPA. Page 3, section 3 explains the database used by Engineering to determine repair locations and track them.
6. Section V (C), page 8: The constructed bypass at Nebraska Avenue has already been eliminated with completion of major sewer work associated with a new road-widening project. Repairs were made in 2006 on a second one located at Athens Road. Additional repairs downstream of this location will be addressed as part of our Rehab Contract "N" now under contract for construction. Further repairs will include in Rehab "O" presently under design.
7. Section V (D1), page 8: The Public Works Engineering Division uses AutoCad Release 14 and Release 2005 to update the city's sewer infrastructure as-built drawings. There are a total of 298 sheets that are continuously updated and made available for review in the engineering office. These drawings contain a significant amount of system information that is not shown on the master drawing that EPA reviewed in December. City work crews are periodically provided reduced drawing sheets in a book for their field use. All field crew changes to the system are provided to the engineering office for updates. Drawings are also updated when new residential and/or commercial/industrial infrastructure is installed and accepted by the City. Details on the existing as-built drawing sheets include:
 - Gravity and force main sewer lines in respect to property lines and roadways.
 - Sewer line sizes, percent slopes, material types and distances between manholes.
 - Known laterals.
 - Manholes with MH numbers, inverts and top elevations.
 - Renewed and rehabilitated lines (pipe burst and slip line).
 - Lift stations.
 - Encased sewer lines.
 - Abandoned sewer lines.
8. Section V (D2), page 8: A better defined Grease Control Program is currently under development.
9. Section V (D3), page 9: The City is currently evaluating the use of chemical root control and has just completed a demo with Dukes Root Control and is evaluating the effectiveness of their product. Written documentation of procedures for root control will be developed.
10. Section V (D4), page 9: The City's water and wastewater consultant, Lamar Dunn and Associates prepared a City Water and Wastewater Master Plan addressing system capacity for each of the 81 mini-systems. The plan contains area-loading projections for each mini-system based on a total of the flows from dwelling units in the mini-system and flows from commercial customers as outlined in the Tennessee Department of Environment and Conservation Design Criteria for Sewage Works and use flows. Future development growth was included in the plan. A comparison of capacity to flows

revealed three locations where inadequate capacity either does or probably will exist in the future. The City has completed corrective actions at some of these locations and has repairs at others either currently under contract or in various stages of design. Population growth in Oak Ridge has essentially remained the same for the past 20 years and developments projecting significant wastewater flows are not common. When development is proposed the Engineering department determines if adequate system capacity exists prior to approval of any new development. Such calculations have resulted in restrictions being placed on two developments currently under construction.

11. Section V (D5), page 9: The City performs significant preventative cleaning of sewers. A written documentation of the procedures for scheduling and completion will be developed.
12. Section V (D7), page 10: A copy of the City Sewer Use Ordinance is attached. A copy of the Ordinance was available for EPA's review at the October 2009 inspection. Subsequent to the inspection, the City forwarded an electronic version of the Ordinance via email to Mr. Sayre.

Additional information and clarifications are provided for consideration to your Compliance Inspection Report.

Sincerely,



Gary M. Cinder, Interim City Manager

GMC/ks

Enclosures

pc: Steven R. Byrd, P.E., Acting Public Works Director
Lamar Dunn, P.E., FACEC, President, Lamar Dunn & Associates, Inc.
Paul E. Davis, P.E., TDEC
John West, TDEC