

07-00007

RECEIVED

2007 AUG 31 AM 9:52

T.R.A. DOCKET ROOM

ODOR CONTROL MEASURES REPORT

FOR

LYNWOOD UTILITY CORPORATION

Docket No. 07-00007

PREPARED BY:

**Ron Graham
Darlene Standley
Aaron Rochelle
Tevin Thompson**

TENNESSEE REGULATORY AUTHORITY

AUGUST 2007

ODOR CONTROL MEASURES REPORT

FOR

LYNWOOD UTILITY CORPORATION

DOCKET NO. 07-00007

I. INTRODUCTION AND BACKGROUND

As a result of odor complaints filed with the Authority, Lynwood Utility Corporation's ("Lynwood" or "Company") legal counsel, Mr. Don Scholes, reported in responses to requests by the Authority and again at the August 20th Hearing on the actions that Lynwood was undertaking to reduce odor at the wastewater treatment plant. The Company attributes one source of the odor problems to a change in the amount and length of time that wastewater treatment sludge is stored at the plant prior to being removed for disposal. This change resulted from a decision by the landfill operator where the sludge is disposed to require that the amount of liquid in the sludge be reduced.

In a response sent to the May 24, 2007 data request, the Company proposed two capital improvements to reduce odor associated with the sludge. The first improvement, estimated at \$150,000 is sludge dewatering equipment to reduce the time that sludge is stored onsite. The second improvement is the addition of odor controls estimated to cost between \$50,000 and \$75,000 with additional associated annual operating costs.

On July 31, 2007, a data request was issued to the Company requesting responses on specific odor controls proposed, permanent solutions, and actions to be taken should the rate increase not be granted. Lynwood responded to these questions on August 16, 2007.

Lynwood's response indicated that odors potentially come from (1) collection system pump stations; (2) raw influent from the gravity sewer; and (3) sludge at the treatment plant. The Company is working to determine the most significant source of odors and a course of action. Certain chemical additions already being employed are having mixed results according to the response. The Company also responded that mobile sludge dewatering is under consideration. Lynwood responded that efforts to proceed to address odor control does not hinge on the results of this rate case, other than the additional income requested in the pending rate case could create a more effective and longer lasting solution.

Six complaints were received concerning offensive odors prior to the August 20, 2007 Hearing. Copies of these complaints were filed in this Docket as part of a data request

on July 31, 2007 and the Consumer Services Division ("CSD") is handling these complaints separately through the normal CSD complaint process. During the Service Hearing six (6) members of the public voiced their complaints about the odor from the Lynwood Wastewater System.

Following the Hearing, Staff further investigated the involvement and actions of the Water Pollution Control Division ("WPC") of the Tennessee Department of Environment and Conservation ("TDEC") in this case and other cases involving odor complaints and odor control issues with other systems. According to the WPC's Nashville Field Office Manager, Joe Holland, the detection of odors associated with wastewater systems is prevalent with the conditions that currently exist such as extreme heat and low flows due to drought conditions. Mr. Holland explained that while odor is not a violation of the Water Quality Act, their office does investigate any odor complaints from the public and works with those wastewater systems to minimize these odors. Mr. Holland reviewed the complaint records in his office and did not find any evidence that complaints had been received. He was told by his staff that they had heard a Lynwood wastewater plant operator had been communicating with individuals living near the wastewater plant about odors.

Pursuant to the directive of the Hearing Panel, Staff contacted Lynwood to gather additional information related to the Company's prior and planned actions to address this issue. Lynwood filed a response on August 30, 2007 containing (1) recommendations and cost proposals by outside companies to correct the odor problem; (2) a complaint log regarding odor problems for the period of 4/18/07 through 8/17/07; and (3) the proposed accounting treatment of costs incurred to resolve this problem. This response is discussed in the following sections of this report.

II. CORRECTIVE ACTION

During the Authority's August 20, 2007 Hearing, Mr. Tyler Ring, President, provided a brief overview of the Company's odor problems and addressed the actions that Lynwood has taken to date. Mr. Ring acknowledged that the Company was aware of odor problems with the plant sludge and explained that temporary solutions have had mixed results at minimizing odors.

Odors from pump stations or gravity sewer lines, brought to the Company's attention through customer complaints, have been analyzed for the past three or four months with assistance from outside consultants. The Company has worked with Southern Sales Company and American Development Corporation to address the odor issues. Each of these companies had a consultant that specializes in odor protection equipment meet with Lynwood. Southern Sales Company brought in a representative from Siemens Corporation while American Development Corporation brought in a representative from Carus Corporation. Mr. Ring explained that pump stations are being monitored for release of sulfur dioxide, a main component of the odor. In the next four to six weeks, Mr. Ring expects the analysis to be complete and the Company to evaluate and select an odor control proposal from one of the consultants mentioned

above. In addition to controlling odors at the pump stations or gravity sewers, the Company may have to invest in sludge equipment to address the odors that are caused by the sludge remaining for extended periods at the plant until the liquid content has been reduced to an acceptable level to be disposed at the landfill.

In the August 30, 2007 filing, Lynwood provided the Authority with the consultant proposals. The Southern Sales/Siemans cost estimate for installation of odor control units was \$25,000 each with annual chemical costs of \$10,000 at each location. The American Development/Carus cost estimate for installation of odor control units was \$5,000 each with annual chemical costs equal to or less than the Southern Sales/Siemans proposal.

Lynwood evaluated these proposals and developed the following odor corrective action plan:

Immediately: Lynwood has installed odor control units at three of six locations in the system, including one at the treatment plant, at a cost of less than \$5,000 per location. The annual chemical cost is estimated at \$10,000 per location. Lynwood however, noted that small dosage changes can have a dramatic effect on the cost and the dosage at these three locations is already double the originally projected dosage.

Lynwood will contract with First Response to remove the sludge in a temporary storage basin by September 30, 2007 at an estimated cost of \$10,000. Lynwood is searching for a landfill to accept the sludge. The sludge removal will address one of the odor sources from the plant.

Short Term (three to six months): Lynwood will install odor control equipment at a fourth location and monitor the odor and chemical dosing at this location along with the three chemically treated locations. Lynwood will then evaluate adding odor control equipment to the remaining two locations based upon the performance of the existing equipment.

Long Term: If the current sludge handling procedure at the plant with the installed odor control equipment is not effective at controlling odors, Lynwood will need a completely new sludge handling system. Because of the prior problems with sludge and associated odors, Lynwood has estimates of \$250,000 from companies that could provide a new sludge handling system.

From an accounting perspective, Lynwood will treat all costs except the removal of the old sludge by First Response (charged to account 711 as period cost) as Deferred Debits in account 186. Lynwood expects to recover these deferrals through a rate recovery method approved by the Authority.

III. MONITORING AND REPORTING

Lynwood currently serves 794 residential customers¹ of which there are fifteen (15) logged complaints regarding odor problems. These complaints were collected from CSD, the August 20, 2007 Hearing and the August 30, 2007, response of Lynwood. Based upon the available information it cannot be determined where the strongest odor is occurring. Although the comments during the Hearing refer to an odor coming from the plant, Lynwood has determined that there six locations within its system that have the possibility of emitting an odor. This is consistent with the comments of Mr. Ring during the Hearing referencing the problem may involve the gravity system, the collection system and/or the treatment plant. According to the response Lynwood is trying to determine the exact location of the problem and have it corrected.

Lynwood's August 30, 2007 response included a statement that the Authority would be notified in writing when the corrective actions occur. The Company failed to mention that the Complainants would also be notified in writing of these corrective actions at the same time that the Authority is notified.

IV. COMPANY ASSURANCE

Lynwood has demonstrated through their August 30, 2007 response that actions have been taken, plans initiated, and responses to customers' complaints have occurred. Lynwood has agreed to notify the Authority in writing of future actions as they occur, future written complaints and the Company's written responses, and submit to the Authority a quarterly call log regarding public odor complaints through 2008.

V. SUMMARY

Lynwood has acknowledged the existence of unacceptable odors from the wastewater system and has already taken certain actions and developed an action plan to further control these odors.

TDEC has provided statements that the odor from the wastewater system is not subject to any wastewater standards but is an issue that should be addressed by the wastewater system should complaints arise.

The costs incurred to address the odors from the wastewater system included in this report are not included in the rate case in Docket 07-00007. This report was compiled at the request of the Directors in this case during the Hearing conducted on August 20, 2007 at which time members of the Public addressed the Hearing Panel with complaints about the odor from the wastewater treatment system.

¹ Response to Authority Data Request, August 7, 2007, Item No. 2.