

August 28, 2014

Arkansas Department of Environmental Quality Water Division – Enforcement Branch 5301 North Shore Drive North Little Rock, AR 72118-5317

RE: AFIN# 72-00781, NPDES Permit# AR0020010 Progress Report – Effluent Mineral Limits Compliance Reporting Period of 03/01/2014 to 08/29/2014

Part II Condition 10 in the NPDES permit for the Paul R. Noland Wastewater Treatment Plant (WWTP) requires progress report every 6 months on the compliance with the minerals limits. This report details the progress made in the period of 03/01/2014 to 08/29/2014.

1. Compliance with the Interim Mineral Limits:

The effluent discharge is meeting the interim limitations for Chloride, Sulfate, and Total Dissolved Solids (TDS) for this reporting period. Results were reported on the monthly Discharge Monitoring Reports.

2. Complete the tasks in accordance with the approved White River Use Attainability Study Plan:

The White River Use Attainability Study is complete.

The City submitted the White River Use Attainability Analysis (UAA) report to ADEQ on May 21, 2013. On June 10, 2013, ADEQ sent a letter to the City requesting assessment of the UAA in consideration of Act 954 compliance. On July 24, 2013, the City submitted a Technical Memorandum summarizes the quantitative assessment in compliant with Act 954. The assessment found that no modifications to the UAA or the proposed site-specific minerals water quality criteria are necessary to be in compliant with Act 954.

- 3. Administrative Rulemaking Processes/Permit Modifications:
 - On September 11, 2013, the UAA team met with ADEQ to be sure that there are no other issues before we proceed with the third party rule making.
 - On October 11, 2013, the Mitchell Williams Law firm filed a petition on behalf of the City of Fayetteville to initiate Third-Party Rulemaking to amend Regulation No. 2, Water Quality Standards. The petition was reviewed by the Arkansas Pollution Control and Ecology Commission's Regulations Committee on October 25, 2013. The Regulations Committee recommended the Commission to consider adopting the proposed revision and proposed that the first public hearing be held during the week of February 10, 2014.
 - In December, ADEQ published a legal notice for the public hearing of the proposed third-party rulemaking to change the Arkansas Pollution Control & Ecology Commission (APC&EC) Regulation 2, the Arkansas Water Quality Standards for minerals for the White River from the discharge of the Noland Wastewater Treatment Plant to immediately downstream of the confluence of Richland Creek.
 - The public hearing was held at the Fayetteville Public Library on February 13, 2014.
- 4. Activities since the February 13, 2014 public hearing
 - Pursuant to the public hearing, written public comments were submitted on February 27, 2014, by

the Arkansas Department of Health (ADH), ADEQ, and Mr. Robert Cross.

- ADH recommended the site-specific minerals criteria should meet the Secondary Maximum Contaminant Levels of 250 mg/L, 250 mg/L, and 500 mg/L for chloride, sulfate, and TDS, respectively.
- ADEQ determined the study indicated the aquatic life is not impacted by minerals and the aquatic life designated use is currently being maintained; however, the proposed criteria need to be re-evaluated to insure they reflect instream concentrations based on either the submitted data or the minerals concentrations measured over the past 23 years in monitoring data.
- Mr. Cross believes the proposed criteria are "much higher than are necessary and reasonable" and recommended "the new specifications should only be set as high as necessary to accommodate the existing situation."
- The minerals database compiled for the UAA was updated with approximately two years of minerals and flow data beyond May 2012. The update constituted anywhere from 14 to over 170 new data points for minerals concentrations, and nearly two years of daily flow data.
- Sampling and analysis of minerals concentrations in the White River and WWTP outfall-001 has continued since the UAA was submitted. Results from the sampling program continue to populate the database.
- The updated data set was evaluated in detail in light of the public comments received after the
 public hearing, including statistical analyses of flow-concentration relationships and percentile
 rankings of minerals concentrations at different locations within the study area.
- The results of the updated data characterization were presented to ADEQ in a meeting in North Little Rock on June 19, 2014.
- On July 31, 2014, ADEQ submitted a letter to the City listing the maximum minerals concentrations the Department can support in the White River, along with the basis of the derivation (i.e., 95th percentile of available data from WR-02 and WR-03 [WHI0052]):
 - WWTP-001 to 0.4 mi downstream: 47 mg/L, 51 mg/L, and 331 mg/L for chloride, sulfate, and TDS, respectively.
 - 0.4 mi downstream of WWTP-001 to the confluence with Richland Creek: 30 mg/L, 40 mg/L, and 237 mg/L for chloride, sulfate, and TDS, respectively.
- On August 8, 2014, at the request of Steve Miller/CH2M HILL on behalf of the City, Mo Shafii and Sarah Clem of ADEQ held a conference call to discuss how the NPDES effluent limits for minerals would be developed for the Noland WWTP considering the proposed site-specific criteria.
- The City is evaluating the information obtained from the recent communications with ADEQ (July 31 and August 8) to determine if the Noland WWTP can meet the anticipated NPDES permit effluent limits that would result from the instream minerals criteria outlined in ADEQ's letter of July 31, 2014.

Please do not hesitate to contact Billy Ammons at 479-443-3292, or <u>billy.ammons@ch2m.com</u>, if you have any questions regarding this report. I can also be reached at 479-466-7589, <u>lhyke@fayettevill-ar.gov</u>.

I, <u>Lynn Hyke</u>, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Sincerely,

City of Fayetteville

Lynn Hyke

Lynn Hyke Construction/Contract Manager

C: Billy Ammons, CH2M HILL Regional Business Manager Don Marr, City of Fayetteville Chief of Staff Amy Schluterman, ADEQ – Water Enforcement