# City of Dumas Wastewater Treatment Facility

NPDES Permit Number: AR0033987; AFIN:21-00045

Industrial Stormwater (No-Exposure): ARR000150; AFIN: 21-00265

Dumas, Desha County, Arkansas

# Compliance Evaluation Inspection Response

The Honorable Mayor Flora J. Simon City of Dumas, Arkansas

Prepared by
McClelland Consulting Engineers
March 8, 2019





# REVISED COMPLIANCE EVALUATION INSPECTION

## RESPONSES

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## March 7, 2019

The city of Dumas wastewater treatment facility has two components: wastewater treatment plant and wastewater collection system. Compliance Evaluation Inspection (CEI) was performed by Arkansas Department of Environmental Quality (ADEQ) on both systems on January 10, 2019. Several deficiencies on both systems were observed by ADEQ and will be addressed under separate headings.

## Wastewater Treatment Plant

#### Comment 1

Samples were collected for NH<sub>3</sub>-N for April 2018 as indicated on the contract lab's COCs; however, the parameter was not analyzed as specified on the DMR submitted for April 2018. A non-compliance report (NCR) has not been submitted to the Department for this excursion. This is a violation of Part I, Section A (INTERIM) and Part III, Section D, 7 of the permit. A NCR must be submitted to the enforcement Branch to address this item.

#### Response 1

Attached is the completed NCR Form.

## Comment 2

For the week of April 2-5, 2018, only two samples were collected and analyzed for TRC by the contract lab (permit requires three/week). An NCR has not been submitted to the Department for this excursion. This is a violation of Part I, Section A (INTERIM) and Part III, Section D, 7 of the permit. A NCR must be submitted to the Enforcement Branch to address this item.

#### Response 2

Attached is the completed NCR for the missing date of none TRC analysis. Future reporting will avoid this inadvertent error.

## Comment 3

For the TRC samples collected/analyzed on Nov 19, 2018 (0.00 and 0.10 mg/L) and Nov 20, 2018 (0.00 and 0.10 mg/L), the permit limit of 0.028 mg/L for TRC was exceeded. Additionally, the contract lab

averaged the results for the Nov 19 sample with 0.05 mg/L reported on the lab analysis sheet. This is a violation of Part I, Section A (INTERIM) of the permit. The city submitted an adequate NCR for the exceedances to the Department. No further action is required for this item. Please be advised the dates on the submitted NCR are for Nov 20 and Nov 21 and the reported values are 0.05 and 0.10 mg/L. The dates should have been Nov 19 and Nov 20 with reported values of 0.10 and 0.10 mg/L.

# Response 3

No action is needed. However, the facility will continue to make improvements on matching the TRC coming out of the chlorination unit with an appropriate dose of sulfur dioxide (SO<sub>2</sub>).

## Comment 4

CBOD<sub>5</sub>/BOD<sub>5</sub>, TSS, and NH<sub>3</sub>-N samples are not being collected as composite samples (see definition of Inspection Report: City of Dumas POTW, AFIN 21-00045, Permit #: AR0033987 "composite" in Part IV). This is a violation of Part I, Section A (INTERIM) of the permit. The city must collect these parameters as composite samples with actual time collected and flow for EACH aliquot documented on the COC. The sample volume is to be proportional to the flow during the time of sample collection.

# Response 4

The city of Dumas (City) has been collecting CBOD<sub>5</sub>/BOD<sub>5</sub>, TSS, and NH<sub>3</sub>-N as composite samples as defined in Part IV, Definitions. However, the operator has not been appropriately listing the sampling times. Sample times, sample volumes and flows will be recorded on the chain of custody (COC) in all future samplings.

#### Comment 5

An instantaneous flow measurement is not being documented during grab samples (see definition of "grab" in Part IV). This is a violation of Part I, Section (INTERIM) of the permit. An instantaneous flow measurement must be documented on the COC for grab samples.

## Response 5

Since the end of December 2018, the contract lab route driver has begun to record the instantaneous flow whenever a grab sample is made.

#### Comment 6

Comparison of influent and effluent samples collected in April 2018 demonstrate that the treatment plant is not meeting the minimal 85% removal for TSS. [(Inf TSS – Eff TSS)/Inf TSS] x 100= Percent Removal or [(140 mg/L – 40 mg/L)/140.0] x 100 = 71%. Percent removal was met for BOD for April, Oct, and Nov 2018 as well as TSS for Oct and Nov 2018. This is a violation of Part II, Condition 3 of the permit. The city needs to evaluate the conditions at the treatment plant to determine why percent removal for TSS was not met.

### Response 6

The City will perform evaluation of the treatment conditions and make pertinent changes to ensure that excursions of TSS and the TSS percent removal are appreciably reduced or eliminated.

### Comment 7

The following items violate Part II, Condition 6 of the permit:

- Sanitary waste removed from the bar screen at the headworks was observed along the concrete pad
  containment area outside proper waste disposal containers. This sanitary waste must be removed
  and disposed of properly.
- A potable water leak had occurred outside the chlorine/sulfur dioxide buildings. The line has been
  repaired; however, the area has not been backfilled and is collecting stormwater runoff. The area
  needs to be backfilled for worker safety and stormwater protection.

## Response 7

The sanitary waste around the disposal containers will be removed and disposed of properly. The dug hole created during a repair of potable water leak will also be backfilled.

## Comment 8

The staff gauge at the Parshall flume is fouled and cannot be read to conduct proper accuracy checks for the primary and secondary flow measurement devices. This is a violation of Part III, Section B, 1.A of the permit. A new staff gauge was observed in the in-house lab and should be installed at the Parshall flume.

# Response 8

The existing staff gauge will be removed and replaced with a new staff gauge to satisfy the terms and conditions of the NPDES Permit, Part III, Section B, 1.A.

## Comment 9

Mr. Larry Harrell, City Worker, is conducting most functions associated with the treatment plant to include recording flow and collecting samples. Mr. Harrell is unlicensed and inadequately trained. This is a violation of Part III, Section B, 1.B of the permit. Mr. Harrell must be properly trained if he is to run the treatment plant and/or collect samples for the NPDES permit.

# Response 9

The City, in most instances, operates the wastewater treatment plant (WWTP) in accordance with its NPDES permit. The WWTP superintendent, a licensed individual, performs day-to-day operations of the wastewater treatment plant. The city worker helps the superintendent and is being supervised by the WWTP superintendent at all times. However, at the time of the compliance evaluation inspection the superintendent was not onsite due to some circumstance that developed that needed immediate attention at the time. Nevertheless, the City would speed up the training and licensing of a city worker to substitute for the WWTP superintendent during times of absence and/or emergencies.

## Comment 10

There is no indication that the thermometer used by the city in the refrigerator for composite storage has been calibrated. This is a violation of Part III, Section C, 3 of the permit. The thermometer must be calibrated or replaced annually to demonstrate accuracy.

#### Response 10

The City will calibrate or replace the thermometer annually, and maintenance record will be maintained.

#### Comment 11

The COCs reviewed for April and Nov 2018 had numerous inconsistencies (see "General Comments" under 'Records Review" for specific items) and they are not being filled out completely by either city personnel or the contract lab. This is a violation of Part III, Section C, 8, A-F of the permit.

## Response 11

The contract laboratory has contacted the appropriate personnel at the city of Duma's facility. There will be two new chains of custody commencing from now: one for April through October and the other November through March. They have been advised on the importance of using correct COC and filling it out properly before it is turned over to the contract laboratory.

# Wastewater Collection System

There are eleven (11) lift stations within the city of Dumas wastewater collection system. Of these, three lift stations were inspected; namely, John Street, Highway 65 and Banks stations. No deficiency was observed at the Banks lift station.

## Comment 1

## General:

- There is no emergency contact information posted at the lift stations.
- The gates, latches, and wet well hatches are not in a controlled state (1.e., no locks; can be accessed by the public).
- There are no maintenance records/operator logs for the lift stations to demonstrate periodic inspections.

## Response 1

Emergency contact information will be provided where permissible at all lift stations. Lift stations gates, latches and wet well hatches will be made restrictive to the public. Maintenance records/operator logs will be maintained for all lift stations in accordance to each pump manufacturer's specifications. All these will be performed in conformance with APC&EC Regulation.

## Comment 2

# For the John Street Lift Station

• There is no working alarm at the lift station.

## Response 2

The city of Dumas will install alarm system in the John Street lift station in conformity with Ten States Standards, Chapter 40, Paragraph 46.