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"Award Winning Water"

August 12, 2022

Ms. Christina Brown, Enforcement Analyst
Office of Water Quality/Enforcement Branch
Division of Environmental Quality
5301 Northshore Dr.
North Little Rock, Arkansas 72118

RE: NPDES Permit No. AR0021768, AFIN 58-00105

Dear Ms. Brown:

Please find included with this correspondence a signed original of the proposed Consent Administrative order received via email on July 26, 2022. Per the instructions in your cover letter as well as in the proposed CAO, I have included the signed order as well as an Interim Operating Plan for the wastewater plant. I have also sent payment in the penalty amount of \$16,000 directly to the address provided in the order in the section related to the payment.

We are also working on completing the CAP and it will be provided in accordance with the CAO pending the effective date of the order.

If there is anything else we need to provide regarding the proposed CAO, please let us know and we will address it immediately. Should you have any questions or need other info please contact me at (479) 928-2105 or by email at smallett@citycorporation.com.

Sincerely,

Steve Mallett, Jr.
Chief Executive Officer
City Corporation

205 W. 3rd Place
PO Box 3186
Russellville, AR 72811
citycorporation.com

ARKANSAS DEPARTMENT OF ENERGY AND ENVIRONMENT
DIVISION OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:

City Corporation
Russellville Water and Sewer System
P.O. Box 3186
Russellville, AR 72811

LIS No. 22-
Permit No. AR0021768
AFIN 58-00105

CONSENT ADMINISTRATIVE ORDER

This Consent Administrative Order (“Order”) is issued pursuant to the authority of the Arkansas Water and Air Pollution Control Act, Ark. Code Ann. § 8-4-101 *et seq.*, the Federal Water Pollution Control Act, 33 U.S.C. § 1311 *et seq.*, and rules issued thereunder by Arkansas Pollution Control and Ecology Commission (APC&EC).

The issues herein having been settled by the agreement of City Corporation Russellville Water and Sewer System (Respondent) and the Division of Environmental Quality¹ (DEQ), it is hereby agreed and stipulated that the following FINDINGS OF FACT and ORDER AND AGREEMENT be entered.

FINDINGS OF FACT

1. Respondent operates a municipal wastewater treatment facility (“facility”) located at 404 Jimmy Lile Road, Russellville, Pope County, Arkansas.
2. Respondent discharges treated wastewater to Whig Creek, thence to the Arkansas River in Segment 3F of the Arkansas River Basin.

¹ Pursuant to Act 910 of 2019, the Arkansas Transformation and Efficiencies Act, the former Arkansas Department of Environmental Quality is now the Division of Environmental Quality in the newly created Department of Energy and Environment.

3. Respondent is regulated pursuant to the National Pollutant Discharge Elimination System (NPDES).
4. Pursuant to the federal Clean Water Act, 33 U.S.C. § 1311(a) *et seq.*, the NPDES program prohibits the discharge of pollutants except as in compliance with a permit issued under the NPDES program in accordance with 33 U.S.C. § 1342(a).
5. DEQ is authorized under the Arkansas Water and Air Pollution Control Act (“Act”) to issue NPDES permits in the state of Arkansas and to initiate an enforcement action for any violation of a NPDES permit.
6. Ark. Code Ann. § 8-4-217(a)(3) provides:
 - (a) It shall be unlawful for any person to:

....
 - (3) Violate any provisions of this chapter or of any rule or order adopted by the [APC&EC] under this chapter or of a permit issued under this chapter by the [DEQ].
7. Ark. Code Ann. § 8-4-103(c)(1)(A) authorizes DEQ to assess an administrative civil penalty not to exceed ten thousand dollars (\$10,000) per violation for any violation of any provision of the Act and any rule or permit issued pursuant to the Act.
8. Pursuant to Ark. Code Ann. § 8-4-103(c)(1)(B), “[e]ach day of a continuing violation may be deemed a separate violation for purposes of penalty assessment.”
9. DEQ issued NPDES Permit Number AR0021768 (“Permit”) to Respondent on August 17, 2016. The Permit became effective on September 1, 2016, and expired on August 31, 2021.
10. On October 13, 2020, DEQ received an application for revocation and reissuance of the Permit from Respondent. The application was deemed complete on October 13, 2020, and Respondent’s coverage was administratively continued pursuant to APC&EC Rule 6.201.

11. On November 6, 2009, DEQ and Respondent entered into Consent Administrative Order LIS 09-146 (CAO LIS 09-146) for effluent violations and Sanitary Sewer Overflows (SSOs). The Order was amended by CAO LIS 09-146-001 on June 2, 2014, with a final compliance date of March 31, 2022.

12. Respondent has submitted annual reports since the execution of CAO LIS 09-146.

13. On February 23, 2021, and July 16, 2021, DEQ received a state construction permit application and plans and specifications to modify the wastewater treatment system. DEQ issued State Construction Permit Number AR0021768C (“State Construction Permit”) to Respondent on October 19, 2021. The Permit became effective on October 19, 2021, with the condition that construction must begin by October 19, 2022. The construction will include the following:

a. Decommissioning of:

- i. Existing primary clarification
- ii. Existing chlorine disinfection system and contact basins
- iii. Existing sulfur dioxide dechlorination system

b. Conversion of:

- i. Existing primary clarifier #3 into an anaerobic selector
- ii. Existing aerobic digesters to aerobic sludge holding tanks

c. Installation of:

- i. One (1) new aeration basin
- ii. New peracetic acid (PAA) disinfection system and contact basin

d. Replacement of:

- i. Existing aeration blowers and expansion of blower capacity
- ii. Corroded portions of existing secondary clarifier mechanical equipment

- iii. Existing non-potable pump station
- iv. Aerated sludge mixing system
- e. Relocation of:
 - i. Final effluent sampling location

14. The existing treatment system consists of three (3) aerated flow equalization basins, bar screens, grit removal, three (3) primary clarifiers, three (3) extended aeration activated sludge basins, three (3) final clarifiers, two (2) chlorine contact basins, dechlorination, and aerobic digestion. The design flow will be changing from 7.3 MGD to 8.5 MGD.

15. On October 19, 2021, Respondent notified DEQ via email that construction at the facility has commenced.

16. On April 20, 2022, DEQ conducted a review of certified Discharge Monitoring Reports (DMRs) submitted by Respondent in accordance with the Permit.

17. The review revealed that Respondent reported the following violations of the permitted effluent discharge limits detailed in Part I, Section A of the Permit from October 1, 2018, through March 31, 2022:

- a. Forty-one (41) violations of Ammonia Nitrogen;
- b. Forty (40) violations of Total Suspended Solids;
- c. Twenty-nine (29) violations of Carbonaceous Biochemical Oxygen Demand;
- d. Twenty-five (25) violations of Fecal Coliform Bacteria;
- e. Nine (9) violations of Dissolved Oxygen;
- f. Seven (7) violations of Total Recoverable Zinc;
- g. Five (5) violations of Total Recoverable Mercury;
- h. Five (5) violations of Total Residual Chlorine;

- i. Three (3) violations of pH; and
- j. Two (2) violations of Total Recoverable Copper.

18. Each of the 166 discharge limitation violations listed in Paragraph 17 above constitutes a separate permit violation for a total of 166 separate violations of Ark. Code Ann. § 8-4-217(a)(3).

19. The review of the DMRs revealed that Respondent has reported flows greater than the permitted design flow twenty-eight (28) months out of the thirty-nine (39) month review period.

ORDER AND AGREEMENT

WHEREFORE, the parties stipulate and agree as follows:

1. Upon the effective date of this Order, CAO LIS 09-146, as amended by CAO LIS 09-146-001, shall be closed.
2. Within thirty (30) calendar days of the effective date of this Order, Respondent shall submit to DEQ, for review and approval, a comprehensive Corrective Action Plan (CAP) developed by a Professional Engineer licensed in the state of Arkansas. The CAP shall include, at minimum, the methods and best available technologies that will be used to correct the violations listed in the Findings of Fact and prevent future violations. The CAP shall also include a reasonable milestone schedule with a date of final compliance. Upon review and approval by DEQ, Respondent shall comply with the terms, milestone schedule, and final compliance date contained the approved CAP. The milestone schedule and final compliance date shall be fully enforceable as terms of this Order.
3. On or before the fifteenth (15th) day of the month following the effective date of this Order, and each quarter thereafter for a period lasting until this Order is closed, Respondent shall submit quarterly progress reports detailing the progress that has been made towards compliance with the final permitted effluent limits set forth in Part I, Section A of the Permit.

4. On or before the effective date of this Order, Respondent shall submit an interim operating plan that describes, in detail, the operational measures that will be undertaken to maximize the removal efficiency of all pollutants covered by this Permit. Respondent shall implement the interim operating plan immediately upon its submittal to DEQ.

5. In compromise and full settlement of the violations specified in the Findings of Fact, Respondent agrees to pay a civil penalty of Sixteen Thousand Dollars (\$16,000.00). Payment of the penalty shall be made payable to the Division of Environmental Quality, and mailed to the attention of:

DEQ, Fiscal Division
5301 Northshore Drive
North Little Rock, AR 72118

In the event that Respondent fails to pay the civil penalty within the prescribed time, DEQ shall be entitled to attorneys' fees and costs of collection to the extent permitted by law.

6. Failure to meet any requirement or deadline of this Order constitutes a violation of this Order. If Respondent should fail to meet any such requirements or deadlines, Respondent consents and agrees to pay on demand to DEQ stipulated penalties according to the following schedule:

- a. First day through fourteenth day: \$100.00 per day
- b. Fifteenth day through the thirtieth day: \$500.00 per day
- c. Each day beyond the thirtieth day: \$1000.00 per day

These stipulated penalties for delay in performance shall be in addition to any other remedies or sanctions that may be available to DEQ by reason of failure by Respondent to comply with the requirements of this Order.

7. If any event, including but not limited to an act of nature, occurs that causes or may cause a delay in the achievement of compliance by Respondent with the requirements or deadlines of

this Order, Respondent shall so notify DEQ, in writing, as soon as reasonably possible after it is apparent that a delay will result, but in no case after the due dates specified in this Order. The notification shall describe in detail the anticipated length of the delay, the precise cause of the delay, the measures being taken and to be taken to minimize the delay, and the timetable by which those measures will be implemented.

8. DEQ may grant an extension of any provision of this Order if Respondent requests such an extension in writing, and the delay or anticipated delay has or will be caused by circumstances beyond the control of and without the fault of Respondent. The time for performance may be extended for a reasonable period, but in no event longer than the period of delay resulting from such circumstances. Respondent has the burden of proving that any delay is caused by circumstances beyond the control and without the fault of Respondent, as well as the length of the delay attributable to such circumstances. Failure to notify DEQ promptly, as provided in the preceding paragraph of this Section, shall be grounds for a denial of an extension.

9. All requirements by the Order and Agreement are subject to approval by DEQ. Unless otherwise specified herein, in the event of any deficiencies, Respondent shall, within the timeframe specified by DEQ, submit any additional information or changes requested, or take additional actions specified by DEQ to correct any such deficiencies. Failure to respond adequately to such Notice of Deficiency within the timeframe specified in writing by DEQ constitutes a failure to meet the requirements established by this Order.

10. This Order is subject to public review and comment in accordance with Ark. Code Ann. § 8-4-103(d) and APC&EC Rule 8 and shall not be effective until thirty (30) calendar days after public notice is given. DEQ retains the right to rescind this Order based upon the comments received within the thirty (30) day public comment period. Notwithstanding the public notice

requirements, the corrective actions necessary to achieve compliance shall be taken immediately. The publication of this Order shall occur on or about the 10th or 25th day of the month following the date this Order is executed. As provided by APC&EC Rule 8, this matter is subject to being reopened upon Commission initiative, or in the event a petition to set aside this Order is granted by the Commission.

11. Nothing in this Order shall be construed as a waiver by DEQ of its enforcement authority over alleged violations not specifically addressed herein. Also, this Order does not exonerate Respondent from any past, present, or future conduct that is not expressly addressed herein, nor does it relieve Respondent of its responsibilities for obtaining any necessary permits.

12. By virtue of the signature appearing below, the individual represents that he or she is an Officer of Respondent, being duly authorized to execute and bind Respondent to the terms contained herein. Execution of this Order by an individual other than an Officer of Respondent shall be accompanied by a resolution granting signature authority to said individual as duly ratified by the governing body of the entity.

SO ORDERED THIS _____ DAY OF _____, 2022.

JULIE LINCK, CHIEF ADMINISTRATOR, ENVIRONMENT

APPROVED AS TO FORM AND CONTENT:

City Corporation Russellville Water and Sewer System

BY: 
(Signature)

STEVE MALLET, JR.
(Typed or printed name)

TITLE: CHIEF EXECUTIVE OFFICER

DATE: 8/11/2022



*Awarded 2016 People's Choice
"Best Drinking Water in North America"*

**Pollution Control Works (PCW)
Permit No: AR0021768**

Interim Operating Plan

August 12, 2022

City Corporation PCW Interim Operations Plan

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City Corporation PCW Interim Operations Plan

A. INTRODUCTION

This Interim Operations Plan is prepared to assist City Corporation's Pollution Control Works (PCW) staff to operate the Wastewater Treatment Plant and is part of the requirements of the Arkansas Department of Energy and Environment, Division of Environmental Quality's Consent Administrative Order issued July 26, 2022.

Included in this document are an overview of the facility, process components, sampling plan and the general operational approach.

The overall objective of the facility is to operate as efficiently as possible while ensuring continuous compliance with NPDES permit requirements. This plan is intended to assist operations staff with operations during normal flows and loading. Unusual loading and/or plant upsets require additional operational steps and are not included in this plan. Any changes to this plan during the noted challenges will be determined by the operations director along with the assistance of the design engineer to ensure proper steps are taken to minimize impact to the plant.

B. FACILITY DESCRIPTION:

The Russellville Wastewater Treatment Plant was originally built in 1963. The plant has been expanded to the current facility which is an activated sludge design that includes screening at the headworks, grit removal, primary clarification, aeration basins, final clarification, and disinfection before discharge into Whig Creek. The facility is currently under construction to address the ongoing permit violations. The construction consists of removal of the primary clarifiers, conversion of one primary basin to an anaerobic selector, addition of a fourth aeration basin, new turbines for all aeration basins, a new peracetic acid feed system and new disinfection contact basin.

The plant is staffed with four Operators, two Lab Analysts, one Pretreatment Coordinator and the Operations Director. All Operators, one Lab Analyst and the Pretreatment Coordinator all hold class 3 Wastewater Treatment Operator licenses. The Operations Director and the Senior Lab Analyst both hold a class 4 Operator license. City Corporation also has an in-house Engineer and annually contracts with engineering firms that specialize in wastewater.

C. FACILITY OPERATION:

1. Preliminary Treatment:

Bar Screening: The influent screening equipment are Duperon Corporation Flex Rake in channel auto cleaning bar screens. Units are installed in parallel and are five feet wide and an operational depth of five feet. The space between bars is 0.25". Screenings are removed automatically and stored in dumpsters for disposal in a landfill. The normal operation involves both units running but all flow can be diverted to one channel for maintenance or repair of a unit.

Operators check units daily to ensure proper operation. Should issues arise, the operator reports the issue to the Lead Operator who generates a trouble ticket using the MVP preventative maintenance program. City Corporation maintenance staff will then make the necessary repairs.

Grit Removal: Grit removal is accomplished by settling in the grit channels. The low velocity channels allow the grit to settle while the influent continues through the Treatment Plant. The grit channels are installed in parallel, and each channel is 22.3 feet long, 14 feet wide and 23.25 feet deep with a flow rate of 24.5 MGD. The settled grit is removed automatically by bucket elevator equipment manufactured by Amwell. The channels are aerated using two centrifugal blowers. Dewatered grit is dumped into dumpsters for disposal in a landfill. Normal operation involves both channels with one blower. Flow can be diverted to one channel for repairs or maintenance of one unit. A second blower can be used in times of excessive nutrient loading.

Operators check units daily to ensure proper operation. Should issues arise, the operator reports the issue to the Lead Operator who generates a

trouble ticket using the MVP preventative maintenance program. City Corporation maintenance staff will then make the necessary repairs.

Raw Sewage Lift Station: After screening and grit removal, the influent will flow into the Raw Sewage Lift Station. The lift station is equipped with four Suizer-ABS variable speed 360 HP SCADA controlled pumps. Each pump has a total capacity of 7.2 MGD. Normal operation involves two pumps selected to pump to the plant, one pump designated to pump to the equalization basins if needed and the fourth pump as a redundant for either pumping to the plant or the equalization. Using our SCADA system, a maximum flow to the plant can be programmed and any excess flow about the set amount will be pumped to the equalization basins. The normal max flow is set at 7 MGD and is adjusted as directed by the Lead Operator or Operations Director.

Operators check the Raw Sewage lift station daily to ensure proper operation. Should issues arise, the operator reports the issue to the Lead Operator who generates a trouble ticket using the MVP preventative maintenance program. City Corporation maintenance staff will then make the necessary repairs.

Flow Equalization Basins: The facility is equipped with three equalization basins with a total capacity of 20 million gallons. Any influent flow above the max setting programmed in the SCADA system is pumped to the equalization basins for holding until flow to the plant is such that the extra water can be effectively treated. Each basin is equipped with surface aerators to help keep the water mixed and aerated.

Operators check basins daily to ensure proper operation. Should issues arise, the operator reports the issue to the Lead Operator who generates a trouble ticket using the MVP preventative maintenance program. City Corporation maintenance staff will then make the necessary repairs.

Anaerobic Selector: The Influent flow from the Raw Sewage Lift Station is pumped to the Anaerobic Selector. The selector is a 95 feet diameter circular clarifier with a side wall depth of 11 feet and is equipped with a surface mixer. Activated sludge for the three secondary clarifiers is pumped to the selector and mixed with the raw sewage from the lift station. Normal

flow through the selector is ≤ 8 MGD. Any flow above 8 MGD is diverted around the selector and pumped directly to the aeration basin flow splitter chamber.

Note: The anaerobic selector is currently offline due to construction in progress at the plant. Once all RAS lines have been installed, the selector will be put online.

2. Secondary Treatment:

Aeration Basins: Flow from the anaerobic selector flows to the aeration basins splitter box where the flow can be directed to any or all four aeration basins. Basins 1 and 2 are 94 feet by 40.25 feet with a sidewall depth of 15.917 feet. Aeration basins 3 and 4 are 127.5 feet by 60.25 feet with a sidewall depth of 15.917 feet. All four basins are designed with an anoxic zone for nitrate removal, alkalinity recovery and filament control. The anoxic zone is equipped with coarse air diffusers for mixing and SCADA controlled for proper mixing.

The aeration zone is equipped with Sanitaire fine bubble diffusers. Air for the fine bubble system is provided by SCADA controlled variable speed Inovair turbines. The turbines are controlled by the basin dissolved oxygen (DO). The DO is measured with YSI in-basin DO probes. Typical operation is 2.0 mg/L DO. At the end of the aeration zone are internal recycle pumps that pump nitrate rich water back to the anoxic zone.

Aeration basins are checked each day by Operators for proper air flow to entire basin, proper mixing of the anoxic zone and operation of all turbines in use. Should issues arise, the operator reports the issue to the Lead Operator who generates a trouble ticket using the MVP preventative maintenance program. City Corporation maintenance staff will then make the necessary repairs.

Secondary Clarifiers: After flow goes through the aeration basins, flow is directed to one of three secondary clarifiers. Clarifiers 1 and 2 have a diameter of 100 feet with a sidewall depth of 12.2 feet. Clarifier 3 has a diameter of 100 feet with a sidewall depth of 16 feet. Activated sludge within the clarifiers are returned to the aeration basin by Fairbanks vertical

centrifugal pumps that are SCADA controlled. The normal return rate is 75% to 100% of the total influent flow. The percentage of return flow is determined by the sludge depth in clarifier, mixed liquor solids (MLSS), and the SRT within the activated sludge system. The depth of sludge, MLSS and SRT are collected and calculated Monday through Friday. The sludge depth is collected on the weekends. All data is recorded in the company's Hach WIMS program.

Secondary Clarifiers are checked each day by operators for proper operation. Should issues arise, the operator reports the issue to the Lead Operator who generates a trouble ticket using the MVP preventative maintenance program. City Corporation maintenance staff will then make the necessary repairs.

3. Disinfection:

PAA Bulk Storage Tank: After secondary clarification, flow is treated with PAA and travels through the PAA contact basin. PAA is stored in a 6000-gallon tank and fed by a Lutz-Jesco feed system to maintain a dosage rate of 1 to 5 mg/L with a target residual of 0.5 mg/L. The PAA contact basin is a split design with basin 1 being 249 feet long and 8 feet wide with a total volume of 0.128 MG. Basin 2 is 259 feet long and 8 feet wide with a total volume of 0.133 MG. The basins are designed so that one side can be used during normal flows and both basins can be utilized during higher flows or when extra contact time is needed.

PAA Contact Basin: Flow through the PAA contact basin allows adequate contact time for the chemical to reduce the number of pathogens to a level below the permit limits. After contact time flow is then discharged through outfall 001 into Whig Creek.

PAA system and basins are checked each day by operators for proper operation. Should issues arise, the operator reports the issue to the Lead Operator who generates a trouble ticket using the MVP preventative maintenance program. City Corporation maintenance staff will then make the necessary repairs.

4. Solids Handling:

Settled activated sludge in the secondary clarifiers may be used in one of two ways: either returned to the aeration basin as Return Activated Sludge (RAS) or wasted and removed from the system as Waste Activated Sludge (WAS).

Settled sludge from the secondary clarifiers is continually collected by rotating scraper blades at the bottom of the clarifier. The scraper blades push the settled sludge to the sludge sump located near the center of the clarifier where it is removed by the RAS/WAS pumps. Each secondary clarifier has a primary and standby RAS pump. The RAS pumps are SCADA controlled and can be operated in Hand or Automatic. The normal operation for the RAS pumps is in Automatic mode and run as a percentage of the plant influent flow. The normal rate is 75% to 100%. WAS pumps are SCADA controlled and pump the WAS to the aerated storage tanks. The amount of solids to waste is based on the MLSS in the aeration basins, depth of sludge in secondary clarifiers and the calculated SRT. During normal operation, the depth of sludge in the secondary clarifiers is 3 feet with a MLSS between 3000 and 4000 and an SRT between 6 to 10 days.

Once the WAS is pumped to the aerated holding tanks, the sludge is processed through a 3-meter belt filter press. The de-watered sludge then goes through a lime stabilization process using a Schwing/Bioset system that produces Class A biosolids. After biosolids have been air dried and tested for salmonella, it is given away to farmers for land application.

All areas of the solids handling process are checked each day by operators. Should issues arise, the operator reports the issue to the Lead Operator who generates a trouble ticket using the MVP preventative maintenance program. City Corporation maintenance staff will then make the necessary repairs.

D. SAMPLING PLAN:

City Corporation has an onsite lab that is staffed with two full time Laboratory analysts. Both analysts are licensed operators, the Senior Lab Analyst holds a class IV license and the other analyst holds a class 3 license. Our Lead Operator is also fully trained in all duties and served as a laboratory analyst for 7 years before taking the Lead Operator position. The other three Operators have limited laboratory skills and are available to assist with collection of samples and running some of the daily samples required at the facility. City Corporation also uses a contract laboratory for testing of metals, WET testing, Biosolids testing and other test outside of the abilities of our staff. Below is a list of the sampling and tests performed at the facility during a normal day.

Plant Influent: Influent is sampled Monday through Friday using a Isco refrigerated sampler. The sampler is flow paced from the influent flow meter. Tests on the 24-hour composite sample are as follows:

- Total Suspended Solids
- Biochemical Demand
- Chemical Oxygen Demand
- Ammonia Nitrogen
- Copper (once a month by contract lab)
- Zinc (once a month by contract lab)
- Mercury (once a month by contract lab)

Tests on the influent from a grab sample:

- pH
- Alkalinity

Plant Effluent: Plant effluent is sampled Monday through Friday using a Isco refrigerated sampler. The sampler is flow paced from the effluent flow meter. Tests on the 24-hour composite sample are as follows:

- Total Suspended Solids
- Carbonaceous Biochemical Oxygen Demand
- Chemical Oxygen Demand

Ammonia Nitrogen

Nitrate

Copper, Total Recoverable (once a month by contract lab)

Zinc, Total Recoverable (once a month by contract lab)

Tests on effluent from a grab sample:

Fecal Coliform Bacteria

pH

Dissolved Oxygen

Alkalinity

PAA residual

Mercury, Total Recoverable (once a month using four grab samples that are composited in the lab, sent to contract lab)

Once a quarter Chronic WET Testing is conducted by contract lab using 24-hour composite sample.

Additional sampling and testing used for process control:

Monday through Friday the following tests are completed from the aeration basins using a grab sample:

30 Minute settle test

pH

Alkalinity

MLSS

MLVSS

Tests completed from the WAS using a grab sample:

MLSS

All test results are entered into the facilities Hach WIMS database and can be used for trending, graphing and NPDES reporting. The results of all tests are reviewed by laboratory staff, Operations Director and Lead Operator to determine any operational changes.