U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION III
CLEAN WATER ACT
COMPLIANCE INSPECTION REPORT

for

Name of Facility: Lyons Creek Mobile Home Park WWTP
Facility Address: 1007 Lower Pindell Road, Lothian, MD 20711
Mailing Address: 1007 Lower Pindell Road, Lothian, MD 20711

Report Prepared on: January 11, 2021 (*Date*) By: _____ (*Signature*), PG

Report Final as of: 01/13/2021 (*Date*) By: STACIE PRATT (*Signature*), EPA
Digitally signed by STACIE PRATT
Date: 2021.01.13 18:30:01 -05'00'

General Information

Type of Inspection:	Wastewater Treatment Facility CEI
Owner:	Lyons Creek MHC, LLC
Operator:	Singh Operational Services
Permittee:	Lyons Creek MHC, LLC
NPDES Permit No:	MD0053511
NPDES Permit Effective Date:	January 1, 2017
NPDES Permit Expiration Date:	December 31, 2021
Receiving Water and/or MS4:	Lyons Creek, a tributary of the Patuxent River
Latitude and Longitude:	38° 45' 42" N, 76° 39' 58" W

On-Site Facility Inspection Overview

On December 1, 2020, U.S. Environmental Protection Agency (EPA) Region III's contract inspectors from PG Environmental, (hereinafter referred to as Inspectors) inspected the Lyons Creek Mobile Home Park Wastewater Treatment Plant (hereinafter, WWTP or Plant) in Lothian, Maryland. At the time of the inspection, Lyons Creek MHC, LLC was identified as the Permittee since they are listed in the Permit as the Permit holder. Horizon Land Co. LLC took over ownership of the Plant in 2015 and is defined for the purpose of this report as Discharger. Singh Operational Services has been hired to contract operate the Plant since April 1, 2020. The Inspectors were joined by a member from the Maryland Department of the Environment (MDE) and Discharger representatives (as listed in the Introduction section of the report).

Approximate Entry Time: 9:00 AM (EDT) **Approximate Exit Time:** 10:30 AM (EDT)

Unique Project Identifier (UPI): 3E21WN003A

U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103

WASTEWATER TREATMENT FACILITY
COMPLIANCE EVALUATION INSPECTION

Lyons Creek Mobile Home Park WWTP
NPDES Permit No. MD0053511
UPI: 3E21WN003A

INSPECTION REPORT

Inspection Date:
December 1, 2020

Report Date:
January 11, 2021

EXECUTIVE SUMMARY

Lyons Creek Mobile Home Park WWTP
(NPDES Permit No. MD0053511)

On December 1, 2020, U.S. Environmental Protection Agency (EPA) Region III's contract inspectors from PG Environmental, (hereinafter referred to as Inspectors) inspected the Lyons Creek Mobile Home Park Wastewater Treatment Plant (hereinafter, WWTP or Plant) in Lothian, Maryland. At the time of the inspection, Lyons Creek MHC, LLC was identified as the Permittee since they are listed in the Permit as the Permit holder. Horizon Land Co. LLC took over ownership of the Plant in 2015 and are defined in this report as Discharger. Singh Operational Services has been hired to contract operate the Plant since April 1, 2020. The Inspectors were joined by a member from the Maryland Department of the Environment (MDE) and Discharger representatives (as listed in the Introduction section of the report).

The Plant is a package style sewage treatment plant with activated sludge and extended aeration. The collection system comprises 2.87 miles of gravity mains, with mostly polyvinyl chloride (PVC) pipes and some clay and Orangeburg pipes. Wastewater flows by gravity to the Plant through an influent manhole. Wastewater flows through a manually-raked bar screen at the influent end of the package plant and into the aeration chamber. Activated sludge is piped in near this location as well. From the aeration chamber, flow is routed to a central clarifier chamber, then into a clarified effluent wet well before being pumped into a building with a rotary cloth filter unit (out of service). After the filter building, effluent is disinfected via ultraviolet (UV) light and flows through a final filter unit prior to being discharged into a pipe in the ground which is connected to the outfall to Lyons Creek (Outfall 001), a tributary of the Patuxent River, designated as Use-I waters, which is protected for water contact and recreation and non-tidal warm water aquatic life. The Plant services approximately 250 mobile home pads with an approximate population of 900 people and is operated 1.5-2 hours per day, 7 days per week.

Solids from the activated sludge process are collected in small section of the package plant and pumped into a waste tank. Wastes solids are hauled off by a contractor as needed.

Activities at the site are regulated under National Pollutant Discharge Elimination System (NPDES) Permit No. MD0053511 (hereinafter, Permit), which became effective on January 1, 2017 and is set to expire on December 31, 2021. During the inspection, the Discharger representatives indicated that they were in the process of reapplying for Permit coverage (due to MDE by December 31, 2020).

The primary purpose of the inspection was to review the accuracy and reliability of the Discharger's self-monitoring and reporting program and to obtain information that will assist EPA in assessing the Discharger's compliance with the requirements of the Permit.

The Inspectors held discussions with Discharger representatives, conducted a detailed site inspection, and reviewed pertinent documentation regarding compliance with the Permit. Based on the information obtained and reviewed, the Inspectors made several observations related to the specific Permit requirements evaluated. These observations are summarized in Table E-1.

Photographs from the inspection are included as Appendix A. Supporting documents are included as Appendix B.

Table E-1. Summary of Permit Requirements and Inspection Observations

Permit Reference	Observations
Permit Status and Effluent Exceedances	
Permit Part II.A	1. The Plant experienced 22 effluent limit exceedances from Outfall 001 between January 1, 2017 through October 31, 2020.
	2. Of the 22 effluent exceedances from Outfall 001, approximately 19 were related to total suspended solids (TSS). The Inspectors made multiple observations related to solids management at the Plant (see Observations 2 and 3 for details).
Proper Operation and Maintenance	
Permit Part III.B.3	3. The Inspectors made several observations related to operations and maintenance at the Plant. 4. The Plant's rotary cloth filter unit was not in operation at the time of the inspection. 5. The Inspectors observed the UV transmittance indicator flashing at the time of the inspection and read 0.4-0.5 mW/cm^2. 6. The Inspectors observed a tall green rectangular filter unit downstream of the UV system, prior to the final effluent channel and discharge location. 7. The Plant did not have an operations and maintenance (O&M) manual on site at the time of the inspection. 8. The Inspectors observed the Plant's discharge to be going into an unprotected pipe located in a hole in the ground where sediment could infiltrate prior to discharging at Outfall 001. 9. The Plant averaged within 80 percent of the design flow (i.e., 56,000 gallons per day (GPD)) 29 times during the Permit term and higher than the design flow 10 times during the Permit term.

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I. INTRODUCTION

On December 1, 2020, U.S. Environmental Protection Agency (EPA) Region III's contract inspectors from PG Environmental, (hereinafter referred to as Inspectors) inspected the Lyons Creek Mobile Home Park Wastewater Treatment Plant (hereinafter, WWTP or Plant) in Lothian, Maryland. At the time of the inspection, Lyons Creek MHC, LLC was identified as the Permittee since they are listed in the Permit as the Permit holder. Horizon Land Co. LLC took over ownership of the Plant in 2015 and is defined for the purpose of this report as Discharger. Singh Operational Services has been hired to contract operate the Plant since April 1, 2020. The Inspectors were joined by a member from the Maryland Department of the Environment (MDE) and Discharger representatives. The primary purpose of the inspection was to review the accuracy and reliability of the Discharger's self-monitoring and reporting program as well as the operation and maintenance of the Plant. The weather at the time of the inspection was cold, with periods of light precipitation.

The Facility is a package style sewage treatment plant with activated sludge and extended aeration. The collection system comprises 2.87 miles of gravity mains, with mostly polyvinyl chloride (PVC) pipes and some clay and Orangeburg pipes. Wastewater flows by gravity to the Plant through an influent manhole. Wastewater flows through a manually-raked bar screen at the influent of the Plant and then into the aeration chamber. Activated sludge is piped in near this location as well. From the aeration chamber, flow is routed to a central clarifier chamber, then into a clarified effluent wet well before being pumped into a building with a rotary cloth filter unit. After the filter building, effluent is disinfected via ultra-violet (UV) light and flows through a final filter unit prior to being discharged into a pipe in the ground which is connected to the outfall to Lyons Creek (Outfall 001). Lyons Creek is a tributary of the Patuxent River, which is designated as Use-I waters and is protected for water contact and recreation and non-tidal warm water aquatic life. The Plant services approximately 250 mobile home pads with an approximate population of 900 people and is operated 1.5-2 hours per day, 7 days per week. Per the Permit fact sheet, the design capacity of the Plant is 70,000 gallons per day (GPD) (refer to Attachment B, Exhibit 1). During the inspection, Discharger representatives stated that the Plant routinely averages flows of 60,000-80,000 GPD, with wet weather peaks over 100,000 GPD.

Solids from the activated sludge process are collected in small section of the package plant and pumped into a waste tank. Wastes solids are hauled off by a contractor as needed.

Activities at the site are regulated under National Pollutant Discharge Elimination System (NPDES) Permit No. MD0053511 (hereinafter, Permit), which became effective on January 1, 2017, and is scheduled to expire on December 31, 2021 (refer to Attachment B, Exhibit 2).

The following personnel were involved in the inspection:

Horizon Land Co. LLC Representatives (Discharger Representatives):	Rikki Drykerman, General Counsel, Horizon Land Co. LLC Emmett Conneely, Project Manager, Horizon Land Co. LLC
Singh Operational Services Representatives (Discharger Representatives):	Chandra Singh, Owner, Singh Operational Services Lyla Walrath, Business Manager, Singh Operational Services Michael Case, Environmental Scientist, Singh Operational Services
EPA Inspectors:	Jake Albright, PG Environmental (contractor) Taylor Fontaine, PG Environmental (contractor)
MDE Representative:	Shailaja Polasi, Regulatory Compliance Engineer

II. INSPECTION PROCESS

The Inspectors held discussions with Discharger representatives, conducted a detailed site inspection, and conducted a records review of pertinent documentation regarding compliance with the Permit. This report documents the Inspectors' observations.

Facility Site Walk

As part of the process, the Inspectors visually observed the treatment train and site conditions in the presence of MDE and Discharger representatives. The treatment train consists of:

- Influent manhole;
- Influent bar screen;
- Aeration tank;
- Clarifier;
- Secondary clarifying trough and wet well chamber/clarified effluent pumps;
- Rotary cloth filter (out of service);
- UV light disinfection; and
- Secondary filter (unknown media);
- Effluent discharge channel, including Parshall flume and ultrasonic transducer for flow measurement.

At the time of the inspection, the Plant had a backup generator onsite, which was being exercised weekly. It should be noted the Inspectors were unable to view the outfall at the time of the inspection due to safety concerns relative to the surrounding terrain.

Records Review

The Inspectors conducted a records review to evaluate the Discharger's compliance with the Permit. Most of the records and reports required by the Permit were available for review after the inspection. The daily handwritten operational datasheets were reviewed onsite during the inspection. The Plant's electronic discharge monitoring reports (eDMRs) were provided electronically and reviewed offsite after the onsite inspection. The following documents were reviewed:

- eDMR data during the period from January 1, 2017 (Permit effective date through October 31, 2020);
- Flow calibration record for ultrasonic transducer (UT) utilized with Parshall flume flow meter (May 21, 2020) (refer to Attachment B, Exhibit 3);
- Operations log (April 1, 2020 to date of inspection);
- DMR-Monthly Operating Report (MOR) log sheets (January 2020 to October 2020);
- Daily handwritten operational datasheets (April 1, 2020 to date of inspection);
- Records of field pH and chlorine meters calibration (October and November 2020) (refer to Attachment B, Exhibit 4); and
- UV system service quote (December 4, 2020).

III. SUMMARY OF OBSERVATIONS

The following section summarizes the Inspectors' observations relative to the Discharger's Permit requirements, including the status of certain treatment units, operation and maintenance practices, and the Discharger's monitoring and reporting documentation.

A. Permit Status and Effluent Exceedances

Part II.A of the Permit defines effluent limitations and monitoring requirements for Outfall 001 discharges.

Observation 1. According to EPA's Integrated Compliance Information System (ICIS) database, the Plant experienced 22 effluent limit exceedances from Outfall 001 between January 1, 2017 and October 31, 2020 (i.e., since the Permit took effect, refer to Attachment B, Exhibit 5).

It should be noted that data was coded in ICIS for two different locations, Monitoring Location 001-A from January 1, 2017 – July 31, 2019, and 001-B from August 1, 2019 – present. It is unclear why there are two monitoring locations in the database for Outfall 001.

EPA's Enforcement and Compliance History Online (ECHO) Database indicates the Plant was in a state of significant noncompliance (SNC) continuously between April 1, 2020 and October 31, 2020 (refer to Attachment B, Exhibit 6). ECHO indicated that violations had been identified during the quarter encompassing the date of the inspection and indicated SNC.

Table 1. Outfall 001-A Final Effluent Exceedances (January 1, 2017 through October 31, 2020)

Permit #	Monitoring Period End Date	Parameter Name	DMR Value	Permit Limit	Units	Limit Type
MD0053511	1/31/2019	Solids, total suspended	6.2	5.8	lbs/day	Monthly Average
MD0053511	1/31/2019	Solids, total suspended	12.6	8.8	lbs/day	Weekly Average

Table 2. Outfall 001-B Final Effluent Exceedances (August 1, 2019 through October 31, 2020)

Permit #	Monitoring Period End Date	Parameter Name	DMR Value	Permit Limit	Units	Limit Type
MD0053511	11/30/2019	pH	9.1	8.5	Standard units	Maximum
MD0053511	4/30/2020	Dissolved Oxygen	4.75	5.0	mg/L	Minimum
MD0053511	4/30/2020	Solids, total suspended	12.77	8.8	lbs/day	Weekly Average
MD0053511	4/30/2020	Solids, total suspended	18	15	mg/L	Weekly Average
MD0053511	5/31/2020	Solids, total suspended	12.2	8.8	lbs/day	Weekly Average
MD0053511	6/30/2020	Solids, total suspended	11	10	mg/L	Monthly Average
MD0053511	6/30/2020	Solids, total suspended	20	15	mg/L	Weekly Average
MD0053511	7/31/2020	pH	6.24	6.5	Standard units	Minimum
MD0053511	7/31/2020	Solids, total suspended	13.18	8.8	lbs/day	Weekly Average
MD0053511	7/31/2020	Solids, total suspended	22	15	mg/L	Weekly Average
MD0053511	8/31/2020	Solids, total suspended	9.48	8.8	lbs/day	Weekly Average
MD0053511	8/31/2020	Solids, total suspended	12.05	10	mg/L	Monthly Average
MD0053511	8/31/2020	Solids, total suspended	17.6	15	mg/L	Weekly Average
MD0053511	9/30/2020	Solids, total suspended	12.42	8.8	lbs/day	Weekly Average

Permit #	Monitoring Period End Date	Parameter Name	DMR Value	Permit Limit	Units	Limit Type
MD0053511	9/30/2020	Solids, total suspended	12.5	10	mg/L	Monthly Average
MD0053511	9/30/2020	Solids, total suspended	33	15	mg/L	Weekly Average
MD0053511	10/31/2020	Solids, total suspended	7.12	5.8	lbs/day	Monthly Average
MD0053511	10/31/2020	Solids, total suspended	19.46	8.8	lbs/day	Weekly Average
MD0053511	10/31/2020	Solids, total suspended	11.8	10	mg/L	Monthly Average
MD0053511	10/31/2020	Solids, total suspended	30.4	15	mg/L	Weekly Average

Part II.A. Footnote (1) of the Permit states, "There shall be no discharge of floating solids or visible foam in other than trace amounts."

Observation 2. Based on the records review, the majority of the Plant's exceedances were related to TSS. During the inspection, the Inspectors observed solids issues throughout the treatment train. For example, bulking solids were observed floating in the clarifier and solids were observed on the clarifier weirs. Additionally, the clarifier skimmer arm was missing at the time of the inspection. Inspectors also observed scum and foam floating in the effluent channel of the UV system. Observations related to solids and the condition of the treatment train are included in Observation 3.

The Inspectors also observed more than 30 entries documented in the Plant's logbook between April 1, 2020 and November 19, 2020 that referred to the Plant's effluent as "cloudy" or "foggy" (refer to Attachment B, Exhibit 7). There were several other entries that included the terms "mostly" or "pretty" clear when referring to the effluent. There were numerous entries that did not describe the clarity of the effluent. This observation was made after the onsite inspection and not reviewed with the Discharger representatives at the time of the Inspection.

B. Proper Operation and Maintenance

Permit Part II.B.3, Facility Operation and Quality Control requires that "All waste collection, control, treatment and disposal facilities shall be operated in a manner consistent with the following:

a. Facilities shall be operated efficiently to minimize upsets and discharges of excessive pollutants."

Observation 3. The Inspectors made several observations related to operations and maintenance at the Plant:

- The influent bar screen was full of sewage material (rags and solids) at the time of the inspection. Discharger representatives stated that the screen is cleaned daily, and it had not yet been cleaned on the day of the inspection. He also stated the condition observed was typical. Daily influent bar screen cleaning was observed to be documented in the Plant's logbook (refer to Attachment B, Exhibit 7).
- Foam was in the aeration chamber (refer to Attachment A, Photographs 2 and 4). During the inspection, Discharger representatives attributed the foaming to microorganisms in the plant biology as well as sludge age (i.e., old sludge).

- Bulking solids were observed floating in the clarifier and solids were observed on the clarifier weirs (refer to Attachment A, Photographs 3 and 4). During the inspection, Discharger representatives attributed the solids to microorganisms in the plant biology as well as sludge age (i.e., old sludge). Solids/scum were also observed in the clarifier effluent wet well (refer to Attachment A, Photograph 5).

- The clarifier skimmer arm was not in operation at the time of the inspection. This same observation was also made in the January 9, 2020 MDE inspection report (refer to Attachment B, Exhibit 8). The January 9, 2020 MDE inspection report recommended "necessary repairs should be made to the skimmer arm immediately". These repairs had not been made at the time of the December 1, 2020 inspection. The Inspectors observed the skimmer arm placed against a chain link fence on the outer perimeter of the Plant. Discharger representatives stated that the skimmer arm had been removed for more than two years.

- One of the two clarifier effluent pumps was not present at the time of the inspection. Discharger representatives were unsure of when it was taken out or why (refer to Attachment A, Photograph 5).

- The outer ring of the Plant, which could be used for additional capacity or emergency storage, was filled with solids and vegetation (refer to Attachment A, Photograph 6).

- Light brown solids and scum were observed on the water surface at the effluent end of the UV channel (refer to Attachment A, Photograph 7). There was no observable odor at the time of the inspection.

Observation 4. The Plant's rotary cloth filter unit was not in operation at the time of the inspection. The filter was positioned immediately upstream of the UV disinfection banks. Discharger representatives stated the unit had been out of service for decades. At the time of the inspection, effluent was being channeled through the non-functioning rotary cloth filters to the UV banks. As stated previously, light brown solids and scum were observed on the water surface at the effluent end of the UV channel. There was no observable odor at the time of the inspection.

Observation 5. The UV transmittance indicator was flashing at the time of the inspection and read 0.4-0.5 mW/cm^2 (refer to Attachment A, Photograph 8). At the time of the inspection, the Plant operator stated the UV transmittance indicator does not necessarily need to provide an exact reading as it is just used to signal an issue. On December 4, 2020, Discharger representatives solicited quotes for repair work on the UV transmittance indicator (refer to Attachment B, Exhibit 9). This same observation was also made in the January 9, 2020 MDE inspection report (refer to Attachment B, Exhibit 8).

Observation 6. The Inspectors observed a tall green rectangular filter unit downstream of the UV system, prior to the final effluent channel and discharge location (refer to Attachment A, Photograph 9). At the time of the inspection, Discharger representatives were unsure of the type of filter media in use or why the filter was installed downstream of disinfection. The filter unit is not described in the Permit fact sheet (refer to Attachment B, Exhibit 1).

Observation 7. The Discharger did not have a Plant operations and maintenance (O&M) manual or standard operating procedures (SOPs) for critical Plant processes at the time of the inspection.

Observation 8. The Inspectors observed the Plant's discharge to be going into a pipe located in a hole in the ground upstream of Outfall 001 (refer to Attachment A, Photograph 10). The pipe was lower than the surrounding grade and the ground surface in the vicinity was mostly dirt and gravel. It appeared that sediment would be able to enter the pipe during a wet weather event and ultimately be discharged to Lyons Creek through Outfall 001.

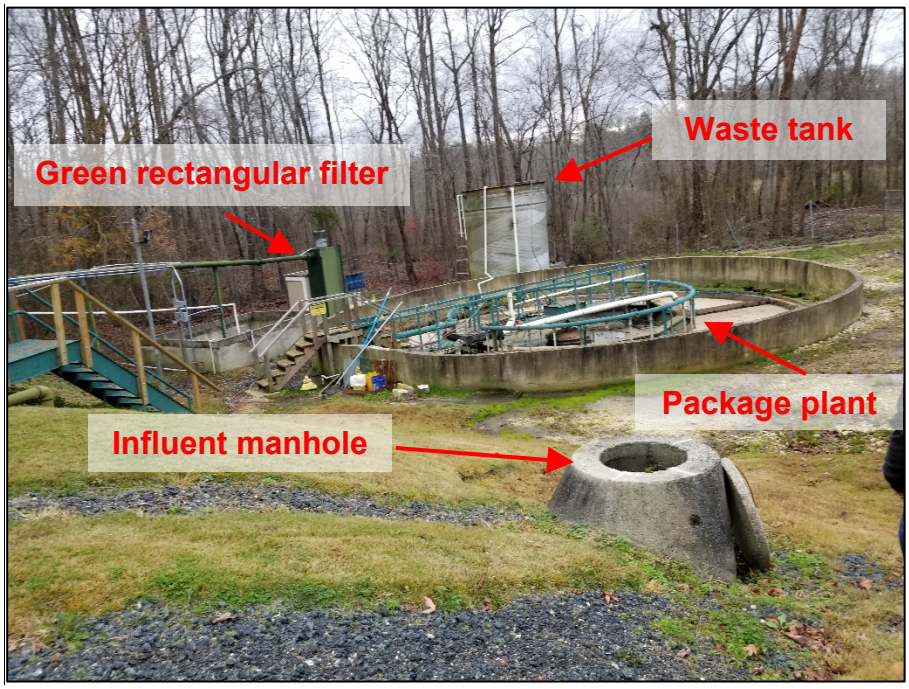
Part II.C of the Permit states that if the Plant's "most recent three year average flow is over 80% of its design capacity or if it is anticipated to exceed 80% in the following year, a Wastewater Capacity Management Plan (WCMP) must be submitted to the Department using NetDMR no later than January 28 of the following year. Thereafter, the "Wastewater Flow Capacity Report (WFCR)" and "worksheet for WFCR" shall be submitted to the Department using NetDMR tool no later than January 28th of each year."

Observation 9. The Permit fact sheet lists the design capacity of the Plant as 70,000 GPD (refer to Attachment B, Exhibit 1). At the time of the inspection, the Plant operator stated that dry weather flows to the Plant are routinely in the 70,000 to 80,000 GPD range, with wet weather peaks over 100,000 GPD. This was confirmed by eDMR data in ICIS (refer to Attachment B, Exhibit 5). The ICIS monthly average flow data indicates that the Plant averaged within 80 percent of the design flow (i.e., 56,000 GPD) 29 times during the Permit term and higher than the design flow 10 times during the Permit term (see Table 3). Based on the average monthly flow data in ICIS, the Plant has averaged 63,000 GPD (i.e., 90 percent of the design flow) between January 2017 and October 2020 (46 months). According to the MDE representative onsite, the Discharger had not submitted a WFCR at the time of the inspection.

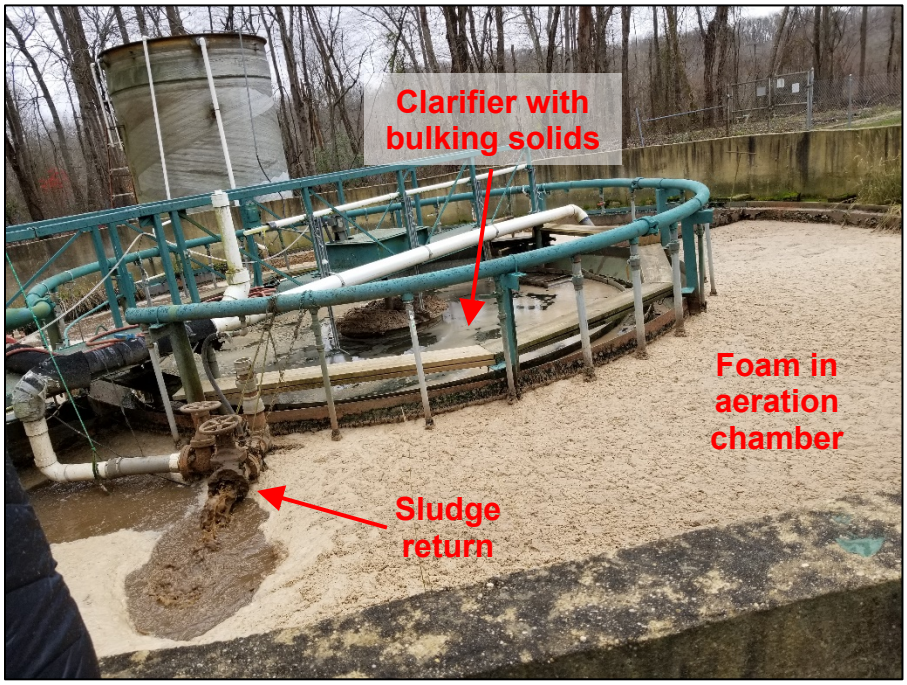
Table 3. Average Monthly Flows within 80 percent of Plant Capacity. Flows higher than the design flow are highlighted in yellow.

Month	Average Monthly Flow
October 2020	70,000 GPD
September 2020	60,000 GPD
August 2020	70,000 GPD
May 2020	60,000 GPD
April 2020	70,000 GPD
March 2020	63,000 GPD
February 2020	70,000 GPD
January 2020	70,000 GPD
December 2019	62,000 GPD
November 2019	57,000 GPD
June 2019	68,000 GPD
April 2019	63,000 GPD
May 2019	73,000 GPD
March 2019	81,000 GPD
February 2019	93,000 GPD
January 2019	95,000 GPD
December 2018	97,000 GPD
November 2018	98,000 GPD
October 2018	72,000 GPD
September 2018	73,000 GPD
August 2018	58,000 GPD
July 2018	65,000 GPD
June 2018	69,000 GPD
May 2018	73,000 GPD
March 2018	65,000 GPD
February 2018	74,000 GPD
January 2018	62,000 GPD
August 2017	57,000 GPD
May 2017	60,000 GPD

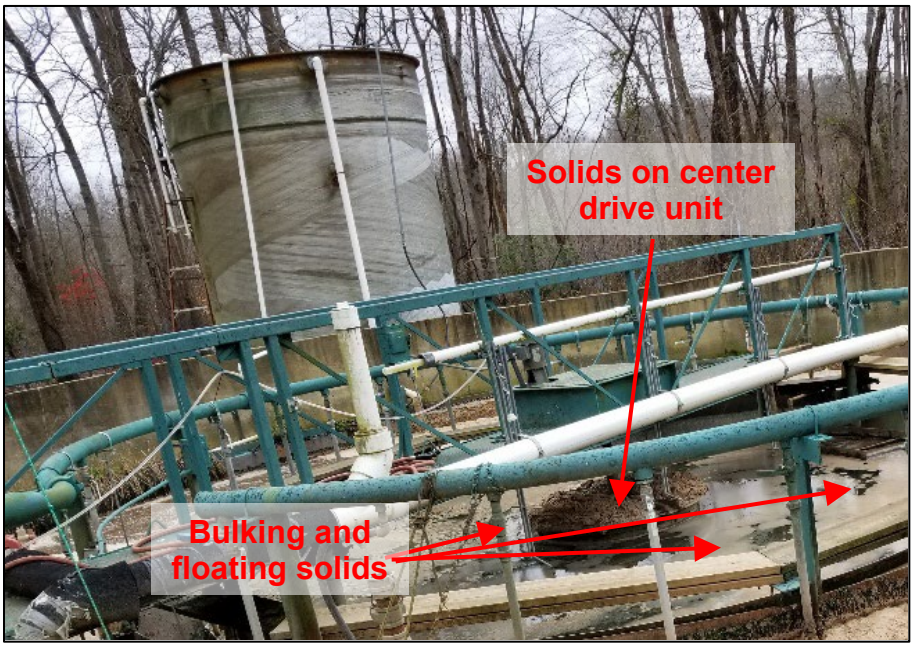
Attachment A
Photograph Log



Photograph 1. View, looking downhill from Lyons Den Drive, of the Lyons Creek Mobile Home Park Wastewater Treatment Plant (WWTP).

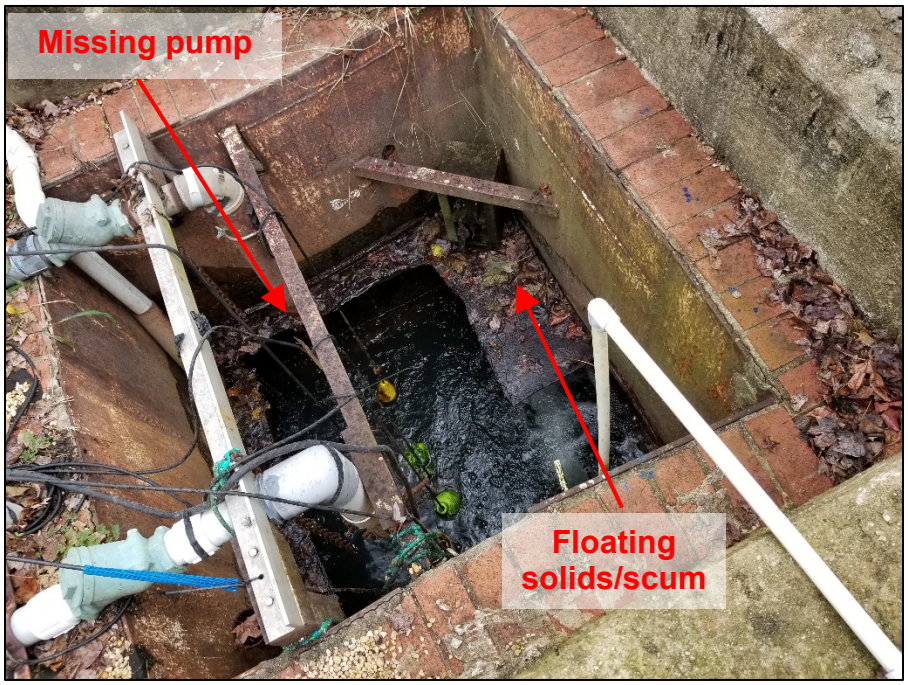


Photograph 2. Closer view of the WWTP. Note the foam in the aeration chamber.



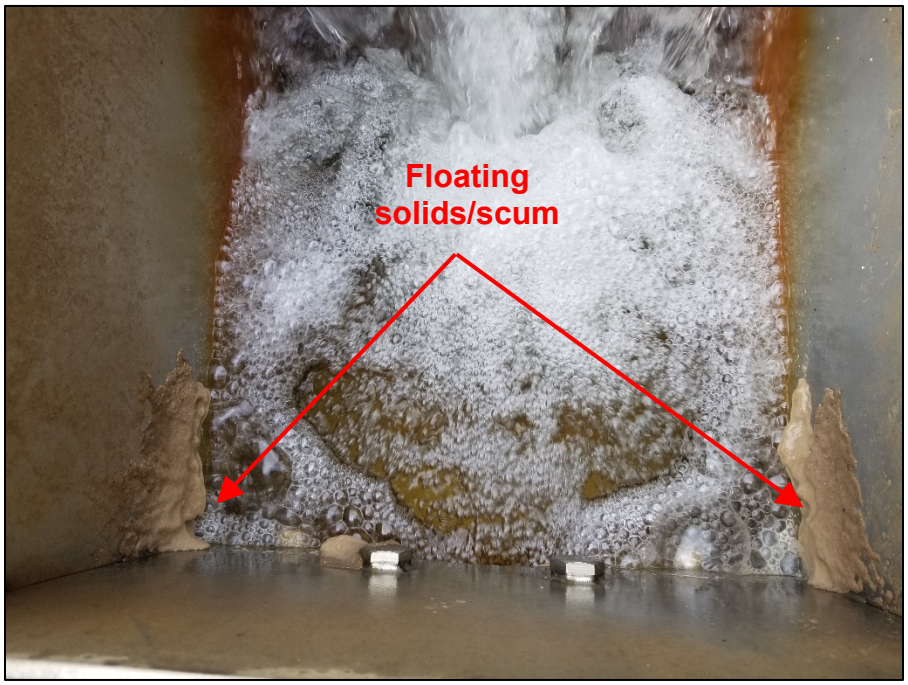
Photograph 3. (Original Photographed zoomed in by Inspector) Closer view of solids bulking and floating in the clarifier. Also note the solids and foam accumulated on the center rotary drive for the skimmer arm. The arm had been removed for at least two years.

Photograph 4. Additional view of the aeration chamber. Note the presence of foam. Also note the presence of bulking solids in the clarifier.

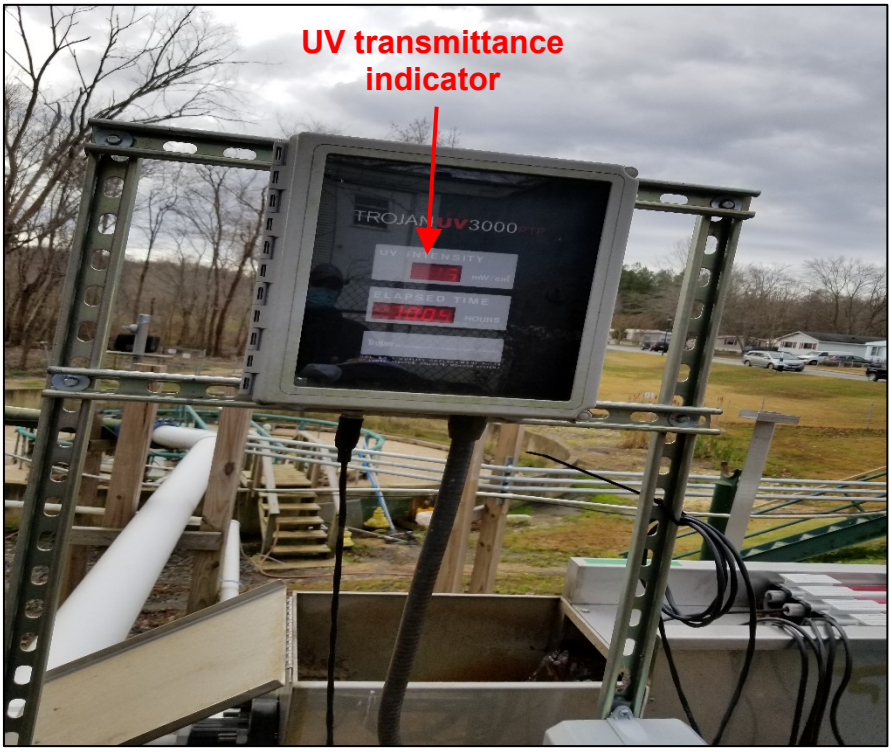


Photograph 5. View of the clarifier effluent wet well. Note the accumulation of floating solids/scum. Also note one of the two pumps was missing.

Photograph 6. View of vegetation/solids in the outer ring of the Plant. Note that this area could be used for additional capacity or emergency storage.



Photograph 7. View of the effluent end of the UV channel. Note the solids/scum on the surface of the water.



Photograph 8. View of the UV transmittance indicator. At the time of the inspection, the indicator was flashing and read 0.4-0.5 mW/cm^2. Note the photograph displays 0.5 mW/cm^2.

Photograph 9. View of the effluent end of the green rectangular filter unit. Plant representatives were unsure of the media in the unit or its exact treatment function.

Photograph 10. View of the effluent discharge location, upstream of Outfall 001. Note the pipe in the ground is below grade and the surrounding area is mostly dirt and gravel.

Attachment B
Exhibit Log

Exhibit 1
NPDES Permit No. MD0053511 Fact Sheet

Maryland
Department of
the Environment

Larry Hogan
Governor

Boyd Rutherford
Lieutenant Governor

Ben Grumbles
Secretary

SUMMARY REPORT & FACT SHEET

Permit Application Numbers: **State:** 12-DP-1275 **NPDES:** MD0053511

Name of Facility: Lyons Creek MHC, LLC Wastewater Treatment Plant

Mailing Address: 2131 Espey Court, Suite 1
Crofton, Maryland 21114

Facility's Location: 1007 Lower Pindell Road
Lothian, Anne Arundel County, Maryland 20711

Facility Organization: Lyons Creek MHC, LLC

Contact Person's Name: Ryan Hotchkiss
-Title: Vice President
-Phone: 410-721-3374

Applicant engaged in: The treatment of domestic wastewater

Number of outfalls: 001A- (Facility Effluent) **SIC Code:** 6515 (Mobile Home Oper5ations)

MDE Engineer: **Completion Date:** 04/15/16

Reviewed /Accepted by: _____ 6/7/16
Yen-Der Cheng, Chief
Municipal Surface Discharge Permits Division
Date

Is EPA joint review required? Yes ☒, Date sent: 6/13/16 No ☐

State/EPA comment/agreement received: Yes ☒ Date received: 7/12/16, N/A ☐

Table of Content

I. Description of Facility, Outfall and Receiving Stream

Description of Facility & Outfall(s)

Details for Facility:

POTW ☐ Privately Owned Facility ☒

EPA MAJOR ☐ EPA MINOR ☐ Chesapeake Bay Significant ☐

Service Area Brief Description… {Example: The facility serves xyz community.}

Population Served **900** people (From **250** mobile homes), 5-year projection flow **0.070** mgd.

The proposed discharge flow of **0.070** Million Gallons per Day (MGD) is consistent with the capacity listed in the latest **Anne Arundel** County's Comprehensive/Master Water and Sewer Plan, as amended and adopted in **2007** by the County, and approved by MDE's Water Resources Planning Program. It is also in conformance with the State's Smart Growth initiatives.

Current Design Capacity of the Facility: **0.070** MGD

Which of the following documents were used as the base of the design capacity? (Check boxes as appropriate.)

☐ Construction Permit (Issued by MDE), ☒ Most updated W/S Plan (2007)
☒ Permit Application ☐ Other (Specify)

Additional comments on the plant capacity: {Examples: future expansion, significant I/I affecting plant capacity, etc.}.

Type of Discharge: ☒ Surface Discharge, Discharge Period: 12 months (January – December)
☐ Groundwater Discharge,

Additional comments on the discharge type: Examples: intermittent discharge or continuous discharge.

Wastewater Treatment Processes:

This is an activated sludge process with clarifier, chlorination. Dechlorination and post aeration process before discharging to Lyons Creek, a tributary of the Patuxent River.

I. Description of Facility, Outfall and Receiving Stream

Details for Outfall:				
Outfall Type:	Non-submerged discharge ☐ Pipe ☒ Ditch ☐ Distance from the last sampling point: 200 ft. Submerged Discharge: ☐ Distance from the last sampling point: _____, Diameter of the Outfall Pipe:_____ Distance from Shore_____ , Depth _____ , No. of Diffusers _____			
Outfall Location:	**GPS Readings**		**Maryland Coordinates, feet**	
	Latitude	Longitude	North	East
	38° 45’ 42” (N)	76° 39’ 58” (W)	338,200	895,200

Details for Effluent Receiving Stream

Name of Stream	Lyons Creek which flows into the Patuxent River.
Type of Stream	Non-tidal Intermittent.
Stream Use Designation	Lyons Creek, a tributary of the Patuxent River is designated as a Use-I waters.
River Mile	2.0 Miles from outfall 001A to the confluence of the Patuxent River.
Watershed	8-Digit Sub-watershed Code: 02-13-11-02 Patuxent River Middle Area Sub-watershed. CBPSEG Code: PAXTF-Patuxent River Tidal Fresh.
Tier II Waters	Receiving stream(s) designated as Tier II water Yes ☐ No ☒ Tier II rules applicable to discharge Yes ☐ No ☐ N/A ☒
Does the facility discharge into impaired waters included on (303(d) list)?	Yes ☒ No ☐ As per the approved Integrated Report of Surface Water Quality (formerly known as the 303(d) List and 305(b) Report)**,** the Patuxent River Middle (02-13-11-02) sub-watershed is listed as impaired water bodies due to sediment, nutrients (1996), chlorpyrifos and impacts to biological communities (2002).

I. Description of Facility, Outfall and Receiving Stream

Approved Total Maximum Daily Load (TMDL) / Water Quality Analysis (WQA) for concerned parameter(s)	Are there any approved TMDL(s) / WQA(s) for the Patuxent River (02-13-11-02) and (02-13-11-01) Sub-watersheds? Yes ☒ No ☐ A Total Maximum Daily Load (TMDL) for chlorpyrifos, approved by the EPA on 7/3/2007 has been completed in the Middle (02-13-11-02) Patuxent River. Chlorpyrifos and fecal bactria TMDLS approved by EPA have been completed in the Lower Patuxent River (02-13-11-01) watershed. This permit is in conformance with the "**Chesapeake Bay TMDL for Nitrogen, Phosphorus and Sediment"** established on December 29, 2010.			
	Is Patuxent River Middle part of the Chesapeake Bay TMDL (as accepted by EPA on 12/29/2010)? Yes ☒ No ☐			
Background Stream Flows (See PROJECT FILE for details):	Period	7Q10 Low-flow, cfs	30Q5 Low-flow, cfs	Average, cfs *
	5/1 To 10/31	0.0	0.0	0.0
	11/1 To 4/30	0.0	0.0	0.0
	Annual	0.0	0.0	0.0
	* Annual average flow is not applicable to tidally influenced waterbody.			

Plant Performance Evaluation:

Source of Data: EPA ICIS DMR Pant Data, Data Period: Jan 2011 to Dec 2015.

The plant performance is summarized as follows:

Parameter	Concentration	Quantity
BOD_5 (5/1 to 10/31) (11/1 to 4/30)	2.4 mg/l 2.09 mg/l	0.88 lbs/day 0.92 lbs/day
Total Suspended Solids (TSS) (5/1 to 10/31) (11/1 to 4/30)	 2.37 mg/l 2.42 mg/l	 0.80 lbs/day 1.10 lbs/day
Total Ammonia Nitrogen as N (5/1 to 10/31) (11/1 to 4/30)	 0.08 mg/l 0.04 mg/l	 0.03 lbs/day 0.02 lbs/day
E. Coli	7.5 MPN/100ml	N/A

I. Description of Facility, Outfall and Receiving Stream

Total Residual Chlorine (TRC)	<0.01mg/l	N/A
pH	6.5 minimum 8.5 maximum	N/A N/A
Dissolved Oxygen (DO)	7.5 mg/l	N/A
Flow	N/A	0.049 MGD

II. Special Requirements and Conditions

WWTP meeting at least 85% reduction of BOD_5 and TSS Yes ☒ No ☐ N/A ☐

Based on the plant performance records for the period Jan 2011- Dec 2015, the effluent BOD_5 and TSS are averaged **2.2** mg/l and **2.4** mg/l, respectively. Using BOD5 and TSS concentration of 200 mg/l for typical raw-sewage influent (as stated in the technical manuals), this facility removes more than **98** % of BOD_5 and TSS during the treatment processes, far exceeding the minimum 85% removal requirement for POTWs with the secondary treatment.

Rationale: 40CFR, PART 133, §133.102

Enhanced Nutrient Removal (ENR) Requirements: ENR Limits ☐ ENR Goal ☐ N/A ☒

As per the Maryland's Chesapeake Bay ENR Strategy for Point Sources, this facility has been assigned with the annual maximum Waste Load Allocation (WLA) goals estimated at xxxx pounds/year for TN and yyy pounds/year for TP which are part of the aggregate nutrient WLAs assigned to the non-significant point sources within the Chesapeake Bay Segment (e.g. POTTF_MD). Because this facility has less than 0.1 mgd flow capacity, the Departmental Guidelines exempts this facility from the annual maximum waste load limits as well as goal requirements. The above nutrient WLAs for this facility will be incorporated to establish the limits, if the existing facility is expanded in future.

Rationale: Maryland's Chesapeake Bay Tributary Strategy Statewide Implementation Plan, 2008 and Chesapeake Bay Watershed Implementation Plan

TMDL Implementation Requirements: Yes ☒ No ☐ N/A ☐

This permit is in conformance with the "**Chesapeake Bay TMDL for Nitrogen, Phosphorus and Sediment"** established on December 29, 2010.

Rationale: 40 CFR §130.7, The approved TMDL(s) for TN, TP, & TSS in Patuxent River Watershed}.

Was Whole Effluent Toxicity (WET) testing required in the previous discharge permit (09-DP-1275)? Yes ☐ No ☒ N/A ☐

II. Special Requirements and Conditions

Is WET testing proposed for the permit? Yes ☐ No ☒ N/A ☐

Estimation of Instream Waste Concentration (IWC) for WET:

A. *For Discharge to Freshwater*:

$$IWC(\%) = \left[\frac{Q_D \times 1.5472}{(Q_D \times 1.5472) + Q_{RW}} \right] \times 100 = \mathbf{\_XX.x\_\ \%}$$

$$IWC(\%) = \left[\frac{0.070 \times 1.5472}{(0.070 \times 1.5472) + 0.0} \right] \times 100 = \mathbf{\_100\_\ \%}$$

Where, Q_D = Plant permitted flow = 0.070, MGD
Q_{RW} = Receiving Water annual 30Q5 low-flow = 0.0, cfs.
XX.x = In-stream waste concentration% %.

Are WET limits proposed? Yes ☐ No ☒ N/A ☐

Was Toxic Chemical Testing required in the previous discharge permit (09-DP-1275)? Yes ☐ No ☒ N/A ☐

No priority pollutant testing is recommended for the renewal discharge permit. Standard influent restriction requirements for a non-pretreatment minor facility is recommended for the renewal discharge permit.

Is Toxic Chemical Testing proposed? Yes ☐ No ☒ N/A ☐

If Yes:
Chemical testing for toxic substances is required for POTWs with flows greater than 1,000,000 gpd or a pretreatment program, a discharger that has demonstrated actual or potential toxicity, or a discharger whose discharge the Department believes may cause toxicity as determined by an evaluation of manufacturing processes, indirect discharges, treatment processes, effluent or receiving water data, or other relevant information.

Rationale: COMAR 26.08.03.07D(1) and MDE's "Toxic Pollutant Analytical and Reporting Requirements Protocol, revised on 5/18/2011"

II. Special Requirements and Conditions

Wastewater Capacity Management

Does the proposed permit include condition pertaining to the wastewater flow capacity management? Yes ☒ No ☐

If NO, p**rovide brief explanation for exemption** (Example: The facility serves {TYPE OF ENTITY} which does not have growth potential in future).

If Yes, does the proposed permit require submittal of Capacity Management Plan (CMP)? Yes ☐ No ☒

Because the most recent three-year annual average wastewater flow is **70** % of the existing rated capacity of **0.07** MGD which does not exceed a threshold of 80 % capacity.

Rationale: MDE's Guidance Document "Wastewater Capacity Management Plans, 2006"

Pretreatment Program/Influent Restriction

WWTP with approved pretreatment program ☐ Non-pretreatment program WWTP ☒

Does the non-pretreatment WWTP require the influent restriction? Yes ☒ No ☐

Rationale: COMAR 26.08.08 and Department Guidelines

Reapplication Due Date for Next Permit Renewal

Per the Departmental guidelines for the watershed permitting, the next renewal of a discharge permit for the Lyons Creek MHC, LLC WWTP is scheduled for 1st quarter, 4th year in cycle with the projected renewal application date of **01/01/2017** and reissuance date of **04/01/2018.**

Because the reapplication due date of **01/01/2017** for the next permit renewal would be within two years from the anticipated issuance date of the proposed permit, the reapplication due date is set as 12 months before the expiration date of the proposed permit.

Rationale: COMAR 26.08.04.01 and Departmental Guidelines.

Are temperature requirements included? Yes ☐ No ☒

III. Proposed Effluent Limits and Monitoring Requirements

The effluent limits and monitoring requirements, as listed below, are proposed to process the application for the discharge permit renewal. ***Refer to Appendix- A for the previous permit's effluent limitations and monitoring requirements***.

The quality of the effluent discharged by the facility at the discharge location- 001A[(1) (2) (3) (4)] shall be limited and/or monitored at all times as shown below. If the sampling point is other than the outfall- 001A, the permittee shall ensure that the effluent samples are representative of the effluent quality being discharged at the outfall 001A.

Effluent Characteristics	Requirements	Period	Quantity	Concentration	Footnotes
BOD_5	**Limits**	All year	5.8 lbs/d (mo ave) 8.8 lbs/d (wkly ave)	10 mg/l (mo ave) 15 mg/l (wkly ave)	
	Monitoring		**Frequency** One per week	**Sample Type** 24-hour composite	(8)
Total Suspended Solids (TSS)	**Limits**	All year	5.8 lbs/d (mo ave) 8.8 lbs/d (wkly ave)	10 mg/l (mo ave) 15 mg/l (wkly ave)	
	Monitoring		**Frequency** One per week	**Sample Type** 24-hour composite	(8)
Total Ammonia Nitrogen as N	**Limits / Reporting**	5/1-10/31	1.1 lbs/d (mo ave) 10 lbs/d (daily ave)	1.9 mg/l (mo ave) 17 mg/l (daily ave)	
		11/1-4/30	1.8 lbs/d (mo ave)	3.0 mg/l (mo ave)	
	Monitoring	All year	**Frequency** One per week	**Sample Type** 24-hour composite	(8)
E. Coli	**Limits**	All year	N/A	126 MPN/100 ml (max mo geo mean)	(5)
	Monitoring		**Frequency** One per week	**Sample Type** Grab	(8)(9)
Total Residual Chlorine (TRC)	**Limits**	All year	N/A	0.011 mg/l at anytime (See footnote- 6)	(6)
	Monitoring		**Frequency** One per day	**Sample Type** Grab	(8)(9)

III. Proposed Effluent Limits and Monitoring Requirements

pH	**Limits**	All year	N/A	6.5 SU min 8.5 SU max	N/A
	Monitoring		**Frequency** One per day	**Sample Type** Grab	(8)
Dissolved Oxygen (DO)	**Limits**	All Year	N/A	5.0 mg/l (min at anytime)	N/A
	Monitoring		**Frequency** One per day	**Sample Type** Grab	(8)
Flow	**Limits**	All year	REPORT mgd (mo ave) REPORT mgd (daily max)	N/A	N/A
	Monitoring		**Frequency** Continuos	**Sample Type** Recorded	(8)(11)(12)

An annual average flow of **0.070** million gallons per day (mgd) was used in waste allocation calculations (expressed as waste loading rate limit), and this unit shall be used when reporting on the Discharge Monitoring Report (DMR), (EPA Form 3320-1, Rev. 01/06). Notification is to be provided to the Department at least 180 days before the annual average flow is expected to exceed this flow level. If a permit modification is required, the Department will initiate the public participation NPDES process.

Footnotes:

For Effluent Limitations

(1) When this permit is renewed, the new limitations may not be equal to the above limitations.

(2) There shall be no discharge of floating solids or visible foam other than trace amounts.

(3) The permit may also be reopened in accordance with the requirements of MDE's Watershed Permitting Plan under which all discharge permits in a watershed are issued the same year.

(4) The Middle and Lower Patuxent River (02-13-11-02 and 02-13-11-01) are on the 303(d) list as impaired waters for Sediment, Nutrient, Chlorpyrifos, Fecal coliform and Biological communities. Total Maximum Daily Load (TMDL) for chlorpyrifos has been completed in the Middle Patuxent River (02-13-11-02) and approved by the EPA on 7/3/2007. Chlorpyrifos and fecal bactria TMDLS approved by EPA have also been completed in the Lower Patuxent River

III. Proposed Effluent Limits and Monitoring Requirements

(02-13-11-01) watershed. This permit is in conformance with the "**Chesapeake Bay TMDL for Nitrogen, Phosphorus and Sediment"** established on December 29, 2010.

When TMDLs for other remaining parameters are completed, limits may be imposed, after the public participation process, to incorporate any TMDL requirements.

(5) Total residual chlorine limitation of 0.011 mg/l shall be applicable, when chlorine or any chlorine-containing compound is used in any treatment process(es), including but not limited to disinfection, that could become a potential constituent of the effluent discharged from the Lyons Creek MHC, LLC. The wastewater shall be dechlorinated to reduce effluent total residual chlorine concentration to the nondetectable level (See definition I.L of the draft permit).

For Monitoring Requirements

(6) "STORET" (short for STOrage and RETrieval) is a widely-used repository for water quality data reporting and monitoring. The STORET codes for the effluent characteristics described as limitations and/or monitoring requirements are: BOD_5 (00310), Total Suspended Solids (00530), Total Ammonia Nitrogen as N (00610), E. Coli (51040), Total Residual Chlorine (50060), Dissolved Oxygen (00300), pH (00400),

(7) The Minimum monitoring requirements of one per day-grab samplings for total residual chlorine shall be applicable, when chlorine or any chlorine compound is used in any treatment process(es), including but not limited to disinfection, that could become a potential constituent of the effluent discharged from the Lyons Creek MHC, LLC. The minimum detection level (quantification level) for total residual chlorine is 0.10 mg/l. The permittee may report all results below the minimum level as <0.10 mg/l. All results reported below the minimum level shall be considered in compliance.

(8) Flows shall be reported in millions gallons per day (mgd) to at least the nearest 1,000 gallons per day. (Example: A flow of 24,699 gallons per day shall be reported as 0.025 mgd.). For each calendar month, flows shall be reported on the MOR as daily individual results and on the DMR as monthly average (mgd) and daily maximum (mgd)).

(9) Continuous electronic flow measurement and recording which can produce a permanent record are acceptable to the Department.

Regulations and Rationale for Effluent Limitations:	
BOD_5	**Regulations:** 40 CFR §130.7, COMAR 26.08.02.03-3A(2), COMAR 26.08.04.04C(1) and COMAR 26.08.0l.01B(80). **Discussion and Rationale(s):** The technical analysis was performed in 1993 using a mathematical model (INPRG) to establish the effluent limits requirements for discharge flows up to **0.07** MGD. There is no increase of the discharge flow for the permit renewal; and also, there are no indications of apparent changes to the receiving stream. Therefore, the BOD_5 and dissolved oxygen effluent limits established in 1993 and incorporated in previous permit(s) 82-DP-1275, 95-DP-1275 & 09-DP-1275 have been considered at this time for the proposed permit renewal. These limits will be protective of meeting the dissolved oxygen criteria in downstream portion of the effluent receiving stream(s).

III. Proposed Effluent Limits and Monitoring Requirements

Total Suspended Solids (TSS)	**Regulations:** 40 CFR §130.7, COMAR 26.08.02.03-3A(5), COMAR 26.08.04.04C(1), COMAR 26.08.0l.01B(80) and 40 CFR§133.102 - §133.105. **Discussion and Rationale(s):** The Chesapeake Bay TMDL (Phase I) approved by USEPA on 12/29/2010 allocated the aggregate annual TSS waste load to cover all non-significant point sources which are located into the Chesapeake Bay Water Quality Segment-02-13-11-02, rather than individual sources. The limit of 30 mg/l monthly average is in conformance to the Bay TMDL.
Total Kjedahl Nitrogen (TKN)	**Regulations:** COMAR 26.08.02.03-3A(2) **Discussion and Rationale(s):** Refer to Discussion and Additional Rationale forBOD_5.
Total Ammonia Nitrogen as N	**Regulations:** COMAR 26.08.02.03-2J, COMAR 26.08.02.03-2K and COMAR 26.08.02.05C, COMAR 26.08.02.05D. **Discussion and Rationale(s):** The reasonable potential of the Lyons Creek WWTP effluent to cause a violation of the receiving stream's ammonia water quality criteria was investigated to process the discharge permit renewal. An in-house SPREADSHEET program (developed by the Municipal Surface Discharge Permits Division) was used as a tool for the toxicity analysis. The dilution factors, based on the applicable mixing zone criteria, were incorporated in the analysis. As the ammonia toxicity criteria are pH dependent, the effluent pH of **7.6** which is a median of the maximum effluent pH data for the period Jan 2011 to Dec 2015.
E. Coli	**Regulations:** COMAR 26.08.04.02-1A(2). **Discussion and Rationale(s):** Brief description, if the fecal coliform limit is included in an approved TMDL.
Total Residual Chlorine	**Regulations:** COMAR 26.08.02.03-2G(1), COMAR 26.08.02.05C, COMAR 26.08.02.05D,COMAR 26.08.03.06C(5), COMAR 26.08.03.06D, COMAR 26.08.03.06F, **Discussion and Rationale(s):** The reasonable potential of the Lyons Creek WWTP effluent to cause a violation of the receiving stream's TRC water quality criteria was investigated to process the discharge permit renewal. An in-house SPREADSHEET program (developed by the Municipal Surface Discharge Permits Division) is used as a tool for the toxicity analysis. The toxicity based limit was compared with the effluent quality criteria to set the TRC limit requirement.
pH	**Regulations:** 40 CFR §130.7, COMAR 26.08.02.03-3A(4) **Discussion and Rationale(s):** The limits are set equal to the stream water quality criteria. Also, refer to Discussion and Additional Rationale for Total Ammonia Nitrogen as N.
Dissolved Oxygen (DO)	**Regulations:** COMAR 26.08.02.03-3A(4) **Discussion and Rationale(s):** The limits are set equal to the stream water quality criteria. Also, refer to Discussion and Additional Rationale forBOD_5.
Flow	**Regulations:** COMAR 26.08.04.02A(2). The discharge is consistent with the (name of County) water and sewer master plan.

III. Proposed Effluent Limits and Monitoring Requirements

	Discussion and Rationale(s): The permit flow considered for this permit renewal is equivalent to the rated design capacity of the facility. It is not a limitation, but it incorporated with concentration limits to calculate the waste load limits for: BOD_5, TSS, TP and TN}.
Temperature	**Regulations:** COMAR 26.08.02.03-3D(3) **Discussion and Rationale(s):** Refer to Section II "Special Condition and Requirements" for additional information pertaining to the temperature.
WET	**Regulations:** COMAR 26.08.03.07. **Discussion and Rationale(s):** Refer to Section II "Special Condition and Requirements" for additional information pertaining to the temperature.

Additional Rationales for Effluent Limitations:

(A) Anti-backsliding Policy Review:

Provisions as stipulated in Federal Regulations [CWA §303(d)(4), CWA §402(o) & 40 CFR 122.44(l) require a reissued permit to be as stringent as the previous permit requirements, with some exceptions as determined be the Department.

The effluent limitations established for the permit renewal are in conformance to the above stated provisions.

(B) Anti-Degradation Policy Review:

As outlined in COMAR 26.08.02.04 (Anti-degradation Policy), certain waters of the State possess an existing quality that is better than the water quality standards established for them. The quality of these waters shall be maintained:

The discharge permit 12-DP-1275 being processed for the reissuance includes the effluent limitations which are sufficient to protect and maintain the water quality of the Lyons Creek. It does not require Tier II antidegradation review for the existing facility with permitted flow of 0.07 MGD.

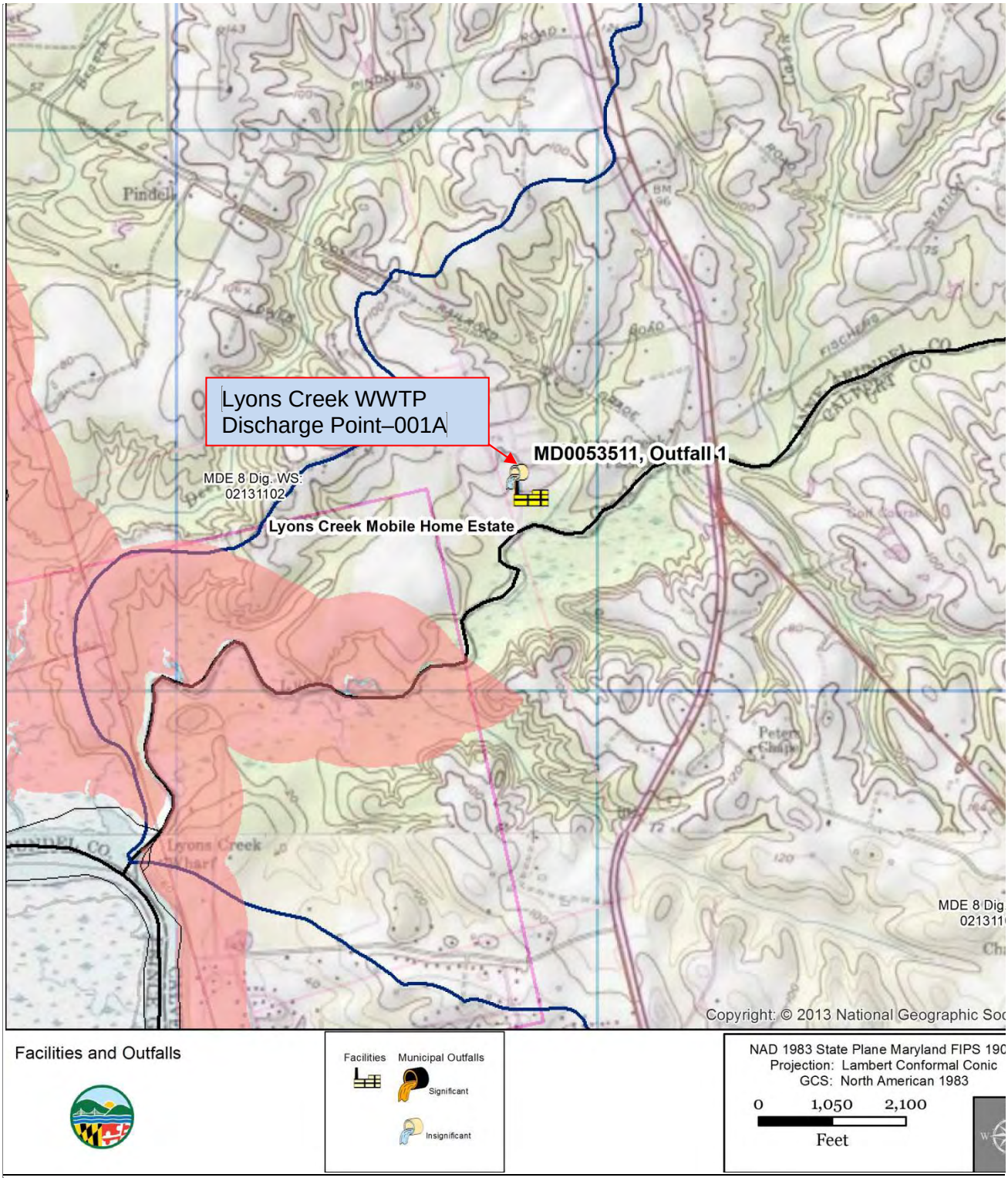
Rationale(s) for Monitoring Requirements:

The Department Guidelines for Minimum Monitoring Requirements as revised by memorandums of 7/24/1996 and 3/6/2008.

IV. Chronological Log of Activities:

DATE	ACTIVITY DESCRIPTION
09/30/2015	The Permitting and Customer Services (PCS) received discharge permit renewal application, signed and sent by Ryan Hotchkiss, facility new owner.
03/17/2016	A facility site visit was made to review the plant effluent treatment process and observe the receiving stream condition at the point of discharge.
03/18/2016	Review of data, office records and information gathering initiated.
03/20/2016	Draft discharge permit began
06/07/2016	Draft discharge permit completed and forwarded for technical reviews & approval.

V. MAP SHOWING POINT OF DISCHARGE LOCATION



VI. APPENDIX- A

Effluent Limitations and Monitoring Requirements of the Previous Permit (09-DP-1275)

The following effluent characteristics shall be limited at all times and monitored at outfall- 001A:

Effluent Characteristics	Requirements	Period	Quantity	Concentration	Footnotes
BOD_5	**Limits**	All Year	5.8 lbs/d (mo ave) 8.8 lbs/d (wkly ave)	10 mg/l (mo ave) 15 mg/l (wkly ave)	N/A
	Monitoring		**Frequency** Two per week	**Sample Type** 8-hour composite	
Total Suspended Solids (TSS)	**Limits**	All Year	5.8 lbs/d (mo ave) 8.8 lbs/d (wkly ave)	10 mg/l monthly average 15 mg/l weekly average	N/A
	Monitoring		**Frequency** Two per week	**Sample Type** 8-hour composite	
Total Ammonia Nitrogen as N	**Limits / Reporting**	**5/1 - 10/31**	1.3 lbs/d (mo ave)	2.3 mg/l (mo ave)	N/A
		11/1 – 4/30	1.8 lbs/d (mo ave)	3.0 mg/l (mo ave)	
	Monitoring	All Year	**Frequency** Two per week	**Sample Type** 8-hour composite	
E. Coli	**Limits**	All Year	N/A	126 MPN/100 ml (max mo geo mean)	
	Monitoring		**Frequency** Two per week	**Sample Type** Grab	
Total Residual Chlorine (TRC)	**Limits**	All Year	N/A	0.011 mg/l (max)	
	Monitoring		**Frequency** Two per day	**Sample Type** Grab	
pH	**Limits**	All Year	N/A	6.5 SU min 8.5 SU max	
	Monitoring		**Frequency** Two per day	**Sample Type** Grab	
Dissolved Oxygen (DO)	**Limits**	All Year	N/A	5.0 mg/l (min at anytime)	
	Monitoring		**Frequency** Two per day	**Sample Type** Grab	
Flow	**Limits / Reporting**	All Tear	REPORT mgd (mo ave)	N/A	
	Monitoring		**Frequency** Continuous	**Sample Type** Recorded	

VI. APPENDIX- A

Effluent Limitations and Monitoring Requirements of the Previous Permit (09-DP-1275)

Footnotes for the effluent limitations:

(1) When this permit is renewed, the new limitations may not be equal to the above limitations. There shall be no discharge of floating solids or visible foam other than trace amounts.

(2) The permit may also be reopened in accordance with the requirements of MDE's Watershed Permitting Plan under which all discharge permits in a watershed are issued the same year.

(3) The **Patuxent River (Segment 02-13-11-02)** is on the 303(d) list of the impaired waters for nutrients and suspended sediment. Water Quality Analysis have been completed and approved by the EPA (Chlorpyrifos July 3, 2007, Fecal Coliform May 15, 2007, Eutrophication February 21, 2007). The permit limits are in conformance with these Water Quality Analysis. When TMDLs are completed in the watershed, limits may be imposed, after the public participation process, to incorporate any TMDL.

(4) The fecal coliform limit shall be in effect until the E. coli limit becomes effective. The E. coli limit shall take effect one year after the issuance date of the permit. However, the permittee may request in writing that the E. coli limitation become effective sooner.

(5) The minimum level (quantification level) for total residual chlorine is 0.10 mg/l. The permittee may report all results below the minimum level as <0.10 mg/l. All results reported below the minimum level shall be considered in compliance.

Footnotes for the monitoring requirements:

(1) "STORET" (short for STOrage and RETrieval) is a widely-used repository for water quality data reporting and monitoring. The corresponding STORET codes for the effluent characteristics specified in Special Conditions II.A and II.B are: BOD_5 (00310), Total Suspended Solids (00530), Total Ammonia Nitrogen as N (00610), Total Phosphorus as P (00665), Total Nitrogen as N (00600), (Nitrite + Nitrate) as N (00630), Organic Nitrogen as N (00605), Orthophosphate as P (70507), Fecal Coliform (74055), Total Residual Chlorine (50060), Dissolved Oxygen (00300), pH (00400) and Flow (50050).

(2) The fecal coliform limit shall be in effect until the E. coli limit becomes effective. Thereafter, E. coli monitoring requirement shall be in effect.

(3) The minimum detection level (quantification level) for total residual chlorine is 0.10 mg/l. The permittee may report all results below the minimum level as <0.10 mg/l. All results reported below the minimum level shall be considered in compliance.

(4) Flows shall be reported to at least the nearest 1,000 gallons. For each calendar month, discharge flows shall be reported as follows: (a) On the *Monthly Operating Reports*, the permittee shall report the following three flows: (1) actual daily flow (in Million Gallons (MG)), (2) total monthly flow (in MG) and (3) monthly average flow (in mgd); and (b) On the *Discharge Monitoring Reports(EPA Form 3320-1, Rev. 01/06)*, the permittee shall report flows in mgd as the monthly average and daily maximum. (Example: A flow of 570,899 gallons per day shall be reported as 0.571 mgd.)"

Continuous electronic flow measurement and recording which can produce a permanent record are acceptable to the Department.

Exhibit 2
NPDES Permit No. MD0053511

Maryland
Department of
the Environment

Larry Hogan
Governor

Boyd Rutherford
Lieutenant Governor

Ben Grumbles
Secretary

CERTIFIED MAIL

Mr. Ryan Hotchkiss, Vice President
Lyons Creek MHC, LLC
2131 Espey Court, Suite 1
Crofton, Maryland 21114

RE: Discharge Permit for Lyons Creek MHC, LLC Wastewater Treatment Plant,
State Discharge Permit 12-DP-1275, NPDES Permit MD0053511

Dear Mr. Hotchkiss:

Enclosed is the above discharge permit with the effective date indicated on the cover page. The permittee is responsible for complying with all permit conditions. You are therefore advised to read the permit carefully and become thoroughly familiar with the requirements in order to maintain compliance with the permit.

The U.S. Environmental Protection Agency (EPA) recently promulgated a final rule to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system (see 40 CFR 127.16). This final rule requires all National Pollution Discharge Elimination System (NPDES) regulated entities to electronically report Discharge Monitoring Reports (DMRs) **starting on 21 December 2016.**

The Maryland Department of the Environment offers NetDMR for filing your required NPDES DMRs. NetDMR is a freely available Web based tool that allows NPDES permittees to electronically sign and submit their DMRs to EPA via a secure internet connection. NetDMR is designed to improve data quality, reduce reporting liabilities, save paper, and provide cost savings. It allows participants to discontinue mailing in hard copy forms under 40 CFR 122.41 and 403.12. For more information go to the EPA website (www.epa.gov/netdmr) or call the MDE Water Management Administration, Compliance Program, at 410-537-3510 and ask to speak to a NetDMR coordinator.

As indicated in General Condition A.2 of your permit, before you can submit official DMRs using NetDMR you must attend a training Webinar and successfully set-up and submit test monitoring results electronically. If you do not attend the required training in a timely manner, you are in risk of violating the new U.S. EPA NPDES electronic reporting rule. While paper DMR reporting is being phased out,

those who are unable to use the NetDMR system before December 21, 2016 may continue to submit paper copies. Thus enclosed are (EPA No. 3320-1) Discharge Monitoring Report (DMR) forms, which, unless you are using NetDMR, must be completed for each reporting period and submitted to the Department in accordance with the requirements of the permit. Copies of these forms can also be downloaded from the Department's website (bit.ly/MDE-New-DMR). Using the latest version of Adobe Acrobat Reader, the DMR form can be completed from a keyboard and printed for mailing to the following address:

Attention: Discharge Monitoring Reports
WMA - Compliance Program
Maryland Department of the Environment
1800 Washington Boulevard, STE 425
Baltimore, MD 21230-1708

You will also find enclosed a copy of the Federal Register published on May 18, 2012 updating the Code of Federal Regulations (CFR), Title 40, Part 136 - "Guidelines Establishing Test Procedures for Analysis of Pollutants". For future update of 40 CFR, Part 136, please visit the U.S Government Publishing Office (GPO) website (http://bit.ly/40CFR_Part136, this link is case-sensitive). Unless otherwise specified, these guidelines are to be used for the analyses of pollutants required by this permit.

In addition, we have also enclosed a copy of the table of the Minimum Monitoring Requirements, a copy of Department's "Toxic Pollutant Monitoring Protocol and Reporting Requirements for Toxic Chemical Testing Analytical Data (amended on 5/18/2011)", a copy of Effluent Biotoxicity Testing Protocol for Industrial and Municipal Effluents, and a copy of the WWTP Effluent Toxic Chemical Monitoring Data Transmittal Cover Sheet.

If you have any questions, please contact Chris Okoye, Project Manager, Surface Discharge Permits Division, at (410) 537-3677.

Sincerely,

Lynn Buhl

Lynn Buhl, Director
Water Management Administration

Enclosures

cc: Mr. Mark Smith, U.S. Environmental Protection Agency (through electronic copy)
Mr. Kerry Topovski, Director, Environmental Health, Anne Arundel County Health Department

Compliance Program's Central Division Chief
Ms. Chantelle Watkins (Permit cover page only)
Mr. Bill Lee (through electronic copy)
Mr. Donald Currey, SSA
Mr. Dennis Rasmussen

DISCHARGE PERMIT

NPDES Discharge Permit Number: MD0053511	**State Discharge Permit Number:** 12-DP-1275
Effective Date: 01/01/2017	**Expiration Date:** 12/31/2021
Modification Date: (Not applicable)	**Reapplication Due Date:** 01/01/2020

Pursuant to the provisions of Title 9 of the Environment Article, Annotated Code of Maryland, and regulations promulgated thereunder, and the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq., and implementing regulations 40 CFR Parts 122, 123, 124 and 125, the Department of the Environment hereby establishes conditions and requirements pertinent to the wastewater treatment plant and collection system and authorizes:

Lyons Creek MHC, LLC
2131 Espey Court, Suite 1
Crofton, Maryland 21114

TO DISCHARGE FROM: Lyons Creek Mobile Home Park Wastewater Treatment Plant

LOCATED AT: 1007 Lower Pindell Road
Lothian, Anne Arundel County, Maryland 20711

THROUGH OUTFALL: 001A (WWTP Effluent)

TO: Lyons Creek, a tributary of the Patuxent River, designated as Use-I waters which is protected for water contact recreation and nontidal warmwater aquatic life; in accordance with the following special and general conditions and a map incorporated herein and made a part hereof.

I. DEFINITIONS

A. "Ambient temperature" of the effluent receiving stream means the water temperature that is not impacted by a point source discharge, and it shall be measured in areas of the stream representative of typical or average conditions of the stream segment in question.

B. "Bypass" means the intentional diversion of pollutants from any portion of a treatment or collection facility.

C. "BOD_5 (Biochemical Oxygen Demand)" means the amount of oxygen consumed in a standard BOD_5 test without the use of a nitrification inhibitor at 20 degree centigrade on an unfiltered sample.

D. "Clean Water Act" means the Federal Water Pollution Control Act, as amended, 33 U.S.C. Section 1251 et seq.

E. "CFR" means the Code of Federal Regulations.

F. "COMAR" means the Code of Maryland Regulations.

G. "Department" means the Maryland Department of the Environment (MDE).

H. Discharge Limits

1. "Daily *maximum* (or *minimum)*" limitation means the *highest* (or *lowest)* allowable the daily averages in a calendar month. The daily discharge expressed as concentration (in mg/l) shall be calculated by dividing total of measurement readings by number of sample collected during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge expressed as loading rate (in pounds/day) is calculated by using this formula {daily average concentration (mg/l) x the same day total flow (in million gallons) x 8.34}.

2. "Weekly average *(maximum* or *minimum)*" limitation means the *highest* or *lowest* allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. Each of the following 7-day periods is defined as a calendar week: Week 1 is Days 1 - 7 of the month; Week 2 is Days 8 - 14; Week 3 is Days 15 - 21; and Week 4 is Days 22 - 28. *For weekly average maximum*, if the "daily discharge" on days 29, 30 or 31 exceeds the "weekly average" discharge limitation, MDE may elect to evaluate the last 7 days of the month as Week 4 instead of Days 22 - 28. *For weekly average minimum*, if the "daily discharge" on days 29, 30 or 31 is lower than the "weekly average" discharge limitation, MDE may elect to evaluate the last 7 days of the month as Week 4 instead of Days 22 - 28.

I. DEFINITIONS

3. "Monthly average *maximum* (or *minimum)*" limitation means the *highest* (or *lowest)* allowable monthly average concentration or waste load of a parameter over a calendar month. The monthly average is calculated as the sum of all daily discharges for a parameter sampled and/or measured in that calendar month divided by the number of days on which monitoring was performed.

4. "Minimum or maximum" limit means the lowest or highest allowable value measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

5. "Monthly loading rate (in pounds/month)" means the total load of a parameter calculated for that calendar month. It is calculated using this formula {(monthly average concentration in mg/l) x (Total monthly flow in Million Gallons) x 8.34}.

6. "Annual Maximum Loading Rate (in pounds/year)" limit means the highest allowable year-to-date cumulative load of a parameter for a calendar year. It is calculated as the sum of the individual Total Monthly Loading Rates from January through December of the current calendar year.

7. "Year-to-date Cumulative load (pounds)" value means cumulative load of a parameter through the reporting month in a calendar year. It is calculated as a sum of the individual total monthly loads from January through the reporting month in a calendar year.

8. "Monthly log mean (Monthly geometric mean)" limit means the highest allowable value calculated as the logarithmic or geometric mean of all samples taken in the calendar month. The geometric mean is the antilogarithm of the mean of the logarithms.

I. Discharge Monitoring

1. "Composite sample" means a combination of individual samples obtained at hourly or smaller intervals over a time period. Either the volume of each individual sample is proportional to discharge flow rates or the sampling interval (for constant volume samples) is proportional to the flow rates over the time period used to produce the composite.

2. "Grab sample" means an individual sample collected over a period of time not exceeding 15 minutes.

3. "Estimated flow" value means a calculated volume or discharge rate which is based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters, and batch discharge volumes.

I. DEFINITIONS

4. "Measured flow" value means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

5. "Recorded flow" means any method of providing a permanent, continuous record of flow including, but not limited to, circular and strip charts.

6. "Monthly average flow" means the total flow for a calendar month divided by the number of days in the same month.

J. "i-s (immersion stabilization)" means a calibrated device immersed in the effluent or stream, as applicable, until the temperature reading is stabilized.

K. "NetDMR" means a nationally-available electronic reporting tool, initially designed by states and later adapted for national use by EPA, which can be used by NPDES-regulated facilities to submit discharge monitoring reports (DMRs) electronically to EPA through a secure Internet application over the National Environmental Information Exchange Network (NEIEN). EPA can then share this information with authorized states, tribes, and territories.

L. "NPDES (National Pollutant Discharge Elimination System)" means the national system for issuing permits as designated by the Clean Water Act.

M. "Nondetectable Level" for total residual chlorine means a residual concentration of less than 0.10 mg/l as determined using either the DPD titrimetric or chlorimetric method or an alternative method approved by the Department.

N. "Outfall" means the location where the effluent is discharged into the receiving waters.

O. "Overflow" means any loss of wastewater or discharge from a sanitary sewer system, combined sewer system or wastewater treatment plant bypass (as defined in I.B) which results in the direct or potential discharge of raw, partially treated wastewater into the waters of the State.

P. "Permittee" means an individual or organization holding the discharge permit issued by the Department.

Q. "POTW" means a publicly owned treatment works.

R. "Sampling Point" means the effluent sampling location in the outfall line(s) downstream from the last addition point or as otherwise specified.

S. "Sanitary Sewer Overflow (SSO)" means a discharge of untreated or partially treated sewage from a separate sewer system before the sanitary wastewater reaches the headworks of a wastewater treatment facility, pursuant to COMAR 26.08.10.01.

I. DEFINITIONS

T. "Significant Industrial User (SIU)" is defined as any industrial user (IU) that:

1. is subject to national categorical standards; and

2. any other IU that:

a. discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater); or

b. contributes a process wastestream that makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW; or

c. is designated as such by the POTW on the basis that the IU has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement; or

d. is found by the POTW, the Department, or the Environmental Protection Agency (EPA) to have significant impact either individually or in combination with other contributing industries to the POTW, on the quality of the sludge, the POTW's effluent quality, or air emissions generated by the system.

U. "TKN (Total Kjeldahl Nitrogen)" means organic nitrogen plus ammonia nitrogen.

V. "TSS (Total Suspended Solids)" means the residue retained on the filter by an analysis done in accordance with Standard Methods or other approved methods.

W. "Upset" means the exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

II. SPECIAL CONDITIONS

A. Effluent Limitations, Outfall 001A [(1) (2) (3) (4)]

The quality of the effluent discharged by the facility at a discharge point location- 001A shall be limited at all times as shown below:

	Maximum Effluent Limits					
Effluent Characteristics	**Monthly Average Loading Rate, Pounds/day**	**Weekly Average Loading Rate, Pounds/day**	**Daily Average Loading Rate, Pounds/day**	**Monthly Average Concentration, mg/l**	**Weekly Average Concentration, mg/l**	**Daily Average Concentration, mg/l**
BOD_5	5.8	8.8	N/A	10	15	N/A
TSS	5.8	8.8	N/A	10	15	N/A
Total Ammonia Nitrogen as N (5/1 to 10/31)	1.1	N/A	10	1.9	N/A	17
(11/1 to 4/30)	1.8	N/A	N/A	3.0	N/A	N/A

	Effluent Limits	
Effluent Characteristics	**Maximum**	**Minimum**
E. Coli	126 MPN/ 100 ml monthly geometric mean value	N/A
Total Residual Chlorine [(5)]	0.011 mg/l at anytime (See footnote- 5)	N/A
pH	8.5	6.5
Dissolved Oxygen	N/A	5.0 mg/l at anytime

An annual average flow of **0.070** million gallons per day (mgd) was used in waste allocation calculations (expressed as waste loading rate limit), and this unit shall be used when reporting on the Discharge Monitoring Report (DMR), (EPA Form 3320-1, Rev. 01/06). Notification is to be provided to the Department at least 180 days before the annual average flow is expected to exceed this flow level. If a permit modification is required, the Department will initiate the public participation NPDES process.

II. SPECIAL CONDITIONS

A. Effluent Limitations, Continued

Footnotes for effluent limitations:

(1) When this permit is renewed, the new limitations may not be equal to the above limitations.

(2) There shall be no discharge of floating solids or visible foam other than trace amounts.

(3) The permit may also be reopened in accordance with the requirements of MDE's Watershed Permitting Plan under which all discharge permits in a watershed are issued the same year.

(4) The Middle and Lower Patuxent River (02-13-11-02 and 02-13-11-01) are on the 303(d) list as impaired waters for Sediment, Nutrient, Chlorpyrifos, Fecal coliform and Biological communities. Total Maximum Daily Load (TMDL) for chlorpyrifos has been completed in the Middle Patuxent River (02-13-11-02) and approved by the EPA on 7/3/2007. Chlorpyrifos and fecal bactria TMDLS approved by EPA have also been completed in the Lower Patuxent River (02-13-11-01) watershed. This permit is in conformance with the "**Chesapeake Bay TMDL for Nitrogen, Phosphorus and Sediment"** established on December 29, 2010.

When TMDLs for other remaining parameters are completed, limits may be imposed, after the public participation process, to incorporate any TMDL requirements.

(5) Total residual chlorine limitation of 0.011 mg/l shall be applicable, when chlorine or any chlorine-containing compound is used in any treatment process(es), including but not limited to disinfection, that could become a potential constituent of the effluent discharged from the Lyons Creek MHC, LLC WWTP. The wastewater shall be dechlorinated to reduce effluent total residual chlorine concentration to the nondetectable level (See definition I.M).

II. SPECIAL CONDITIONS

B(1) Minimum Monitoring Requirements:

The effluent characteristics listed below in Table B (1) shall be monitored at the sampling point (Definition I.R). If the sampling point is other than the outfall- 001A, the permittee shall ensure that the effluent samples are representative of the effluent quality being discharged at the outfall 001A.

Effluent Characteristics	Monitoring Period	Measurement Frequency	Sample Type
BOD_5 (6)	All Year	One per week	24-hour composite
Total Suspended Solids (6)	All Year	One per week	24-hour composite
Total Ammonia Nitrogen as N (6)	All Year	One per week	24-hour composite
E. Coli (6) (9)	All Year	One per week	Grab
Total Residual Chlorine (6) (7)	All Year	One per day	Grab
Dissolved Oxygen (6)	All Year	One per day	Grab
pH (6)	All Year	One per day	Grab
Flow (6) (8)	All Year	Continuous	Recorded (9)

II. SPECIAL CONDITIONS

B(1) Minimum Monitoring Requirements, continued:

Footnotes for the monitoring requirements, continued:

(6) "STORET" (short for STOrage and RETrieval) is a widely-used repository for water quality data reporting and monitoring. The STORET codes for the effluent characteristics described as limitations and/or monitoring requirements are: BOD_5 (00310), Total Suspended Solids (00530), Total Ammonia Nitrogen as N (00610), E. Coli (51040), Total Residual Chlorine (50060), Dissolved Oxygen (00300), pH (00400), Flow (50050).

(7) The Minimum monitoring requirements of **one** per day-grab samplings for total residual chlorine shall be applicable, when chlorine or any chlorine compound is used in any treatment process(es), including but not limited to disinfection, that could become a potential constituent of the effluent discharged from the Lyons Creek MHC, LLC WWTP**.** The minimum detection level (quantification level) for total residual chlorine is 0.10 mg/l. The permittee may report all results below the minimum level as <0.10 mg/l. All results reported below the minimum level shall be considered in compliance.

(8) Flows shall be reported in millions gallons per day (mgd) to at least the nearest 1,000 gallons per day. (Example: A flow of 24,699 gallons per day shall be reported as 0.025 mgd.). For each calendar month, flows shall be reported on the Monthly Operating Report (MOR) as daily individual results and on the Discharge Monitoring Report (DMR) as monthly average (mgd) and daily maximum (mgd)*).*

(9) Continuous electronic flow measurement and recording which can produce a permanent record are acceptable to the Department.

II. SPECIAL CONDITIONS

C. Wastewater Capacity Management

The permittee shall report the total cumulative flow for the each calendar year for the above referenced facility. The total cumulative flow shall be reported in million gallons for the entire calendar year to the nearest ten thousand gallons. The annual total cumulative flow determination shall be provided to the Department using NetDMR no later than January 28th of the following year.

If the most recent three year average flow is over 80% of its design capacity or if it is anticipated to exceed 80 % in the following year, a Wastewater Capacity Management Plan (WCMP) must be submitted to the Department using NetDMR no later than January 28 of the following year. Thereafter, the "Wastewater Flow Capacity Report (WFCR)" and "worksheet for WFCR" shall be submitted to the Department using NetDMR tool no later than January 28th of each year. (The Department has published a "Wastewater Capacity Management Plans" guidance document, which can be found on the Department's web site as indicated below): http://bitly.com/CMPGuidance (This link is case-sensitive)

If the permittee prefers to provide the above documents in hard copies, they shall be provided to the Department postmarked by January 28th of the following year to the address below:

Attention: Calendar Year Total Cumulative Flow
WMA – Wastewater Discharge Permits Program
Maryland Department of the Environment
1800 Washington Boulevard, STE-455
Baltimore, MD 21230-1708

(NOTE: If the documents are submitted electronically using NetDMR tool, the permittee must make written notification upon submission to the Calendar Year Total Cumulative Flow Coordinator.)

D. Influent Restrictions

1. The permittee is not authorized to receive the discharge of any type or quantity of substances which may cause interference with the operation of the treatment works. The permittee is required to notify the Pretreatment Section of the Department, in writing, prior to allowing:

   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and COMAR 26.08.08 if it were directly discharging those pollutants; and
   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source at the time of issuance of this permit.

II. SPECIAL CONDITIONS

2. Adequate notice shall include information on (i) the quality, quantity and frequency of wastewater introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works. The permittee shall also maintain an updated list of indirect dischargers which shall be available upon the request of the Department. Under no circumstances shall the permittee allow introduction of the following wastes into the waste treatment system:

   a. Pollutants which cause pass through or interference;
   b. Pollutants which create a fire hazard or explosion hazard in the sewerage system, including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;
   c. Pollutants which will cause corrosive structural damage to the sewerage system; but in no case, discharges with pH less than 5.0, unless the works is specifically designed to accommodate such discharges;
   d. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the sewerage system resulting in interference;
   e Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the treatment plant;
   f. Heat in amounts which will inhibit biological activity in the treatment plant resulting in interference; but in no case, heat in such quantities that the temperature at the treatment plant exceeds 90 degrees Fahrenheit (32 degrees Centigrade) unless the Pretreatment Section of the Department, upon request of the permittee, approves alternate temperature limits;
   g. Pollutants which result in the presence of toxic gases, vapors or fumes within the sewerage system in a quantity that may cause acute worker health and safety problems; and
   h. Any trucked or hauled wastewater is prohibited, except for (1) domestic septage from within the service area, (2) wastewater from within the collection system due to blockage, or breaks in the system, (3) drinking water plant wastewater located from within the service area, or, (4) other sources specifically authorized by the Department. Prior to the acceptance of any trucked waste other than those listed in this section, the permittee must make an official written request and, if approved by the Department, must follow the conditions specified in permit requirements which may be modified or rescinded at the discretion of the Department for any reason.

E. Protection Of Water Quality

It is a violation of this permit to discharge any substance not otherwise listed under the permit's "Effluent Limitations and Monitoring Requirements" special conditions at a level which would cause or contribute to any exceedance of the numerical water quality

II. SPECIAL CONDITIONS

standards in COMAR 26.08.02.03 unless the level and the substance were disclosed in writing in the permit application prior to the issuance of the permit. If a discharge regulated by this permit causes or contributes to an exceedance of the water quality standards in COMAR 26.08.02.03, including but not limited to the general water quality standards, or if the discharge includes a pollutant that was not disclosed or addressed in the public record for the permit determination, the Department is authorized to modify, suspend or revoke this permit or take enforcement action to address unlawful discharges of pollutants.

F. Reapplication for a Permit

No later than 12 months prior to permit expiration, unless permission for a later date has been granted by the Department, the permittee shall submit a new application for a permit or notify the Department of the intent to cease discharging by the expiration date. In the event that a timely and complete reapplication has been submitted and the Department is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit continue and remain fully effective and enforceable. The renewal application is required by that date in accordance with the requirements of MDE's Watershed Permitting Plan under which all discharge permits in a watershed should be issued in the same year.

III. GENERAL CONDITIONS

A. Monitoring and Reporting

1. Representative Sampling

Samples and measurements shall be taken at times that are representative of the quantity and quality of the discharge, and at evenly spaced intervals.

2. Monthly Monitoring Results

a. Discharge Monitoring Reports

Monitoring results obtained during each calendar month shall be summarized and submitted electronically using NetDMR once the permittee is granted access to this tool. Results shall be submitted to the Department via NetDMR no later than the 28th of the month following the end of the reporting month. Specific requirements regarding submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

(i) NetDMR is a U.S. EPA tool allowing regulated Clean Water Act permittees to submit monitoring reports electronically via a secure Internet application. At the earliest from the effective date of this permit, the permittee must apply for access to NetDMR at www.epa.gov/netdmr and register for a NetDMR Webinar. Before the permittee can submit official DMRs using NetDMR the permittee must attend a training Webinar and successfully set-up and submit test monitoring results electronically.

(ii) Hard copies of monitoring results obtained before the permittee is granted access to NetDMR or before December 21, 2016, whichever comes first, shall be submitted postmarked no later than the 28th of the month following the end of the reporting month. Signed copies of the results shall be submitted to MDE at the following address:

Attention: Discharge Monitoring Reports
Water Management Administration
Compliance Program
Maryland Department of the Environment
1800 Washington Boulevard, STE-425
Baltimore, MD 21230-1708

(iii) The permittee may be eligible for a temporary waiver by MDE from NPDES electronic reporting requirements if the permittee has no current internet access and is physically located in a

III. GENERAL CONDITIONS

geographic area (i.e., zip code) that is identified as under-served for broadband internet access in the most recent National Broadband Map from the Federal Communications Commission (FCC); or if the permittee can demonstrate that such electronic reporting of the monitoring data and reports would pose an unreasonable burden or expense to the NPDES-permitted facility. Waiver requests must be submitted in writing to the Department for written approval at least 120 days prior to the date the permittee would be required under this permit to begin using NetDMR. This demonstration shall be valid for five (5) years from the date of the Department approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department unless the permittee submits a renewed waiver request and such request is approved by the Department. All waiver requests and subsequent hardcopy DMRs shall be sent to the following address with "Attn: DMRs":

Attention: NetDMR Waiver Request
Maryland Department of the Environment
WMA – Compliance Program
1800 Washington Blvd., Suite 425
Baltimore, MD 21230

b. Monthly Operating Reports (MOR)

The permittee shall submit monthly operating reports on a form acceptable to the Compliance Program. For each calendar month, the permittee shall submit to the Department a signed original of the MOR either in paper format or via NetDMR in electronic format concurrently with the Discharge Monitoring Report submission postmarked no later than the 28th day of the month following the reporting month.

If the permittee prefers to submit hard copy of the monthly MORs instead of the electronic submission using NetDMR tool, they shall be submitted to MDE at the following address:

Attention: Discharge Monitoring Reports
Water Management Administration
Compliance Program
Maryland Department of the Environment
1800 Washington Boulevard, STE-425
Baltimore, MD 21230-1708

III. GENERAL CONDITIONS

c. Toxic Chemical Reporting

Any data collected according to the Department's "Toxic Pollutant Monitoring Protocol and Reporting Requirements for Toxic Chemical Testing Analytical Data" (05/18/2011) being submitted to the Department, either in fulfillment of Special Conditions II.B or pursuant to the toxic chemical testing requirement, pretreatment requirements or toxic metals or organic data collected on a voluntary basis, must be accompanied by laboratory data reports. At a minimum, these reports shall include, the name of the facility, the date(s) of sampling, beginning and ending sample time, place of sampling collection, the sample type (grab, composite, etc.), the sample description (influent or effluent), the preservation method, the analytical method used for each parameter, the analytical method detection limit, the date of analysis, the name of person performing the analysis, the analytical result, and the name and address of the laboratory performing the analyses. Chain-of-custody forms shall also be submitted.

If the permittee prefers to submit hard copy of this information along with the supporting documentations instead of the electronic submission via NetDMR, they shall be submitted to:

Attention: Toxic Chemical Data
WMA – Compliance Program
Maryland Department of the Environment
1800 Washington Boulevard, STE 420
Baltimore, Maryland 21230-1708

3. Sampling and Analysis Methods

Analytical and sampling methods shall conform to test procedures for the analysis of pollutants as identified in 40 CFR Part 136 - "Guidelines Establishing Test Procedures for the Analysis of Pollutants."

4. Analytical Laboratory

Within 30 days after the effective date of this permit, the permittee shall submit to the Department the name and address of the analytical laboratory (including the permittee's own laboratory) which is used to perform the monitoring required by this permit.

If the laboratory changes during the effective period of this permit, the permittee shall notify the Department of the new laboratory within 30 days after the change.

III. GENERAL CONDITIONS

5. Monitoring Equipment Maintenance

   a. The permittee shall calibrate and maintain all monitoring and analytical instrumentation to ensure accuracy of measurements.

   b. Environment Article, Section 9-343 provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

6. Recording of Results

   For each measurement or sample taken pursuant to the requirements of the permit, the permittee shall record the following information:

   a. the date, exact place and time of sampling or measurement;

   b. the person(s) who performed the sampling or measurement;

   c. the dates analyses were performed;

   d. the person(s) who performed each analysis;

   e. the analytical techniques or methods used; and

   f. the results of such analyses.

7. Additional Monitoring by Permittee

   If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report form (EPA No. 3320-1). The increased frequency shall also be reported. The results of any other monitoring performed by the permittee shall be made available to the Department upon request.

8. Record Retention

   All data used to complete the permit application and all records and information resulting from the monitoring activities required by this permit, including all records of sampling and analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instruments, shall be retained for a minimum of three years. This period shall be extended automatically during the course of litigation or when requested by the Department.

III. GENERAL CONDITIONS

B. General Requirements

1. Permit Noncompliance - Notification Requirements

All discharges authorized herein shall be consistent with the terms and conditions of this permit. If, for any reason, the permittee does not comply with or will be unable to comply with any permit condition, the permittee shall, within 24 hours, notify the Department by telephone at (410) 537-3510 during work hours or at (866) 633-4686 during evenings, weekends, and holidays. The permittee shall provide the Department with the following information in writing within five days of such oral notification.

a. a description of the noncomplying discharge including the name of the stream and the impact upon the receiving waters;

b. cause of noncompliance;

c. the duration of the period of noncompliance and the anticipated time the condition of noncompliance is expected to continue;

d. steps taken by the permittee to reduce and eliminate the noncomplying discharge;

e. steps to be taken by the permittee to prevent recurrence of the condition of noncompliance;

f. a description of the accelerated or additional monitoring to determine the nature and impact of the noncomplying discharge; and

g. the results of the monitoring described in f. above.

2. Change in Discharge

The permittee shall report any anticipated facility expansions, production increases, or process modifications which will result in new, different or an increased discharge of pollutants by submitting a new application at least 180 days prior to the commencement of the changed discharge except that if the change only affects a listed pollutant and will not violate the effluent limitations specified in this permit, by providing written notice to the Department. Following such notice, the permit may be modified by the Department to include new effluent limitations on those pollutants.

III. GENERAL CONDITIONS

3. Facility Operation and Quality Control

All waste collection, control, treatment and disposal facilities shall be operated in a manner consistent with the following:

a. Facilities shall be operated efficiently to minimize upsets and discharges of excessive pollutants.

b. The permittee shall provide an adequate operating staff qualified to carry out operation, maintenance and testing functions required to ensure compliance with this permit. Superintendents and operators must be certified by the Board of Waterworks and Waste Systems Operators located at Montgomery Park Business Center, 1800 Washington Boulevard, STE- 410, Baltimore, Maryland 21230 in accordance with Title 12 of Environmental Article, Annotated Code of Maryland, and Section 26.06.01 of the COMAR.

c. Facility maintenance work, which adversely affects or may adversely affect the discharge quality shall be scheduled during non-critical water quality periods.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to waters of this State, human health or the environment resulting from noncompliance with any effluent limitations specified in this permit, and must perform accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

Any bypass of treatment facilities is prohibited unless the bypass does not cause any violations of the effluent limitations specified in Special Condition II.A, and is for essential maintenance to assure efficient operation, or unless the permittee can prove that:

a. the bypass is unavoidable to prevent loss of life, personal injury, or substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources; and

b. there are no feasible alternatives to the bypass; and

c. the Department receives notification pursuant to General Condition III.B.1 above. Where the need for a bypass is known (or should have

III. GENERAL CONDITIONS

been known) in advance, this notification shall be submitted to the Department for approval at least ten days before the date of the bypass or at the earliest possible date if the period of advance knowledge is less than ten days; and

d. the bypass is allowed under conditions approved by the Department to be necessary to minimize adverse effects.

6. Conditions Necessary for Demonstration of Upset

An upset shall constitute an affirmative defense to an action brought for noncompliance with technology-based effluent limitations only if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence, that:

a. an upset occurred and that the permittee can identify the specific cause(s) of the upset;

b. the permitted facility was at the time being operated in a prudent and workman-like manner and in compliance with proper operation and maintenance procedures;

c. the permittee submitted a 24-hour notification of upset in accordance with the reporting requirements of General Condition III.B.1 above;

d. the permittee submitted, within five calendar days of becoming aware of the upset, documentation to support and justify the upset; and

e. the permittee complied with any remedial measures required to minimize adverse impact.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

7. Sewage Sludge Requirements

The permittee shall comply with all State and federal laws and regulations regarding Sewage Sludge Management, and with any regulations promulgated pursuant to Environment Article, Section 9-230 et seq. or to the Clean Water Act, Section 405 (d). A Sewage Sludge Utilization Permit is required for the collection, handling, burning, storage, treatment, land application, disposal, or transportation of sewage sludge, processed sewage sludge, or any product containing these materials in Maryland. If the sludge is hauled out of the State for disposal, a transportation permit must be obtained from the Department.

III. GENERAL CONDITIONS

8. Power Failure

The permittee shall maintain compliance with the effluent limitations and all other terms and conditions of this permit in the event of a reduction, loss or failure of the primary source of power to the wastewater collection and treatment facilities.

9. Right of Entry

The permittee shall allow the Secretary of the Department, the Regional Administrator of the Environmental Protection Agency, and their authorized representatives, upon the presentation of credentials to enter upon the permittee's premises and:

a. to have access to and to copy any records required to be kept under the terms and conditions of this permit;

b. to inspect any monitoring equipment or monitoring method required in this permit;

c. to inspect any collection, treatment, pollution management, or discharge facilities required under this permit; or

d. to sample any discharge of pollutants.

10. Property Rights/Compliance With Other Requirements

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property, invasion of personal rights, or any infringement of federal, State or local laws or regulations.

11. Reports and Information

a. Upon request, the permittee shall provide to the Department, within a reasonable time, copies of records required to be kept by this permit. The permittee shall also furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit; or to determine compliance with this permit.

b. All applications, reports or information submitted to the Department shall be signed and certified as required by COMAR 26.08.04.01 and 40 CFR 122.22.

III. GENERAL CONDITIONS

c. Except for data determined to be confidential under COMAR 26.08.04.01, all data shall be available for public inspection at the Department and the Office of the Regional Administrator of the Environmental Protection Agency. Effluent data shall not be considered confidential.

d. Environment Article, Section 9-343 provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, shall upon conviction be punished by a fine of not more than $10,000 or by imprisonment for not more than six months or by both.

12. Transfer of Ownership or Control

In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the permit may be transferred automatically to another person only if:

a. the current permittee notify the Department, in writing, of the proposed transfer at least 30 days prior to the proposed transfer date;

b. the notice includes a written agreement between the existing permittee and a new permittee containing the specific date of proposed transfer of permit coverage, and of responsibilities and liabilities under the permit; and

c. neither the current permittee nor the new permittee receive notification from the Department, within 30 days of the Department's receipt of the agreement, of its intent to modify, revoke, reissue or terminate the existing permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 12(b) above.

13. New Effluent Standards

This permit shall be revoked and reissued or modified to meet any effluent standard, water quality standard or prohibition established under the Environment Article, the Clean Water Act, or regulations promulgated thereto, and the permittee shall be so notified.

III. GENERAL CONDITIONS

14. Industrial Users

The permittee shall require all industrial users of the wastewater treatment facility to comply with user charges as established by the permittee, pursuant to Section 9-326(a)(i) of the Environment Article.

15. Noncompliance

Nothing in this permit shall be construed to preclude the institution of any legal action for noncompliance with State, federal or local laws and regulations.

16. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action against the permittee or to relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act or under the Environment Article.

17. Waterway Construction and Obstruction

The permit does not authorize the construction or placing of physical structures, facilities, debris, or the undertaking of related activities in any waters of this State including the 100 year flood plain.

18. Construction Permit

This permit is not a permit to construct. For a new facility, in order to make this permit valid, a construction permit shall be obtained to meet the requirements of COMAR 26.03.12.03(A) and Environment Article, Section 9-204(d).

19. Severability

If any provision of this permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect, and such invalid provisions shall be considered severed and deleted from this permit.

III. GENERAL CONDITIONS

C. Wastewater Collection System

This permit shall not authorize discharges from the wastewater collection system for this facility.

1. Reporting Requirements

Pursuant to Environment Article Sub title 9-331.1, the permittee must report sanitary sewer overflows (SSOs) which result in the direct or potential discharge of raw or diluted sewage into the surface waters or ground waters of the State to the Water Management Administration's Compliance Program. Concurrently, the permittee shall also notify the local health department. Such reports must be made via telephone as soon as practicable, but no later than 24 hours after the time that the permittee became aware of the event. Reportable SSOs include, but are not limited to, overflows into the surface of the ground, into waterways, storm drains, ditches or other manmade or natural drainage conveyances to surface or ground waters which are reasonably likely to reach waters of the State. Overflows that are wholly contained within buildings and not likely to discharge to waterways need not be reported. Treatment plant bypasses shall be reported under General Condition III.B.1. Telephone reports shall be made to (410) 537-3510 on weekdays between 8:00 a. m. and 5:00 p.m. After hours telephone notification shall be made to emergency response number at (866) 633-4686.

When the incident is reported to the Department, the following information needs to be included:

a. the location of the overflow, including city or county,

b. the name of the receiving water, if applicable;

c. an estimate of the volume of sewage discharged;

d. a description of the sewer system or treatment plant component from which the overflow was released (such as manhole, crack in pipe, pumping station wet well or constructed overflow pipe);

e. an estimate of the overflow's impact upon public health and to waters of the State;

f. the cause or suspected cause of the overflow;

g. the estimated date and time when the overflow began and stopped or the anticipated time the overflow is expected to continue;

III. GENERAL CONDITIONS

h. if known at the time of reporting, the steps taken or planned to reduce, eliminate and prevent reoccurrence of the overflow and a schedule of major milestones for those steps; (if unknown at the time the telephone report is made, the steps must be included in the written reports submitted under general conditions III.C.2).

i. if known at the time of reporting, measures taken or planned to mitigate the adverse impact of the overflow and a schedule of major milestones for those steps (if unknown at the time the telephone report is made, the steps must be included in the written reports submitted under general conditions III.D.2); and

j. whether there has already been a notification to the public and other City or County Agencies or Departments and how notification was done.

2. Written Reports

Within 5 calendar days following telephone notification of the event, the permittee shall provide MDE with a written report regarding the incident that includes, at a minimum, the information cited above.

The permittee shall maintain copies of all overflow records and reports, work orders associated with investigation of overflows, a list and description of complaints from customers or others related to overflows (including backups of sewage in to houses or businesses), and documentation of performance and implementation measures for minimum period of three years and shall make this information available to MDE for review upon written request.

This wastewater collection system provision may be superseded by a general permit for collection systems, when such a permit is issued by MDE and the permittee have been accepted for registration under the permit.

3. Other Requirements

The permittee, as directed by the State or local health department, shall also be responsible for posting notification in close proximity to the affected area/stream and for conducting appropriate water quality sampling as deemed necessary.

III. GENERAL CONDITIONS

D. Permit Expiration, Modification, or Revocation

1. Expiration of Permit

This permit and the authorization to discharge shall expire at midnight on the expiration date of the permit unless the permittee has submitted a timely and complete reapplication pursuant to Section II.I.

2. [Reserved.]

3. Permit Modification - Request of Responsible Permittee

A permit may be modified by the Department upon the written request of the permittee and after notice and opportunity for a public hearing in accordance with the provisions set forth in COMAR 26.08.04.10.

4. Permit Modification, Suspension, Revocation - Violation of Laws

A permit may also be modified, suspended or revoked by the Department, in the event of a violation of the terms or conditions of the permit, or of State or federal laws and regulations and in accordance with the provisions set forth in COMAR 26.08.04.10. This permit may be suspended or revoked upon a final, unreviewable determination that the permittee lacks, or is in violation of, any federal, state, or local approval necessary to conduct the activities authorized by this permit.

IV. CIVIL AND CRIMINAL PENALTIES

A. Civil Penalties for Violations of Permit Conditions

In addition to civil penalties for violations of State water pollution control laws set forth in Section 9-342 of the Environment Article, Annotated Code of Maryland, the Clean Water Act provides that any person who violates Section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act or in a permit issued under Section 404 of the Act, is subject to a civil penalty not to exceed $37,500 per day for each violation.

B. Criminal Penalties for Violations of Permit Conditions

In addition to criminal penalties for violations of State water pollution control laws set forth in Section 9-343 of the Environment Article, Annotated Code of Maryland, the Clean Water Act provides that:

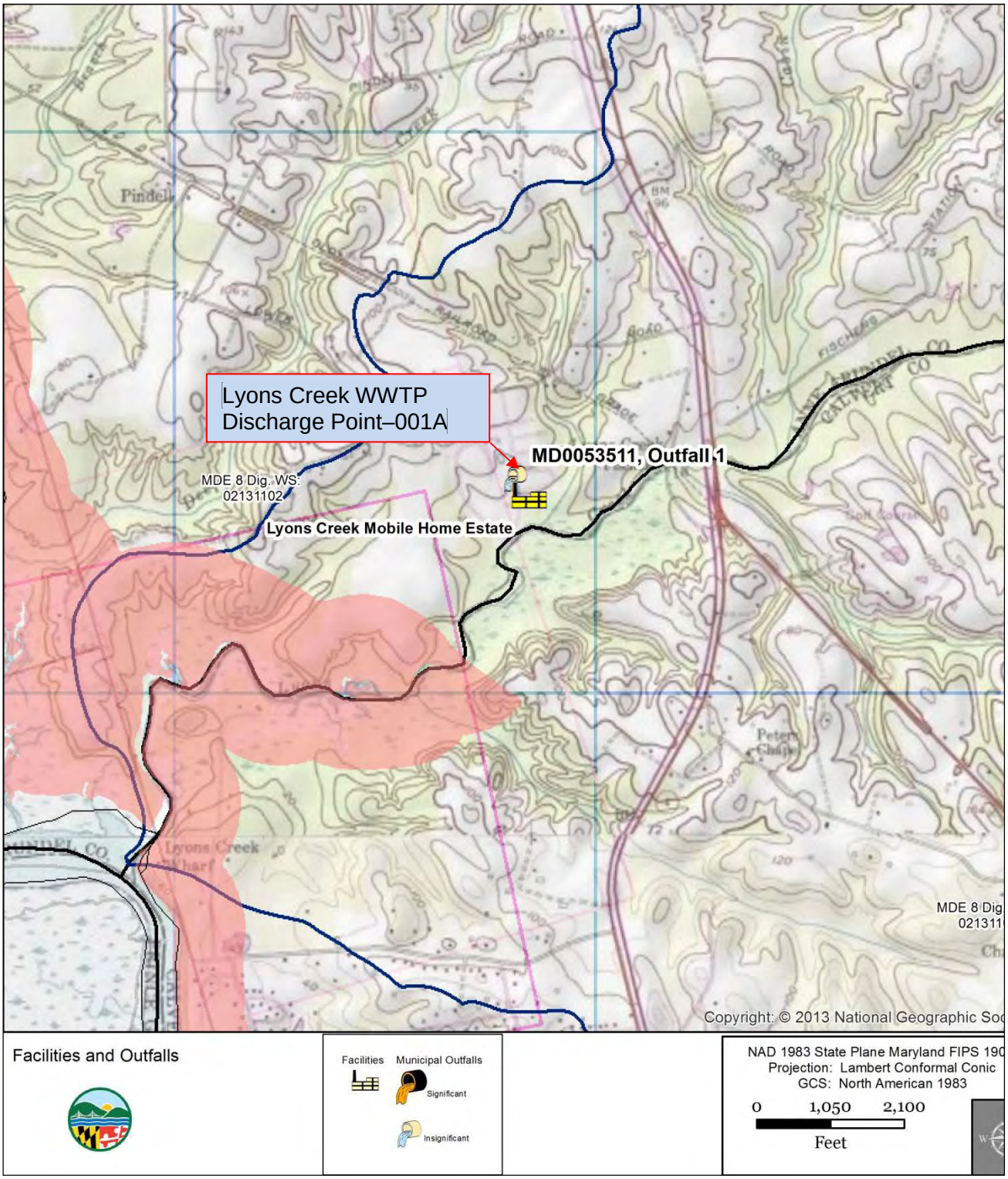
1. any person who negligently violates Section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or in a permit issued under Section 404 of the Act, is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or by both.

2. any person who knowingly violates Section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or in a permit issued under Section 404 of the Act, is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than three years, or by both.

3. any person who knowingly violates Section 301, 302, 306, 307, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or in a permit issued under Section 404 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, is subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both.

4. any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with or renders inaccurate any monitoring device or method required to be maintained under the Act, is subject to a fine of not more than $10,000 or by imprisonment for not more than two years, or by both.

V. MAP SHOWING DISCHARGE POINT LOCATION



VI. NPDES PROGRAM

On September 5, 1974, the Administrator of the U.S. Environmental Protection Agency approved the proposal submitted by the State of Maryland for the operation of a permit program for wastewater discharges pursuant to Section 402 of the Clean Water Act.

Pursuant to the aforementioned approval, this discharge permit is both a State of Maryland discharge permit and an NPDES permit.

Lynn Buhl

Lynn Buhl, Director
Water Management Administration

Exhibit 3
Flow calibration record for ultrasonic transducer (UT) utilized with Parshall flume flow meter

WG Malden

P.O. BOX 196, EAST EARL, PA 17519
PHONE: (717) 768-0800 FAX: (717) 768-0802

*** SERVICE REPORT ***

LYONS CREEK ESTATES (SINGH)
C/O SINGH OPERATIONAL SERVICES
LYONS DEN DRIVE
DUNKIRK, MD 20754

SERVICE DATE: MAY 21, 2020 **SERVICE CONTRACT:** ANNUAL (A5)
LOCATION: EFFLUENT
METER #: D0161 AA

PRIMARY: FLUME PARSHALL 3 INCH
MAXIMUM CAPACITY: 347 GPM

METER: SIEMENS	**MODEL #:** HYDRO RANGER 200	**SERIAL #:** PBD/D9190025
RECORDER: PARTLOW	**MODEL #:** MRC 5000	**SERIAL #:** 45052651-2208

*** WORK PERFORMED ***

METER CALIBRATION **ERROR:** 0.30 INCHES **TOLERANCE:** ±0.125 INCHES
METHOD: LEVEL MEASUREMENTS AND FLOW CHECKS

RECORDER CALIBRATION **ERROR:** % **TOLERANCE:** ±1.000 %
CHECKED AT: 0%, 100%

TOTALIZER CALIBRATION **ERROR:** 0 **TOLERANCE:** ±1.000 %
CHECKED AT: OPERATING VALUE

*** TECHNICIAN COMMENTS ***

PERFORMED ANNUAL CALIBRATION
CLEANED PRIMARY
ADJUSTED EQUIPMENT
VERIFIED TOTALIZER (PASSED)
CORRECTED PROGRAMMING ERRORS.
ADJUSTED PROGRAMMING TO BETTER SUIT FLOW CONDITIONS.
LEFT EQUIPMENT OPERATING PROPERLY

SERVICE REPRESENTATIVE(S): BOB HEINE, PATRICK MCNALLY

Exhibit 4
Records of field pH and chlorine meters calibration

Lyons Creek WWTP
138 Lyons Den Dr
Lothian, MD, 20711

Singh Operational Services, Inc.
8 Rees Dr
Willow Street, PA, 17584

Phone: 7174647395

Start: 2020-10-01
End: 2020-10-31
MD0053511

Calibrations

Date	Cl2 Blank (0.00)	Cl2 Standard No. 1	Cl2 Standard No. 2	Cl2 Standard No. 3	pH 4.00	pH 4.00 Temp. (C)	pH 7.00	pH 7.00 Temp. (C)	pH 10.00	pH 10.00 Temp. (C)	pH Slope	DO Probe	Initial
2020-10-01	0	0.26	1.54	2.66	4.01	16.9	7.00	16.9	10.01	16.8	-51.83	factory	CT
2020-10-02	0	0.21	1.54	2.66	4.01	17.0	7.00	17.1	10.01	17.0	-52.23	factory	CT
2020-10-03	0	0.21	1.56	2.66	4.01	17.8	7.00	17.7	10.01	17.8	-54.56	factory	CT
2020-10-04	0	0.25	1.56	2.66	4.01	16.7	7.00	16.7	10.01	16.8	-55.12	factory	CT
2020-10-05					4.00	21.3	7.01	21.5	10.09	21.6	-53.79	factory	BB
2020-10-06	0	0.23	1.59	2.67	4.00	23.0	7.01	23.0	10.05	22.9	-53.45	factory	BB
2020-10-07	0	0.20	1.60	2.70	4.01	15.5	7.00	15.7	10.01	15.4	-50.40	factory	MM
2020-10-08	0	0.23	1.59	2.74	4.00	20.0	7.00	20.0	10.01	21.0	-56.61	factory	PD
2020-10-09	0	0.17	1.56	2.66	4.00	21.0	7.00	21.0	10.01	21.2	-56.19	factory	PD
2020-10-10	0	0.21	1.62	2.72	4.00	19.7	7.00	19.7	10.01	20.1	-56.35	factory	PD
2020-10-11					4.01	14.8	7.00	15.3	10.01	15.3	-51.27	factory	MM
2020-10-12					4.01	15.6	7.00	15.7	10.01	15.6	-52.47	factory	MM
2020-10-13					4.01	16.4	7.00	16.4	10.01	16.5	-52.71	factory	MM
2020-10-14	0	0.20	1.52	2.60	4.00	24.9	7.00	25.1	10.03	24.9	-52.38	factory	BB
2020-10-15					4.00	21.4	7.01	21.4	10.06	21.5	-52.53	factory	BB
2020-10-16	0	0.17	1.62	2.70	4.01	19.8	7.02	19.8	10.01	20.1	-56.18	factory	PD
2020-10-17	0	0.23	1.61	2.75	4.02	18.7	7.02	18.7	10.04	19.1	-55.91	factory	PD
2020-10-18	0	0.23	1.63	2.69	4.02	18.0	7.00	18.0	10.02	18.3	-56.31	factory	PD
2020-10-19					4.01	13.5	7.00	13.3	10.01	13.2	-53.74	factory	MM
2020-10-20					4.01	15.2	7.00	15.2	10.01	15.4	-53.61	factory	MM
2020-10-21	0	0.22	1.56	2.66	4.01	27.4	6.99	27.0	9.99	27.6	-51.72	factory	BB
2020-10-22	0	0.19	1.59	2.63	4.00	17.9	7.01	17.9	10.01	18.0	-55.10	factory	PD
2020-10-23	0	0.23	1.63	2.68	4.00	19.3	7.02	19.2	10.01	19.3	-56.15	factory	PD
2020-10-24	0	0.25	1.60	2.70	4.01	17.9	7.01	17.9	10.02	18.1	-55.89	factory	PD
2020-10-25					4.01	16.7	7.03	16.7	10.04	16.5	-53.78	factory	MM
2020-10-26					4.01	14.3	7.01	14.3	10.05	14.5	-52.68	factory	mm
2020-10-27					4.01	15.3	7.03	15.3	10.05	15.1	-53.47	factory	mm
2020-10-28					4.00	23.1	7.00	23.7	10.05	23.2	-52.31	factory	BB
2020-10-29	0	0.24	1.61	2.72	4.02	19.3	7.02	19.3	10.01	19.4	-53.11	factory	PD
2020-10-30	0	0.20	1.67	2.75	4.00	20.3	7.00	20.3	10.01	21.0	-54.19	factory	PD
2020-10-31	0	0.24	1.70	2.72	4.00	19.6	7.01	19.6	10.02	19.7	-55.72	factory	PD

Lyons Creek WWTP
138 Lyons Den Dr
Lothian, MD, 20711

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8 Rees Dr
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Phone: 7174647395

Start: 2020-11-01
End: 2020-11-30
MD0053511

Calibrations

Date	Cl2 Blank (0.00)	Cl2 Standard No. 1	Cl2 Standard No. 2	Cl2 Standard No. 3	pH 4.00	pH 4.00 Temp. (C)	pH 7.00	pH 7.00 Temp. (C)	pH 10.00	pH 10.00 Temp. (C)	pH Slope	DO Probe	Initial
2020-11-01					4.02	18.6	7.02	18.6	10.01	18.7	-53.69	factory	PD
2020-11-02					4.01	15.6	7.03	15.4	10.05	15.4	-53.27	factory	MM
2020-11-03					4.01	15.7	7.00	16.2	10.01	15.4	-54.12	factory	MM
2020-11-04					4.00	16.3	7.03	16.1	10.14	16.4	-53.61	factory	MM
2020-11-05					4.00	21.5	7.01	21.1	10.06	21.1	-51.15	factory	bb
2020-11-06	0	0.19	1.64	2.70	4.03	19.1	7.03	19.1	10.01	19.2	-54.06	factory	PD
2020-11-07	0	0.24	1.61	2.68	4.00	18.6	7.00	18.6	10.02	19.0	-53.80	factory	PD
2020-11-08					4.01	15.4	7.03	15.4	10.05	15.4	-54.17	factory	MM
2020-11-09					4.00	22.3	7.00	22.3	10.08	22.2	-53.30	factory	MM
2020-11-10	0	0.26	1.55	2.70	4.01	18.6	7.02	18.6	10.01	18.8	-55.21	factory	PD
2020-11-11					4.00	24.7	7.00	24.2	10.00	24.8	-52.57	factory	MM
2020-11-12	0	0.27	1.60	2.75	4.00	17.9	7.01	17.9	10.01	18.0	-52.18	factory	PD
2020-11-13	0	0.22	1.63	2.77	4.00	19.0	7.00	19.0	10.02	19.1	-53.35	factory	PD
2020-11-14	0	0.19	1.58	2.69	4.00	17.9	7.00	17.9	10.03	18.0	-53.26	factory	PD
2020-11-15					4.00	20.5	7.01	20.5	10.05	20.5	-51.00	factory	MM
2020-11-16					4.00	15.6	7.01	15.7	10.08	15.7	-53.21	factory	MM
2020-11-17					4.00	15.3	7.01	15.3	10.05	15.3	-52.15	factory	MM
2020-11-18					4.00	16.1	7.02	16.1	10.12	16.3	52.14	factory	bb
2020-11-19	0	0.17	1.58	2.65	4.00	17.6	7.00	17.6	10.02	17.7	-53.92	factory	PD
2020-11-20	0	0.21	1.61	2.71	4.00	18.2	7.00	18.2	10.01	18.4	-54.89	factory	PD
2020-11-21	0	0.23	1.58	2.74	4.01	17.9	7.00	17.9	10.01	18.1	-53.62	factory	PD
2020-11-22					4.01	15.6	7.00	15.8	10.01	15.8	-52.11	factory	MM
2020-11-23					4.00	20.3	7.02	19.8	10.05	20.4	-51.82	factory	MM
2020-11-24					4.01	15.3	7.00	15.3	10.01	15.4	-51.28	factory	MM
2020-11-25					4.00	17.7	7.03	17.6	10.05	17.6	-50.48	factory	bb
2020-11-26	0	0.23	1.55	2.72	4.02	17.5	7.02	17.5	10.01	17.7	-54.72	factory	PD
2020-11-27	0	0.18	1.59	2.67	4.00	16.7	7.00	16.7	10.02	16.9	-55.21	factory	PD
2020-11-28	0	0.19	1.59	2.65	4.00	15.9	7.01	15.9	10.02	16.0	-54.06	factory	PD
2020-11-29					4.01	18.6	7.03	18.7	10.08	18.7	-52.31	factory	MM
2020-11-30					4.01	15.6	7.01	15.7	10.08	15.6	-52.47	factory	MM

Exhibit 5
ICIS Database DMR Data
(January 1, 2017 – October 31, 2020)

NPDES ID	Mon. Period End Date	Limit Set	Param Cd - MLC - Season ID	Parameter	Mon. Loc. Desc.	Worst % exced.	Quantity 1	Quantity 2	Quantity Units	Concentration 1	Concentration 2	Concentration 3	Concentration Units
MD0053511	01/31/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					8.2			mg/L
MD0053511	01/31/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.8	1.4	lb/d		2	4	mg/L
MD0053511	01/31/2017	001-A	00400-1-0	pH	Effluent Gross					7.2		7.7	SU
MD0053511	01/31/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1	1.4	lb/d		2.6	4	mg/L
MD0053511	01/31/2017	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	01/31/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.047	.083	MGD				
MD0053511	01/31/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	01/31/2017	001-A	51040-1-0	E. coli	Effluent Gross							1	MPN/100mL
MD0053511	02/28/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					9			mg/L
MD0053511	02/28/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.4	.7	lb/d		1	2	mg/L
MD0053511	02/28/2017	001-A	00400-1-0	pH	Effluent Gross					7.3		7.7	SU
MD0053511	02/28/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		.7	.8	lb/d		2	2	mg/L
MD0053511	02/28/2017	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	02/28/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.042	.058	MGD				

MD0053511	02/28/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	02/28/2017	001-A	51040-1-0	E. coli	Effluent Gross							1	MPN/100mL
MD0053511	03/31/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					8.4			mg/L
MD0053511	03/31/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.3	1.1	lb/d		.8	3	mg/L
MD0053511	03/31/2017	001-A	00400-1-0	pH	Effluent Gross					7.3		7.6	SU
MD0053511	03/31/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.1	1.5	lb/d		3	4	mg/L
MD0053511	03/31/2017	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	03/31/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.043	.065	MGD				
MD0053511	03/31/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	03/31/2017	001-A	51040-1-0	E. coli	Effluent Gross							1	MPN/100mL
MD0053511	04/30/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.6			mg/L
MD0053511	04/30/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.9	1.8	lb/d		2	4	mg/L
MD0053511	04/30/2017	001-A	00400-1-0	pH	Effluent Gross					7.2		7.4	SU
MD0053511	04/30/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.2	1.9	lb/d		2.8	4	mg/L
MD0053511	04/30/2017	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L

MD0053511	04/30/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.053	.083	MGD				
MD0053511	04/30/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	04/30/2017	001-A	51040-1-0	E. coli	Effluent Gross							3	MPN/100mL
MD0053511	05/31/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.8			mg/L
MD0053511	05/31/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1	2	lb/d		2	4	mg/L
MD0053511	05/31/2017	001-A	00400-1-0	pH	Effluent Gross					7.2		7.5	SU
MD0053511	05/31/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.4	2.5	lb/d		2.8	5	mg/L
MD0053511	05/31/2017	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	05/31/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.06	.097	MGD				
MD0053511	05/31/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	05/31/2017	001-A	51040-1-0	E. coli	Effluent Gross							2	MPN/100mL
MD0053511	06/30/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.5			mg/L
MD0053511	06/30/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.1	3.6	lb/d		2.8	9	mg/L
MD0053511	06/30/2017	001-A	00400-1-0	pH	Effluent Gross					7.3		7.6	SU
MD0053511	06/30/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1	1.2	lb/d		2.5	3	mg/L

MD0053511	06/30/2017	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	06/30/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.05	.064	MGD				
MD0053511	06/30/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	06/30/2017	001-A	51040-1-0	E. coli	Effluent Gross							10	MPN/100mL
MD0053511	07/31/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.1			mg/L
MD0053511	07/31/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.4	.8	lb/d		1	2	mg/L
MD0053511	07/31/2017	001-A	00400-1-0	pH	Effluent Gross					7.4		7.7	SU
MD0053511	07/31/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.8	2.8	lb/d		4.5	7	mg/L
MD0053511	07/31/2017	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	07/31/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.048	.078	MGD				
MD0053511	07/31/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	07/31/2017	001-A	51040-1-0	E. coli	Effluent Gross							3	MPN/100mL
MD0053511	08/31/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.3			mg/L
MD0053511	08/31/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.2	1	lb/d		.4	2	mg/L
MD0053511	08/31/2017	001-A	00400-1-0	pH	Effluent Gross					7.2		7.7	SU

MD0053511	08/31/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.5	2.7	lb/d		3.2	5	mg/L
MD0053511	08/31/2017	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	08/31/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.057	.103	MGD				
MD0053511	08/31/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	08/31/2017	001-A	51040-1-0	E. coli	Effluent Gross							4	MPN/100mL
MD0053511	09/30/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7			mg/L
MD0053511	09/30/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.1	2.8	lb/d		2.5	6	mg/L
MD0053511	09/30/2017	001-A	00400-1-0	pH	Effluent Gross					7.3		7.8	SU
MD0053511	09/30/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		.9	1.5	lb/d		2	3	mg/L
MD0053511	09/30/2017	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	09/30/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.054	.082	MGD				
MD0053511	09/30/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	09/30/2017	001-A	51040-1-0	E. coli	Effluent Gross							6	MPN/100mL
MD0053511	10/31/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.5			mg/L
MD0053511	10/31/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		NODI B	NODI B	lb/d		NODI B	NODI B	mg/L

MD0053511	10/31/2017	001-A	00400-1-0	pH	Effluent Gross					7.3		7.6	SU
MD0053511	10/31/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		.9	1.1	lb/d		2.3	3	mg/L
MD0053511	10/31/2017	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	10/31/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.049	.075	MGD				
MD0053511	10/31/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	10/31/2017	001-A	51040-1-0	E. coli	Effluent Gross							NODI B	MPN/100mL
MD0053511	11/30/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					8.1			mg/L
MD0053511	11/30/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.5	.8	lb/d		1.2	2	mg/L
MD0053511	11/30/2017	001-A	00400-1-0	pH	Effluent Gross					7.4		7.7	SU
MD0053511	11/30/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.3	2.5	lb/d		3	6	mg/L
MD0053511	11/30/2017	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	11/30/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.051	.075	MGD				
MD0053511	11/30/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	11/30/2017	001-A	51040-1-0	E. coli	Effluent Gross							2	MPN/100mL
MD0053511	12/31/2017	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					9.1			mg/L

MD0053511	12/31/2017	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.2	.8	lb/d		.5	2	mg/L
MD0053511	12/31/2017	001-A	00400-1-0	pH	Effluent Gross					7.5		7.7	SU
MD0053511	12/31/2017	001-A	00530-1-0	Solids, total suspended	Effluent Gross		.8	1.2	lb/d		2	3	mg/L
MD0053511	12/31/2017	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	12/31/2017	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.05	.084	MGD				
MD0053511	12/31/2017	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	12/31/2017	001-A	51040-1-0	E. coli	Effluent Gross							3	MPN/100mL
MD0053511	01/31/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					9.7			mg/L
MD0053511	01/31/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.4	1.2	lb/d		.8	2	mg/L
MD0053511	01/31/2018	001-A	00400-1-0	pH	Effluent Gross					7.3		7.8	SU
MD0053511	01/31/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.5	1.8	lb/d		3	6	mg/L
MD0053511	01/31/2018	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	01/31/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.062	.108	MGD				
MD0053511	01/31/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	01/31/2018	001-A	51040-1-0	E. coli	Effluent Gross							1	MPN/100mL

MD0053511	02/28/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					9.9			mg/L
MD0053511	02/28/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.4	2.2	lb/d		2.3	4	mg/L
MD0053511	02/28/2018	001-A	00400-1-0	pH	Effluent Gross					7.1		7.7	SU
MD0053511	02/28/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		2	3	lb/d		3	4	mg/L
MD0053511	02/28/2018	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	02/28/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.074	.177	MGD				
MD0053511	02/28/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	02/28/2018	001-A	51040-1-0	E. coli	Effluent Gross							2	MPN/100mL
MD0053511	03/31/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					8.3			mg/L
MD0053511	03/31/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.4	2.7	lb/d		2.5	4	mg/L
MD0053511	03/31/2018	001-A	00400-1-0	pH	Effluent Gross					7.3		7.7	SU
MD0053511	03/31/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.4	2	lb/d		2.5	3	mg/L
MD0053511	03/31/2018	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	03/31/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.065	.105	MGD				
MD0053511	03/31/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L

MD0053511	03/31/2018	001-A	51040-1-0	E. coli	Effluent Gross							10	MPN/100mL
MD0053511	04/30/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					8.5			mg/L
MD0053511	04/30/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.8	1.4	lb/d		1.8	3	mg/L
MD0053511	04/30/2018	001-A	00400-1-0	pH	Effluent Gross					7.1		7.5	SU
MD0053511	04/30/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.4	2.3	lb/d		3.3	5	mg/L
MD0053511	04/30/2018	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	04/30/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.052	.074	MGD				
MD0053511	04/30/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	04/30/2018	001-A	51040-1-0	E. coli	Effluent Gross							9	MPN/100mL
MD0053511	05/31/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					8.3			mg/L
MD0053511	05/31/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.5	2.1	lb/d		2.4	3	mg/L
MD0053511	05/31/2018	001-A	00400-1-0	pH	Effluent Gross					7.2		7.7	SU
MD0053511	05/31/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		2.7	4.2	lb/d		4.4	6	mg/L
MD0053511	05/31/2018	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	05/31/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.073	.203	MGD				

MD0053511	05/31/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	05/31/2018	001-A	51040-1-0	E. coli	Effluent Gross							2	MPN/100mL
MD0053511	06/30/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.7			mg/L
MD0053511	06/30/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.2	3.2	lb/d		2	4	mg/L
MD0053511	06/30/2018	001-A	00400-1-0	pH	Effluent Gross					7.2		7.8	SU
MD0053511	06/30/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		3	4.7	lb/d		5.3	8	mg/L
MD0053511	06/30/2018	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	06/30/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.069	.176	MGD				
MD0053511	06/30/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	06/30/2018	001-A	51040-1-0	E. coli	Effluent Gross							6	MPN/100mL
MD0053511	07/31/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.1			mg/L
MD0053511	07/31/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.4	2.1	lb/d		.8	2	mg/L
MD0053511	07/31/2018	001-A	00400-1-0	pH	Effluent Gross					7.1		7.8	SU
MD0053511	07/31/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		2.1	6.3	lb/d		3.8	6	mg/L
MD0053511	07/31/2018	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L

MD0053511	07/31/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.065	.197	MGD				
MD0053511	07/31/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	07/31/2018	001-A	51040-1-0	E. coli	Effluent Gross							3	MPN/100mL
MD0053511	08/31/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7			mg/L
MD0053511	08/31/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.2	.9	lb/d		.5	2	mg/L
MD0053511	08/31/2018	001-A	00400-1-0	pH	Effluent Gross					7.4		7.7	SU
MD0053511	08/31/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.2	2.1	lb/d		2.5	4	mg/L
MD0053511	08/31/2018	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	08/31/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.058	.078	MGD				
MD0053511	08/31/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	08/31/2018	001-A	51040-1-0	E. coli	Effluent Gross							10	MPN/100mL
MD0053511	09/30/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7			mg/L
MD0053511	09/30/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.3	.9	lb/d		.5	2	mg/L
MD0053511	09/30/2018	001-A	00400-1-0	pH	Effluent Gross					7.2		7.7	SU
MD0053511	09/30/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.2	1.7	lb/d		2	3	mg/L

MD0053511	09/30/2018	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	09/30/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.073	.151	MGD				
MD0053511	09/30/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	09/30/2018	001-A	51040-1-0	E. coli	Effluent Gross							33	MPN/100mL
MD0053511	10/31/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.1			mg/L
MD0053511	10/31/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.2	1.3	lb/d		.4	2	mg/L
MD0053511	10/31/2018	001-A	00400-1-0	pH	Effluent Gross					7.1		7.7	SU
MD0053511	10/31/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		2.3	3	lb/d		3.8	5	mg/L
MD0053511	10/31/2018	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	10/31/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.072	.134	MGD				
MD0053511	10/31/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	10/31/2018	001-A	51040-1-0	E. coli	Effluent Gross							1	MPN/100mL
MD0053511	11/30/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7			mg/L
MD0053511	11/30/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.8	1.7	lb/d		1	2	mg/L
MD0053511	11/30/2018	001-A	00400-1-0	pH	Effluent Gross					7.1		8	SU

MD0053511	11/30/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		3.9	7.5	lb/d		4.8	9	mg/L
MD0053511	11/30/2018	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	11/30/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.098	.152	MGD				
MD0053511	11/30/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	11/30/2018	001-A	51040-1-0	E. coli	Effluent Gross							3	MPN/100mL
MD0053511	12/31/2018	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					8.7			mg/L
MD0053511	12/31/2018	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.4	2.1	lb/d		1.8	3	mg/L
MD0053511	12/31/2018	001-A	00400-1-0	pH	Effluent Gross					7.3		7.8	SU
MD0053511	12/31/2018	001-A	00530-1-0	Solids, total suspended	Effluent Gross		5.2	8.3	lb/d		6.5	9	mg/L
MD0053511	12/31/2018	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	12/31/2018	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.097	.169	MGD				
MD0053511	12/31/2018	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	12/31/2018	001-A	51040-1-0	E. coli	Effluent Gross							2	MPN/100mL
MD0053511	01/31/2019	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					8.7			mg/L
MD0053511	01/31/2019	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		2.2	3.2	lb/d		2.8	4	mg/L

MD0053511	01/31/2019	001-A	00400-1-0	pH	Effluent Gross					7.6		7.9	SU
MD0053511	01/31/2019	001-A	00530-1-0	Solids, total suspended	Effluent Gross	43	6.2	12.6	lb/d		7.8	14	mg/L
MD0053511	01/31/2019	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	01/31/2019	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.095	.14	MGD				
MD0053511	01/31/2019	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	01/31/2019	001-A	51040-1-0	E. coli	Effluent Gross							1	MPN/100mL
MD0053511	02/28/2019	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					10.2			mg/L
MD0053511	02/28/2019	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.7	2.5	lb/d		2.3	3	mg/L
MD0053511	02/28/2019	001-A	00400-1-0	pH	Effluent Gross					7.6		8	SU
MD0053511	02/28/2019	001-A	00530-1-0	Solids, total suspended	Effluent Gross		5.8	7.7	lb/d		7.5	10	mg/L
MD0053511	02/28/2019	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	02/28/2019	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.093	.141	MGD				
MD0053511	02/28/2019	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	02/28/2019	001-A	51040-1-0	E. coli	Effluent Gross							2	MPN/100mL
MD0053511	03/31/2019	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					9.5			mg/L

MD0053511	03/31/2019	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.5	3.3	lb/d		2.3	4	mg/L
MD0053511	03/31/2019	001-A	00400-1-0	pH	Effluent Gross					7.7		8	SU
MD0053511	03/31/2019	001-A	00530-1-0	Solids, total suspended	Effluent Gross		4.9	7.5	lb/d		7.3	11	mg/L
MD0053511	03/31/2019	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	03/31/2019	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.081	.115	MGD				
MD0053511	03/31/2019	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	03/31/2019	001-A	51040-1-0	E. coli	Effluent Gross							1	MPN/100mL
MD0053511	04/30/2019	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					8.4			mg/L
MD0053511	04/30/2019	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.7	2.3	lb/d		3.2	4	mg/L
MD0053511	04/30/2019	001-A	00400-1-0	pH	Effluent Gross					7.6		8.1	SU
MD0053511	04/30/2019	001-A	00530-1-0	Solids, total suspended	Effluent Gross		2.5	2.7	lb/d		4.8	5	mg/L
MD0053511	04/30/2019	001-A	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	04/30/2019	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.063	.097	MGD				
MD0053511	04/30/2019	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	04/30/2019	001-A	51040-1-0	E. coli	Effluent Gross							2	MPN/100mL

MD0053511	05/31/2019	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.7			mg/L
MD0053511	05/31/2019	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		2.1	3.2	lb/d		3.5	6	mg/L
MD0053511	05/31/2019	001-A	00400-1-0	pH	Effluent Gross					7.5		8	SU
MD0053511	05/31/2019	001-A	00530-1-0	Solids, total suspended	Effluent Gross		1.8	2.7	lb/d		3	4	mg/L
MD0053511	05/31/2019	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	05/31/2019	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.073	.015	MGD				
MD0053511	05/31/2019	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L
MD0053511	05/31/2019	001-A	51040-1-0	E. coli	Effluent Gross							1	MPN/100mL
MD0053511	06/30/2019	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.9			mg/L
MD0053511	06/30/2019	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		2.1	3.5	lb/d		3.8	6	mg/L
MD0053511	06/30/2019	001-A	00400-1-0	pH	Effluent Gross					7.6		8	SU
MD0053511	06/30/2019	001-A	00530-1-0	Solids, total suspended	Effluent Gross		3.8	5.2	lb/d		6.8	9	mg/L
MD0053511	06/30/2019	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		NODI B		lb/d		NODI B		mg/L
MD0053511	06/30/2019	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.068	.101	MGD				
MD0053511	06/30/2019	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							NODI 9	mg/L

MD0053511	06/30/2019	001-A	51040-1-0	E. coli	Effluent Gross							7	MPN/100mL
MD0053511	07/31/2019	001-A	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					6.5			mg/L
MD0053511	07/31/2019	001-A	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.88	.88	lb/d		< 2	< 2	mg/L
MD0053511	07/31/2019	001-A	00400-1-0	pH	Effluent Gross					6.9		7.4	SU
MD0053511	07/31/2019	001-A	00530-1-0	Solids, total suspended	Effluent Gross		.88	1.32	lb/d		2	3	mg/L
MD0053511	07/31/2019	001-A	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		.088		lb/d		< .2		mg/L
MD0053511	07/31/2019	001-A	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.053	.071	MGD				
MD0053511	07/31/2019	001-A	50060-1-0	Chlorine, total residual	Effluent Gross							0	mg/L
MD0053511	07/31/2019	001-A	51040-1-0	E. coli	Effluent Gross							49.194	MPN/100mL
MD0053511	08/31/2019	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					6.7			mg/L
MD0053511	08/31/2019	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.88	.88	lb/d		0	0	mg/L
MD0053511	08/31/2019	001-B	00400-1-0	pH	Effluent Gross					6.5		7.4	SU
MD0053511	08/31/2019	001-B	00530-1-0	Solids, total suspended	Effluent Gross		1.55	2.65	lb/d		3.5	6	mg/L
MD0053511	08/31/2019	001-B	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		.088		lb/d		0		mg/L
MD0053511	08/31/2019	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.053	.579	MGD				

MD0053511	08/31/2019	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							NODI Q	mg/L
MD0053511	08/31/2019	001-B	51040-1-0	E. coli	Effluent Gross							7.014	MPN/100mL
MD0053511	09/30/2019	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					6.7			mg/L
MD0053511	09/30/2019	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.88	.88	lb/d		0	0	mg/L
MD0053511	09/30/2019	001-B	00400-1-0	pH	Effluent Gross					6.8		7.4	SU
MD0053511	09/30/2019	001-B	00530-1-0	Solids, total suspended	Effluent Gross		1.55	2.65	lb/d		4	11	mg/L
MD0053511	09/30/2019	001-B	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		.088		lb/d		0		mg/L
MD0053511	09/30/2019	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.053	.077	MGD				
MD0053511	09/30/2019	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							0	mg/L
MD0053511	09/30/2019	001-B	51040-1-0	E. coli	Effluent Gross							1.913	MPN/100mL
MD0053511	10/31/2019	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					6.5			mg/L
MD0053511	10/31/2019	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.56	.76	lb/d		1.31	1.79	mg/L
MD0053511	10/31/2019	001-B	00400-1-0	pH	Effluent Gross					6.7		7.4	SU
MD0053511	10/31/2019	001-B	00530-1-0	Solids, total suspended	Effluent Gross		1.45	4.69	lb/d		3.4	11	mg/L
MD0053511	10/31/2019	001-B	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		.043		lb/d		.1		mg/L

MD0053511	10/31/2019	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.051	.09	MGD				
MD0053511	10/31/2019	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							0	mg/L
MD0053511	10/31/2019	001-B	51040-1-0	E. coli	Effluent Gross							1.541	MPN/100mL
MD0053511	11/30/2019	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					9.1			mg/L
MD0053511	11/30/2019	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.32	.66	lb/d		.67	1.39	mg/L
MD0053511	11/30/2019	001-B	00400-1-0	pH	Effluent Gross					7.4		9.1	SU
MD0053511	11/30/2019	001-B	00530-1-0	Solids, total suspended	Effluent Gross		.35	.47	lb/d		.75	1	mg/L
MD0053511	11/30/2019	001-B	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI 9		lb/d		NODI 9		mg/L
MD0053511	11/30/2019	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.057	.09	MGD				
MD0053511	11/30/2019	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							0	mg/L
MD0053511	11/30/2019	001-B	51040-1-0	E. coli	Effluent Gross							.1	MPN/100mL
MD0053511	12/31/2019	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.1			mg/L
MD0053511	12/31/2019	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.3	.57	lb/d		.58	1.1	mg/L
MD0053511	12/31/2019	001-B	00400-1-0	pH	Effluent Gross					6.6		7.2	SU
MD0053511	12/31/2019	001-B	00530-1-0	Solids, total suspended	Effluent Gross		.59	1.56	lb/d		1.13	3	mg/L

MD0053511	12/31/2019	001-B	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		NODI 9		lb/d		NODI 9		mg/L
MD0053511	12/31/2019	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.062	.084	MGD				
MD0053511	12/31/2019	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							0	mg/L
MD0053511	12/31/2019	001-B	51040-1-0	E. coli	Effluent Gross							.853	MPN/100mL
MD0053511	01/31/2020	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					6.7			mg/L
MD0053511	01/31/2020	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.56	.56	lb/d		1	1	mg/L
MD0053511	01/31/2020	001-B	00400-1-0	pH	Effluent Gross					6.7		7.3	SU
MD0053511	01/31/2020	001-B	00530-1-0	Solids, total suspended	Effluent Gross		.38	.56	lb/d		.67	1	mg/L
MD0053511	01/31/2020	001-B	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		0		lb/d		0		mg/L
MD0053511	01/31/2020	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.07	.094	MGD				
MD0053511	01/31/2020	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							0	mg/L
MD0053511	01/31/2020	001-B	51040-1-0	E. coli	Effluent Gross							1	MPN/100mL
MD0053511	02/29/2020	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					8.1			mg/L
MD0053511	02/29/2020	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.91	3.78	lb/d		3.48	6.87	mg/L
MD0053511	02/29/2020	001-B	00400-1-0	pH	Effluent Gross					6.6		7	SU

MD0053511	02/29/2020	001-B	00530-1-0	Solids, total suspended	Effluent Gross		.27	.27	lb/d		.5	.5	mg/L
MD0053511	02/29/2020	001-B	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		0		lb/d		0		mg/L
MD0053511	02/29/2020	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.07	1.119	MGD				
MD0053511	02/29/2020	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							0	mg/L
MD0053511	02/29/2020	001-B	51040-1-0	E. coli	Effluent Gross							1.189	MPN/100mL
MD0053511	03/31/2020	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					7.7			mg/L
MD0053511	03/31/2020	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		3.31	5.33	lb/d		6.32	10.2	mg/L
MD0053511	03/31/2020	001-B	00400-1-0	pH	Effluent Gross					6.6		7.3	SU
MD0053511	03/31/2020	001-B	00530-1-0	Solids, total suspended	Effluent Gross		3.66	7.32	lb/d		7	14	mg/L
MD0053511	03/31/2020	001-B	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		0		lb/d		0		mg/L
MD0053511	03/31/2020	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.063	.823	MGD				
MD0053511	03/31/2020	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							0	mg/L
MD0053511	03/31/2020	001-B	51040-1-0	E. coli	Effluent Gross							5.768	MPN/100mL
MD0053511	04/30/2020	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross	5				4.75			mg/L
MD0053511	04/30/2020	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.98	2.04	lb/d		1.58	2.88	mg/L

MD0053511	04/30/2020	001-B	00400-1-0	pH	Effluent Gross					6.5		8.45	SU
MD0053511	04/30/2020	001-B	00530-1-0	Solids, total suspended	Effluent Gross	45	4.07	12.77	lb/d		6.5	18	mg/L
MD0053511	04/30/2020	001-B	00610-1-1	Nitrogen, ammonia total [as N]	Effluent Gross		.04		lb/d		.08		mg/L
MD0053511	04/30/2020	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.07	.1098	MGD				
MD0053511	04/30/2020	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							NODI Q	mg/L
MD0053511	04/30/2020	001-B	51040-1-0	E. coli	Effluent Gross							3.85	MPN/100mL
MD0053511	05/31/2020	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					6.45			mg/L
MD0053511	05/31/2020	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.19	2.24	lb/d		2.16	3.1	mg/L
MD0053511	05/31/2020	001-B	00400-1-0	pH	Effluent Gross					6.62		8.35	SU
MD0053511	05/31/2020	001-B	00530-1-0	Solids, total suspended	Effluent Gross	39	5.04	12.2	lb/d		8.5	11	mg/L
MD0053511	05/31/2020	001-B	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		.08		lb/d		.14		mg/L
MD0053511	05/31/2020	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.06	.133	MGD				
MD0053511	05/31/2020	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							NODI Q	mg/L
MD0053511	05/31/2020	001-B	51040-1-0	E. coli	Effluent Gross							2.71	MPN/100mL
MD0053511	06/30/2020	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					6.18			mg/L

MD0053511	06/30/2020	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.55	1	lb/d		1.25	2.29	mg/L
MD0053511	06/30/2020	001-B	00400-1-0	pH	Effluent Gross					6.5		7.21	SU
MD0053511	06/30/2020	001-B	00530-1-0	Solids, total suspended	Effluent Gross	33	4.36	8.41	lb/d		11	20	mg/L
MD0053511	06/30/2020	001-B	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		.05		lb/d		.11		mg/L
MD0053511	06/30/2020	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.05	.0621	MGD				
MD0053511	06/30/2020	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							NODI Q	mg/L
MD0053511	06/30/2020	001-B	51040-1-0	E. coli	Effluent Gross							1.15	MPN/100mL
MD0053511	07/31/2020	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					5.84			mg/L
MD0053511	07/31/2020	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.8	2.54	lb/d		1.39	4.24	mg/L
MD0053511	07/31/2020	001-B	00400-1-0	pH	Effluent Gross					6.24		7.41	SU
MD0053511	07/31/2020	001-B	00530-1-0	Solids, total suspended	Effluent Gross	50	4.35	13.18	lb/d		9.5	22	mg/L
MD0053511	07/31/2020	001-B	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		.05		lb/d		.14		mg/L
MD0053511	07/31/2020	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.05	.073	MGD				
MD0053511	07/31/2020	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							NODI Q	mg/L
MD0053511	07/31/2020	001-B	51040-1-0	E. coli	Effluent Gross							2.01	MPN/100mL

MD0053511	08/31/2020	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					5.11			mg/L
MD0053511	08/31/2020	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.32	1.3	lb/d		.55	2.19	mg/L
MD0053511	08/31/2020	001-B	00400-1-0	pH	Effluent Gross					6.54		7.53	SU
MD0053511	08/31/2020	001-B	00530-1-0	Solids, total suspended	Effluent Gross	21	4.94	9.48	lb/d		12.05	17.6	mg/L
MD0053511	08/31/2020	001-B	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		.01		lb/d		.03		mg/L
MD0053511	08/31/2020	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.07	.1415	MGD				
MD0053511	08/31/2020	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							NODI Q	mg/L
MD0053511	08/31/2020	001-B	51040-1-0	E. coli	Effluent Gross							1.58	MPN/100mL
MD0053511	09/30/2020	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					5.76			mg/L
MD0053511	09/30/2020	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		1.25	4.29	lb/d		2.72	8.3	mg/L
MD0053511	09/30/2020	001-B	00400-1-0	pH	Effluent Gross					6.52		7.49	SU
MD0053511	09/30/2020	001-B	00530-1-0	Solids, total suspended	Effluent Gross	120	4.87	12.42	lb/d		12.5	33	mg/L
MD0053511	09/30/2020	001-B	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		0		lb/d		0		mg/L
MD0053511	09/30/2020	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.06	.0935	MGD				
MD0053511	09/30/2020	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							NODI Q	mg/L

MD0053511	09/30/2020	001-B	51040-1-0	E. coli	Effluent Gross							7.77	MPN/100mL
MD0053511	10/31/2020	001-B	00300-1-0	Oxygen, dissolved [DO]	Effluent Gross					6.75			mg/L
MD0053511	10/31/2020	001-B	00310-1-0	BOD, 5-day, 20 deg. C	Effluent Gross		.8	2.05	lb/d		1.48	3.2	mg/L
MD0053511	10/31/2020	001-B	00400-1-0	pH	Effluent Gross					6.5		7.42	SU
MD0053511	10/31/2020	001-B	00530-1-0	Solids, total suspended	Effluent Gross	121	7.12	19.46	lb/d		11.8	30.4	mg/L
MD0053511	10/31/2020	001-B	00610-1-0	Nitrogen, ammonia total [as N]	Effluent Gross		0		lb/d		0		mg/L
MD0053511	10/31/2020	001-B	50050-1-0	Flow, in conduit or thru treatment plant	Effluent Gross		.07	.1337	MGD				
MD0053511	10/31/2020	001-B	50060-1-0	Chlorine, total residual	Effluent Gross							NODI Q	mg/L
MD0053511	10/31/2020	001-B	51040-1-0	E. coli	Effluent Gross							1.97	MPN/100mL

Exhibit 6
Enforcement and Compliance History Online (ECHO) Database
Detailed Facility Report

ECHO
Enforcement and Compliance History Online

Detailed Facility Report

Facility Summary

LYONS CREEK MOBILE HOME ESTATE
WWTP
1007 LOWER PINDELL ROAD, LOTHIAN, MD 20711

FRS (Facility Registry Service) ID: 110006635301
EPA Region: 03
Latitude: 38.763403
Longitude: -76.66592
Locational Data Source: NPDES
Industry: Trailer Parks And Campsites
Indian Country: N

Enforcement and Compliance Summary

Statute	CWA
Insp (5 Years)	3
Date of Last Inspection	01/09/2020
Current Compliance Status	**Significant/Category I Noncompliance**
Qtrs with NC (of 12)	12
Qtrs with Significant Violation	2
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): Minor, Permit Effective (MD0053511)
Resource Conservation and Recovery Act (RCRA): No Information
Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information
Greenhouse Gas Emissions (eGGRT): No Information
Toxic Releases (TRI): No Information
Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Known Data Problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110006635301					N	38.763403	-76.66592
ICIS-NPDES	CWA	MD0053511	Minor: NPDES Individual Permit	Effective		12/31/2021	N	38.763369	-76.666255

Facility Address

System	Statute	Identifier	Facility Name	Facility Address
FRS		110006635301	LYONS CREEK MOBILE HOME ESTATE WWTP	1007 LOWER PINDELL ROAD, LOTHIAN, MD 20711
ICIS-NPDES	CWA	MD0053511	LYONS CREEK MOBILE HOME ESTATE WWTP	1007 LOWER PINDELL ROAD, LOTHIAN, MD 20711

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
ICIS-NPDES	MD0053511	7033	Trailer Parks And Campsites
NPDES	MD0053511	7033	Trailer Parks And Campsites

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
No data records returned			

Facility Industrial Effluent Guidelines

Identifier	Effluent Guideline (40 CFR Part)	Effluent Guideline Description
No data records returned		

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
No data records returned			

Enforcement and Compliance

Compliance Monitoring History (5 years)

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CWA	MD0053511	ICIS-NPDES	Inspection/Evaluation	Base Program - Evaluation, Sampling	State	01/09/2020	
CWA	MD0053511	ICIS-NPDES	Inspection/Evaluation	Base Program - Evaluation, Sampling	State	08/01/2017	
CWA	MD0053511	ICIS-NPDES	Inspection/Evaluation	Base Program - Evaluation, Sampling	State	10/06/2016	

Entries in italics are not counted in EPA compliance monitoring strategies or annual results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	MD0053511	Yes	06/30/2020	12	11/27/2020

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type				QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12	QTR 13+
	CWA (Source ID: MD0053511)				07/01-09/30/17	10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19	10/01-12/31/19	01/01-03/31/20	04/01-06/30/20	07/01-11/27/20
	Facility-Level Status				**Violation Identified**	**Violation Identified**	**Violation Identified**	**Violation Identified**	**Violation Identified**	**Violation Identified**	**Violation Identified**	**Violation Identified**	**Violation Identified**	**No Violation Identified**	**Significant/ Category I Noncompliance**	**Significant/ Category I Noncompliance**	**Violation Identified**
	Quarterly Noncompliance Report History				Other Violation	Other Violation	Other Violation	Other Violation	Other Violation	Other Violation	Other Violation	Other Violation	Other Violation	Resolved	Failure to Report DMR - Not Received	Failure to Report DMR - Not Received	
	Pollutant	**Disch Point**	**Mon Loc**	**Freq**													
CWA	Oxygen, dissolved [DO] E	001 - B	Effluent Gross	Neither												5%	
CWA	Solids, total suspended E	001 - A	Effluent Gross	NMth							43%						
CWA	Solids, total suspended E	001 - B	Effluent Gross	NMth												**45%**	**121%**
CWA	pH E	001 - B	Effluent Gross	NMth										LIMIT VIOLATION			
CWA	pH E	001 - B	Effluent Gross	Neither													LIMIT VIOLATION
	Single Event Violations		**NPDES Violation ID**	**Agency**													
CWA	Monitoring Violations - No Flow Measurement Device		3402720697	State	09/13/2013	→	→	→	→	→	→	→	→	→	→	→	→
	Late or Missing Discharge Monitoring Report (DMR) Measurements																
	Counts of Late DMR Measurements												51	51	51	23	14

Informal Enforcement Actions (5 Years)

Statute	System	Source ID	Type of Action	Lead Agency	Date
No data records returned					

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions (5 Years)

Statute	System	Law/Section	Source ID	Action Type	Case No.	Lead Agency	Case Name	Issued/Filed Date	Settlements/Actions	Settlement/Action Date	Federal Penalty Assessed	State/Local Penalty Assessed	SEP Cost	Comp Action Cost
No data records returned														

Environmental Conditions

Watershed(s)

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
020600060501	Lyons Creek	LYONS CREEK TRIB OF PATUXENT RV	No	No	Solids, total suspended	Yes

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Aquatic Life	Fish Consumption Use	Recreation Use	Other Use
MD	2018	MD-02131102	Patuxent River Middle	Impaired - 303(d) Listed - With Restoration Plan	SALINITY/TOTAL DISSOLVED SOLIDS/CHLORIDES/SULFATES | TURBIDITY		Not Supporting			

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)
Ozone	Yes	1-Hour Ozone (1979); 8-Hour Ozone (2008); 8-Hour Ozone (2015)	No	
Lead	No		No	
Particulate Matter	No		Yes	PM-2.5 (1997)
Carbon Monoxide	No		No	
Sulfur Dioxide	No		No	

Pollutants

Toxics Release Inventory History of Reported Chemicals Released in Pounds per Year at Site

TRI Facility ID	Year	Total Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Transfers
No data records returned								

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

Demographic Profile

EJSCREEN EJ Indexes

Eleven primary environmental justice (EJ) indexes of EJSCREEN, EPA's screening tool for EJ concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. The index values below are for the Census block group in which the facility is located. Note that use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJSCREEN provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJSCREEN home page.

Census Block Group EJ Indexes (percentile)	
Particulate Matter (PM 2.5)	49
Ozone NATA Diesel PM	48
NATA Air Toxics Cancer Risk	48.6
NATA Respiratory Hazard Index (HI)	48.5
Traffic Proximity	44.1
Lead Paint Indicator	45.2
Superfund Proximity	41.8
Risk Management Plan (RMP) Proximity	50.5
Hazardous Waste Proximity	53.4
Wastewater Discharge Proximity	22.1

Number of EJ Indexes Above 80th Percentile
0

View EJSCREEN Report

Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 U.S. Census and 2006-2010 American Community Survey 5-Year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial

processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary.

General Statistics	
Total Persons	6,703
Population Density	252/sq.mi.
Percent Minority	15%
Households in Area	2,350
Housing Units in Area	2,458
Households on Public Assistance	12
Persons Below Poverty Level	877

Geography	
Radius of Selected Area	3 mi.
Center Latitude	38.763403
Center Longitude	-76.66592
Land Area	94%
Water Area	6%

Income Breakdown - Households (%)	
Less than $15,000	63 (2.65%)
$15,000 - $25,000	171 (7.19%)
$25,000 - $50,000	413 (17.37%)
$50,000 - $75,000	302 (12.7%)
Greater than $75,000	1,429 (60.09%)

Age Breakdown - Persons (%)	
Children 5 years and younger	308 (5%)
Minors 17 years and younger	1,562 (23%)
Adults 18 years and older	5,142 (77%)
Seniors 65 years and older	978 (15%)

Race Breakdown - Persons (%)	
White	5,781 (86%)
African-American	556 (8%)
Hispanic-Origin	127 (2%)
Asian/Pacific Islander	133 (2%)
American Indian	46 (1%)
Other/Multiracial	189 (3%)

Education Level (Persons 25 & older) - Persons (%)	
Less than 9th Grade	167 (3.7%)
9th through 12th Grade	302 (6.69%)
High School Diploma	1,569 (34.74%)
Some College/2-year	1,180 (26.13%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	1,298 (28.74%)

Exhibit 7
Daily Logbook Pages
(April 1, 2020 – November 19, 2020)

Date/Day: 8/16/20 Location:

70°f Rainy 1" rain 1210

RR

Calibrations

		Slope
4.01	22.5	-51.51
7.00	21.9	
10.01	22.5	

MR 42495772 Q 89824

Tests

	pH	Temp	D.O
EFF	6.54	24.3	7.50

Clarifier - skimmed

Influent - barscreen cleaned

Aeration - starting to foam again, restored PAC pump

Effluent - clear

Date/Day: 8/17/20 Location:

80°f sunny 0" rain 1800

MM

Calibrations

MR 42609880 Q 114108

Tests

INF	6.73	26.2	
~~SBR~~AE	7.41	24.8	4.27
EFF	6.59	24.4	7.24

Clarifiers skimmed, cleaned weirs

Influent - Cleaned barscreen

Aeration - returning to normal

Effluent - clear

Date/Day: 8/19/20 Location:

MM 80°F Sunny 0"Rain 172

Calibrations

4.01	23.4	-51.78
7.00	23.1	
10.01	23.3	

MR 42482932 Q72952

Tests

Inf	4.38	23.5	
AC	6.91	24.2	3.29
Eff	6.54	24.8	7.34

Inf - Cleaned barscreen

Ac - Returning to normal

Eff - Clear

Clarifier - Sprayed, and scrubbed

Chem ~ 55 gal

Date/Day: 8/19/20 Location:

CT 1015 72° Mostly Cloudy 0.2in Rain

Calibrations

4.01	21.9	
7.00	21.9	slope 56.62
10.01	21.9	

MR - 42732736 Q - 49904

Tests

	Ph	Temp	DO
Inf	6.46	24.5	
AER	5.97	25.6	6.83
Eff	6.56	26.5	6.86

Notes

Inf - Cleaned bar screen, emptied trash.

AE - Foam w/large opening on right side. Added 1 bag Soda Ash

Eff - Mostly clear

Clarifier - Cloudy, drum high. Solids return was clogged, purged air, return working. Sprayed drum & clarifier & skimmer.

Chemicals - Pac below 50% new drum tomorrow. Flowing good.

Date/Day: 8/20/20 Location:

CT 0945 73° Mostly Sunny Chance Rain

Calibrations

4.01	21.7		
7.00	21.7	Slope -	56.56
10.01	21.7		

MR- 42796616 Q- 63880

Tests

Inf -	7.32	25.5	
AER -	6.85	25.8	4.71
Eff -	7.10	25.8	6.56

Notes

Inf - Cleaned / Sprayed bar screen.

Aer - Foam w/ large opening on right side.

Eff - Clear water

Clarifier - Thick foam/sludge on top. Skimmed & Scraped weirs. Some light foam spots when done.

Chemicals - PAC flowing, new drum.

Date/Day: 8/21/20 Location:

CT 0845 ~~88~~° Partly Cloudy Chance Rain

Calibrations

4.01	21.9		
7.00	21.8	Slope	-56.37
10.01	21.9		

MR-42859932 Q-63316

Tests

	pH	Temp	DO
Inf -	6.87	24.5	
Aer -	6.62	25.8	4.65
Eff -	6.84	25.4	6.81

Notes -

Inf - Cleaned bar screen.

Aer - Foam w/ large opening on right side.

Eff - Clear water, Cleaned UV

Clarifier - Thick foam, Sprayed / Skimmed. Near side skimmer not staying under surface water. Wasted 40 minutes.

Chemicals - PAC Flowing, drum over 50% full.

Date/Day: 8/22/20 Location:

CT 0930 73° Cloudy 0.2" Rain

Calibrations

4.01	22.2	
7.00	22.1	56.50
10.01	22.1	

MR-42920744 Q-60812

Test

	ph	Temp	DO
Eff	6.66	26.2	6.88

Notes

Inf- Cleaned bar screen

Aer- Foam W/large opening on right side

Clarifier- Thick foam on top. Skimmed & Sprayed until clear

Eff- Clear water.

PAC- Flowing new drum

Date/Day: 8/23/20 Location:

MM 1100 81°F P-cloudy 0" Rain

4.01	24.2	-51.78
7.00	24.5	
10.01	24.6	

MR 42979952 Q 59208

Test

	ph	Temp	DO
EFF	6.83	24.9	7.21

Notes

EFFluent- cloudy

Clarifier- thick foam, sprayed, scraped, and scooped

INF- Cleaned bar screen

SBR- foam on both sides

Chem- PAC small drip leak, Fixed

Added 1 Bag Soda Ash

Date/Day: 8/24/20 Location:

Calibration 1847
4.01 24.4 -52.47
7.00 24.3
10.01 24.4

MR 4306430 @ 81478

test

EFF 6.57 24.7 6.94

Clarifier - AWFUL, spent 1½ hours scooping, did spraying

INF - Cleaned bar screen

Aeration - Foam both sides

EFF - Cloudy

Chem Feed - Replaced PAC

Date/Day: 8/25/20 Location:

MM 1815 Overcast 89°F Sunny

Calibrations
4.01 25.2 -53.17
7.00 25.3
10.01 25.3

MR 4311836 @ 81204

test

INF 6.71 25.4
SBR 6.87 24.2 6.83
EFF 6.73 24.4 6.81

Sprayed, scooted, scraped clarifier

Effluent - Cloudy

Inf - cleaned bar screen

~~SBR~~ Ae - Fine

Chem Feed - 40 gal

Date/Day: 8/26/20 Location:

CT 0745 72° Sunny .4in Rain

Calibrations

4.01	23.1	
~~23~~ 7.00	23.2	Slope - 55.81
10.01	23.2	

MR- 43142124 Q- 29288

Tests

Inf -	7.27	25.3	
Aer -	6.84	26.2	4.48
Eff -	6.99	25.6	6.90

Notes-

Clarifier - Bad, thick foam, sprayed skimmed once scraped. water under is cloudy.

Inf- Cleaned bar screen

Aer- Mostly ~~foam~~, Some large openings.

Eff- Cloudy water, cleared UV's

Chemicals- PAX flowing, new drum

Date/Day: 8/27/20 Location:

0820 CT 77° Sunny Rain

Calibrations

4.01	23.4	
7.00	23.3	Slope - 55.44
10.01	23.1	

MR- 43196776 Q - 54652

Tests

Inf -	6.11	25.5	
Aer -	5.91	26.3	2.99
Eff -	6.59	26.1	6.89

Notes -

Clarifier - bad, Thick foam, drum mushroomed up. Sprayed & Skimmed. Manwall back blew the drum. Water cloudy

Inf - Cleaned bar screen

Aer - Mostly foam. openings on right side. Added 1 bag soda Ash JV30 - 640

Eff - Cloudy water.

Chemicals - PAX flowing. drum over 50% full.

Date/Day: 8/28/20 Location: _____

CT 0815 77° Mostly Sunny 0.in Rain

Calibrations

4.01	24.1	
7.00	24.1	Slope 55.59
10.01	24.0	

MR-43249592 Q-52816

Tests

Inf -	7.32	27.3	
~~ABR~~ -	7.16	26.5	2.37
~~Eff~~ -	7.28	26.4	6.68

Notes

Inf- Cleaned bar screen

Clarifier - lighter foam on top water still cloudy. Sprayed/ skimmed.

Aeration - foam w/ openings on right side.

Eff- Cloudy water.

Chemicals- Opened new drum, turned pump off until tomorrow am. per Greg

Date/Day: 8/29/20 Location: _____

CT 0745 75° Mostly Cloudy 3.2in Rain

Calibrations

4.01	22.9	
7.00	22.8	Slope - 58.72
10.01	22.7	

MR-43329340 Q-74748

Tests

	pH	Temp	DO
Eff -	6.85	26.5	6.56

Notes

Inf- Cleaned bar screen

Clarifier - Foam on top/ water very cloudy. Sprayed and skimmed.

Aeration- Foam with some openings.

Eff - Cloudy/ foam in well and around discharge pipe.

Chemicals- Startle Pot pump. flowing well

Date/Day: 8/30/21 Location:

MM 1420 0"Rain 82°F sunny

Calibrations

4.01 23.4 -53.71
7.00 23.7
10.01 23.2

MR 43470822 Q 18106

EFF 6.73 27.2 6.38

EFF - cloudy

Clarifier - Still skimmer up, Sprayed and scooped

INF - cleaned barscreen

Ae - Road side 100 King better

Chem Feed - Running as normal

Date/Day: 8/31/20 Location:

MM 1430 75°F cloudy 0.1" Rain

Calibrations

4.00 28.2 -55.31
7.00 28.4
10.01 28.2

MR 43534494 Q 68070

tests
pH Temp D.O

INF 5.57 25.7
Ae 6.14 25.9 0.94
EFF 6.95 25.9 6.72

Clarifier - Sprayed, scooped

INF - Barscreen cleared

Ae - Foam Heavy Both sides

EFF - clouds

Chem - Empty, Replace tomorrow

Date/Day: _____ Location: _____

MM 80°F cloudy 0" Rain 1115

Calibrations

4.01 29.3 -54.17
7.00 28.2
10.01 28.3

MR 43615452 Q 80958

Test

EFF 6.87 26.4 6.43

Inf - Cleaner bar screen

Ae - Heavy foam, sprayed

Clarifier - sprayed, weirs brushed

EFF - clear

Chem feed - empty fri thursday

Date/Day: _____ Location: _____

CT 1160 82° Mostly Cloudy 0.1 Rain

Calibrations

4.01 24.8
7.00 25.4 factory 55.94
10.01 25.0

MR - 43665748 Q - 50296

Tests

Inf	5.76	25.1	
Aer	6.49	26.9	3.13
Eff	6.75	26.0	7.12

Notes

Inf - Cleaner bar screen

Aer - Heavy foam w/ some openings.

Clarifier - looking better, Sprayed & skimmed. Scraped weirs

Eff - Mostly clear

Chemicals - PAC flowing. full drum.

Date/Day: 9/3/20 Location:

1045 CT 88° Partly Cloudy 0.1 in Rain

Calibrations

4.01 25.9
7.00 26.0 Slope - 56.59
10.01 25.9

MR - 43735646 Q - 69898

Tests

Inf - 5.93 26.3
AER - 7.21 26.8 4.12
Eff - 6.68 26.2 6.69

Notes

Inf - Cleaned bar Screen.

Aeration - Heavy Foam, Some openings.

Eff - Clear water.

Chemicals - PAC flowing

Clarifier - Thick foam, Sprayed, Scraped and Skimmed

Date/Day: 9/4/20 Location:

0800 CT 78° Sunny 0.4 in Rain

Calibrations

4.01 24.6
7.00 24.7 Slope - 56.36
10.01 24.6

MR - 43792748 Q - 57102

Tests

Inf - 6.14 25.3
AER - 6.73 26.7 3.41
Eff - 6.85 26.4 6.74

Notes

Inf - Cleaned bar Screen

Aer - Foam w/ Some openings. Added 1 bag Soda ash, Sprayed old foam down

Eff - Mostly Clear.

Chemicals - PAC flowing.

Clarifier - better, thin foam in spots, Sprayed Scraped and Skimmed

Date/Day: 9/5/20 Location:

0740 CT 61° Sunny 0.1in Rain

Calibrations

4.01 218
7.00 215 Slope 5655
10.01 216

MR- 43854124 Q- 61376

Tests

Eff- 7.18 25.9 7.00

Notes-

Inf- Cleaned bar screen

Aer- Foam w/ opening on right side

Clarifier- Thin foam on top, Sprayed & Skimmed Scraped weirs.

Eff- Clear water.

Chemicals- PAC flowing.

Date/Day: 9/6/20 Location:

MM 79°F Sunny 0"Rain 1735

Calibrations 1280

4.01 22.3 -52.61
7.00 22.4
10.01 22.4

MR 43939388 Q 85264

Eff 6.75 26.6 7.31

Eff- is cloudy

Inf- cleaned bar screen

Ac- clearing on Road side

chemicals- Fine

Date/Day: 9/7/20 Location:

MR 73°F SUNNY 0" Rain 1030

Calibrations 1020

4.01 24.9 -54.56
7.00 22.1
10.01 25.0

MR 4397972 Q39784

tests

	pH	temp	D.O
INF	7.24	24.1	
AE	6.43	25.7	1.74
EFF	7.19	25.4	7.85

Clarifier - NO change, scraped weirs, sprayed

INFluent - Cleaned bar screen

AE - Opening Road side

EFF - CLOUDY

Chem feed - Fine

Date/Day: Location:

MR 82°F P-CLOUDY 0" Rain 1720

Calibrations

4.01 24.3 -54.12
7.00 24.4
10.01 24.3

MR 48054752 Q77580

tests

	pH	Temp°C	D.O
INF	6.97	26.0	
AE	6.39	26.0	2.14
EFF	6.83	26.4	7.30

Clarifier - sprayed, looking better

INFluent - cleaned barscreen

AE - Openings on road side

EFFluent - clear

Chem feed - started new barrel

Date/Day: 9/9/20 Location:

CT 0740 73° Cloudy 0.1 Rain

Calibrations

4.01 23.6
7.00 23.6 slope 55.43
10.01 23.6

MR-44092304 Q- 35552

Tests

Inf -	7.35	25.2	
Aer -	6.52	25.8	2.83
Eff -	6.92	26.2	7.45

Notes -

Clarifier - Foam on top, not much improvement. Scrapee skimmed. Water under is slightly foggy.

Inf - Cleared bar screen

Aer - Heavy foam w/ some openings.

Eff - Slightly foggy.

Date/Day: Location:

9/10/20 Cloudy 81° 0 rain
1310
BS MR- 44178738 Q- 86432

Cal @ 0950
4.00-22.0
7.01-21.9
10.08-21.9
-52.93

	tests pH	temp	DO
Inf-	7.16	~~25.1~~	
Aer	6.83	25.9	4.77
Eff	6.82	26.2	6.87

Notes Clarifier looked better, skimmed it

Aer - foam no opening
Eff - ~~B~~ Pretty clear

Date/Day: 9/11/20 Location: _____

CT 0740 73° Cloudy 0.4in Rain

Calibrations

4.01 24.3
7.00 24.3 Slope - 55.22
10.01 24.3

MR - 44247888 Q - 69152

Tests

Inf - 7.03 26.1
Aer - 7.13 25.8 5.01
Eff 6.96 25.9 6.60

Notes

Inf- Cleaned bar screen.

Aeration- Foam with small openings, Greg switched valves around.

Clarifier - light grease on top, Skimed, Sprayed & Scraped weirs.

Eff- Mostly clear water.

Chemicals - Pac flowing, 75% full drum.

Date/Day: 9/12/20 Location: _____

CT 0810 66° Mostly Cloudy 0.1in Rain

Calibrations

4.01 23.3
7.00 23.2 Slope - 55.58
10.01 23.2

MR - 44321680 Q - 73792

Test

Eff - 7.05 25.9 6.88 †

Notes

Inf- cleaned bar screen

Aeration - Mostly foam w/some small openings

Clarifier - covered in grease. Sprayed skimmed, scraped weirs. Water cloudy under.

Eff Mostly clear.

Chemicals - Pac flowing, New drum - opened.

Date/Day: 9/13/20 Location:

MR 76°F P-cloudy · 0" Rain · 1645

Calibrations 1410

P.01 22.6 -24.31
7.00 22.4
10.01 22.4

MR 4447515198 Q93508

test
pH TEMP D.O
EFF 6.74 26.0 7.24

INF- Cleaned barscreen

Clarifier - looking better

Aeration - little openings on Road Side

Effluent - clear

Chem Feed - good

Date/Day: 9/14/20 Location:

MM 78°F P-cloudy 0" Rain 1440

Calibrations 1480

-56.11 - Slope
pH TEMP
4.01 30.4
7.00 30.0
10.01 30.3

MR 4447337 4 QS7188

Tests
pH TEMP D.O
INF 5.34 25.2
Ae 5.41 25.4 5.11
EFF 6.53 24.0 7.93

INF - Cleared barscreen

Aeration - openings on Road Side

Clarifier - serviced

Effluent - clear

Date/Day: 8-4-20 Location:

Calibration

4.01
7.00 > 23.7°
10.01

Slope - 56.72

mA -

Tests

Eff pH - 6.61 Temp - 24.7 DO - 6.17

UV - 0.2

Flow - 7154

Date/Day: 8/5/20 Location:

CT 1150 84° Sunny 1/4 Rain

Calibrations

4.01	24.4	
7.00	24.1	Slope - 5663
10.01	24.2	

MR - 41646060 Q - 208816 (2 days)

Flow meter area was flooded by tropical storm on 8/4/20. Operator was unable to get reading. 2 day flow reading was 208 816. ÷ by 2 to get 104 408 per day over the last 2 days.

Tests

	pH	Temp	DO
Inf -	7.44	26.1	
Aer -	7.06	26.3	4.77
Eff -	6.73	26.6	7.13

Notes -

Inf - Cleared bar screen

Aer - large openings

Clarifier - Solids & grease covered entire top of clarifier. Skimmed and cleared.

Effluent - Clear water, end well overflow.

Date/Day: 9/15/20 Location:

9/15/20 65° Sunny

1140

MR-44523780 Q-50404

Cal @ 1140

		pH	Do	temp
4.00 - 23.8				
7.00 - 23.8	Inf	6.11	—	25.7
10.07 - 23.8	Aer	6.01	4.82	25.3
-56.06	Eff	6.52	7.52	25.1

SV 30= 640

Inf - Cleared

Screen - Clarifier

Effluent - Clear ~~Foggy~~

Aeration - Small opening on right

Date/Day: 9/16/20 Location:

CT 1045 70° Partly Cloudy Cin Rain

Calibrations

4.01	14.9	
7.00	14.6	Slope - 5464
10.07	14.7	

MR-44584056 Q-60276

Tests

Inf	5.71	25.5	
Aer	6.23	25.5	4.91
~~Eff~~	7.00	24.6	7.32

Notes

Inf- Cleaned bar screen

Aer- Foam w/ some openings on right side. Added 1 bag Soda Ash. Switched Aeration valves.

Eff. Slightly foggy.

Chemicals - PAC Flowing 50% full

Clarifier- Thick grease & Solids on top. Skimmer, sprayer are scraped wiers.

Date/Day: 9/17/20 Location:

CT 0800 66° Cloudy 0.1in Rain

Calibrations

4.01	18.2		
7.00	18.0	Slope	54.88
10.01	18.2		

MR-44635036 Q-50980

Tests

Inf-	7.46	24.3	
Aer-	7.48	25.2	3.76
Eff-	7.42	24.4	6.47

Notes-

Inf- Cleaned bar screen

Aer- Foam w/opening on right side Ran return to far side of trough for 1hr, Added bag of bugs to both sides.

Clarifier- Foam on top, drum high. back blew the drum to clear it out. Cleaned, sprayed, skimmed clarifier & Scrapper weirs.

Eff. ~~Foggy~~ water. - Chemicals PAC flowing.

Changed Air filter on roof of building.

Date/Day: 9/18/20 Location:

CT 1000 66° Cloudy 0.6in Rain

Calibrations

4.01	22.3		
7.00	21.7	Slope	54.44
10.01	22.0		

MR-44703864 Q-68828

Tests

Inf	7.44	23.8	
Aer	7.35	24.9	4.15
Eff	7.31	24.5	6.35

Notes

Inf. Cleaned bar Screen

Aer- Mostly foam w/ sparsity on right side

Clarifier - much better, some foam on top, skimmed scraped weirs and sprayed. Ran return to far side for 1hr. Drum medium/low.

Eff. foggy water.

Chemicals - New PAC drum, flowing good.

Date/Day: 9/19/20 Location:

CT 0915 54° Mostly Sunny Ohio Rath

Calibrations

4.01 20.4
7.00 20.4 slope - 54.96
10.01 20.3

MR- 44762604 Q- 58740

Tests

~~Eff~~- 7.30 24.4 6.40

Notes

Inf- Cleaned bar screen

Aer- Mostly foam w/ spots on right side.

Clarifier- improving, sprayed & skimmed water under is clear. Vortex 10 mm

Eff- ~~Water~~ Slightly cloudy, improving

Chemicals- PAC floats over 50% full

Date/Day: 9/20/20 Location:

MM ~~1400~~ 1540 46°F Sunny 0.17 Rain

calibrations 1220

4.01 20.3 -58.78
7.00 20.3
10.01 20.4

MR 44839620 Q77016

Tests

Eff 6.67 24.4 7.69

INF - cleaned bar screen

SBR - large opening Rack side

Eff ~ clear

clarifier - filmontop, sprayed, sprayed center drum

Chem feed - good

Date/Day: 9/21/20 Location:

MM 62°F sunny 0" Rain 1900

Calibrations

4.01 19.1 -51.32
7.06 19.3
10.01 18.6

MR 44907676 Q68056

Tests

	pH	Temp	D.O
INF	6.19	23.8	
Ac	5.90	23.9	4.49
EFF	6.78	23.7	7.32

INF - Cleaned barscreen.

Ac - Performed SV30(650), Openings on Road side

Clarifier - Sprayed drum, sprayed tank, sprayed and scraped weirs

Effluent - Clear, propped sample

Chem Feed - good

Date/Day: Location:

9/22/20 70° Sun 0" Rain
1850
BB

MR- 44965524Q- 57848

Cal@0950

tests

	pH	DO	temp
4.00-2.10			
7.01-21.0	Inf 6.03	-	23.4
10.01-20.9	Ac 6.18	5.61	23.7
-55.25	eff 6.65	7.19	23.4

Inf - Cleaned Barscreen
Chem - good
Eff - Clear
Sprayed Clarifier
Ac - Opening on Road side

Date/Day: 9/23/20 Location:

CT · 10:30 72° Sunny 0.in Rain

Calibrations

4.01	18.9	
7.00	18.9	Slope 55.53
10.01	18.8	

MR- 45002088 Q- 36564

Tests

Inf-	7.61	23.5	
Aer-	7.14	23.4	5.08
Eff-	7.44	23.2	6.67

Notes-

Inf- cleaned bar screen.

Aer- Opening on right side, mostly foam.

Clarifier- Back blew drum, Sprayed/skimmed clarifier. Scraped weirs. Top looked very bad & drum was high. better after.

Eff- foggy water.

Chemicals - PAC feeding, over 50% full.

Date/Day: 9/24/20 Location:

CT 0815 59°, Mostly Sunny 0.in Rain

Calibrations

401	17.2	
7.00	17.3	-5489
10.01	17.3	

MR- ~~4050600~~ 45050600 Q- 48512

Tests

Inf-	7.24	23.0	
Aer-	7.25	23.3	4.98
Eff-	7.49	23.0	7.06

Notes

Inf - Cleaned bar screen

Aer- Opening on right side, mostly foam

Clarifier- heavy film on top. Scrapers, skimmed/sprayed top. Sprayed/skimmed drum.

Eff- Water slightly foggy. mech sewer

Chemicals- PAC flowing. 50% full.

Date/Day: 9/25/20 Location:

CT 0945 64° Partly Clowe 0.1in Rain

Calibrations

4.01 17.9
7.00 17.8 Slope - 53.41
10.01 17.7

MR - 45109788 Q - 59188

Tests

Inf	7.72	231	
Aer	7.13	23.4	5.01
Eff	7.39	23.1	7.01

Notes

Inf- Cleaned bar screen

Clarifier - Very BAD thick grease on top. Sprayed & Skimmed, Scraped weirs. Sprayed drum, Skimmed from drum. Washed till trough is full (40 minutes) per Greg.

Aer- Mostly foam, opening on right side

Eff- Mostly clear water.

Chemicals - PAC flowing near drum

Date/Day: 9/26/20 Location:

0945 CT 66° Cloudy 0.2 in Rain

Calibrations

4.01 18.1
7.00 18.0 Slope 53.79
10.01 18.0

MR-45171184 Q- 61396

Test

Eff- 7.40 229 6.91

Notes-

Inf- Cleaned bar Screen

Aer- Added 7 bags of bugs per Greg. Opening on Return side. Turned return air to 70%

Clarifier- ½in or more thick sludge over the whole top. Skimmed / Sprayed & Scraped for 2 hours. Water murky under neath.

Eff- Cloudy water.

Chemicals - PAC flowing, ~~Pumped~~ timer. drum over 50%

Date/Day: 9/27/20 Location:

MM 70°F cloudy 0.2" Rain 1120

Calibrations

4.01 28.6 −54.72
7.00 28.6
10.01 28.3

MR 45241240 Q 70876

tests

Eff 6.83 23.8 7.50

INF – Cleaned Bar screen

AE – openings on Road side

Clarifier – sprayed down, surface sludge thinner than previous days

Eff level – cloudy

Chemfeed – last day, replace barrel tomorrow

Date/Day: 9/27/20 Location:

MM 78°F Cloudy 0.14 Rain 2070

Calibrations

4.01 20.6 −54.72
7.00 22.8
10.01 20.6

MR 4533 4632 Q 93372

Tests

Eff 6.79 23.5 6.83

INF –

AE – No openings

Checked Sampler, Works and running
Met with Chandra, Shut off Pact.
Opened all diffusers, Sprayed Clarifier
BB / gms

Date/Day: _____ Location: _____

9/29/20 MR-45376536 Q=41904
1410
BS

		tests		
		PH	DO	temp
Cal@1430	Inf	7.30	—	24.1
4.01-30.5	Aer	6.32	~~0.38~~	24.5
6.98-30.0	Eff	6.53	5.76	24.5
10.01-29.8				
-54.69				

Sprayed Clarifier / Scooped FOR Over an hour and half. Very caked up.
Aer very small opening following Singhs adjustments
~~Eff Foamy Clear~~ Eff cloudy foamy
grabbed Samples
NO SV30 will do tomorrow
Pac off

Date/Day: 9/30/20 Location: _____

CT 0940 64° Sunny · 0.7 in Rain

Calibrations

4.01	18.1	
7.00	18.1	slope-54.13
10.01	18.2	

MR-45438440 Q-61904

Tests

Inf -	5.90	22.0	
Aer -	6.38	23.4	6.46
Eff-	6.76	22.0	6.96

Notes

Inf- Cleaned bar screen

Aer- Mostly foam w small opening by return

Eff- Foggy water.

Clarifier - Thick sludge on top. Skimmed/sprayed & scraped weirs.

PAC not running per Singh

Cleaned Clarifier + Cleaned UV
BS

Date/Day: 10/1/20 Location:

CT 0920 66° Sunny 0 in Rain

Calibrations

4.01 16.9
7.00 16.9 Slope 51.83
10.01 16.8

MR-45504772 Q-66332

Test

Inf	6.93	23.1	
SBR	6.84	23.3	0.49
Eff	7.05	23.0	6.78

Notes

Inf- Cleared bar screen, emptied trash

Aer- Foam w/ small opening on return side.

Clarifier- Cleaned, sprayed & skimmed. less film than yesterday. wasted 25 min

Eff- Still foggy water, slightly better.

* GMS 0630
- CLEANOUT CLARIFIER
- HY TECH TOOK 2 LOADS FROM SHIT (TOWER
- PAC ON (4 HRS DAILY)

Date/Day: 10/2/20 Location:

CT 0925 57° Partly Cloudy 0.9 in Rain

Calibrations

401 17.0
7.00 17.1 Slope - 52.23
10.01 17.0

MR-45574724 Q-69952

Tests

Inf	6.51	23.5	
Aer	6.62	23.1	0.51
Eff	7.22	22.5	7.28

Notes-

Inf- Cleared bar screen

Aer- Foam w/ small opening by return

Clarifier- Horrible, thick solids on top covering. Sprayed, skimmed & scraped w/ rs.

Eff- getting better, slightly foggy

PT 11/19/20 52 F Sunny 15:42

Final Flow
49060884

Flow
73016

Test
PH Temp DO UV

IN 7.08 19.0
AER 6.90 18.6 9.33
EFF 6.92 18.8 9.48

Sprayed Clarifier
Cleaned Bar Screen
Changed Chemick Feed Line
Sprayed Weirs
Effluent Water Clear

Date/Day: 6/28/20 Location:

MM 85° P-Cloudy 0" Rain 1800

Calibrations

		slope
4.01	26.3	-55.21
7.00	26.3	
10.01	26.4	

FLOW

MR 39593588 Q 62056

Tests

	pH	Temp	DO
EFF	6.77	24.3	4.34

Notes

Clarifier - Clear top water

Influent - cleaned barscreen

Aeration - large clearing near side

Effluent - Clear

Chemical Feed - Replaced barrel

Date/Day: 6/29/20 Location:

MM 88°F P-Cloudy 0" Rain 1830

Calibrations

4.01	23.3	-52.73
7.00	23.7	
10.01	23.4	

FLOW

MR 39695168 Q 51580

tests

	pH	Temp	D.O
INF	7.23	24.2	
A.O	6.15	25.4	0.57
EFF	6.59	26.4	6.19

Notes

Clarifier - top water clear

Influent - Cleared barscreen

Aeration - large streamers both sides

Effluent - clear

Chemical Feed - ✓ 45

Dat

Date/Day: 6/30/20 Location: Lyons

Shawn 91° Sunny

FM 3967 9075 @ 33907

Calibration

4	4.00	@ 24.0	-52.75
7	7.00	@ 24.0	
10	10.01	@ 24.2	

Test

	pH	Test	DO
Eff	6.97	26.9	7.04
UV	6.10		

notes:

visability @ 10 ft

aeration good color - foamy

Cleaned influent catch

effluent Clear

collected samples 0900 MM

Date/Day: 7/1/20 Location:

MM 85° Clouds. 0.2" Rain

4.01	20.7	-54.84
7.00	20.3	
10.01	20.7	

Test

pH	Temp	D.O
6.63	25.9	4.34

Effluent - Clear

Clarifier looks to be operating normally

Aeration has large streams on both sides

Date/Day: 7/2/20 Location:

CT 1215 84° Partly cloudy Rain .2in

Calibrations

ph	Temp
4.01	@ 23.3
7.00	@ 21.0
10.01	@ 22.2

Spc 57.91

MR 39774920 Q - 41652

Tests

	ph	DO	Temp
Inf	7.45		23.7
Aer	6.30	2.91	25.2
Eff	6.64	8.657	25.7

UVT .1 UVR 6358

Notes-

Inf- Cleaned/Sprayed bar screen Emptied trash

Aer - foamy w/ large openings on both ends

Eff - clear water - cleaned UV's

Clarifier- clear water- Some solids. Skimmed top 10" Blanket Wasted 10 min

Chemicals - PAC Running well - More than 50% full.

Date/Day: 7/3/20 Location:

CT 1038

Calibrations

ph	Temp
4.01	25.1
7.00	25.2
10.01	25.2

Spc 57.52

MR 39815216 Q 40296

Tests

	ph	DO	Temp
Inf	6.04		25.2
Aer	6.37	1.55	25.2
Eff	6.74	6.51	25.4

UVT 0.2 UVR 6374

Notes:

Inf - Cleaned/Sprayed bar Screens

Aer - foamy w/ large openings on both ends

Eff - Clear water

Clarifier - clear on top - Skimmed top mat 8" blanket. Wasted 15 min

Chemicals - PAC above 50% full flowing good.

Date/Day: 7/4/20 Location:

CT 1630 82° Sunny O.n Rch

Calibrations

ph	Temp	slope
4.01	25.6	
7.00	25.5	-57.36
10.01	25.6	

MR 39858829 Q 43616

Tests Weekend

	ph	Temp	D.O
Eff-	6.56	25.7	6.44

UVI 6.1 UVRT 6404

Notes

Inf- Cleaned / Sprayed Bar Screen

Aer- Foamy W/ large openings on both sides

Eff- Clear Water

Clarifier- Clear Water, Some solids on top. Sprayed & Skimmed. 8" Blanket

PAC - Running well Tote above 50% full

Date/Day: 7/5/20 Location:

CT 0945 81° Sunny O.n Rch

Calibrations

ph	Temp	Slope
4.01	23.8	
7.00	23.5	57.15
10.01	23.8	

MR 39901632 Q 42803

Tests Weekend

	ph	Temp	D.O
Eff-	6.52	25.9	6.41

UVI 6.2 UVRT 6427

Notes

Inf- Cleaned / Sprayed Bar Screen

Aer- Foamy W/ large openings on both sides. Added Bag of Soda Ash

Eff- Clear Water

Clarifier - Clear Water. Some Solids on top. Sprayed & Skimmed. 8" Blanket

PAC - Running well. New Tote opened.

Date/Day: 7/6/20 Location: 011 RAM

MM 90°F sunny 1700

Calibration 0930
4.01 23.3
7.00 23.3
10.01 23.2

MR 39967480 Q 65848

tests	Ph	Temp	D.O
INF	6.63	27.0	
SBR	6.48	28.5	2.81
Eff	6.57	27.4	7.75

Notes

Clarifier - fine

Influent - Cleared barscreen

Aeration - large Openings

Effluent - taken from outspout clear

Chem feed - ≈40 Gal

Date/Day: 7/7/20 Location: 4.2"

MM 82°F Cloudy 1315

Calibrations 1320
4.01 24.2 -54.71
7.00 24.4
10.01 24.5

MR 40040346 Q 72886

tests

	Ph	Temp	D.O.
INF	6.08	26.3	
Aé	6.18	25.9	7.04
Eff	6.64	27.1	7.87

Notes

Clarifier - blanket is high

Influent - Cleared barscreen

Aeration - large Openings

Effluent - Clear

Chem feed - 10%, will replace tomorrow

Date/Day: 7/8/20 Location:

CT 1130 88° Partly Cloudy 0in Rain

Calibrations

pH	Temp
4.01	24.6
7.00	24.8
10.01	24.7

Slope 57.22

MR 40112204 Q 71838

Tests

	pH	Temp	D.O
Inf	7.31	25.5	
Aer	6.54	25.9	2.46
Eff	7.34	25.8	7.00

UVI 0.2 UVRT 6501

Notes:

Inf - Cleaned / Sprayed bar screen emptied trash

Aer - large openings on near SVBO - 870

Eff Clear Water. Blanket 10". Skim and Sprayed Solids off top

Chemicals - PAC running well

Date/Day: 7/9/20 Location:

CT 2340 84° Sunny Rain 0.in

Calibrations

PH	Temp
4.01	26.5
7.00	25.9
10.01	26.2

Slope 57.07

MR 40169408 Q 57204

Tests

	pH	Temp	DO
Inf	6.51	27.5	
Aer	6.42	25.8	2.56
Eff	6.99	26.2	6.62
	UVI 0.2	UVRT	6526

Notes: Cleaned / Sprayed Bar Screen
Large openings on both ends of Aerators
Effluent water is clear
Sprayed clarifier & Skimmer loads scraped
PAC running good above 50% in drum

* HYDROTECH TOOK (2) LOADS SLUDGE FROM TOWER
** GENERATOR SELF-TEST @ 12PM

Date/Day: 7/10/20 Location:

CT 1005 79° Cloudy 0.in Rain

Calibrations

pH	Temp	
4.01	25.1	
7.00	25.0	Slope 56.96
10.01	25.0	

MR-40216321 Q 46913

Tests

	Ph	Temp	DO
Inf	6.33	25.4	
Aer	6.42	26.5	2.92
Eff	6.86	26.3	6.52

UVI 0.2 UVRT 6548

Notes:

Inf- Cleaned Bar Screen

Aer- Mostly open w/ some foam.

Eff- Clear water. Cleaned UV's

Clarifier- Skimmed top looks clear. Blanket 10"

Chemicals- PAC running good drum 50% full

Date/Day: 7/11/20 Location:

CT 0915 79° Partly Cloudy 0.in Rain

Calibrations

pH	Temp	
4.01	25.3	
7.00	25.4	Slope 58.23
10.01	25.4	

MR-40269792 Q- 53471

Tests

	Ph	Temp	D.O
Eff	6.62	26.3	6.59

UVI 0.2 UVRT 6570

Notes:

Inf- Cleaned Bar Screen

Aer- Mostly open w/ some foam on both sides.

Eff- Clear water.

Clarifier- Sprayed / Skimmed top looks clear Blanket 10"

Chemicals- PAC running good. New drum in use.

Date/Day: 7/12/20 Location: O'Ryan

MR 88°F sunny

Calibrations

4.01	24.2	-53.82
7.00	24.5	
10.01	24.6	

MR 4034208 Q71416

tests

	ph	temp	D.O
	6.74	27.2	6.89

Clarifier - good

Influent - cleared bar screen

Aeration - near side full roll, far side bar openings

Effluent - clear

Chem Feed - ≈ 40 gal

Date/Day: 7/13/20 Location:

MR 80°F sunny O'Ryan

Calibrations

4.01	21.7	-53.27
7.00	21.7	
10.01	21.9	

MR 4038480 Q41472

tests

	pH	Temp	D.O
INF	5.95	24.4	
Ae	6.44	26.4	6.34
EFF	6.84	27.2	6.11

clarifier - looks good

Influent - cleared bar screen

Aeration - both sides very open

Effluent - clear

Chem ≈ 30

Date/Day: 7/14/20 Location:

MR 84°F Cloudy Off Run 1920

Calibrations

4.01 22.1 -54.27
7.00 22.5
10.01 22.9

MR40480760 Q68084

test	pH	temp	D.O
Eff	6.98	27.2	7.94

Notes

INF - Good

Aeration - large openings

Eff - Clear

Date/Day: 7/15/20 Location:

CT 10.15 84° Sunny On Run

Calibrations

pH	Temp	
4.01	22.7	
7.00	22.7	Slope 57.17
10.01	22.7	

MR-40480700 Q-29936

Tests

	pH	Temp	D.O
Inf	7.85	25.1	
Aer	7.01	26.2	2.27
Eff	7.23	26.3	6.52

Notes

Inf- Cleaned / sprayed bar screen. took out trash

Aeration- large openings on both sides

Eff- clear water

Chemicals- New drum opened. PAC running well

Date/Day: 7/16/20 Location:

CT 1245 82° Mostly Cloudy 0in Rain

Calibrations

pH	Temp
4.01	24.2
7.00	24.3
10.01	24.4

Slope 57.76

MR -40535728 Q- 55028

Tests

	pH	Temp	D.O
Inf	7.30	25.7	
Aer	6.97	25.4	3.42
Eff	7.16	26.7	5.85

Notes

Inf- Cleaned & sprayed bar screen

Aer- looks good, large openings on both sides

Clarifier- Mostly clear water w/ some grease on top- Sprayed & skimmed. 8" blanket.

Eff- clear water.

Chemicals- PAC running well. Drum over 50% full

Date/Day: 7/17/20 Location:

CT 1100 86° Partly Cloudy 0in Rain

Calibrations

pH	Temp
4.01	23.0
7.00	22.9
10.01	23.0

Slope - 57.81

MR- ~~405 35 728~~ CT 40582088 Q- ~~55028~~ CT 46360

Tests

	pH	Temp	D.O.
Inf	~~7.30~~ CT 6.25	~~25.7~~ CT 26.2	
Aer	~~6.97~~ CT 6.27	~~25.4~~ CT 26.6	~~3.42~~ CT 1.97
Eff	7.61	27.0	5.85

Notes

Influent- Cleaned & sprayed bar screen

Aeration- looks good, large openings on both ends

Clarifier- Mostly clear, some grease on top. Sprayed & skimmed & blanket. Wasted 20 mins

Effluent- Clear water.

Chemicals- PAC running well. 30% full

Date/Day: 7/18/20 Location:

CT 0940 84° Sunny 0 in Rain

Calibrations

ph	Temp	
4.01	26.5	
7.00	26.2	-Slope- 57.75
10.01	26.5	

MR - 40628244 Q - 43156

Tests

	pH	Temp	DO
Effluent -	6.74	27.3	5.89

Notes weekend Operations

Influent - Cleaned/sprayed bar screen. Emptied trash

Aeration - Added 1 bag Soda Ash. Large openings on both Sides.

Clarifier - Top mostly clear. Sprayed & Skimmed. Blankets

Effluent - Clear Water, Cleaned UVs

Date/Day: 7/19/20 Location:

MM 92°F Overcast

Calibrations

4.01	27.2	-56.28
7.00	27.3	
10.01	27.2	

MR 40490440 Q 62191

tests

Eff 4.83 28.2 4.17

Notes: All Systems functioning

Date/Day: 7/20/20 Location:

MM 79°F SUNNY 0.2" RAIN 0814

Calibrations

4.01 25.2 -56.71
7.00 25.6
10.01 25.2

MR 40725800 Q 35360

tests

INF 6.68 27.4
AE 6.56 27.3 3.81
EFF 6.78 27.4 6.71

Notes

Clarifier - scraped weirs, scooped out algae, water is clear

Influent - cleaned bar screen

Aeration - large openings on both sides

Effluent - clear

Chemfeed - ~ 30 Gal

Date/Day: 7/21/20 Location:

MM 93°F SUNNY 0" Rain 1815

4.01 27.1 -55.84
7.00 27.3
10.01 27.1

MR 40777 G300 Q 50500

tests

EFF 6.92 28.3 7.24

Notes

Cleaned bar screen

Cleaned algae from lower Eff box

Effluent clear

Aeration - has large openings

Date/Day: 7/22/20 Location:

CT 09 15 81° Partly Cloudy 0 in Rain

Calibrations

4.01	27.0	
7.00	26.7	-57.55
10.01	27.2	

MR 40838224 Q 61924

Tests

Inf	6.35	25.9	
Aer	6.91	27.7	1.38
Eff	7.20	27.3	5.86

Notes

Inf- Cleared Bar Screen

Aer- large openings on both sides SV 30 - 860

Eff- Clear Water

Clarifier- Some Solids on top. Skimmed/sprayed Wasted 20 minutes

Chemicals - PAC flowing good. over 50% full

Date/Day: 7/23/20 Location:

CT 1280 90° Mostly Sunny .6 in Rain

Calibrations

4.01	25.9	
7.00	26.4	Slope -57.28
10.01	26.1	

MR-40895632 Q-57408

Tests

	pH	Temp	DO
Inf	5.57	26.9	
Aer	6.42	27.5	2.41
Eff	6.92	27.8	6.00

Notes

Inf- cleaned bar Screen. Emptied trash

Aer- large openings on both sides. SV 30 - 860 / SV 60 - 780

Eff- Clear water.

Clarifier - Some solids/grease on top. Sprayed/Scraped drum, Scraped weirs, sprayed & skimmed top water.

Chemicals - PAC flowing well, Change drum tomorrow.

Date/Day: 7/24/20 Location:

CT 0920 73° Mostly Cloudy 0.7in Rain

Calibrations

4.01	24.7	
7.00	24.5	Slope - 57.35
10.01	24.7	

MR-40937864 Q-42232

Tests

	PH	Temp	DO
Inf -	8.00	25.7	
Aer -	7.26	27.3	2.21
Eff -	7.32	27.4	6.07

Notes-

Inf- Cleared bar Screen

Aeration- large openings on both sides. Added a bag of Soda Ash. SV30-880

Effluent Clear water, Cleaned UVS

Clarifier- Some Grease, Sprayed & Skimmed, wasted 15 minutes.

Chemicals - PAC flowing well, started new drum.

Date/Day: 7/25/20 Location:

CT 69 20 81° Partly Cloudy 0in Rain

Calibrations

401.	25.5	
7.00	25.4	Slope 57.12
10.01	25.4	

MR-40990920 Q-53056

Tests

	PH	Temp	DO
Eff	7.41	27.3	5.57

Notes

Performed Weekend ops

Inf - Cleaned Bar Screen.

Aeration- large openings on both ends

Effluent- Clear water

Clarifier - Some grease/solids. Sprayed & Skimmed top. Scraped weirs. Blanket 8". Waste 10 min

Chemicals - PAC flowing well. Drum over 50% full

Date/Day: 7/27/20 Location:

MR 88°F sunny 0.11" rain

calibrations 0830

4.01	23.9	
7.00	23.7	52.71
10.01	23.9	

MR 4108232B Q24448

tests

	ph	temp	D.O
Inf	6.04	26.4	
Ae	4.41	27.4	1.41
Eff	6.79	27.8	5.94

Notes

Clarifier - looks fine

Aeration - Good!

Influent - Cleaned bar screen

Effluent - Clear

Chem feed ~ 55 gal

Date/Day: 7/28/20 Location:

MM 84°F sunny 0.11" rain

calibrations

4.01	24.2	-54.61
7.00	24.2	
10.01	24.5	

MR 4114564 Q43288

tests

Eff	6.82	27.6	6.27

Clarifier - looks good

Aeration - good

Influent - cleaned bar screen

Effluent - clear

Chem feed - ~40 gal

Collected samples

Date/Day: 7/29/20 Location:

CT 0930 84° Mostly Sunny 0.2in Rain

Calibrations

4.01	25.3	
7.00	25.3	slope - 56.90
10.01	25.4	

MR-41177476 Q-31860

Tests

	ph	Temp	DO
~~Inf~~	6.90	27.0	
~~Aer~~	6.91	27.6	3.09
~~Eff~~	6.90	27.5	5.94

Notes-

Clarifier - Skimmed / sprayed. ~~Adde~~ Clz to weirs for Algae. Wasted 60 min. Blanket 8"

Aeration - large openings

~~Inf~~ Cleaned bar screen

~~Eff~~ clear water.

Chemicals - PAC Flowing well, 30% full

Date/Day: Location:

7/30/20

PD 80F 2:20

MR 41229176 Q 51700

test

	ph	temp	DO	UV
IW	7.25	26.2		
Aer	6.89	28.2	6.20	
EFF	7.23	28.7	6.70	
			0.4	7031

NOTES - Clear Water

Clean INFluent catch

Clean Bar Screen

Cleaned Weirs

Calibration

4 4.00

7 7.00

10 10.01

Date/Day: 7/31/20 Location:

CT 1115 75° Cloudy .5in Rain

Calibrations

4.01 24.5
7.00 24.5 Slope - 56.22
10.01 24.6

MR-41276840 Q-41664

Tests

	pH	Temp	DO
Inf	7.54	26.0	
Aer	6.91	27.7	2.76
~~Eff~~	6.86	28.3	6.59

Notes

Inf- Cleares bar Screen

Aer- large openings

~~Eff~~- Clear water, Cleares UV's

Clarifier- Skimmed/sprayed top water. Scraped Weirs. Blanket 8" ~~Cleares UV's~~

Chemicals- PAC flowing/ over 50% full

Date/Day: 8/1/20 Location:

1030 CT 81° mostly Cloudy 0.2in Rain

Calibrations

4.01 23.8
7.00 23.9 Slope - 56.37
10.01 23.9

MR-41326336 Q-41496

Tests

	pH	Temp	DO
Eff-	7.38	27.6	5.94

Notes -

Inf- Cleares Bar Screen

Aer- large openings

~~Eff~~- Clear water

Clarifier- Skimmed/sprayed Top water. Blanket 10" wasted is min

Chemicals- PAC flowing well. Over 50% full

Date/Day: 8/2/20 Location:

MM 82°F cloudy 1.6" Rain 1116

Calibrations

4.01 25.2 -53.81
7.00 25.4
10.01 25.4

Flow 4 1367860 @ 47524

tests

	pH	Temp	D.O
EFF	6.94	28.3	5.11

Notes

Cleaned bar screen

Strained clarifier

Effluent is clear

Aeration looking good

Replaced Chem Feed

Date/Day: 8/3/20 Location:

MM 80°F Rain 1" Rain 1700

Calibrations 1130

4.01 27.3 -51.44
7.00 27.3
10.01 27.1

MR 4143724 @ 49384

tests

	pH	Temp	D.O
Inf	5.37	26.4	
Ae	6.31	26.8	1.47
Eff	6.58	27.7	6.03

Notes

Effluent is clear

Chem feed is Approx 44 gal

Thunderstorm prevented wasting and SV30 one

will waste 1Hr tomorrow and perform SV30

Date/Day: 8/6/20 Location:

CT 1320 82° Partly Cloudy 0.2in Rain

Calibrations

4.01	26.4	
7.00	26.5	Slope 57.77
10.01	26.3	

MR-41717120 Q ~~50660~~ 71060

Tests

Inf	7.49	26.2	
Aer	6.71	26.8	3.60
Eff	7.12	26.9	7.12

Notes

Inf- Cleaned bar screen, emptied trash

Aer- large openings

Clarifier- grease on top. Skimmed, Scraped walls

Eff- Clear water - cleaned 4 CVJs

Date/Day: 8/7/20 Location:

CT 1000 79° Partly Cloudy 0.2in Rain

Calibrations

4.01	24.[illegible]	
7.00	24.5	Slope- 57.50
10.01	24.2	

MR-41770352 Q- 53232

Tests

Inf	5.77	26.1	
Aer	6.29	26.6	4.70
Eff	6.80	26.7	7.00

Notes

Inf- Cleaned bar screen

Aer- large openings, added bag of Soda Ash

Clarifier- Film on top, Sprayed and Skimmed.

Eff- Clear water

Chemicals- PAC Flowing drum 25% full, Change tomorrow

Date/Day: 8/18/20 Location:

CT 1000 75° Cloudy .4 in Rain

Calibrations

4.01	23.4
7.00	23.5 slope = 57.70
10.01	23.6

MR - 41874616 Q 104264

Tests

	pH	Temp	DO
Eff	7.53	26.4	6.93

Notes

Inf - Cleaned bar screen

Aeration - large openings, looks good

Eff - clear water

Chemicals - PAC Flowing, new drum in use

Date/Day: 8/19/20 Location:

MM 81°F sunny 0" Rain 9000

Calibrations 0903

pH	temp	slope
4.01	22.5	-51.72
7.00	22.4	
10.01	22.5	

MR 419 58412 Q 83796

Tests

	pH	Temp	D.O
Eff	6.78	26.3	7.42

Notes

Clarifier - sprayed off sludge

Eff - clear

Inf - Cleaned bar screen

Aeration - 100 hrs final

Chem feed - ≈45 gal

Date/Day: 8/10/20 Location: _____

MM 89°F Sunny Oil Rain

4.01 24.7 -55.71
7.00 24.7
10.01 24.6

MR 42057156 Q 98744

6.84 26.8 7.53

EFF - clear

INF - cleaned bars clear

SBR - looks fine

Date/Day: _____ Location: _____

PD 85°F 3:00

Final Flow 42107296

Flow 60137

Calibration
4. 4.00
7. 7.00
10. 10.00

	PH	Temp	DO	UV
		Test		
IN	7.30	26.9		
AER	7.00	27.4	5.03	
EFF	7.34	27.5	8.00	

0.5 7318

NOTES sprayed Clarifier
Cleaned Influent Catch

Date/Day: 8/12/20 Location:

CT 1200 90° Partly Cloudy 0 in Rain

Calibrations

4.01	26.2	
7.00	26.3	slope - 57.64
10.01	26.3	

MR - 42164028 Q-56732

Tests

	pH	Temp	DO
Inf	7.31	26.2	
Aer	6.11	27.0	4.76
Eff	6.67	27.4	6.86

Notes -

- Clarifier covered in foam, wiers full of Algae and foam, Skimmer clarifier & Scum wiers.

- Cleaned bar Screen.

- Aeration more foam than usual, Scrapings.

- Chemicals, PAC flowing drum above 75% full

Date/Day: 8/13/20 Location:

CT 0845 75° Thunderstorms .3 in Rain

Calibrations

4.01	24.4	
7.00	24.4	slope - 57.05
10.01	24.3	

MR - 42219332 Q - 55304

Tests

Inf -	7.21	26.0	
Aer -	6.57	26.4	4.95
Eff -	6.80	26.8	6.83

Notes -

Heavy rain & Thunderstorms

Clarifier - Cleaned/Skimmed

Aeration - Foam with large openings - SV30 65%

Inf - Cleaned bar Screen, emptied trash.

Eff clear water - Blanket 10"

Date/Day: 8/14/20 Location:

CT 1100 81° Mostly Cloudy .2in Rain

Calibrations

4.00 25.4
7.00 25.6 Slope -5743
10.01 25.3

MR - ~~47219332~~ 47336032 Q - 116700

Tests

	Ph	Temp	DO
Inf	6.84	25.3	
Aer	6.72	26.4	3.92
Eff	6.88	26.6	7.10

Notes-

Inf- Cleaned bar screen

Aer- Foam w/ large opening on right side

Eff- Clear water cleaned UV's

Chemicals- PAC Flowing, new drum pump leaking. Notified Rich.

Clarifier- Skimmed & Sprayed foam from the top.

Date/Day: 8/15/20 Location:

CT 0945 73° Showers 0.2in Rain

Calibrations

4.01 21.6
7.00 21.6 Slp - 57.05
10.01 21.6

MR - 47405948 Q - 69916

Test

	Ph	Temp	DO
Eff -	6.63	26.3	6.88

Notes-

Inf- Cleaned bar screen

Aer- Foam with large opening on right side

Eff- Clear water

Clarifier- foam on top, Skimmed and Sprayed top water. Scraped weirs.

Chemicals- PAC Flowing Slowly, leak on pump

Date/Day: 10/3/20 Location:

CT 0850 59° Sunny Oh Rea

Calibrations

4.01	17.8	
7.00	17.7	-54.56
10.01	17.8	

MR- 45638540 Q- 63816

Test

Eff 7.37 223 6.89

Notes

Inf- cleared bar screen

Air- Small opening near return. Per Singh opened first 5 air valves near return fully & every valve after is a ½

Clarifier - Crappy!! Solid 1 inch thick sludge over top & in weirs Scooped, sprayed & skimmed.

Eff- Cloudy water.

Running PAC 24/7 no timer per Greg. PAC ↑50% full

Date/Day: 10/4/20 Location:

CT 0845 57° Sunny Oh Rea

4.01	16.7	
7.00	16.7	-55.12
10.01	16.8	

MR- 4569876 Q- 61336

Test

Eff- 7.42 223 7.01

Notes

Inf- Cleared bar screen

Air- Small opening near return

Clarifier - Bad! Slightly better than yesterday. thick sludge on top, drum mushroomed. Scooped, skimmed sprayed clarifier. Used net to scoop solids from the drum.

Eff- Still cloudy but slightly better

PAC running no timer, new drum of PAC

Date/Day: 10/5/20 Location: WWTP CYons

1540 66° Sun

BB

MR- 45781368

Cal@1110
4.00 - 21.3
7.01 - 21.5
10.09 - 21.6
-53.79

tests

	PH	DO	temp
Inf	7.38	-	23.4
Aer	5.96	0.23	23.1
Eff	6.71	7.02	23.0

Inf Bar screen Cleaned
Aer Pretty big opening near return
Rich Put Pac in clarifier
Clarifier was really Bad did spraying
and used net for roughly 2 hours looks
good for now
Eff Cloudy
Pac in Middle not in Aer

30 Min. Settle = 550

Date/Day: Location:

10/6/20 MR- 45835548
1445 tests
BB

	PH	DO	temp
Eff	7.02	7.69	22.7

Cal @1400
4.00 - 23.0
7.01 - 23.0
10.05 - 22.9
-58.45

Inf Bar cleaned
Aer bug opening on left hand
side
Clarifier Pretty Caked Spread out
Used net.
Eff Clear
Eff testing only
Added line PM was low

Chris dont focus on clarifier
tommorow ill be here for it.

Date/Day: _____ Location: _____

MM/DW 75°F SUNNY 0" Rain 1255

Calibrations

4.01 15.5 -50.40
7.00 15.7
10.01 15.4

MR 45886112 Q 50564

Tests

	PH	Temp	D.O
INF	7.14	21.9	
AE	6.20	22.6	6.21
EFF	6.54	22.5	7.15

INF- Bar screen cleaned

Aeration- Openings on woods side

EFF- little cloudy

Clarifier- Thick foam, scooped, skimmed, and sprayed

Chem Feed- Started new barrel

Date/Day: 10/8/20 Location: Lyons

(21) 64°F 1100

Final 45945328 59216 Flow
Flow

	PH	Temp	Test DO	UV
			0.7	8707
IN	6.06	20.8		
AER	6.38	22.4	8.91	
EFF	6.71	21.8	7.87	

PH Cal 4.00 20.0 7.00 20.0 10.01 20.0
PH Slope 5661 DO Factory

NOTES Cleaned Bar Screen
Sprayed out Clarifier
Clarifier Thick Foam
Effluent Water Clear
Sprayed out Weirs
Wasted for 10 min

Date/Day: 10/9/20 Location: Lyons

PD

49°F 09:30

Final 4599812 ~~52800~~ 49484 Flow
Flow

Test

	PH	Temp	DO	UV
				0.8 8730
In	7.06	21.0		
Aer	6.92	22.6	9.01	
Eff	7.03	22.6	7.81	

PH Cal 4.00 21.0 7.00 21.0 10.01 21.2
PH Slope 5619 DO Factory

Cleaned Bar Screen
Effluent Water Clear
Clarifier Water little Foamy
Sprayed out Weirs

G 1315 - Sprayed Clarifer & drum. Skimmer 4 mins of solids from the drum, ~~ft~~
SV30 - 590
60 - 480
Q.1 Floc on top

Date/Day: 10/10/20 Location: Lyons

PD

72°F 1600

Final Flow
46068380

Flow
70260

Test

	PH	Temp	DO	UV
				0.8 8760
In	6.99	23.0		
Aer	7.03	23.3	8.10	
Eff	7.11	22.9	7.63	

PH Cal 4.00 19.7 7.00 19.7 10.01 20.1
PH Slope 5635 DO Factory

Cleaned Bar screen
sprayed out Clarifier
Clarifier Little Foamy
sprayed out Weirs
Sprayed Clarifier Barrel

SV30
700

Date/Day: 10/11/20 Location:

MM 70°F Rainy 0.1" Rain 1505

Calibrations 0930

4.01 14.8 -51.27
7.00 15.3
10.01 15.3

Tests

	pH	Temp	D.O
EFF	6.85	22.9	8.07

ENF- Cleaned barscreen

Aer- Opening near return

EFF- Cloudy

Clarifier - little foam on top upon arrival

Chem Feed - low, replace tomorrow

Date/Day: 10/12/20 Location:

MM 63°F Rain 1.2" Rain 1830

Calibrations 1750

4.01 15.2 -52.48
7.00 15.3
10.01 15.5

MR 46227160 Q102752

Tests

ENF - 6.81 22.8

Aer 6.91 25.2 7.63

EFF 6.73 21.7 7.48

ENF- Cleaned barscreen

Aer - Opening near return

EFF- Very cloudy

Clarifier - Sprayed

Date/Day: 10/13/20 Location:

MM 68°F P-cloudy 0" Rain 1600

Calibrations

4.01 16.4 -52.17 -7.52
7.00 16.5
10.01 16.6

MR 46308200
Q 81040

Tests

INF - 5.34 21.4
Aer - 5.68 22.2 1.23
Eff - 6.54 22.4 6.75

INF - cleaned barscreen

Aer - Opening near return, wasted 20mn

Clarifier - sprayed, scooped, and scraped. Blanket high

Effluent - cloudy, sampled this morning

Clarifier and Effluent looked Fine in Morning not sure why so cloudy this Afternoon

Date/Day: _____ Location: _____

10/14/20 12° Sun MR-46375948
1430 Q-67748
BB

tests

		PH	DO	temp
Cal 1330	Inf	7.27		22.1
4.00-249	Aer	6.05	0.73	22.8
7.00-251	Eff	6.76	7.77	22.2
10.00-249				
-5258				

Cleaned Influent bar
Sprayed clarifier
Pac running
Aer opening @ return
Eff looked good
SV30: 450

10/13/20 MR-46440140 Q-64192
1340
BB

	PH	DO	temp	
Inf	7.23		22.4	0.8 8378
Aer	6.21	0.19	22.4	
Eff	6.79	8.05	22.1	

Cal 0945
4.00-214
7.01-214
10.06-215
-5283

Cleaned influent bar screen
Sprayed Clarifier / looked good today
Aer not much opening
Eff clear
SV30: 550

Date/Day: 10/16/20 Location: Lyons

60F
Rainy

17:15

Final Flow
46517620

Flow
7.7480

Test

	PH	Temp	DO	UV
				0.8 8803
INF	7.18	23.0		
AER	7.32	22.9	1.35	
EFF	6.69	22.5	7.86	

PH Cal 4.00 1.98 7.02 1.98 10.01 2.01
PH Slope 56.18 DO factory

Cleaned Bar screen
Clarifier foamy
Effluent Water clear
Sprayed Clarifier

SV30
500

Date/Day: 19/17/20 Location: Lyons

60°F
Sunny

16:09

Final Flow
46584460

Flow
66840

Test	PH	Temp	DO	UV
				08 8927
Inf	7.32	22.7		
Aer	7.41	22.5	9.13	
Eff	7.18	22.1	8.34	

PH 4.02 18.7 7.02 18.7 10.04 19.1
Slope 5591 DO Factory

SV30
550

Cleaned Bar Screen
Sprayed Clarifier
Sprayed Weirs
Effluent Water Clear
Sprayed Solids off
Clarifier Water Cloudy

Date/Day: 10/18/ Location: Lyons

64F
Sunny

1545

Final Flow
46648908

Flow
64440

Test	PH	Temp	DO	UV
				06 8951
Inf	7.27	21.5		
Aer	7.31	22.0	9.26	
Eff	7.29	21.0	8.41	

PH 4.02 18.0 7.00 18.0 10.02 18.3
Slope 5631 DO factory

SV30
550

Cleaned Bar Screen
sprayed Clarifier
Effluent Clear
Sprayed Clarifier
Again
Water Clear
Sprayed Weirs

Date/Day: 10/19/20 Location:

MM 72°F Cloudy 0"Rain 1705

Calibration 0915

4.01	13.5	-53.74
7.00	13.3	
10.01	13.2	

MR 47 19832 Q 70932

Tests

INF	4.49	20.8	
AC	5.33	21.4	9.31
EFF	6.50	22.2	8.71

INF- Cleaned bar screen

Ac- light, opening near return

Clarifier - Scraped, Scooped

EFF- clear

Date/Day: 10/20/20 Location:

MM 70°F Sunny 0"Rain 1750

Calibrations 1400

4.01	15.2	-53.41
7.00	15.2	
10.01	15.3	

MR 47 83700 Q 63868

Tests

INF	5.37	21.2	
Ac	5.78	21.4	8.78
EFF	6.71	23.4	7.16

Inf - Cleaned bar screen

Ac - light, open near return

clarifier - Scraped

EFF- Clear

Date/Day: 10/21/20 Location: Lyons

BB 72° sun 0" Rain 1530

Cal @ 1530
4.01 -27.4
6.99 - 27.0
9.99 - 27.6
-51.72
MR- 46839472 Q- 55772

tests

	PH	DO	temp	UV	
Inf	7.72	—	24.4°	0.5	9025
Aer	6.34	0.59	22.6		
eff	6.61	7.93	22.4		

Inf - Cleaned bar screen

Aer - Open near return

Clarifier - Sprayed

eff. clear

Pac Running

Date/Day: 10/22/20 Location:

PD 69 F 16:45

Final Flow
46899568

Flow
60.096

Test

	PH	Temp	DO	UV	
INF	7.23	22.9	-		
AER	6.57	23.1	8.32		
EFF	6.81	22.9	7.10		

PH 4.00 179 7.01 179 10.01 180
Slope 5510 DO Factory

Cleaned Bar Screen
Sprayed Clarifier
Effluent Water Clear
Sprayed out Weirs

5430
500

Date/Day: 10/23/20 Location: Lyons

PM

72°F 1630

Final Flow
46955204

Flow
55638

Test

	PH	Temp	DO	UV 254
INF	7.31	21.3		9072
AER	7.03	23.9	8.11	
EFF	6.93	22.1	7.18	
Cal	4.00 193	7.02 192	10.01 193	

SV30
600

Sprayed Clarifier
Sprayed Weirs
Cleaned Bar Screen
Effluent Water Clear

Date/Day: 10/24/20 Location: Lyons

PM

71°F 16:00

Final Flow
47011112

Flow
55908

Test

	PH	Temp	DO	UV 254
INF	7.17	22.0		9095
AER	7.21	22.6	8.31	
EFF	6.96	23.1	8.13	
PH	4.01 17.9	7.01 17.9	10.02 18.1	

SV30
500

Pac Running
Clarifier Look terrible
sprayed out Clarifier
Cleaned Bar Screen
Sprayed Weirs
Effluent Water Clear
Sprayed Clarifier Barrel

Date/Day: 10/25/20 Location: _____

MM 63°F Rain 0.6" Rain 1250

calibrations
4.01 14.7 -53.78
7.01 14.7
10.03 14.5

MR 47071234 Q 60124

Tests

EFF 6.87 21.7 7.41

INF - cleaned bar screen

Ac - no ~~Apparent~~ openings

EFF - clear

clarifier - scraped

Date/Day: 10/26/20 Location: _____

MM 54°F Cloudy 0.2" Rain 1105

calibrations
4.01 14.3 -52.69
7.01 14.5
10.05 14.5

MR 47135044 Q 63808

Tests

	pH	Temp	D.O
INF	6.39	22.4	
AC	6.53	22.8	6.78
EFF	6.41	19.8	7.58

INF - cleaned bar screen

Ac - openings on both sides

EFF - clear

clarifier - scooped, scraped

Date/Day: _____ Location: _____

MM 70°F Cloudy Off Rain 1555

Calibrations

4.01 15.3 -53.47
7.03 15.3
10.05 15.1

MR 47212700 Q77954

test

EFF- 6.55 22.0 6.93

IdF - cleaned bar screen

Ae - openings on both sides

EFF - cloudy

Clarifier - secured / cleaned for ≈ 3 hrs

Chem feed - Replaced

Date/Day: 10/28/20 Location: _____

BB 68° Cloudy 1430

Calibrations
4.00 - 23.11
7.00 - 23.7
10.05 - 23.2
-52.31

MR - 47271216 Q - 58516

test

	PH	DO	temp	W	
Inf	7.25	—	21.6	0.4	9191
Aer	6.18	0.27	21.7		
eff	6.68	8.22	21.8		

Inf Bar screen cleaned

Aer - Only open rear influent

eff - Cloudy

Clarifier - Cleaned and secured

Pac Running

SV30 = 650

Date/Day: 10/29/20 Location: Maryland

PM

60°F
Rainy

16:30

Final Flow
47373836

Flow
102620

	Test				
	PH	Temp	DO	UV	
				0	9217
INF	6.93	22.3			
ACL	7.05	22.9	3.18		
EFF	6.57	22.1	7.11		

PH 4.02 19.3 7.02 19.3
10.01 19.4 Slope 5311

5430
650

Notes Cleaned Bar Screen
sprayed out Weirs
Pac Running
Clarifier terrible

Date/Day: 10/30/20 Location: Lyons

PM

62°F

16:45

Final Flow
47507556

Flow
133720

	Test				
	PH	Temp	DO	UV	
				0.6	9241
INF	7.00	23.1			
ACL	7.26	22.1	6.12		
EFF	7.16	21.9	7.23		

PH 4.00 20.3 7.00 20.3 10.01 21.0
Slope 5419

Notes Clarifier terrible
sprayed Clarifier
Cleaned Bar Screen
Clarifier Thick Sludge

Date/Day: 10/31/20 Location: P Lyons

PD

67°F

Final Flow
47597148

Flow.
~~133720~~
89592

	Test	pH	Temp	DO	UV
				0.7	9263
INF		7.20	23.4		
AER		7.26	22.9	6.72	
EFF		7.09	20.0	8.79	
PH	4.00	19.6	7.00	19.6	
	10.02	19.7	Slope	5572	

Notes Clarifier terrible
Sprayed Clarifier
Poc empty
Cleaned out Influent
Effluent Water Clear
Sprayed Clarifier
again

Date/Day: 11/1/20 Location:

MM 55°F Sunny 1" Rain 1585

Calibrations 0920

4.01	15.4	-53.19
7.00	15.4	
10.03	15.4	

MR 47701312 Q104164

EFF 6.57 20.1 8.93

INF- Cleaned bar screen

AC- Opening tree side

Clarifier- Scooped

EFF- Clear

Chem Feed - Replace tomorrow

Date/Day: 11/2/20 Location:

MM 48°F Sunny 0" Rain 1315

Calibrations 0925

4.01	15.6	-53.27
7.03	15.4	
10.05	15.4	

MR 47782792 Q 81480

Tests

	pH	Temp	D.O
INF	6.42	19.0	
Ae	6.04	19.5	10.39
EFF	6.52	18.9	9.28

INF- Cleaned bar screen

Ae - SV30 400, Opening on tree side

Clarifier - sprayed, and scooped

EFF- Clear

Chem Feed - Replaced

Date/Day: 11/3/20 Location:

MM 61°F Sunny 0" Rain 1245

Calibrations 1145

pH	Temp	slope
4.01	15.7	-54.12
7.00	16.2	
10.01	15.4	

MR 47852260 Q 69468

Tests

	pH	Temp	D.O
INF	6.38	18.7	—
Ae	6.17	19.4	10.49
EFF	7.11	19.0	10.10

INF- Cleaned bar screen

Ae - openings on both sides, SV30 450

Clarifier - sprayed til clear

EFF - Clear

Chem feed - Fine

Date/Day: 11/4/20 Location:

MM 36°F clear 0" Rain 0645

Calibrations 0615

4.00 16.3 -53.61
7.03 16.1
10.14 16.4

MR47904912 Q52652

Tests

INF	~~6.38~~	6.63	18.4	
Ae		6.38	19.2	11.14
EFF		7.04	18.9	9.99

INF - Cleaned bar screen

Ae - Openings on both sides

EFF - Clear

Clarifier - Sprayed

Chem Feed - Fine

Date/Day: Location:

11/5/20 68° Cloudy 1440
BB

Cal @ 1400
4.00 -21.3
7.01 -21.1
10.06 -21.1
-51.15

MR - 47997752 Flow 92740

	tests PH	temp	DO		
Inf	7.35	30.4	—	0.7	9375
Aer	6.37	29.8	8.22		
Eff	6.67	19.4	8.35		

Inf - Cleaned Bar screen

Ae - Openings on Both sides

Eff - Clear

Clarifier - Sprayed

Chemfeed - good

Date/Day: 11/6/20 Location: _____

PD

71 F

Final Flow
48064436

Flow
66,684

Test
PH Temp DO UV
0.7 9410

IN 7.15 20.9

ACR 6.83 21.6 9.13

EFF 6.82 19.2 7.96

PH 4.03 19.1
7.03 19.1
10.01 19.2
Slope 5406

NOTES Cleaned out Bar Screen
Clarifier Water Clear
Effluent Water Clear
Aer open on both sides
sprayed Weirs

Date/Day: 11/7/20 Location: _____

PD

75°F 15:32

Final Flow
48126716

Flow
62280

Test
PH Temp DO UV
0.6 9433

Inf 6.83 19.7

ACR 7.05 20.9 8.92

EFF 7.38 20.5 880

PH 4.00 18.6
7.00 18.6
10.02 19.0
Slope 5380

Cleaned Bar Screen
Pac Running
Effluent Water Clear
Sprayed Clarifier
Sprayed Weirs
Aeration open 2 sides
Sprayed Clarifier
Again

Date/Day: 11/8/20 Location:

MM 72°F Sunny 0" Rain 1820

4.01 15.4 -54.17
7.03 15.4
10.05 15.4

MR48185728 Q59012

EFF 7.32 20.5 9.40

INF - Cleaned bar screen

SBR - Opening far side

EFF - clear

Date/Day: 11/9/20 Location:

MM 72°F Sunny 0" Rain 1180

Calibrations
4.00 22.3 -53.30
7.00 22.3
10.08 22.2

MR48237744 Q52016

Tests

	pH	Temp	D.O
INF	5.83	19.6	
AE	6.13	19.9	9.94
EFF	7.09	20.1	9.36

INF - Cleaned bar screen

SBR - Opening far side

EFF - clear

Chem Feed - replaced

Clarifier - Sprayed

Date/Day: 11/10/20 Location:

PM

Final Flow 48300596

70°F Sunny

14:20 Flow 62812

	Test			
	PH	Temp	DO	UV 08 9503
INF	6.05	20.1		
Aer	6.28	20.9	9.17	
Eff	7.21	20.8	9.24	

PH 4.01 18.6
7.02 18.6
10.01 18.8
Slope 5521

Cleaned Bar Screen
Pac Running
Clarifier little Cloudy
Sprayed off Clarifier
Sprayed out Weirs
Effluent Water Clear

Date/Day: 11/11/20 Location:

MM 66°F Rainy 0.1" Rain 1030

Calibrations

4.00 24.7 -52.57
7.00 24.2
10.00 24.8

MR 48349116 Q48520

Tests

	PH	Temp	DO
INF	5.92	19.7	
Ae	6.17	24.5	9.31
Eff	7.32	20.4	9.55

Cleaned bar screen

Sprayed clarifier

Effluent clear

Chem feed low

Date/Day: 11/12/20 Location: Lyons

PD

64°F 16:00

Final Flow 48500912

Flow 151796

Test

	PH	Temp	DO	U4
INF	6.08	20.6		
Aer	6.29	21.8	9.09	
EFF	7.18	20.9	9.36	

PH 4.00 17.9
7.01 17.9
10.01 18.0
Slope 5218

Cleaned Bar screen
Clarifier NOT Clear
Clarifier terrible
Sprayed Clarifier

Date/Day: 11/13/20 Location:

PD

60 F
Sunny

16.30

Final Flow 48608952

Flow 108040

Test

	PH	Temp	DO	U4
INF	6.38	21.3		
Aer	6.81	20.7	8.68	
EFF	7.27	21.7	9.08	

PH 4.00 19.0
7.00 19.0
10.02 19.1

Sprayed Clarifier
Effluent Water good
Cleaned Bar Screen
Sprayed Weirs
Sprayed Clarifier again
Looks Better

Date/Day: 11/14/20 Location: Lyons

PD

Final Flow
48673352

0945
Flow
64400

Test

PH	Temp	DO	UV
~~764~~	~~191~~	~~0~~	07 9596

INF	6.91	19.5	
AER	6.23	19.7	8.16
EFF	7.64	19.1	9.96
PH	4.00	17.9	
	700	17.9	
	10.03	18.0	
Slope	5326		

Notes Cleaned Bar Screen
Clarifer Cloudy
Effluent Water good
sprayed Weirs
sprayed Clarifier

Date/Day: 11/15/20 Location:

MM 64°F Mostly Cloudy 0" Rain 1230

Calibration 1221

4.00	20.5	-51.00
7.01	20.5	
10.05	20.5	

MR 48766116 092,764

Tests

EFF	6.77	19.1	9.75

cleaned bar screen

sprayed clarifier

Effluent clear

Aeration Oper on far side

Date/Day: 11/16/20 Location: _____

MM 54°F Clear 0" Rain 1700

Cal

4.00 15.4 -53.12
7.01 15.7
10.08 15.7

MR 48840844 Q 94728

Tests

EFF 7.04 19.2 9.52

INF - Cleaned barscreen

Ae - Openings on both sides

EFF - Clear

Clarifier - Sprayed

Date/Day: _____ Location: _____

MM 52°F Cloudy 0" Rain 1580

Cal

4.00 15.3 -52.15
7.01 15.3
10.05 15.3

MR 48924816 Q 63,972

INF 5.34 14.8

Ae 4.00 18.7 9.07

EFF 4.87 18.5 9.87

INF - Cleaned barscreen

Ae - Openings on both sides

EFF - clear

Clarifier - sprayed

Date/Day: 11/18/20 Location: Lyons

BB 48° Sun 1345

Cal
4.00 - 16.1
7.02 - 16.1 -52.14
10.12 - 16.3 test

Rail Flw
4898768

	pH	DO	Temp	UV
Inf	7.20		18.2	07 9696
Aer	6.73	10.03	17.8	
Eff	6.79	9.61	18.0	

Inf Screen cleaned

Aer Opening Both Sides

Sprayed Clarity & Weeds

Eff Clear

Date/Day:_____ Location:_____

04-01-20

ARRIVED TO PLANT; COLLECTED / RECORDED READINGS,
PH 7.58 TEMP 17.0 DO 8.15 U.V 0.1/4175
SPRAID CLAIR TO REMOVE SLUDGE ON CLAIR WALLS;
FINAL FLOW: 339947.03

04-02-20

ARRIVED TO PLANT; COLLECTED / RECORDED DAILY SAMPLES
& TEST; PH 7.58 TEMP 17° DO 8.15 U.V 0.1/4175
SPRAID CLAIR DOWN; SECURED

04-03-20

ARRIVED TO PLANT & COLLECTED / RECORDED DAILY SAMPLES
& TEST;
PH 7.94 TEMP 16.3° DO 8.05 U.V 0.1/4193
PREFORMED WASTE OF SLUDGE FOR APPROXIMENTLY
30 MIN; SPRAID CLAIR SLUDGE OFF WALLS;
CLEANED OUT INNFLUENT SCUM CATCH;

04-4-20

FF 341034.19 Q 642
PH 6.11 TEMP 17.1 DO 8.32 U.V 0/4220
SPRAIED CLAIR & CLEANED CATCH

4-5-20

FF 341617.63 Q 583.44
PH 8.45 TEMP 17.0 DO 4.75 UV 0.1/4243
CLEANED INFLUENT CATCH; SPRAIED CLAIRFY

Date/Day:_____ Location:_____

4.6.20

Arrived to Plant, Collected / Recorded Readings
~~INF~~ INF pH 7.93 Temp 16.7
AERA pH 5.98 Temp 17.4 DO 0.48 Blanket 9'
FE pH 6.50 Temp 17.6 DO 9.76
Sprayed Clarifier, Cleaned Barscreen, all OPS
Completed Added 2bags Soda Ash BS/MM

4-7-20

ARRIVED TO PLANT; COLLECTED / RAN / RECORDED READINGS:
INFLUENT; 8.00 TEMP 16.3
AERA PH 7.59 TEMP 17.3 DO 0.96 BED 11'
EFFLUENT PH 7.99 TEMP 17.1 DO 7.30 UV 0.1/4288
SPRAID DOWN CLAIR; RAN SCUM PUMP; CLEAN INFLUENT CATCH

4-8-20

toured plant upon arrival, all ops are ok; Calibrated meter, collect samples, ran/recorded findings

Calibration	4.00	7.03	10.15	-83.27
	15.9	15.8	15.7	

Inf	7.96	16.6		blanket 11'	SV30 900
Ae	6.97	16.9	0.57		
Eff	7.13	17.9	7.38	UV 0.1	4313

FF 343586.53 Q 633.62

Sprayed Down clair, clean influent catch, clean barscreen

Date/Day:_____ Location:_____

4-9-20

MR 344070.69 Q 684.14

INF 7.55 18.1

Ae 4.81 18.7 0.30

EFF 7.06 19.4 7.79

Sprayed clarifier, Cleance barscreen, used chlorine on Aeration from MM

4-10-20

MR 344531.4 Q 46071

INF 7.60 17.0

Ae 7.04 17.7 0.30

EFF 7.24 17.5 7.84

Sprayed clarifier, and Aeration, Cleance barscreen

4-11-20

MR 344971.0 Q 439.6

Eff. 6.85 16.9 7.76 0 4386

Sprayed Clarifier and Aeration

4-12-20

MR 345260.5 Q 289.5

Eff 7.04 15.3 7.47 0 4410

4-13-20

MR

Inf 7.18 17.0

Ae 7.05 17.2 0.36

Eff 7.04 17.9 7.02 0.1 4432

Date/Day:_____ Location:_____

4-14-20

MR 347435.78 Q

INF 7.36 18.4

~~SPR~~ Ae 7.14 17.4 0.47

EFF 7.31 18.5 7.72

Sprayed clarifier, ~~brushed~~ pulled Algae from clarifier brush fell OFF order for a new one has been placed

4-15

MR 347985.38

Inf 7.11 14.1

Aer 6.91 15.0 .0.58 UV ϕ 4480

Eff 7.44 15.1 7.68

4-16-20

MR 348759.56 Q 774.18

INF 7.24 14.2

Ae 7.02 17.0 0.55 Blanket 10' SV 30

EFF 7.38 17.0 8.04 UV 0 4505

Cleaned bar screen, worked with Greg around plant. Settability: Very compact, Dark in color MM

Repaired Farside Skimmer, Adjusted Air flow to Aeration tank 10n/10FF, Sprayed clarifier, Located outflow P.Pe worked on blower one: needs to be replaced.

Date/Day:_____ Location:_____

4-17-20
MR 349461.44 Q 701.88
INF 7.29 16.0
Ae 6.98 17.1 0.59 Blanket 9' SV30 890
EFF 7.55 14.6 7.73 UV 0.1 4528
Performed Settability test, performed normal ops, cleaned bar screen, emptied buckets into trash, Turned on for skimmer
Settability @ 60 780
DO of Second Aeration tank 7.03

MM

4-18-20
MR 350318.94 Q 857.50
EFF 7.59 14.1 7.97 UV 0 4556

4-19-20
MR 350937.38 Q 618.44
EFF 7.71 13.2 8.01 UV 0 4577

4-20-19
MR 351453.78 Q 716.40
INF 7.47 16.3
Ae 7.01 17.5 DOA 0.44 DOB 7.01 Blanket 9' SV30 900
EFF 7.31 17.4 7.07 UV 0 4600
Performed SETTABILITY, Made COMP. SAMPLE, Sprayed CLARIFIER, Performed normal OPS

MM

Date/Day:_____ Location:_____

4-21-20
MR 352314.13 Q 660.35
INF 7.43 16.4
Ae 6.94 17.5 0.35
EFF 7.31 17.4 7.36 UV 0 4424
Performed normal OPS, collected SAMPLES, Sprayed clarifier

4-22-20
MR 352982.69 Q 667.56
Inf 7.39 15.7
Ae 6.74 15.8 0.32 UV 0 4630
Eff 7.50 16.7 7.81
Settlement 30 900 60 840 90 780

Performed normal ops; calibrate meters, collect sample ran/recorded findings
Sprayed Clarifier

4-23-20
MR 353415.69 Q 738.00
INF 7.59 16.2
Ae 6.83 16.4 0.24 Blanket 10' SV30 890
EFF 7.41 16.8 7.43 UV 0 4474

4/24/20. GMS 6745 RAIN
- REPLACED TOOK (1) LOAD FROM SHT.
- CLD AIR FILTERS W/ LYSOL - GETTING NEW ONES. CHECK EQ(1) PUMP SET UP FOR PAC. EFFLUENT LOOK GOOD
- CLEANED INFLU CATCH; CLEANED U.V; SCRUBED CLAZR
COLLECTED, RAN, RECORDED READINGS

Date/Day:_____ Location:_____

4-24-20 BAKER CONT.
FM 364426.22 Q 810.63
INFLU PH 7.03 15.8°
AE PH 6.91 16.8 0.49 DO
EFF 6.98 16.7 7.18 DO ∅/4689 UV

4-25-20
Arrived @ plant; all ops are good; calibrated meter ran/recorded finding

FM 355285.34 Q 859.12
EFF 7.04 14.7 7.13 UV ∅ 4722

Sprayed clarifier
Cleaned barscreen
effluent clear

4-26-20
Arrived @ plant; all ops are good; calibrated meters ran/recorded readings

FM 556178.81 Q 893.74
Eff 6.89 11.8 7.24 ∅ 4746

Sprayed clar
Clean barscreen
effluent clear

Date/Day:_____ Location:_____

4-27-20
Arrived @ plant and toured; all ops appear good; calibrated meters; ran/recorded readings

FM 357124.69 Q 945.88

Inf 7.05 16.2
Aer 6.91 17.1 0.41 UV ∅ 4769
EFF 7.03 17.2 7.66

Cleaned barscreen
Cleared Clarifier of foam
scrubbed side of clarifier of algie
wasted 15 mins
effluent clear
Settleability very compact SV30 920 SV60 900

4-28-20
MR 357983.94 Q 859.25
INF 7.18 16.2
Ae 6.85 17.1 0.44
EFF 7.41 16.9 8.14
wasted 10 min, performed normal ops, took weekly samples, cleaned barscreen

MM

Date/Day:_____ Location:_____

4-29-20
MR 358836.44 Q 852.50
INF 6.89 17.1
Ae 6.80 17.4 0.47 Forside D.O 8.20 SV30 850
EFF 7.41 17.4 7.97
Cleaned Bar screen, SV30: 850, SV60: 730,
Sprayed clarifier, wasted 20 min

4-30-20 Baker
Arrived; cleaned Inflo catch; performed SV30,
sprayed clair;
MR 359616.75 Q 780.31
IN 7.63 17.4°
AE 7.28 17.9° 0.62 DO
EFF 7.45 12.8 6.43 DO

05/01/20 Baker
Arrived; cleaned Inflo catch; slitly sprayd Clair;
Empty rag buckets; Preformed SV30
FM 360714.56 Q 109781
IN 9.46 16.8
AE 7.15 17.3 0.25
EFF 8.26 17.3 7.08 o/4866

5-2-20
Arrived @ plant; cleaned inflo catch; spray clarifier; calibrated meters, recorded readings
FM 361748.72 Q 1034.16
EFF 8.14 16.8 7.45 UV ϕ 4890

Date/Day:_____ Location:_____

5-3-20
MR 362643.97 Q 895.75
EFF 8.01 14.2 7.10 UV ϕ 4914

5-4-20
MR 363433.19
INF 7.18 17.9
Ae 7.14 18.3 0.21 SV30 820
EFF 7.10 20.7 4.98 UV 0 4937
Performed normal operations, Adjusted returns, wasted 10 min
wasted additional 10 minutes

5-5-20
MR 364590.63 Q 957.44
INF 7.22 15.4
Ae 7.20 14.7 6.56
EFF 7.21 17.4 7.39
Performed normal OPS, noticed increased D.O in Aeration,
wasted 15 min, collected samples

5-6-20
MR 365470.72 Q 1280.09
INF 6.02 17.4
Ae 5.82 17.4 6.29
EFF 6.83 17.4 7.14
Performed normal ops, sprayed clarifier, performed SV30,
closed both skimmers to prevent blanket rise, cleaned UV's

Date/Day: Location:

5-7-20
MR 344626.24 Q 955.72
INF 6.06 17.4
AC 5.80 17.7 0.30
EFF 6.71 18.7 7.84 UV 0 5016
performed normal ops, sprayed clarifier

5-8-20
MR 347204.49 Q 578.25
INF 6.58 16.7
AC 6.48 17.6 1.57 SV 30 850
EFF 6.75 17.6 7.59 UV 0 5033
performed normal ops, sprayed clarifier, performed settability,
cleaned bar screen, put waste in trash can, wasted 10 min

5-9-20
MR
EFF 6.84 12.1 7.84 UV 0.0 5057

Clean influent catch
Sprayed clarifier
Need to get control from Polverent to fix computer on flow reader

5-10-20
MR
EFF 6.74 12.3 7.76 UV 0 5082

Cleaned inflow catch
Sprayed clarifier

Date/Day: Location:

5-11-20
MR 349174.17
INF 6.58 18.4
AC 6.44 18.6 0.20 SV 30 870
EFF 6.62 18.5 7.56 UV 0 5109
Decant 15 min, Transfer 15 min, waste 12 min, cleaned bar screen
sprayed clarifier, performed normal ops

5-12-20
MR
INF 6.28 16.2
AC 5.99 17.5 1.65
EFF 6.64 16.3 7.58
performed normal ops, sprayed clarifier, collected samples

5/13/20
OMS 0700 CLEAR 45° ΦR
* STARTED PAC CHLOR FEED AGAIN
* TRANSFERRED SOLIDS SHT → BIG
\- STARTED TAKING "THINGS" APART
\- BUNCH OF JUNK @ BOTTOM OF SHT

5/13/20
MR 371282.47
INF 6.53 19.0
AC 6.39 18.3 1.19
EFF 6.68 18.3 7.50
performed normal ops, sprayed clarifier, cleaned bar screen,
brushed weirs

Date/Day: _____ Location: _____

5/14/20
MR 371897.49 Q 615.22
INF 6.83 18.5
Ae 7.24 19.2 1.22 SV30 800
EFF 7.13 18.6 7.67 UV 0 5183
Performed normal ops, scraped algae, sprayed clarifier, Glen installed Railing, Board to Return valve, Gate to Return valve,

5/15/20
MR 372426.34
INF 6.74 18.6
Ae 6.38 1.72 20.5 SV 830
EFF 6.92 19.5 6.83 UV 0 5204
performed normal ops, scraped Algae, transfered trash to can, sprayed clarifier, cleaned UVS

5/16/20
MR 372984.31 Q 557.97
EFF 7.07 16.3 6.79 UV 0.0 5225

5/17/20
MR 373620.44 Q 636.13
7.21 13.7 7.07 UV 0.0 5249

Date/Day: 5/18/20 Location: Lyons

Cans 0700 Cloudy 55° 9/N

* DISCONNECTED BLOWER #1 READY FOR CBS. CLEANED BAFFLE.
- GROWTH ALL DIFFUSERS ON NORTH SIDE OF SYSTEM (?)
- JASON ATTACHED BRACE FOR SKIMMER #2
- CHOD PAC BARREL (3 DAYS??)

5/18/20
MR 374465.94 Q 845.50
INF 6.85 19.3
Ae 6.87 19.8 0.79 SV30 830
EFF 6.84 19.7 6.88
Performed normal ops, cleared bar screen, scraped weirs, Performed settability

5/19/20
MR 374983.54 Q 517.62
INF 6.93 19.4
Ae 6.83 19.3 0.70 SV30 820
EFF 6.83 18.4 7.21 UV 0 5298
Performed normal ops, cleared bar screen, scraped weirs, performed settability, collected samples

5/20/20

Date/Day: Location:

5/20/20
MR
INF 7.39 19.3
AE 7.06 19.3 0.31
EFF 7.18 19.4 7.64
Performed normal ops, wasted for 15 min per singh, blanket was very high

Date/Day: 5/21/20 Location: Lyons

Cams 0700
- Chkd Plant - OL
- Ran skimmers 1:30 ??. flow
- WG. Marden calibration ^ meter
- Discussed plant w/ Jason

5/21/20
MR 37432313
INF 6.88 19.2
AE 7.09 21.0 1.57
EFF 6.81 20.1 7.25
Sprayed and scraped clarifier, cleaned bar screen, performed normal ops
MM

5/22/20
MR 37482308 Q 49996
INF 6.30 20.7
AE 6.66 20.0 0.64
EFF 7.06 20.5 7.74
Performed normal ops, emptied waste buckets, cleaned UVs
MM

5/23/20
MR 37726104 Q 53796
Eff 7.19 11.4 7.61 w 0.0 5392

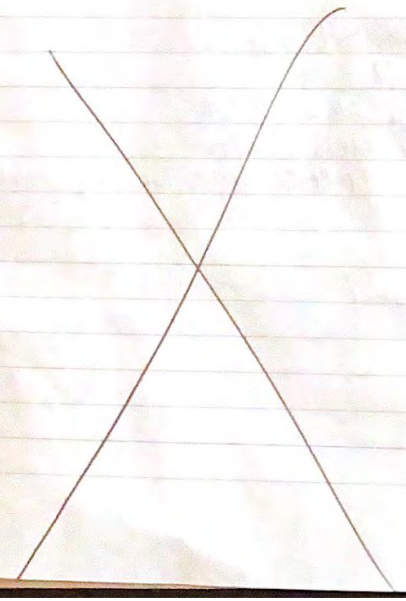
5/24/20
MR 37788554 Q 62450
Eff 7.31 11.2 7.39 w 0.0 5417

Date/Day: 5/25/20 Location: _____

Cons
- ADJUSTED AIR (CLOSED 1/2) ON SOUTH SIDE

5/25/20
MR 37855300 Q 66746
Eff ph 7.01 Temp 20.4 D.O. 7.27
Performed Weekend ops, Cleaned bar Screen, Sprayed/skimm Clarifier, Scraped Weirs, Cleaned Sampler intake CT/MM

5/26/20 7:45 CT On site
MR 37904696 Q 49396
Inf ph 7.25 Temp 18.9°C
Aeration ph 6.87 Temp 20.0°C DO 2.82 Blanket 5ft
Eff ph 6.97 Temp 20.3 D.O. 7.04
Performed Normal ops, Cleaned bar Screen, Skimmed/Sprayed Clarifier, Scraped Weirs, Collected weekly/monthly Samples MM



Date/Day: 5/27/20 Location: LC

Cons C760 Cloudy 65° QR
- ADJUSTED AIR ON SOUTHSIDE. ONLY 3 DIFFUSERS ON (Could Roll under foam)

- RE-POSITIONED PAC FEED FROM INF MANHOLE TO NORTHSIDE AT (TEMPORARY?)

- CLEANED BUILDING
- SPOKE W JASON → DARK WATER COMING IN INF MANHOLE.

- BEALL'S TAKING (1) LOAD FROM TOWSON
- EFFLUENT QUALITY VERY GOOD (GOOD JOB MARK)

5/27/20
MR 37978112 Q 73416
INF 7.00 19.9
AE 6.94 22.3 1.97
EFF 6.71 22.1 6.73
Performed Normal Ops, Cleaned bar screen, scraped weirs, serviced clarifier, Performed Settleability

Date/Day: _____ Location: _____

5/28/20 CT #415 on site
MR 38029896 Q50784
Inf ph 6.34 Temp 21.6
Aeration ph 6.43 Temp 22.7 DO 4.33 Blanket 11ft
Effluent ph 6.87 Temp 21.8 DO 6.45
Performed normal ops, Cleaned bar screen, Scraped weirs, Raining off and on all day, did Settleability 30min 870

5/29/20
Arrived @ plant and toured, all ops are good, meters Calibrated
Collected Samples, ran/record readings
FM 38075205 Q 45313

		PH	Temp	
Meter calibrations	4.00	4.00	14.1	-54 32
	7.00	7.04	14.1	
	10.0	10.01	14.7	

In	7.16	21.6				
Ae	7.56	21.5	5.69	UV	0.0	5536
Eff	8.35	21.8	6.87			

Notes
Clarifier looks good - visibility @ 4ft
Clean barscreen
Sv 30 - 880
wasted until tank full aprox - 20 min
2 gal Cl_2 added to Clarifier
brushed weirs
New barrel of pac being used 3 remaining
CT - Reread #'s
~~ADDITIONAL~~

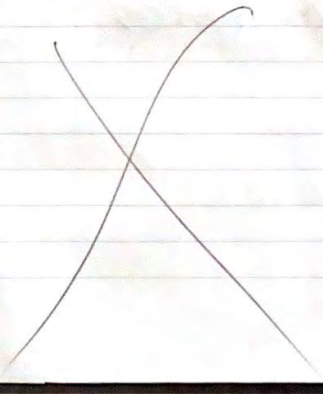
Date/Day: _____ Location: _____

5/29/20 CT on site 11:15
Reread #'s
INF ph 7.31 Temp 22.3°C
Aeration ph 6.54 Temp 21.7°C D.O. 4.14
Eff ph 6.91 Temp 22.2°C D.O. 6.50
Scraped weirs, cleaned bar screen.

5/30/20
Arrived @ plant and toured, all ops are excellent; meters calibrated, collected samples, ran/record readings
FM 38127337 Q 52124
Eff 7.60 21.8 6.84 UV 0.0 5561

5/31/20
Arrived @ plant and toured, ops appear good, Calibrate meters
Collect Samples; ran/record reading
FM 38175148 Q 47816
Eff 7.94 21.2 6.59 UV 0.0 5586

Cleaned barscreen
Visibility on clarifier @ max
1 cup of Cl_2 added to clar



Date/Day: ____ Location: Lyons TEMPLATE

INITIALS WEATHER RAIN? Time

METER CALIBRATIONS

pH 4 @ SLOPE -
7 @
10 @

TU

TESTS

pH TU T SUSU/GU Time

INF
AT
EFF

NOTES:
- CLARIFIER (VISIBILITY, SKIMMERS RAKES ETC)
- AERATION TANK - (ROLL, COLOR, FOAM ETC, FOAM)
- EFFLUENT - (QUALITY, ETC)
- CHEMICAL FEED
- WASTING (MIN) (DECANTING, TRANSFERRED)

* ADDITIONAL NOTES.

Date/Day: 6/1/20 Location: LYONS

MM 71° P-CLOUDY Rain 0.in 1430

calibrations

ph 4	4.01 @ 21.90°C	slope ~	-52.40
7	7.00 @ 22.6°C		
10	10.01 @ 21.6°C		

Tests

	PH	D.O.	Temp	SU30	1505
~~INF~~					
~~AT~~ INF	7.30	RO	20.1	870	
~~EFF~~ AT	6.46	6.29	23.0		
EFF	6.59	6.81	22.1		

Notes:

Clarifier - surface water is clear, Blanket is 12', very little foam/Debris on top

Aeration - Operation both sides of Aeration, Heavy foam still remains in spots, overall appears to be lightening up

Effluent - clear, want to Raise pH

Chemical - PAC feeding at steady pace

Date/Day: 6/2/20 Location:

MM 73°F P-cloudy Rain 0.in 1600

Calibrations 1311
4 4.01 20.3 slope - -51.38
7 7.00 20.7
10 10.01 20.4

Test
MR 38294300 Q 53208
INF 7.00 20.8
Ae 6.26 21.3 5.13
EFF 6.65 22.6 6.78

Notes:

Clarifier - blanket 12', water clear, weirs cleared

Aeration - several large openings, most of foam is on far side

Effluent - clear, little particulate

Chemical Feed - Operating as normal

Wasted - 15 min

Collected samples 0840

Date/Day: 6/3/20 Location:

MM 90°F P-cloudy Rain 0.in 1700

Calibrations
4 3.98 20.2 slope -50.68
7 7.01 20.4
10 9.97 20.4

tests
MR 38346544 Q 52244
INF 7.17 21.5
Ae 6.81 6.81 22.1 4.89
EFF 6.53 22.7 6.18
SV30 880

Notes:

Clarifier - blanket 12', weirs cleared, Added Smaller Chlorine tabs to trough

Aeration - large openings; foam on far side

Effluent - clear

Chemical Feed Operating as normal

Date/Day: 6/4/20 Location:

CT 86° Mostly Sunny Rain 0 in 1045

Calibration	ph	Temp	slope
4	4.03	25.4°C	
7	7.00	25.2°C	-57.06
10	10.01	25.3°C	- Taken 0745 6/4/20

Tests

MR 38380656 Flow 34062
inf ph 6.47 Temp 22.6°C
Aeration ph 6.21 Temp 22.1°C D.O. 4.12
Eff ph 6.65 Temp 22.1°C D.O. 6.49

Notes; SV30-900 60-860 90-830
Clairifier: Blanket 12ft, Water mostly clear, Some particles on top floating. Sprayed/Skimmed particles, Scraped walls

Aeration; mostly foam w/large openings in spots

Effluent: clear/normal

Chemical feed: operating as normal

Cleaned and Sprayed bar screen

Date/Day: 6/5/20 Location:

CT 80° Sunny Rain 0.7 in 0930

Calibration	ph	Temp	slope
4	4.03	25.2	
7	7.00	25.1	-56.75
10	10.01	25.4	Taken 0915 6/5/20

Tests

MR 38426128 Flow ~~34064~~ 45472
inf ph 7.55 Temp 20.9°C
Aeration ph 6.38 Temp 22.4°C D.O 4.50
Eff ph 6.74 Temp 22.6°C D.O. 6.25

Notes; SV30-880 60-820 90-790
Clairifer - Blanket 10ft, Water mostly clear, some floating particles. Sprayed/Skimmed particles, Scraped walls

Aeration: Mostly foam w/large openings added 1 bag Soda Ash

Effluent: Clear/normal, cleared DV's

Chemical feed. normal

Cleaned & Sprayed bar Screen, Bagged waste buckets, wasted for 30 min

Date/Day: 6/6/20 1215 CM Location: LYONS CREEK WWTP SUNNY 84°

CALIBRATIONS @ 1100
4.01 @ 24.7
7.00 @ 24.3
10.01 @ 25.0
SLOPE - 52.70 DO FACTORY

MR - 38483392
FLOW - 57,264

TESTS @ 1230

	PH	DO	TEMP
EFF -	7.01	6.46	24.1

UV HRS. 5733
INT. - Ø

CLEANED AND HOSED SCREEN
HOSED + NETTED CLARIFIER
SCRAPED WEIRS

EFFLUENT CLEAR W/ SOME SOLIDS

Date/Day: 6/7/20 Location:

MM 75°F SUNNY 1115

CALIBRATIONS @ 0900
4.00 24.3
7.03 23.9
10.05 24.3
SLOPE -53.61

Tests

	pH	temp	DO
EFF	6.65	23.6	6.36

Notes:
Clarifier - clear top water

INF - Cleaned bar screen, Hosed interior bowl

Aeration - large openings on Road Side

Effluent - Clear, UV trough is clean

Date/Day: 6/8/20 Location:
MM 78°F Sunny 0.in Rain Hot

Calibrations @ 0830

4	4.01	20.6	Slope -56.35
7	7.00	20.2	
10	10.01	20.4	

Tests

	PH	Temp	D.O	SV30
INF	6.97	21.4		840
Ae	6.54	24.7	2.54	Appears to be lightening in
EFF	6.53	24.2	6.92	

Notes:
Clarifier - blanket has dropped to 9', water is clear, cleaned off algae on weirs, and trough

Aeration - large opening on near side

Influent - Glenn installed new bar screen

Effluent - Clear

Date/Day: 6/9/20 Location:
CT 0956 79° Mostly Sunny 0.in Rain

Calibrations

4 4.02 - 19.3°C
7 7.02 - 19.8°C Slope -56.28
10 10.07 - 19.4°C

Tests

	PH	Temp°C	D.O.	SV30
Inf	6.49	21.9		860
Aeration	6.41	22.9	2.38	
Eff	6.90	23.0	6.73	

Notes:
Clarifier - Blanket at 7', water mostly clear w/ some foam on top. Skimmed and sprayed foam and solids. very clear after. Scraped weirs

Aeration - Mostly foam, large openings near influent side. Small openings throughout.

Influent - Cleaned/Sprayed bar screen.

Effluent - Clear

SAMPLES COLLECTED @ 0905 CT

Date/Day: 6/10/20 Location:

MM 79°F CLOUDY Rain 0.7in 0905

Calibrations 0811

4	4.01	@ 22.9	slope
7	7.00	@ 22.4	-56.84
10	10.01	@ 22.8	

FLOW
MR 38664468 Q 45468

Tests

	pH	Tene	D.O
INF	7.17	22.7	
Ae	6.04	24.4	0.58
EFF	6.52	23.7	6.62

Notes

Clarifier - top water is clear, Minor Grease balls on surface, through looking good

Aeration - Deep brown, large openings on both sides

Influent - New barscreen Appears Effective

Effluent - Clear

Brisel brush broke, going to Acquire new one

Date/Day: 6/11/20 Location:

MM 79°F CLOUDY Rain 0.1in 0910
T-storms later

Calibrations 0915

4	4.03	@ 23.9°C	slope: -56.99
7	7.00	@ 24.0°C	
10	10.02	@ 23.9°C	

FLOW
MR 58712668 Q 48520

tests

	pH	Tene	D.O
INF	7.43	22.6	
AR	5.61	24.5	1.55
EFF	7.15	24.5	6.30

Notes - T

Clarifier - top water is clear

Aeration - Deep brown, Large Openings on near side

Influent - Cleaned barscreen

Effluent - Clear

Date/Day: 6/12/20 Location:

Cl 11:15 on site 81° Sunny Rain .01 in

Calibrations

	pH	Temp°C	Slope
4	4.02	20.4	
7	7.02	20.1	@ 56.15
10	10.04	20.3	

Flow

MR 38766972 Q 54304

Tests

	pH	Temp°C	D.O:	
Inf	7.95	22.6		
Aeration	6.07	22.8	3.38	- Blanket 13"
Eff	6.81	24.4	7.07	

Notes

SV30 - 880 - 60 850

Clarifier - Clear, high blanket, some particles & grease on top. Skimmed/sprayed top. Wasted 20 min

Aeration - Large openings on both sides

Influent - Cleaned/Sprayed bar screen

Eff - Clear, cleaned UV's

Date/Day: 6/13/20 Location:

1200 CM

CALIBRATIONS @ 1100

4.01 - 23.2 MR- 38812365 Q- 45376

7.00 - 23.2

10.01 - 22.9

-5425 Do FACTORY

TESTS @

	pH	Do	Temp
Eff-	7.15	7.10	24.3

CLEANED & SPRAYED SCREEN FOR INFLUENT

HOSED CLARIFIER & NETTED

EFFLUENT CLEAR

Date/Day: 6/14/20 Location:

MM 75°F SUNNY 0.1" RAIN 1430

Calibrations 0825

4	4.01	22.8	slope
7	7.00	22.8	-56.23
10	10.03	22.8	

Flow

MR 38860680 Q 48312

tests

	pH	Temp	D.O
EFF	6.57	25.0	7.14

notes

Clarifier had a lot of Grease balls, cleared and skimmed

Aeration - still have large openings

Influent - looked fine

Effluent - Clear

Transfer pump was on when I arrived, transfer tank is full

Date/Day: 6/15/20 Location:

MM 75°F P-CLOUDY 0.1" Rain 1505

Calibrations

4	4.01	15.9	-55.64
7	7.06	16.6	
10	10.01	15.9	

Flow

MR 38906312 Q 45432

tests

	pH	Temp	D.O
INF	5.71	23.6	
AC	6.12	23.9	3.76
EFF	6.54	24.4	7.03

notes:

All conditions same as yesterday

Date/Day: 6/16/20 Location:

MM 75° Cloudy 0.1in Rain 18x

Calibrations

			Slope
4	4.01	@ 22.9	-54.02
7	7.00	@ 22.9	
10	10.03	@ 22.9	

Tests MR 38961152 Q 54946

	pH	Temp	D.O
INF	7.04	22.8	
AE	6.48	24.1	0.68
EFF	6.53	24.1	6.78

Notes

Clarifier - looks fine

Aeration - large openings Road Side

Influent - cleared bar screen, sprayed down

Effluent - clear

* Samples collected @ 0915 CM

Date/Day: 6/17/20 Location:

MM 67°F ~~Thunder~~ Storm w/Rain 0.2in 1715

Calibrations

4	4.01	17.9	-53.93
7	7.00	18.0	
10	10.01	18.6	

Tests MR 39011508 Q 50356

	pH	Temp	D.O
INF	7.05	22.5	
AE	6.15	23.7	4.07
EFF	6.62	23.7	6.85

Notes

Clarifier - looks Fine

Aeration - large openings both sides

Influent - Fine

Effluent - Fine, Clear

PAC - 45 Gal

Date/Day: 6/18/20 Location:

CT 1200 77° partly cloudy 0.4 in Rain

Calibrations

	pH	Temp °C	Slope
4	4.01	26.4	
7	7.00	20.3	-56.14
10	10.01	20.3	

Tests	pH	Temp	D.O		
Inf	7.80	22.3°C			
Aeration	6.15	23.5°C	4.13	SV30	820
Eff	6.71	24.2°C	7.19		

Notes -

Inf - Cleaned/Sprayed bar Screen, did trash

Aeration - Large openings on both ends

Clarifier - looked bad when I got here, lots of grease spots and solids. Skimmed/Sprayed for a while & looks great. clear water. Blanket - 10" Scrapes wires

Eff - Clear water. Cleaned UV's

PAC - 25 Gal - Feeding fine

Flow

MR 3905352 Q 41644

Date/Day: 6/19/20 Location:

CT 0945 77° mostly cloudy 0 in Rain

Calibrations

	pH	Temp	Slope
4	4.01	23.5	
7	7.00	23.6	-58.03
10	10.01	23.3	

Tests	pH	Temp °C	D.O.		
Inf	5.22	23.0			
Aeration	5.87	23.6	2.24	SV30	860
Eff	6.65	23.8	6.91		

Notes -

Inf - Cleaned/Sprayed bar screen

Aeration - Large openings on both ends & North Side wher PAC dips. Adjusted North Side Aeration

Clarifier - Clear W/ some solids on top. Skimmed/Cleaned solids & looks very good. 9" Blanket

Eff - Clear Water

PAC - 53 Gal - feeding fine.

Flow MR 39094800 Q 41648

Date/Day: 6/20/20 Location: LYONS WWTP

1245pm
RAW 72°

MR- 39156060 Q-61260

	PH	TEMP	DO
EFF-	6.73	22.8	7.03

CALIBRATIONS @ 1200
4.01 - 231
7.00 - 223
10.01 - 243
- 5325 DO FACTORY

RAKED + HOSED BAR SCREEN
HOSED + NETTED CLARIFIER
CHANGED OUT PAC DRUM
EFF MOSTLY CLEAR BUT W/ SOLIDS

Date/Day: 6/21/20 Location:

MM 79°F P-CLOUDY 2in RAIN 1130

Calibrations 1135 SLOPE - -55.43
4 4.01 @ 26.1
7 7.06 @ 26.1
10 10.03 @ 26.1

FLOW
3921681 4 Q 59754

Tests

	pH	Temp	D.O
INF	6.23	23.7	
AE	6.13	24.5	0.77
EFF	6.51	24.0	7.31

Notes:
All systems operating
Cleaned bar screen
Cleaned clarifiers

Date/Day: 6/22/20 Location:

MM 88°F P-CLOUDY 0.1 in

1995

Calibrations

			Slope
4	4.01	22.3	-55.34
7	7.00	22.4	
10	10.01	22.1	

Flow

MR 39278376 Q 61560

Tests

	pH	Temp	D.O	
Inf	5.63	23.4		
Ae	6.05	24.6	0.32	D.O. Probe 7.58
Eff	6.53	24.7	6.54	

Notes

Clarifier - blanket high, water clear

Inf - Cleared bar screen

Aeration - large openings both sides CV 30 600

Effluent - Clear

Chemical feed - 45 Gal

Date/Day: 6/23/20 Location:

1200 am 81° CLEAR

CALIBRATIONS @ 1200

4.01 - 27.6

7.00 - 27.5

10.01 - 27.7

-51.74 DO FACTORY

MR - 39329476 Q - 51,100

	pH	DO	TEMP
EFF -	6.50	6.61	24.8
AT -	5.47	6.52	25.2
INF -	7.61	3.50	23.8

CLEARED BAR SCREEN

HOSED CLARIFIER

AT - GOOD COLOR W/ LG. OPENINGS

EFFLUENT CLEAR W/ SOME SMALL SOLIDS

Date/Day: 6/24/20 Location: Lagoons

MM 81° sunny 0 in rain 1155

calibrations 0800 Slope -55.13

4.01	25.4
7.00	25.3
10.01	25.4

tests Flow MR39379920 Q49484

	pH	Temp	D.O
INF	6.90	23.3	
AE	6.12	25.8	1.39
EFF	6.57	26.2	6.99

Notes
Clarifier - Blanket has lowered, top water clear

INF - Cleaned barscreen

Aeration - SV30 850 ; large opening near side

Effluent - Clear

Chemical feed - 2064

* Cows - moved fence to U.V. side skimmed in clarifier

** Removed rags from diffusers

Date/Day: 6/25/20 Location:

CT 1100 82° mostly sunny Rain 0.4

Calibrations 0745

MR - 39426288
Q - 46368

4.01	23.2	
7.00	23.3	-58.16
10.01	23.3	

Tests

	pH	Temp	D.O.
~~INF~~			
inf	7.99	24.4	
AE	6.57	24.2	2.31
Eff	6.56	24.4	6.51

Notes:
Clarifier - Blanket 9" to water clear. Skimmed/sprayed Clarifier. Wasted 10 min

Inf - Cleaned/sprayed bar screen. Bagged trash

Aeration: SV30 - 860 , large opening on influent side

Effluent - water clear. Cleaned UV lights

PAC - Started new drum - 50 gal

Date/Day: 6/26/20 Location:

CT 1000 79° Sunny Rain 0.6

Calibrations

pH	Temp	Slope
4.01	21.1	
7.00	21.0	-58.01
10.01	21.1	

MR-39473552 a-47264

Tests

	pH	Temp	DO
Inf	7.33	22.7	
AE	6.33	24.2	2.93
Eff	7.11	28.2	6.63

Notes- Clarifier- Clear top water. Skimmed and Sprayed. Wasted 10 min - Blanket 9"

Inf - Cleaned/Sprayed bar Screen

AE - large spurg where PAC flows in

Eff - Clear water

Chemical Feed - 35 gal - Flowing well

Date/Day: 6/27/20 Location:

1315 CM 86° 0" Rain

CALIBRATIONS@1220

4.01 - 27.0

7.00 - 26.6

10.01 - 26.8

-52.50 MR-39531532 a-57980

	pH	Temp	DO
Eff -	7.21	26.3	6.89

CLEANED + SPRAYED BAR SCREEN

HOSED + NETTED CLARIFIER

EFF CLEAR

Exhibit 8
Maryland Department of Environment (MDE) Inspection Report (January 9, 2020)

Maryland Department of Environment

Water and Science Administration
Compliance Program
1800 Washington Blvd, Baltimore, MD 21230
410-537-3510

AI ID: 22179 **Inspector:** Shailaja Polasi

Site Name: **Lyons Creek Mobile Home Park WWTP**
Facility Address: 1007 Lower Pindell Rd, Lothian, MD 20711
County: Anne Arundel County

Inspection Date: January 9, 2020 **Start Date/Time:** January 9, 2020**,** 10:20 AM
End Date /Time: January 9, 2020, 11:40 AM

Media Type(s): NPDES Municipal Minor Surface Water

Contact(s): Bernard Williams, Operator
Deayo Betiku, Operator

NPDES Municipal Minor Surface Water

Permit / Approval Numbers: DP-1275

Site Status: Active

Site Condition: Noncompliance

Recommended Action: Continue Routine Inspection

Inspection Reason: Initial Quarterly, Initial Yearly, Routine Scheduled

Evidence Collected:
Samples Taken, Photos/Videos Taken, Visual Observation

Inspection Samples

Parameter	Result	Units	Method	Location	Date	Taken by
Oxygen, Dissolved	9.1	mg/L	Recorder	box after UV disinfection	2020-01-09 11:20:00	Deayo Betiku, Operator
pH	7.3	standard units	Recorder	box after UV disinfection	2020-01-09 11:20:00	Deayo Betiku, Operator

Inspection Findings:

An announced compliance evaluation inspection was scheduled on this date. The treatment plant at the mobile home park is operated by Prostart Professionals. I met onsite with Bernard Williams and Deayo Betiku, operators representing Prostart Professionals. After preliminary introductory meeting I began the inspection reviewing the treatment plant operations at the wastewater treatment plant. The sky was sunny clear at the time of the inspection. Mr. Williams accompanied me during the site walk of the facility.

The treatment plant is an activated sludge plant with aeration, clarifier, filtration, UV disinfection prior to discharge to tributary of the Patuxent River, designated as Use-I waters

which is protected for water contact and recreation and non-tidal warm water aquatic life. The clarifier effluent is pumped to UV disinfection and gravity fed to flow measuring box and discharge to tributary of Patuxent River.

The following was observed during the site walk of the facility-

1. The wastewater from the mobile home park enters the treatment plant via gravity to manhole. On this date I observed cracks to the walls of the influent manhole and erosion around the manhole. Pictures are taken. **Corrective Action**: The influent manhole should be inspected for cracks and leaks and necessary repairs should be completed. The erosion near the manhole should be backfilled and repaired immediately.
2. On this date Mr. Williams stated the effluent pumps near the clarifier wetwell have failed which caused overflow from clarifier wetwell to backup into clarifier/aeration tank and which eventually overflowed out of the clarifier/aeration structure and overflowed on to the ground and gravity into tributary of Patuxent River. On this date Mr. Williams stated it was unclear at what time the effluent pumps failed and the overflow started. Mr. Williams stated the overflow was reported to the Department. **Corrective Action**: Submit a letter to the Department explaining when the overflow was notified to the Department via telephone and 5 day report was submitted to the Department. Submit a copy of the 5 day written report with the steps taken to prevent future overflows.
3. On this date Mr. Williams stated the clarifier effluent control system failed and pumps did not start when floats are activated. Mr. Williams stated the operator observed the overflow upon arrival onsite and operated the effluent pump manually to stop the overflow. On this date I observed dampness inside the clarifier/aeration tank structure. Pictures are taken. **Corrective Action:** Inspect the concrete wall around the aeration/clarifier tank for any leaks or cracks. Necessary repairs should be made to the concrete wall around the aeration/clarifier tank to prevent any leak or unauthorized discharge leaving the aeration/clarifier structure.
4. Mr. Williams stated the effluent pumps near clarifier were temporarily wired to operate the pumps. On this date I observed electricians onsite hard wiring all the wiring near the clarifier wet well. Mr. Williams stated the repairs will be complete by Monday. **Corrective Action**: Submit a letter to the Department indicating the electrical repairs at the clarifier effluent pumps.
5. Mr. Williams stated the treatment plant has mission's tele dial system to notify personnel during emergencies. **Corrective Action**: Submit a letter to the Department with the current mission system/telemetry dialing system onsite and which components are connected to the mission system and the working condition of the system. The letter should include whether the mission system/telemetry dialing system notified the operators of pump failure on the day of the event.
6. On this date I observed the facility did not have composite sampler onsite. Mr. Williams stated grab samples are collected for effluent analysis. **Corrective Action**: Permittee should start collecting 24hr composite samples immediately as required by the permit. Failing to comply with permit condition is considered as violation of the permit.
7. On this date I reviewed the monthly operating sheets (MOR) onsite. The review of MOR indicates no monthly effluent flow was reported for July, August and September 2019. Mr. Williams stated the final effluent totalizer was out of service and no final effluent flow was reported. **Corrective Action**: Submit a letter to the Department indicating (1) when the repairs to the flow totalizer was completed (2) how final effluent flow was reported (3) how the final effluent loadings are calculated.

8. On this date Mr. Williams stated the sand filter is bypassed in the treatment plant. **Corrective Action**: Notify the Department of the bypass of sand filters. Submit a letter to the Department what corrective action steps will be taken to bring sand filter online.
9. On this date I observed the skimmer arm to the clarifier was not working. On this date Mr. Williams stated the wastewater from clarifier leaks into wasting tank. On this date I observed portable pump is used to waste. **Corrective Action:** The structural integrity of the clarifier tank should be inspected, cracks and leaks should be repaired immediately. Necessary repairs should be made to the skimmer arm immediately.
10. On this date I observed the UV intensity panel was not working and it's unclear if the UV bulbs are in proper working condition. Pictures are taken.

With respect to the above MDE NPDES Permit, violations of the Environmental Article, Title 9 were observed on this date:

1. Failed to operate the treatment to minimize upsets and unauthorized discharges as required by NPDES permit General Condition B-3"Facility Operation and Quality Control".
2. Failed to notify the Department of Bypass of Filter as required by NPDES permit General Condition B-5 "Bypassing".
3. Failed to calibrate the monitoring equipment as required by the NPDES permit General Condition A-5:" Monitoring Equipment Maintenance".
4. Failed to submit the Discharge Monitoring reports to the Department as required by permit General Condition A-2: "Monthly Monitoring Results".
5. Failed to collect composite samples as required by NPDES permit Special Condition-B (1) –Minimum Monitoring Requirement.

To bring this site into compliance with Environmental Article Title 9, the following corrective action should be made immediately upon receipt of this report.

1. All the above mentioned corrective actions mentioned above should be corrected immediately.
2. The permittee should notify the Department via telephone within 24hrs followed by 5 day written report for the bypass of the sand filter.
3. Necessary repairs should be completed to the rotary drum filter and the filter should be brought online.
4. The UV intensity panel should be repaired and the UV intensity should be maintained as per manufacturer requirement.
5. DMRs should be submitted to the Department immediately.
6. The leak in the clarifier waste line should be repaired and necessary repairs should be completed to minimize the sludge blanket and scum buildup in the clarifier. Necessary repairs should be made to the clarifier skimmer arm.
7. Submit a letter to the Department explaining from which location grab samples for PH, DO and E.Coli samples are collected.

Contact this inspector upon implementation of the requested corrective actions, reasonably necessary to bring the site into compliance. If the corrective actions cannot be completed within the prescribed time frames above, you should continue to advise this inspector, at least every 30 days, of the status of the measures taken to complete the corrective actions.

Inspection Date: January 9, 2020
Site Name: Lyons Creek Mobile Home Park WWTP
Facility Address: 1007 Lower Pindell Rd, Lothian, MD 20711

If you have any questions, need assistance or to request a re-inspection, please contact this inspector *at or in writing at 410-537-3521 or by e-mail at shailaja.polasi@maryland.gov*.

NPDES Municipal Minor Surface Water- Inspection Checklist

Inspection Item	*Status*	*Comments*
1. Does the facility have a discharge permit? [Environment Article §9-323(a)(1-3)]	Yes	
2. Is the discharge permit current? [Environment Article §9-328(a)(1)]	Yes	
3. If the permit is not current, has facility applied for renewal? [Environment Article §9-328(a)(1)]	No	
4. Does the facility operate as authorized by their current permit? [COMAR 26.08.04.01B(4)]	Info	See FIR
5. Has the Permitee exceeded the permitted capacity of the WWTP? [40 CFR Part 122 Subpart C Section 122.42.(b)(1-3)]	Not Evaluated	
6. Is the number and location of discharge points as described in the discharge permit? [Environment Article §9-331]	Yes	
7. Has permittee submitted correct name and address of receiving waters? [40 CFR 122.21.j(3)]	Yes	
8. Is the permittee meeting the compliance schedule per permit requirements? [COMAR 26.08.04.02-1A(3)]	Out of Compliance	See FIR
9. Has the operator or superintendent been certified by the Board in the appropriate classification for the facility? [COMAR 26.06.01.05A(1)]	Not Evaluated	
10. Are adequate records being maintained for the sampling date, time, and exact location; analysis dates and times; individual performing analysis; and analytical results? [COMAR 26.08.04.03B(3)(a, b, c, e)]	Not Evaluated	
11. Are adequate records being maintained for the analytical methods/techniques used? [COMAR 26.08.04.03B(3)(d)]	Not Evaluated	
12. Does the permittee retained a minimum of 3 years' worth of monitoring records including raw data and original strip chart recordings; calibration and maintenance records; and reports? [COMAR 26.08.04.03B(1)]	Not Evaluated	
13. Do lab records reflect that lab and monitoring equipment are being properly calibrated and maintained? [Environment Article §9-331]	Not Evaluated	
14. Does the permittee/laboratory use suitable QA/QC procedures and operate a formal quality assurance (QA) program using appropriate controls? [40 CFR Part 136.7]	Not Evaluated	

NPDES Municipal Minor Surface Water- Inspection Checklist

Inspection Item	*Status*	*Comments*
15. Has the permittee submitted the monitoring results on the proper Discharge Monitoring Report form? [COMAR 26.08.04.03C(1)]	Not Evaluated	DMRs not submitted
16. Do the Discharge Monitoring Reports reflect permit conditions? [COMAR 26.08.04.03C]	Not Evaluated	DMRs not submitted
17. Has the permittee submitted these results within the allotted time electronically? [COMAR 26.08.04.03C(2), 40 CFR Part 127.16]	Out of Compliance	DMRs not submitted on time
18. Is the facility being properly operated and maintained including:(a) stand-by power or equivalent provisions available, (b) adequate alarm system for power or equipment failure available, (c) all treatments units are in service, . [40 CFR Part 122 Subpart C Section 122.41.e]	Yes	
19. Is sewage sludge managed correctly per permit requirements? [COMAR 26.04.06.09]	Info	See FIR
20. If a by-pass occurred since last inspection, has the permittee submitted notice of the by-pass within the allotted time? [40 CFR Part 122 Subpart C Section 122.41.m(4)(i)(C)]	Not Evaluated	
21. If a non-complying discharge occurred since the last inspection, was the regulatory agency notified within the allotted time? [40 CFR Part 122 Subpart C Section 122.41.l(6)]	Not Evaluated	
22. If applicable, has the permitee complied with all special conditions of their permit? [COMAR 26.08.03.07D]	Out of Compliance	See FIR
23. Have overflows occurred since the last inspection? [COMAR 26.08.10.02A]	Yes	See FIR
24. Have records of overflows been maintained at the facility for at least five years? [COMAR 26.08.10.06A-B]	Not Evaluated	
25. Are flow measuring devices properly installed and operated, calibration frequency of flow meter adequate, flow measurement equipment adequate to handle expected ranges of flow? [40 CFR Part 122 Subpart C Section 122.41.e]	Out of Compliance	See FIR
26. Are discharge monitoring points adequate for representative sampling? [Environment Article §9-331(4)]	Yes	
27. Do parameters and sampling frequency meet the minimum requirements? [Environment Article §9-331(4)]	Not Evaluated	DMRs not submitted
28. Does the permittee use the method of sample collection required by the permit? [Environment Article §9-331(4)]	Out of Compliance	See FIR

NPDES Municipal Minor Surface Water- Inspection Checklist

Inspection Item	*Status*	*Comments*
29. Are analytical testing procedures used approved by EPA? [COMAR 26.08.01.02B(1)]	Not Evaluated	
30. If alternate analytical procedures are being used, has proper approval been obtained? [COMAR 26.08.01.02B(1)]	Not Evaluated	
31. Has the permittee notified the Department of the name and address of the commercial laboratory? [COMAR 26.08.04.03A(3)]	Not Evaluated	
32. Were discharges observed at the authorized outfalls? [Environment Article §9-314(b)(1)]	Yes	
33. If discharges were observed, do the discharges or receiving waters have any visible pollutants observed? [Environment Article §9-314(b)(1)]	No	
34. Were discharge samples collected? [Environment Article §9-261(c)(1)]	Info	See FIR
35. Does this facility have coverage under a NPDES stormwater discharge permit? [40 CFR Part 122 Subpart B Section 122.26.(c)(1)(I)(A-B)]	Not Applicable	
36. If the permittee has coverage under a NPDES storm water permit, has a storm water pollution prevention plan been developed and implemented as required? [40 CFR Part 122 Subpart B Section 122.26.(c)(1)(I)(A-B)]	Not Applicable	
37. Are the permit conditions being met? [Environment Article §9-326(a)(1)]	Out of Compliance	See FIR

Inspector: Shailaja Polasi
Shailaja Polasi/Date
shailaja.polasi@maryland.gov
410-537-3510

Received by: _____
Signature/Date

_____
Print Name

Report Provided to:
[ ] Fax _____
[ ] Email _____
[ ] Regular Mail _____
[ ] Certified Mail _____

Exhibit 9
UV Transmittance Indicator Repair Quote
(dated December 4, 2020)

Heyward INCORPORATED
10146 West Broad Street
Glen Allen, VA 23060
Phone: 804.965.0086
Fax: 804.270.7863

Quote

Date	Estimate #
12/4/2020	2063

Customer
Horizon Land Management c/o Singh Operational Services Attn: Deborah Spangler dspangler@singh-ops.com

Item	Description	Qty	Cost	Total	Lead Time
	Lyons Creek (Waldorf) - Project #611951				
331014-002	Lamp Sleeve Kit, 64" PTP/3B	2	353.20	706.40T	
302403	Ballast, 120V/60 Hz	1	287.86	287.86T	
Service	Service Technician, Per Day	1	1,600.00	1,600.00	
	*ALL UNITS MUST BE LEVEL.				

FREIGHT: **Prepay & Add __x_____**
Allowed _____
Collect _____

Prices are valid for 30 days. Shipments are made FOB factory.
Terms are net 30 days.

Subtotal	$2,594.26
Sales Tax (6.0%)	$59.66
Total	$2,653.92