

INSPECTION REPORT

Inspection Entry Date/Time	08/14/2023 12:00 PM (ET)	Announced: No	
Inspection Exit Date/Time	08/14/2023 04:00 PM (ET)	Access: Granted	
Weather	Dry, cloudy, mid-70s		
Media	Water		
Statute(s)/Program(s)	Clean Water Act, NPDES, WWTP		
Type of Inspection	Compliance Evaluation Inspection (CEI)		
Permittee Name	Oak Harbor WWTP		
Facility or Site Name	Oak Harbor WWTP		
Facility/Site Physical Address	355 East Water Street		
City, State, Zip Code	Oak Harbor, OH 43449		
County/Borough/Parish	Ottawa		
Facility GPS Coordinates	41.5076, -83.1369		
FRS ID	110006285144		
Permit Number(s) (If Applicable)	2PB00032*OD		
SIC and/or NAICS	4952		
Lead Inspector:			
Megan Zale	MEGAN ZALE	Digitally signed by MEGAN ZALE Date: 2023.09.25 10:28:02 -04'00'	
	EPA REGION 5	zale.megan@epa.gov	(440) 250-1711
Supervisor Review:			
Brooke Furio	BROOKE FURIO	Digitally signed by BROOKE FURIO Date: 2023.09.25 10:52:40 -04'00'	
	EPA REGION 5	furio.brooke@epa.gov	(440) 250-1705

SECTION I – INTRODUCTION

Site Entry and Inspection Objectives

EPA Region 5 Lead Inspector, Megan Zale, arrived at the Oak Harbor WWTP, located at 355 East Water Street, Oak Harbor, OH 43449, at 12:00 PM (ET) on 08/14/2023 for an unannounced inspection. EPA Region 5 Lead Inspector presented credentials to the Operator of Record, Melissa Albright, and informed her that this was an EPA Region 5 inspection to determine compliance as authorized by Clean Water Act (CWA) Section 308 and implementing regulations. This report is based on information supplied by Oak Harbor WWTP representatives, direct observations made by the EPA Region 5 inspector, records and reports maintained by the permittee and other information including: photographs taken by EPA Region 5 inspector(s), physical evidence collected by the EPA Region 5 inspector(s), measurements taken by EPA Region 5 inspector(s), verbal or written statements made by information supplied by Oak Harbor WWTP representatives during or subsequent to the on-site inspection, and materials, processes, data, photographs, or documents shown, demonstrated, or submitted to

the EPA REGION 5 inspector(s) by Oak Harbor WWTP representatives during or subsequent to the on-site inspection. In addition, information gathered prior to or subsequent to the inspection from a review of EPA, State, and/or public records may be included in this report.

Attendees

Organization	Attendee Name	Title	Present in Opening Conf.	Present in Closing Conf.
EPA Region 5	Megan Zale	Lead Inspector	Yes	Yes
Oak Harbor WWTP	Melissa Albright	Operator of Record	Yes	Yes

Facility/Site Description

EPA Region 5 lead inspector confirmed the following facility information:

Facility treatment consists of a bar screen and comminutor, a pre-aeration tank, three primary clarifiers, a lift and recirculation building that leads to two trickling filter towers (the east trickling filter's arm is out of service so approximately 75% of flow is being fed to the west trickling filter, and 25% to the east filter), two secondary clarifiers, two settling tanks, ultraviolet ("UV") treatment, three sludge digesters, and a sludge belt press. The facility has an HMI system as opposed to SCADA, so it is a local interface and the assets are not remotely connected.

Assets also include four raw (influent) pumps, six trickling filter pumps, two sludge transfer pumps, a sludge box where sludge is held before being pumped to the sludge digesters, and a sludge storage building which holds approximately 22 tons of sludge.

Melissa Albright, Operator of Record, does all of the sampling for the facility.

Facility/Site Information

Responsible official	Melissa Albright
Type of primary flow meter	Rectangular weir without end contractions and ultrasonic flow meter.
What sort of failure alarm does the plant have?	High/low level alarm and backup power alarm
What portion of the plant does the backup power operate?	All of the plant with minimal lighting
How are biosolids managed?	Belt filter press and off-site landfill disposal
Have any bypasses or overflows happened at the plant or in the collection system in the last year?	Yes; 29 bypasses
Backup electrical power source, and	Yes; Yes but the trickling filter arms have to be manually restarted after losing power

does it turn on automatically?	
What is the overflow/emergency capacity (overflow basins, holding tanks, redundancy) and are there sufficient spare parts?	The CSO pond has 5 MG of storage
How often are the outfall(s) and flow measuring devices visually inspected?	Daily
Secondary flow measuring devices? If so, what type and are comparisons made between the primary and secondary flow measurements?	No
Type(s) of primary flow measuring device(s)?	Rectangular weir without end contraction and ultrasonic flow meter
Industrial Users	No major users - several welding shops
Are there any plans for renovation or additional equipment to allow for increased wastewater flow?	Plans to replace all mechanical equipment in primary clarifier #3 before the end of 2023, in primary clarifier #2 in 2024, and in primary clarifier #1 in 2025. Leaving current troughs in all of them.
Is there currently any portion of the treatment train that is non-operational?	Yes, the east trickling filter rotating arm is out of service (approximately 75% of flow is being directed to the west trickling filter, and the rest to the east strickling filter), and 2 of 4 blowers for the sludge digesters are in the process of being replaced.
Does the facility accept waste from septage haulers? If so, what problems have been experienced?	No
Do the facility use in-house or contract out for laboratory analyses? (including for metals or WET testing?)	In-house for pH, D.O., temperature, ammonia, e. coli, total suspended solids, total dissolved solids, CBOD. Contract for oil and grease, nitrite/nitrate, total phosphorus, metals, mercury, cyanide.
Operation schedule (days of operation, # shifts/day, #	Melissa Albright, Operator of Record, is on site 5 days/week, 7am-3:30pm, which is sufficient staffing for proper operation for a Class II facility, which has a requirement of 5 days a week for a minimum of 20 hours per week per Ohio regulations.

operators/shift, coverage overnight, weekends & emergencies), and is staffing sufficient for proper operation?	
Outfalls: (and do the numbers, locations, and receiving waters match the permit?)	Outfall 001 into Portage River (GPS coordinates: 41N 30' 15"; 83W 08' 11"). Location matches permit.
WWTP Approx. # of residents served	4,800
WWTP Design Capacity & Average Daily Flow	0.930 MGD peak, 0.912 MGD average

SECTION II – OBSERVATIONS

OAK HARBOR WWTP		
Observation #: MZ2-OB-001	Date: 08/14/2023	Weather: Dry, cloudy, mid-70s
The east trickling filter arm is not operational and has been out of operation at least since Ohio EPA conducted a facility inspection on October 20th, 2022. The operator of record stated that the reason for all of the facility's ammonia exceedances is that the east trickling filter arm is not operational, in addition to the media in both of the trickling filters being old. She also stated that there are currently no plans to repair or replace the filter arm. She stated that approximately 75% of the plant's flow is being directed to the west trickling filter, with the rest being directed to the east trickling filter.		

OAK HARBOR WWTP		
Observation #: MZ2-OB-002	Date: 08/14/2023	Weather: Dry, cloudy, mid-70s
The thermometer in the influent automatic sampler refrigerator was not operational at the time of the inspection.		

OAK HARBOR WWTP		
Observation #: MZ2-OB-003	Date: 08/16/2023	Weather: Dry, cloudy, mid-70s
The operator stated that the facility's history of e. coli exceedances had been due to the UV treatment unit requiring repairs, which were completed the first week of June 2023. The facility's June 2023 Discharge Monitoring Report ("DMR") showed that the facility's e. coli effluent levels lowered to within permit limits in the third week of sampling for the month. They were also significantly lower in the final sampling week for the month, but slightly above permit limits. The operator stated this was due to a new employee cleaning/flushing the primary tanks on the first day of e. coli sampling. The operator's daily log book confirmed this information (photo DSCN0610.JPG).		

OAK HARBOR WWTP		
Observation #: MZ2-OB-004	Date: 08/14/2023	Weather: Dry, cloudy, mid-70s
EPA observed that the final outfall signage was facing away from the receiving stream. The plant operator of record followed up with EPA in an email dated 8/31/2023 with photos of the outfall sign facing toward the receiving stream.		

SECTION III – RECORDS REVIEW

Records may not be in sequential order.

Record: DMR Reports		AOC: No
Ref #: MZ2-RR-008	Reviewed By: Megan Zale	Reviewed Date: 09/19/2023
Discharge Monitoring Reports for January 2023 through July 2023		
Record: Flow Meter Logs		AOC: No
Ref #: MZ2-RR-007	Reviewed By: Megan Zale	Reviewed Date: 08/14/2023
Chart recorder logs for January 2023 through July 2023.		
Record: Laboratory Analysis Reports		AOC: No
Ref #: MZ2-RR-006	Reviewed By: Megan Zale	Reviewed Date: 09/13/2023
Laboratory analysis reports from Jones and Henry Laboratories Inc. for April 2023, May 2023, and July 2023.		
Record: Other - Great Lakes Basin Combined Sewer Overflow Public Notification Plan		AOC: No
Ref #: MZ2-RR-005	Reviewed By: Megan Zale	Reviewed Date: 09/13/2023
Great Lakes Basin Combined Sewer Overflow Public Notification Plan		
Record: Other - Laboratory Chain of Custody Forms		AOC: No
Ref #: MZ2-RR-004	Reviewed By: Megan Zale	Reviewed Date: 08/14/2023
Chain of custody forms for Jones and Henry Laboratories, Inc. for January 2023 through July 2023.		
Record: Calibration Records		AOC: No
Ref #: MZ2-RR-003	Reviewed By: Megan Zale	Reviewed Date: 08/14/2023
Most recent calibration record for flow meter (October 2022)		
Record: Other - Operator Log Book		AOC: No
Ref #: MZ2-RR-002	Reviewed By: Megan Zale	Reviewed Date: 08/14/2023

Operator of Record's daily log book		
Record: Other - CSO Closures Report and follow-up letter to Ohio EPA		AOC: No
Ref #: MZ2-RR-001	Reviewed By: Megan Zale	Reviewed Date: 09/13/2023
List of currently closed CSOs and expected closure dates of remaining CSOs. Letter dated August 28, 2023 addressed to Ohio EPA stating that all CSOs have been closed except permitted CSO #11 (CSO Basin Overflow).		

SECTION IV – SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

No sampling was conducted.

SECTION V - AREA OF CONCERN

Area(s) of Concern may not be in sequential order.

The presentation of Area(s) of Concern does not constitute a formal compliance determination or violation.

AOC Reference #: MZ2-OB-001
Regulation and/or Permit Requirement:
According to the facility NPDES permit Part III. 3. A. "All wastewater treatment works shall be operated in a manner consistent with the following: At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures..."
AOC:
The east trickling filter arm is not operational and has been out of operation at least since Ohio EPA conducted a facility inspection on October 20th, 2022. The operator of record stated that the reason for all of the facility's ammonia exceedances is that the east trickling filter arm is not operational, in addition to the media in both of the trickling filters being old. She also stated that there are currently no plans to repair or replace the filter arm. She stated that approximately 75% of the plant's flow is being directed to the west trickling filter, with the rest being directed to the east trickling filter.

SECTION VI – CLOSING CONFERENCE AND FOLLOW UP**Closing Conference**

The EPA REGION 5 Lead Inspector held a closing conference with Facility personnel at 04:00 PM (ET) on 08/14/2023 for the inspection. During the closing conference, EPA REGION 5 Lead Inspector discussed the observations and Area(s) of Concern identified during the inspection. Observations and Area(s) of Concern have not yet been evaluated for a formal compliance determination.

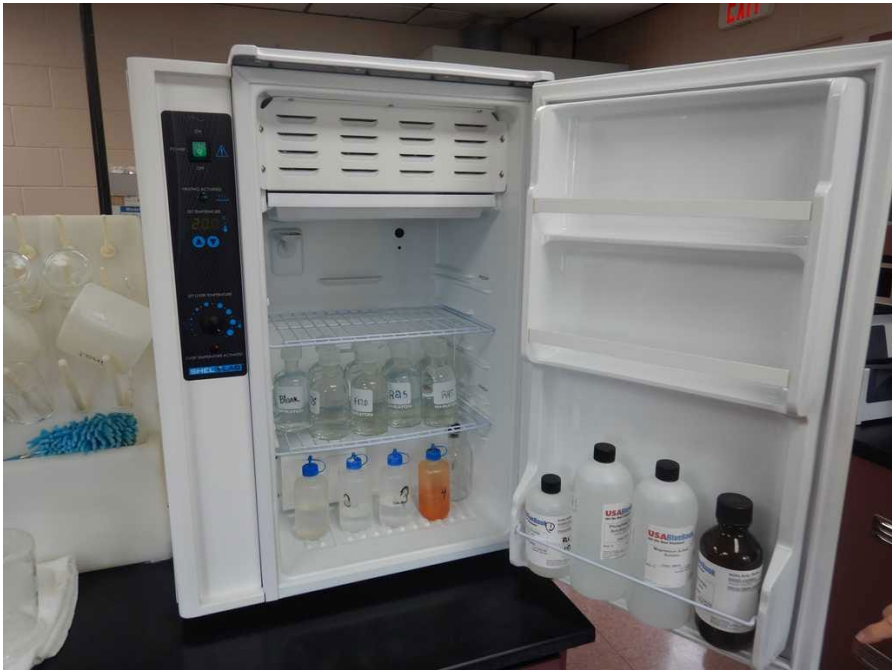
EPA discussed with the operator of record the concerns seen at the plant, which were the inoperable trickling filter arm in the east trickling tower, the inoperable thermometer in the influent sampling refrigerator, and the outfall sign not facing the receiving stream. EPA returned to the site on 8/23/2023 to take photos of the outfall

and upstream and downstream sampling locations.

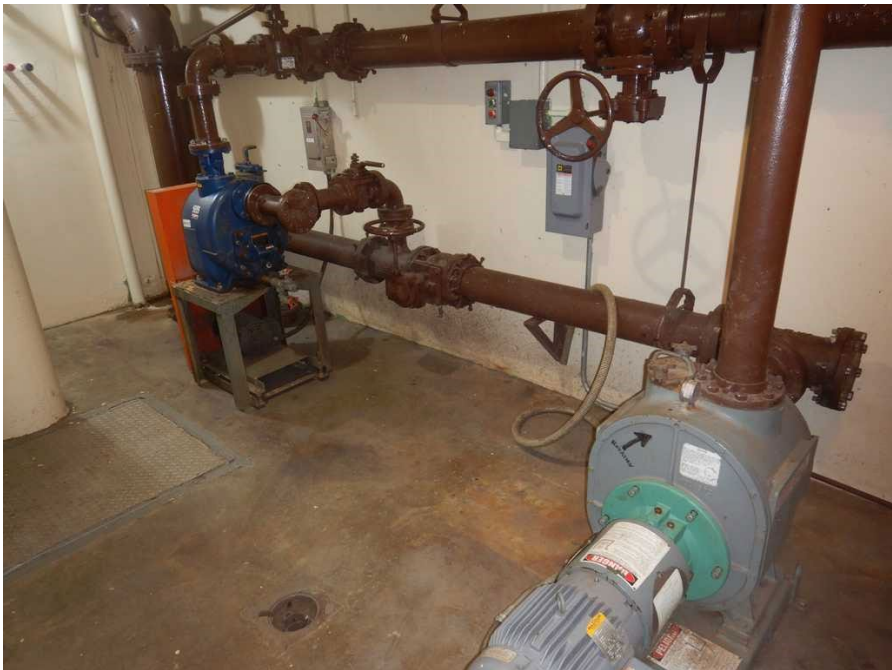
SECTION VII – LIST OF ATTACHMENTS

1. Photo Log

ATTACHMENT 1: PHOTO LOG



Laboratory refrigerator			DSCN0580.JPG
08/14/2023 01:49 PM	No CBI	No PII	Photographer: Megan Zale
Laboratory refrigerator which includes sample storage			



Sludge pumps			DSCN0581.JPG
08/14/2023 01:56 PM	No CBI	No PII	Photographer: Megan Zale
Sludge pumps			



Primary pumps			DSCN0582.JPG
08/14/2023 01:57 PM	No CBI	No PII	Photographer: Megan Zale
Primary pumps			



Influent sample refrigerator			DSCN0583.JPG
08/14/2023 02:00 PM	No CBI	No PII	Photographer: Megan Zale
Influent sample refrigerator			



Comminutor			DSCN0584.JPG
08/14/2023 02:00 PM	No CBI	No PII	Photographer: Megan Zale
Comminutor			



Bar Screen			DSCN0585.JPG
08/14/2023 02:02 PM	No CBI	No PII	Photographer: Megan Zale
Bar screen			



Backup Generator			DSCN0586.JPG
08/14/2023 02:03 PM	No CBI	No PII	Photographer: Megan Zale
Backup generator			



Blowers for Pre-aerator			DSCN0587.JPG
08/14/2023 02:03 PM	No CBI	No PII	Photographer: Megan Zale
Blowers for pre-aerator			



Sludge Box			DSCN0588.JPG
08/14/2023 02:04 PM	No CBI	No PII	Photographer: Megan Zale
Sludge box - sludge is held before being pumped to digesters			



Pre-aeration tank			DSCN0589.JPG
08/14/2023 02:05 PM	No CBI	No PII	Photographer: Megan Zale
Pre-aeration tank			



Primary Clarifier #3			DSCN0590.JPG
08/14/2023 02:06 PM	No CBI	No PII	Photographer: Megan Zale
Primary Clarifier #3			



Influent Flow Meter			DSCN0591.JPG
08/14/2023 02:07 PM	No CBI	No PII	Photographer: Megan Zale
Influent flow meter			



Primary Clarifier #2			DSCN0592.JPG
08/14/2023 02:08 PM	No CBI	No PII	Photographer: Megan Zale
Primary clarifier #2			



Primary Clarifier #1			DSCN0593.JPG
08/14/2023 02:09 PM	No CBI	No PII	Photographer: Megan Zale
Primary clarifier #1			



East Trickling Filter			DSCN0594.JPG
08/14/2023 02:10 PM	No CBI	No PII	Photographer: Megan Zale
East trickling filter (rotating arm not operational)			



West Trickling Filter			DSCN0595.JPG
08/14/2023 02:11 PM	No CBI	No PII	Photographer: Megan Zale
West trickling filter			



West Trickling Filter			DSCN0596.JPG
08/14/2023 02:11 PM	No CBI	No PII	Photographer: Megan Zale
West trickling filter			



West Secondary Clarifier			DSCN0597.JPG
08/14/2023 02:13 PM	No CBI	No PII	Photographer: Megan Zale
"West secondary clarifier"			



East Secondary Clarifier			DSCN0598.JPG
08/14/2023 02:13 PM	No CBI	No PII	Photographer: Megan Zale
"East secondary clarifier"			



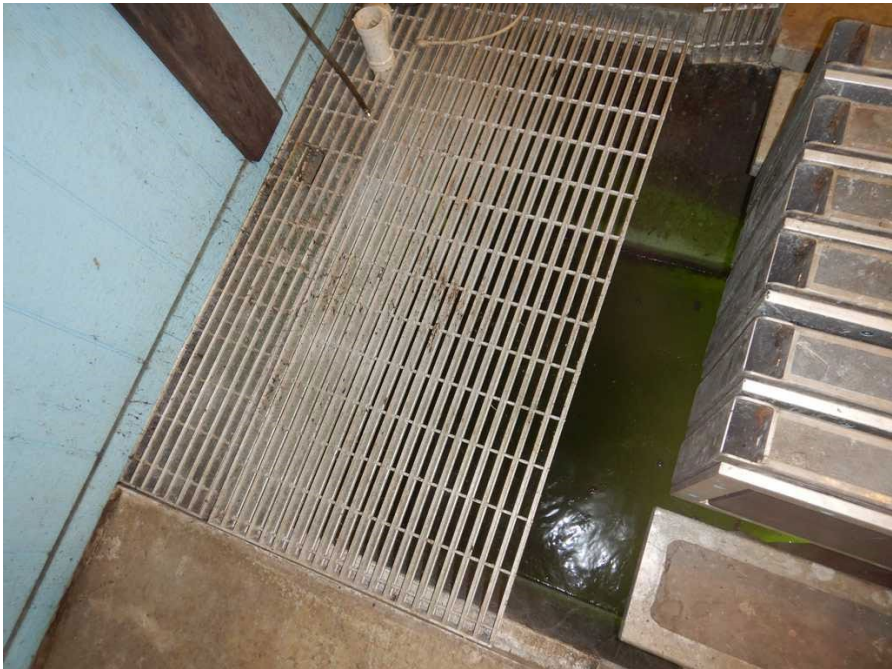
Settling Tanks			DSCN0599.JPG
08/14/2023 02:14 PM	No CBI	No PII	Photographer: Megan Zale
Settling tanks (used to be chlorine contact tanks)			



UV Treatment			DSCN0600.JPG
08/14/2023 02:15 PM	No CBI	No PII	Photographer: Megan Zale
UV treatment			



Effluent Composite Sample Refrigerator			DSCN0601.JPG
08/14/2023 02:16 PM	No CBI	No PII	Photographer: Megan Zale
Effluent composite sample refrigerator			



Effluent Grab Sample Location			DSCN0602.JPG
08/14/2023 02:17 PM	No CBI	No PII	Photographer: Megan Zale
Effluent grab sample location			



Effluent Flow Meter			DSCN0603.JPG
08/14/2023 02:18 PM	No CBI	No PII	Photographer: Megan Zale
Effluent flow meter			



Sludge Belt Press			DSCN0604.JPG
08/14/2023 02:19 PM	No CBI	No PII	Photographer: Megan Zale
Sludge belt press			



Blowers for digesters			DSCN0605.JPG
08/14/2023 02:20 PM	No CBI	No PII	Photographer: Megan Zale
Blowers for digesters			



Digester #1			DSCN0606.JPG
08/14/2023 02:22 PM	No CBI	No PII	Photographer: Megan Zale
Digester #1			



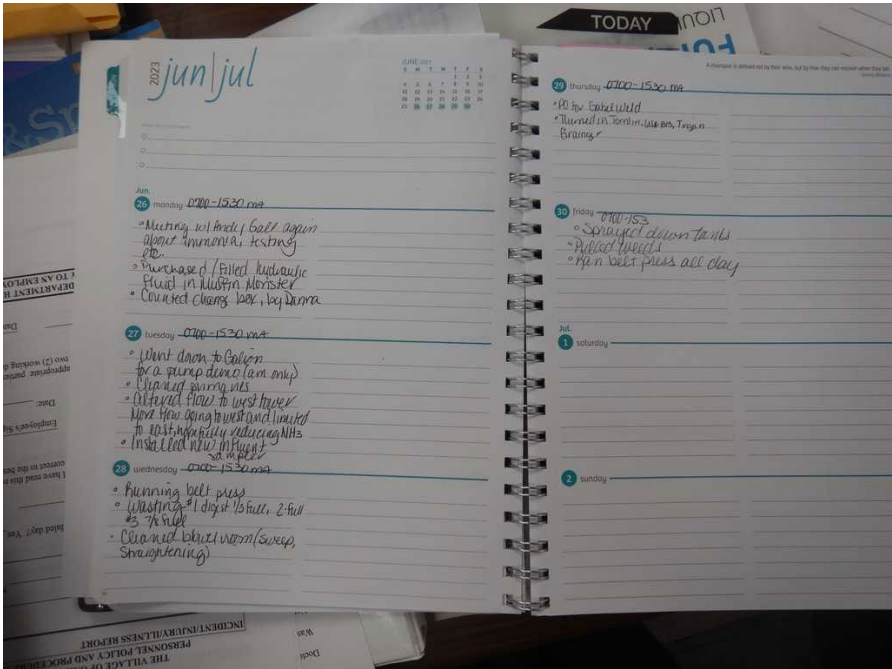
Digester #2			DSCN0607.JPG
08/14/2023 02:22 PM	No CBI	No PII	Photographer: Megan Zale
Digester #2			



Digester #3			DSCN0608.JPG
08/14/2023 02:23 PM	No CBI	No PII	Photographer: Megan Zale
Digester #3			



Sludge Transfer Pump			DSCN0609.JPG
08/14/2023 02:25 PM	No CBI	No PII	Photographer: Megan Zale
Sludge transfer pump			



Operator Log Book			DSCN0610.JPG
08/14/2023 02:29 PM	No CBI	No PII	Photographer: Megan Zale
Operator log book			



Operator Certifications			DSCN0611.JPG
08/14/2023 02:35 PM	No CBI	No PII	Photographer: Megan Zale
Operator certifications			



Outfall 001			DSCN0638.JPG
08/23/2023 10:02 AM	No CBI	No PII	Photographer: Megan Zale
Outfall 001			



Outfall 001			DSCN0639.JPG
08/23/2023 10:03 AM	No CBI	No PII	Photographer: Megan Zale
Outfall 001			



Outfall 001 Signage			DSCN0640.JPG
08/23/2023 10:03 AM	No CBI	No PII	Photographer: Megan Zale
Outfall 001 signage			



Downstream Sampling Location			DSCN0641.JPG
08/23/2023 10:11 AM	No CBI	No PII	Photographer: Megan Zale
Downstream sampling location			



Upstream Sampling Location			DSCN0642.JPG
08/23/2023 10:22 AM	No CBI	No PII	Photographer: Megan Zale
Upstream sampling location			