



REGION 1

NEW ENGLAND REGIONAL LABORATORY
NORTH CHELMSFORD, MA 01863

Date:

Subject: Reconnaissance and Sampling Inspection Report
Clean Water Act – National Pollutant Discharge Elimination System
West Haven, CT

From: Anna Hatke, Inspector
Laboratory Services and Applied Science Division (LSASD)
Field Services Branch (FSB)

**ANNA
HATKE**

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Reviewed

By: Jerome Keefe, Investigations Team Leader
LSASD-FSB

To: Elliot Anderson, Inspector
Enforcement and Compliance Assurance Division (ECAD)
Water Compliance Section 1

CC: Todd Borci, Manager
ECAD - Water Compliance Section 1

I. Facility Information

- A. Facility Name:* City of West Haven, CT
- B. Facility Location:* West Haven, CT
- C. Facility Contact:* Robert Sandella, Acting Commissioner,
sandella@westhaven-ct.gov, (203) 937-3585
- D. NPDES Permit ID:* CTR030002 (MS4)

II. Background Information

- A. Date/Start time of Reconnaissance inspection:* 9/24/2024 09:13
- B. Weather conditions:* Sunny-partly cloudy approx. 60°F
- C. USEPA Representatives:* Anna Hatke, Nafisah Ali, Jerry Keefe
- D. State/Local Representatives:* N/A

A. Date/Start time of sampling inspection: 10/22/2024 08:14

B. Weather conditions: Sunny, clear, approx. 58°F

C. USEPA Representatives: Anna Hatke, Nafisah Ali

D. State/Local Representatives: N/A

E. Federally Enforceable Requirements Investigated: Stormwater discharges and certain non-stormwater discharges from the West Haven, CT Municipal Separate Storm Sewer Systems (MS4) are authorized by the National Pollutant Discharge Elimination System (NPDES) General Permit for the Discharge of Stormwater from Small MS4 (hereinafter, the Permit), issued by the Environmental Protection Agency (EPA) Region 1. The City obtained coverage under the Permit with NPDES Permit ID CTR030002.

F. Pollutants Sampled: Pharmaceuticals and Personal Care Products (PPCPs), Enterococcus, Ammonia (nitrogen), Total Chlorine, and Surfactants

III. Disclaimer:

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

IV. Type and Purpose of Inspection(s)

The purpose of the reconnaissance inspection was to locate stormwater outfalls which discharge into the Long Island Sound, while noting appearance, presence of flow, and access requirements for one or more sampling inspections.

The purpose of the compliance sampling inspection was to identify potential illicit connections or illegal discharges within the West Haven, CT MS4 that may adversely impact the water quality along the Long Island Sound. Samples were collected from 1 location in accordance with the FSB Investigations Team Stormwater Program Plan.

V. Permittee Details

The City of West Haven is a coastal town that occupies approximately 10.75 square miles in New Haven County, CT approximately 36 miles southwest of Hartford, CT. The city shares borders with the municipalities of New Haven to the north and east, and Milford and Orange to the west. According to the 2020 U.S. Census, the population of West Haven, CT was 55,584.

VI. 07/23/2024 Reconnaissance Inspection Summary

On September 24th, 2024, EPA Inspectors Anna Hatke, Nafisah Ali and Jerry Keefe conducted an unannounced reconnaissance inspection of the West Haven, CT MS4 at the locations described in Section VIII. They were not accompanied by any city or state representatives. The inspection

started near 700 Ocean Ave, West Haven, CT at approximately 09:13. At the time of the inspection, the weather was partly cloudy and approximately 60°F.

According to the National Weather Service (NWS) for New Haven Tweed Airport, CT, the last precipitation event prior to the inspection occurred on 9/7, 2024, with 0.30 inches recorded. There was not precipitation recorded within the 72 hours before the inspection. According to the NWS, in the month (to date of inspection) of September, the area observed 0.31 inches of rain, which is approximately 9.7% of the 30-year normal value of 3.18 inches. According to the US Drought Monitor, as of October 1, 2024, New Haven County is experiencing no drought conditions.

VII. 07/24/2024 Sampling Inspection Summary

On October 22, 2024, Anna Hatke and Nafisah Ali (“the EPA Inspection Team”) conducted an unannounced compliance sampling inspection of the West Haven MS4 at the locations described in Section VIII. They were not accompanied by any city or state representatives. The inspection started near 700 Ocean Ave, West Haven, CT at approximately 08:14. At the time of the inspection, the weather was sunny and clear and approximately 58 °F.

According to the National Weather Service (NWS) for New Haven Tweed Airport, CT, the last precipitation event prior to the inspection occurred on 10/13, 2024, with 0.02 inches recorded. There was not precipitation recorded within the 72 hours before the inspection. According to the NWS, in the month (to date of inspection) of October, the area observed 0.29 inches of rain, which is approximately 10.6% of the 30-year normal value of 2.73 inches. According to the US Drought Monitor, as of October 29, 2024, New Haven County is experiencing abnormally dry weather.

The sampling locations described in Section VIII were field screened using test kits for ammonia (nitrogen), surfactants, and total chlorine. In-situ measurements for specific conductivity, salinity, and temperature were also measured using a YSI water quality meter and recorded. Field data were recorded on field data sheets. Samples were delivered to and analyzed for enterococcus at the Complete Environmental Testing Inc., 80 Lupes Drive, Stratford, CT 06615, and PCPs at the EPA New England Regional Laboratory in North Chelmsford, MA. Table 1 below summarizes the sampling and analytical data.

VIII. Description of Sampling Locations (in order of collection time)

Photographs depicting each sample location are included in Appendix A of this report.

- **Seaview1**: One circular corrugated metal outfall approximately 4 feet in diameter, located at 700 Ocean Ave and at the end of a man-made rock jetty. Discharge flow was approximately 4 gallons per minute (“gpm”) into the Long Island Sound. Sample was collected at the mouth of the outfall. A briny odor was detected. Color was clear and turbidity was low. No overt floatables were observed. Dark green algae growth was observed on the sides of the metal outfall. The structural integrity of the outfall was observed to be deteriorating, with a section of the pipe caved in.

Samples were not collected from the following sample locations, due to no observed flow.
Photographs depicting each location are included in Appendix A of this report.

- **Seaview2:** One circular corrugated metal outfall approximately 4 feet in diameter, located at the end of a jetty, located at Ocean Ave. and Opp Dawson Ave. At low tide, discharge flow was not observed, due to the partial submergence of the outfall by the tide. The outfall pipe was heavily degraded, with observed holes further up the pipe.
- **Cove2:** One oblique concrete outfall, approximately 2 feet in diameter, preceding a roughly 3- foot concrete flume, located at 1083 Ocean Ave. The outfall is located on the left bank, looking upstream, preceding Long Island Sound. The water was stagnant with no discharge observed and the outfall was mostly submerged. Dead oysters were observed around the outfall and directly downstream.

Map of Sample Locations

Note: the locations on the map were estimated using Google Earth and are used for display purposes only.



Note:

Seaview 2: No flow. Outfall was partially submerged.

Cove 2: No flow. Outfall was partially submerged.

Table 1: Summary of Sampling and Analytical Data

Location	Site ID	Seaview1
	Sample Date	10/22/2024
	Sample Time	8:14
Coordinates ¹ (decimal degrees)	North	41.24359
	West	-72.968716
YSI Meter	Salinity, ppt.	0.2
	Temperature, °C	15.6
	Conductivity,	345.1
Field Test Kits (mg/L)	Ammonia	0.1
	Total Chlorine	0.0
	Surfactants	0.35
Bacteria (MPN/100mL)	Enterococcus	980
PPCPs (ng/L)	Cotinine	2.5
	Acetaminophen	130
	Paraxanthine	5.0
	Atenolol	ND
	Caffeine	6.1
	Metoprolol	ND
	Diphenhydramine	0.95
	Carbamazepine	1.8

Abbreviations and Notes:

1. The coordinates listed in Table 1 were derived from the map created in Google Earth, therefore the coordinates are estimates of the actual locations.

N/A: Not Analyzed

ND: Not Detected above Reporting Limit

Entero*: [REDACTED], Orange ≥ 500, Yellow ≥ 104-500 col/100ml, Black < 104 col/100ml

NH₃: [REDACTED], Orange ≥ 0.5 mg/L, Yellow ≥ 0.25 mg/L, Black < 0.25 mg/L

Cl₂: [REDACTED], Orange ≥ 0.3 mg/L, Yellow ≥ 0.02 mg/L, Black < 0.02 mg/L

Surfactants: [REDACTED], Orange ≥ 0.5 mg/L, Yellow ≥ 0.25 mg/L, Black < 0.25 mg/L (may give false positive at salinity greater than 1 ppt)

PPCPs: [REDACTED], Orange ≥ 10x the RL, Yellow ≥ 3x the RL; Black < 3x the RL**

* Threshold values are based on single sample maximum for Connecticut's standards for recreational salt water designated for swimming.

**See Reporting Limit (RL) values for each compound in attached Laboratory Report for Source Tracking

EPA notes while there are currently no numerical standards to compare pharmaceutical results against, it is EPA's experience that acetaminophen is the single best bacterial source tracking compound of those listed above, and any detection of this compound may indicate a source of sanitary sewage. With respect to all of the above compounds, when a sanitary sewage source is present, depending on the type of source, distance from the sample location, and the strength of the source, concentrations of these compounds may range from the low ng/l range up to thousands of ng/L.

IX. Appendix

Appendix A: Photograph Log

X. Attachments

Attachment A: Laboratory Report for PPCPs (Source Tracking) Analysis

Attachment B: Laboratory Report for Enterococcus Analysis

End of Report

Appendix A
Photograph Log



Photo 1: Seaview1 (photo taken 10/22/2024 at approx. 8:14) Outfall located near 700 Ocean Ave, discharging into the Long Island Sound. Sample point is indicated by a red X.



Photo 2: Seaview2 (photo taken 10/22/2024 at approx. 8:44) Outfall located near Ocean Ave. and Opp Dawson Ave. No sample was collected at this location. (Note: Time stamp on photo is incorrect)

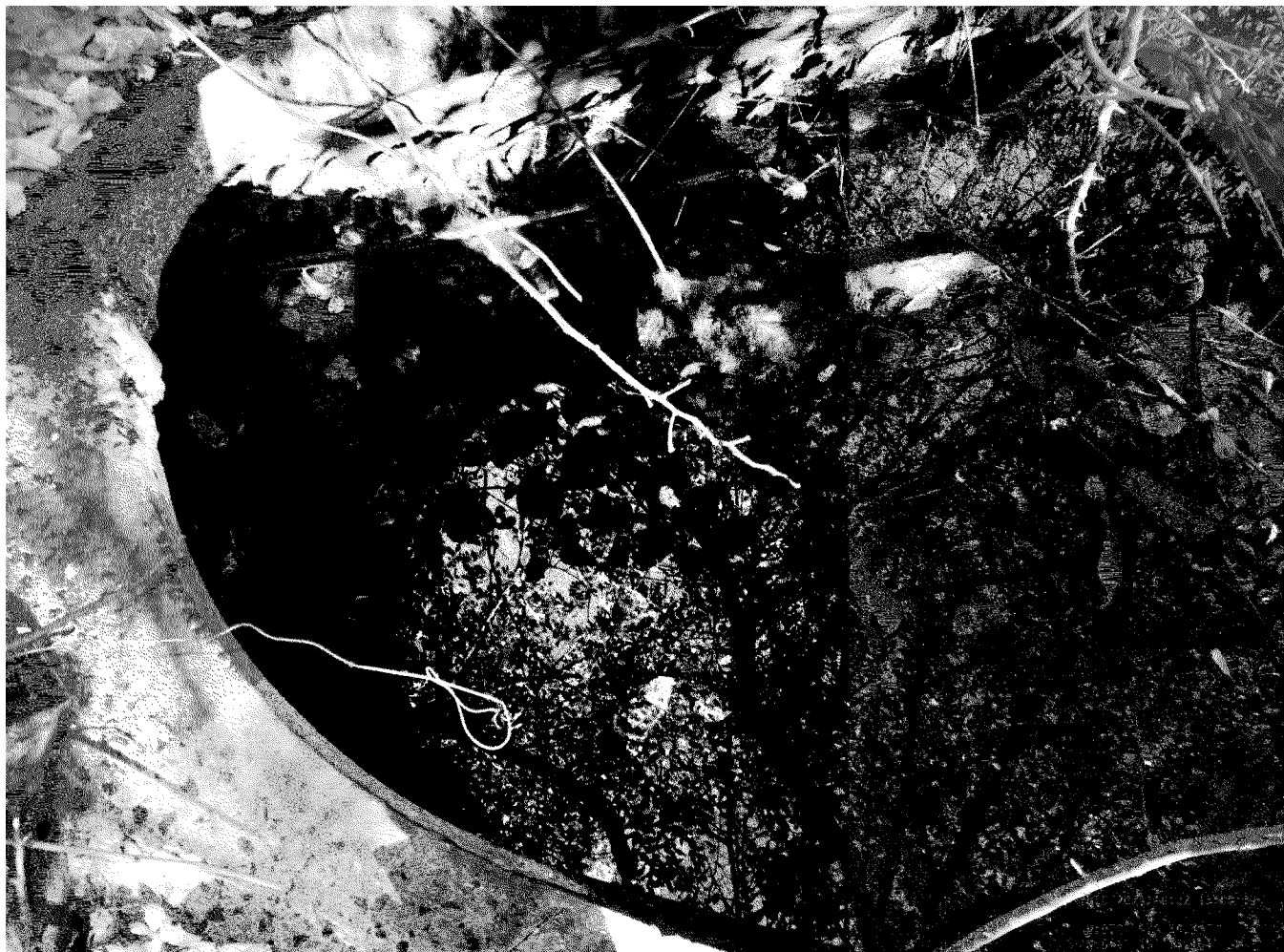


Photo 3: Cove2 (photo taken 10/22/2024 at approx. 9:00) Stream located near 1083 Ocean Ave #107.
No sample was collected at this location. (Note: Time stamp on photo is incorrect)

Attachment A
Laboratory Report for
Source Tracking Analysis

Author: LSASD Laboratory Services Branch
Pages: 10

Attachment B
Laboratory Report for
Enterococcus Analysis

Author: Complete Environmental
Pages: 7

End of Report