



New England Industrial Pretreatment Coordinators Workshop

October 21st – 22nd 2026

EPA (Environmental Protection Agency)
NERPCA (New England Regional Pretreatment
Coordinators Association)

***Illicit Discharge Somerville, MA
Case Study***



Massachusetts Water Resources Authority Toxic Reduction and Control (TRAC)

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Program Manager, Permitting & Inspections

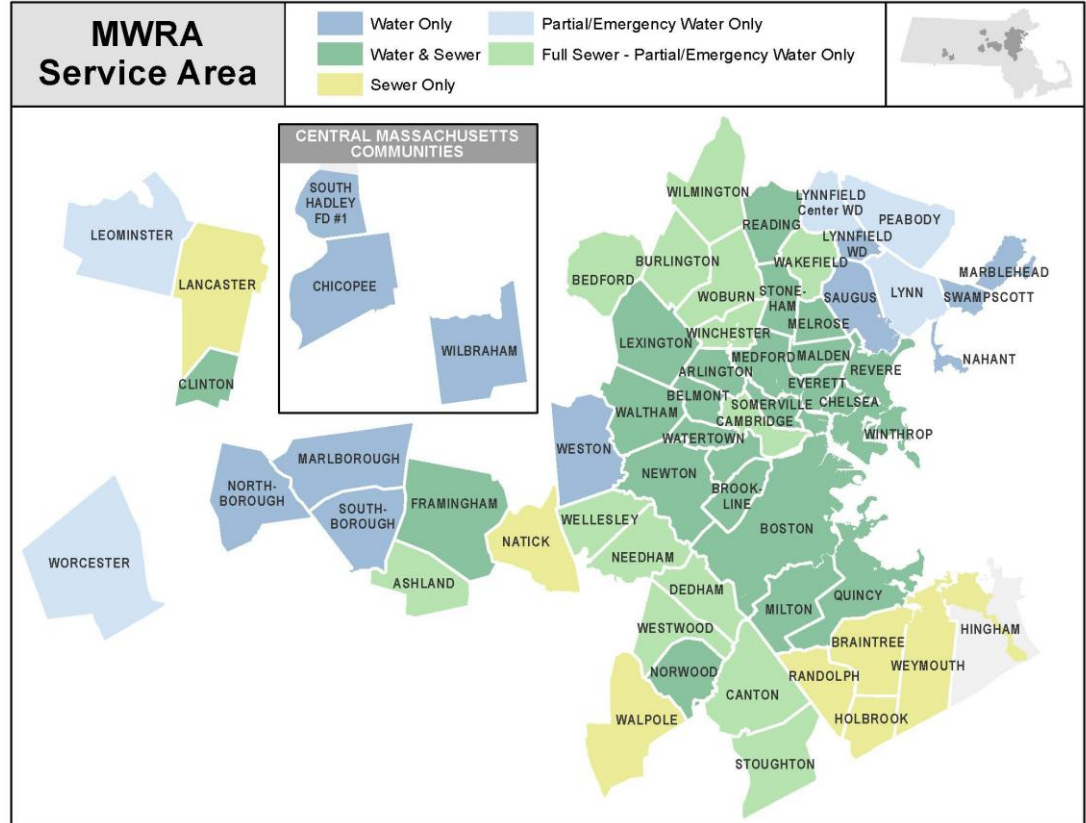
Keary L. Simmerman

Project Manager, Inspections



MWRA Statistics

- 3.1 million people served
- 5,500 businesses & 890,000 households served
- 200 MGD of water supplied
- 400 MGD of wastewater treated
- 45 sewerage & 51 water communities





MWRA Statistics

- 5,400 miles of sewer
- 228 miles of MWRA interceptors
- Clinton Wastewater Treatment Plant – flow design of 3.01 MGD
- Deer Island Wastewater Treatment Plant – flow design of 1.2 BGD



Deer Island Treatment Plant



Agencies

- City of Somerville MA Engineering Department
- MWRA (TRAC: Inspections/Permitting, Monitoring, Compliance, TRAPs; Law Department)
- MassDEP (MA Department of Environmental Protection)
- MBTA (Mass Bay Transportation Authority)



June 16th 2026

Somerville notified MWRA to investigate an illicit discharge to sewer system

- Facility online review
- GIS sewer drawings
- Permits



Notification

Illicit discharge

Unknown composition and quantity of an industrial liquid waste

Violation: Prohibited Wastes
360 CMR § 10.023(20)





First Site Visit

July 15th 2026 Somerville & TRAC inspection

Somerville concerns: sewer capacity, structural integrity, flow compliant with Somerville collection system

MWRA concerns: protect Deer Island Treatment Plant; ensure compliance with state and federal sewer use regulations



First Site Visit

- Present IDs to authorized representative
- Explain received an anonymous notification of disposal on their property
- Questions:
 - discharge waste onto property (denial)
 - lab analysis of solid & liquid waste (unavailable)
 - description of operations



Facility Operations

Grease pump truck



Vacuum truck





Facility Operations

Water jetting truck



Vactor truck





Roll-off container truck

- Water evaporates
- Solids stored on floor





First Site Visit

MWRA Monitoring Group sampled street connection

- FOG, TSS, Petroleum Hydrocarbons (TPH)





First Site Visit

Access granted to sample on property





SURPRISE



First Site Visit

- Grate & towel removed = **No Sewer Connection**
- A through-way to MBTA property





First Site Visit Follow-up

MWRA contacted MassDEP and MBTA





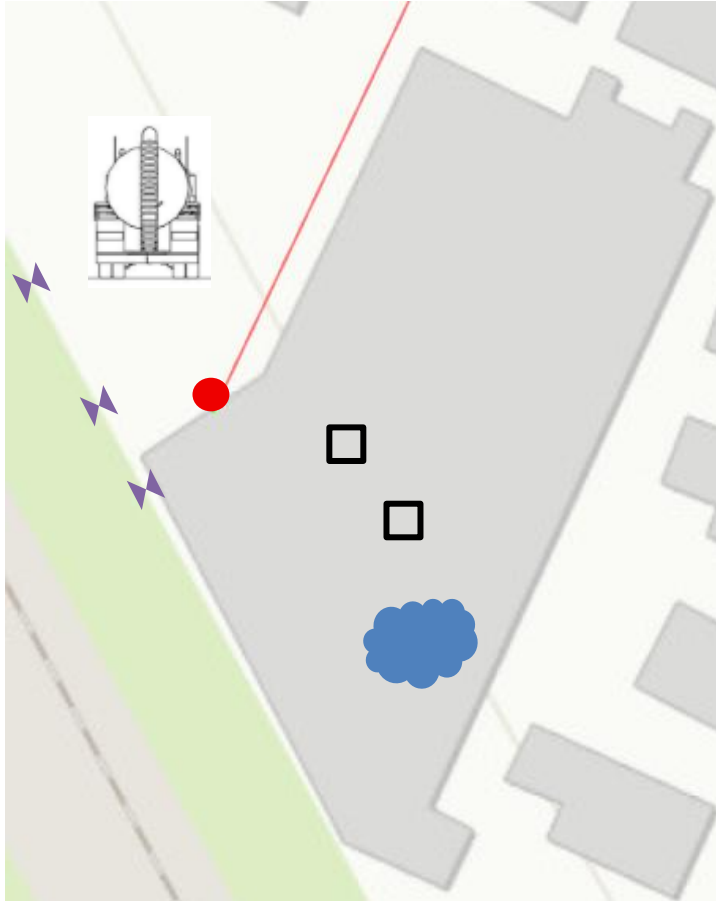
Second Site Visit

July 21st 2026 MassDEP & MWRA inspection

- DEP request authorized representative sign consent form
- DEP investigate waste handling of solids and liquids
- MWRA investigate garage oil water separator (OWS) requirement & access to sewer system



Site Drawing



- ✕ Through-hole
- Sewer manhole
- Floor drain
- ☁ Solids pile



Second Site Visit

Garage

- OWS not installed
- Two floor drains
- One drain blocked with debris





Second Site Visit

- Confirmed garage floor drain $\Rightarrow$ manhole
- Dead-end sewer manhole $\Rightarrow$ collection system





Second Site Visit

Dried solids moved
from roll-off container
to garage floor





Second Site Visit

DEP collected four samples

Solid residue within manhole



Solids pile in garage





Second Site Visit

Wall through-hole solid residue (2 sampled)



ROW solid residue





Second Site Visit

- DEP spoke with owner regarding regulation violations
 - Solid Waste 310 CMR 16.000 & 310 CMR 19.00
 - Water Pollution Control 314 CMR 3.00 & 314 CMR 5.00
 - Lab analysis for the removal of solids pile
 - Disposal records of liquids and solids
 - Bill of Ladings for Allentowns, NH WWTP
- MWRA gave a verbal cease and desist order to immediately stop discharge to the sewer (360 CMR § 10.023(20))



MassDEP Follow up

- Received waste disposal records for past 2 years
- Facility stated only handle non-hazardous, non-state-regulated waste; Maintains NH septage hauler permit
- Lab analysis:
 - TCLP (Toxicity Characteristic Leaching Procedure)
 - 13 priority pollutant metals
 - Combination of petroleum and oil/grease; biofuel



MassDEP Sampling Results

<u>Parameter</u>	<u>MWRA limit</u>	<u>Manhole</u>	<u>MCP value</u>	<u>Solids pile</u>	<u>Through-hole</u>	<u>Retaining wall</u>
Arsenic, Total	0.5	8.56	20	3.41	5.83	3.96
Chromium, Total	1.0	39.9	100	29.6	31.5	130
Copper, Total	1.0	2260	1000	127	90.8	174
Lead, Total	0.2	175	200	65.2	206	127
Mercury, Total	Prohibited	ND	20	0.128	ND	0.175
Nickel, Total	1.0	20.9	600	16.5	22.6	28.7
Silver, Total	2.0	2.69	100	ND	ND	ND
Zinc, Total	1.0	365	1000	157	261	200
TPH	-	1,130,000	1,000	17,600	2,540	80,800

ND: Antimony, Beryllium, Cadmium, Selenium, Thallium (Total)

Metals, TPH (mg/L)

360 CMR 10.024 / MCP Soil Value RCS-1



MWRA Follow Up

- Hand-deliver written cease and desist order 8/7/26
- Garage OWS requirement
- MBTA notification of discharge to Right of Way
- Somerville permanently close through-holes
- Street manhole results:

<u>Parameter</u>	<u>MWRA limit</u>	<u>Manhole (street)</u>
Fats Oils & Grease	300	20.2
Total Suspended Solids	-	158
Total Petroleum Hydrocarbons	-	2.1

FOG, TSS, TPH (mg/L)
360 CMR 10.024



Conclusion

- DEP: Enforcement action/fine is being pursued for Clean Water Act violation
- DEP: Disposal of solids pile to appropriate facility
- DEP: Consultant to obtain stormwater discharge permit from MassDEP/EPA
- MWRA: TRAPs program & OWS installation requirement
- Joint effort of 4 agencies; teamwork to ensure environmental stewardship



Questions





Contact Information



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