

Right to Know Session Format

1. Regulators with Panel Discussion
2. Boston Water & Sewer Commission
3. BREAK
4. Weston & Sampson/Flow Assessment Services
5. MWH: Springfield Water & Sewer Commission
6. Woodard & Curran

CSO “Right to Know” Monitoring & Notification: Regulator Panel

Date

October 26, 2015

Presented by

Ivonne Grajko Hall, CT DEEP

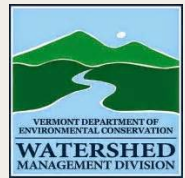
Edward Hampston, NYS DEC

Ernie Kelley, VT DEC

Alex Rosenberg, EPA Region 1

Event / Location

NEWEA Technical Conference / Lowell, MA



Why the Public Needs to Know



Connecticut Department of Energy and Environmental Protection

EPA: Timeline of Guidance

EPA 1995 Nine Minimum Control Guidance

#8 Ensure adequate public notification of occurrence and impact.

EPA 1999 Monitoring and Modeling Guidance

When LTCP based on modeled data...should verify model predictions (number and magnitude of overflows).

EPA 2010 NPDES Permit Writers Guidance

Expected that permittees w/ pop. >75,000 would utilize metering (or an event monitoring/modeling system) versus block testing.

EPA 2012 CSO Post Construction Monitoring

Plan should include data to determine the effectiveness of CSO controls.

EPA Region 1

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National EPA e-reporting Rule

- Rule finalized on September 24, 2015.
 - Phase 1: 1 year out / Phase 2: 5 years out
- The Permit still rules:
 - CSO discharges from permitted outfalls should be reported on DMRs at the frequency identified by the permit. [40 CFR 122.41(l)(4)(i)]
 - EPA Region 1 would anticipate unexpected dry-weather flows from CSO permitted outfalls to be reported under 40 CFR 122.41(l)(6) and (7) (within at least 24 hours).
- DMR data is available to public through FOIA or comparable state laws.
- The rule does not require e-flow monitoring nor real-time reporting, but discussions with permitting and or enforcement authorities may conclude that it is appropriate.
 - If required in permit must report electronically



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EPA Regional Example: Exeter, NH

NPDES Permit

Notice of Combined Sewer Overflow (CSO) 2015

Monday, April 20th & Tuesday, April 21st, the total measured precipitation was 2.07". Two wet weather CSO discharges were Spring Street CSO of 165,000 gal from 9:55 p.m. April 20th to 12:25 p.m. April 21st. Water Street CSO of 11,000 gal, April 21st, from 7:30 a.m. to 8:30 a.m. Total of both sites: 176,000 gallons.

- Immediate Reporting for any bypass of full treatment: CSO/SSO
 - Permittee (Public Works Dept) must notify State (NHDES-WD).
- State Shellfish Program determines suitable interval for continued notification.
- Qtrly sample at critical CSO outfall following discharges (1st yr)
 - 2 times per day for 3 consecutive days following discharge
 - public notification of discharges and impacts to rec. areas



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EPA Regional Example: Chelsea, MA

NPDES Permit

Date	CSO Activating	Quantity (Gals)	Duration (Hrs)	Rainfall (in)
01/11/14	004	1,000	0.25	0.54*
03/30/14	004	44,000	0.50	2.44
03/30/14	008	96,000	0.50	
03/31/14	004	16,000	1.00	0.96

- Monitor: total flow, duration, and precipitation for each outfall
- 24-hr Notification: E-mail selected list of NGOs and local officials
 - “or as soon as feasibly possible” (emergency situations)
- Update website annually to include general information regarding CSOs,
 - including potential health impacts and locations of outfalls



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EPA National Example:

DC Sewer and Water Authority, DC

Consent Decree

<<http://www2.epa.gov/enforcement/washington-suburban-sanitary-commission-clean-water-settlement>>

Combined Sewer System Model Results							
Period: April, May, June 2015							
SCENARIO: Y2015_Q2, produced July 13, 2015							
NPDES No.	Description	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
Anacostia CSOs							
005	Chicago St and Railroad Station SE	18	9.55	59.25	3.29	13.50	0.75
006	Good Hope Road, West of Nichols Ave., SE	separated					
007	13 th Street and Ridge Place, SE	13	17.35	31.00	2.38	8.50	0.50

- **Monitor: operate existing 120 permanent flow monitors**
 - Must utilize NASSCO guidance and achieve a 90% level of data quality
- **Public Notification: Operate lights on the Anacostia and Potomac Rivers (via SCADA).**
 - two light system (💡 during event; 💡 24-hrs after)
- **Maintain website with prior quarters discharges based on model results, and a description of light system.**



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Delegated State Implementation

- Delegated states like Connecticut, New York, and Vermont are requiring electronic CSO notification, using some combo of “Sewage Right to Know” legislation and NPDES permit conditions.
- Each state is at different point in the process.



Regional Example: Connecticut

CT General Statute §22a-424a: Sewage Right to Know

- Enacted on July 1, 2012.
- Part 1 was for CSOs:
 - DEEP “shall post a map of the state indicating the combined sewer overflows anticipated to occur during certain storm events”.
 - Location, anticipated duration and extent
 - Reasonable public health, safety or environmental concerns
 - Public safety precautions that should be taken
- Static map of CSOs, FAQs about LTCPs and safety precautions were posted to CT DEEP website in 2013.



Regional Example: Connecticut

CT DEEP CSO Webpage

The screenshot shows the CT DEEP CSO Webpage interface. At the top, there is a navigation bar with categories: ENERGY, ENVIRONMENTAL QUALITY, NATURAL RESOURCES, OUTDOOR RECREATION, and PURA. Below this is a 'Water' section with a sidebar menu containing links for Water Resources, Water Quality, Water Quantity, Watershed Management, Wetlands, Regulating Water Usage and Water Discharges, Environmental Protection Begins With You, Water Main Page, and Main Menu. The main content area is titled 'Combined Sewer Overflows (CSOs)' and features a map of Connecticut with several municipalities highlighted in different colors: Hartford (green), Waterbury (red), Middletown (purple), and others. A legend is visible in the top left of the map area. Below the map, there is a 'How to use the Combined Sewer Overflow (CSO) locations map:' section with a list of instructions.

How to use the Combined Sewer Overflow (CSO) locations map:

- Select one of the highlighted municipalities to display a pop-up window.
- Selecting "zoom to" will center the map on that municipality and display the location of the individual CSO locations.
- For additional information about a specific location, select the location to display a pop-up window. (Additional information is available in the fact sheets.)
- The map may also be zoomed in by selecting the + button or zoomed out by selecting the - button.
- To pan the map hold in the left mouse button and move the cursor.
- Selecting the legend button will display the map legend.

Note: Map may be slow to load

This screenshot shows the same CT DEEP CSO Webpage interface, but with the map zoomed in to focus on the Hartford area. The highlighted municipalities are more clearly visible, and the map shows more detail of the city's layout and surrounding areas. The sidebar menu and navigation bar are identical to the previous screenshot. The 'How to use the Combined Sewer Overflow (CSO) locations map:' section and the note are also present.

How to use the Combined Sewer Overflow (CSO) locations map:

- Select one of the highlighted municipalities to display a pop-up window.
- Selecting "zoom to" will center the map on that municipality and display the location of the individual CSO locations.
- For additional information about a specific location, select the location to display a pop-up window. (Additional information is available in the fact sheets.)
- The map may also be zoomed in by selecting the + button or zoomed out by selecting the - button.
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Note: Map may be slow to load



Regional Example: Connecticut

CT General Statute §22a-424a: Sewage Right to Know

- Part 2 includes ALL sewer bypasses
- CT definition of “bypass” is broader than federal, includes CSOs:
 - Regulations of Connecticut State Agencies § 22a-430-3:
"Bypass" means the diversion of wastes from any portion of the wastewater collection or treatment facilities.
 - 40CFR § 122.41(m) Bypass—(1) Definitions. (i) Bypass means the **intentional** diversion of waste streams from any portion of a treatment facility.



Regional Example: Connecticut

New NPDES Permit Conditions

- 2-hr notification of wet-weather CSO discharge
- 5-day follow-up report
- Annual CSO monitoring report.
- Submission of CSO Monitoring Plan for all CSOs.
- All to be reported to upcoming web portal.



Regional Example: Connecticut

CT DEEP CSO Webpage Part 2

- CT DEEP has a consultant developing a GIS based interactive web portal to receive notification from municipalities about CSO events, in addition to sewage bypass events.
 - Lots of challenges!!!
 - Anticipate starting in 2016.



Regional Example: New York

Sewage Pollution Right to Know (SPRTK) Act

- Enacted on May 1, 2013.
- Changes existing requirements for reporting partially treated or untreated sewage discharges: Publicly Owned Treatment Works (POTWs).
- Imposes new reporting and regulatory requirements for reporting partially treated or untreated sewage discharges: Publicly Owned Sewer Systems (POSSs).
- Imposes new reporting and regulatory requirements on NY DEC for reporting CSOs.

Regional Example: New York

SPRTK Municipal Overflow Reporting Requirements

- Within two hours of discovery, the following 6 items to be reported to NYSDEC/DOH **to extent knowable with existing systems and models:**
 - Volume & treated state of the discharge
 - Date and time of the discharge
 - Expected duration of the discharge
 - Brief description of steps taken to contain the discharge (N/A for wet weather CSOs)
 - Location of discharge with maximum specificity possible
 - Reason for the discharge
- Four Hour Report to General Public if impact to waterbody.

Regional Example: New York

SPRTK NY DEC CSO Public Reporting Obligations

- Post reported information expeditiously on NYSDEC website.
- Publish annual report that includes:
 - Total number of discharges
 - Details of discharges such as volume and treated state of discharges
 - Duration/location summary
 - Remedial response to mitigate impacts and avoid further discharges

Regional Example: New York

.....This is an ACTUAL NOTIFICATION.....

Issued By: City of Plattsburgh
Issued To: Clinton_2
Headline: City of Plattsburgh CSO #020 Surcharge
Location of Discharge: 1 Waterhouse St, Plattsburgh, NY 12901, USA
Additional Address Info: Waterhouse St CSO #020
Name of Waterbody Affected: Saranac River
Description of Discharge: Heavy rain caused CSO #020 to surcharge.
Potential public area(s) impacted:

The following public areas were potentially impacted:

Bathing Beach: Plattsburgh City Beach
Boat Launch: Green St
Fishing Area: Saranac River; Lake Champlain

Facility name: City of Plattsburgh, Facility ID: NY0026018

Date and Time of Discharge: 2015-10-09T08:00:00

Duration of Discharge: 1.0 hours ended.

Reason for Discharge:

Weather Conditions: Heavy rain in short period of time.

Volume or Rate of Discharge: 20 Gallons Per Minute (Estimated)

Treated State of Discharge: Untreated

Steps Taken to Contain Discharge: Maximized plant raw waste pumping.

For more information on this and other discharges, visit [SPRTK](#)

[Disclaimer: Daily and/or termination reports will be provided for ongoing discharges. The information provided in this message is accurate at the time of report using existing systems and models.]

Instructions:

Attachments:

[City of Plattsburgh_20151015T102432.pdf](#)

Regional Example: New York

Obstacles/Impacts with SPRTK Implementation

- Registration Process for NY-Alert System and Follow-up
- Sufficient Training (Staff and Notifiers)
- No/Limited Additional Resources
- Monitoring Systems
- Status/Use of Models
- Quality of Reporting and Updates
- Increased Workload to Respond to Inquiries (Media, Public, Officials)
- Customization of NY-Alert vs. Developing System

Regional Example: New York

CSO Wet Weather Advisory, Outfall Map, Web Pages

- Added and Updated CSO web pages
 - What are the potential impacts of CSO discharges
 - What is DEC doing to identify and abate issues
 - Links to explanations of BMPs & LTCP
 - Links to more information & education material
 - Key search words
 - Swimming web page
- Better distinction between info for public & POTWs.
- Continued communications through listserv.
- CSO Outfall Maps
 - 3 categories of CSO discharge activation data availability.
 - When possible, link to POTW website.
 - When possible, include static information about frequency of CSO activation.



Regional Example: Vermont

Revising Existing Legislation

- **CURRENT: 10 V.S.A. 1278 (e):** Notice of certain discharges.
*“The secretary of natural resources shall post publicly notice of an illegal discharge that may pose a threat to human health or the environment on its website within **24** hours of the agency's receipt of notification of the discharge.*
- VT DEC will be proposing revisions to §1278 (e) to shorten the notification period to 4 hours and to implement the new electronic reporting capability, whereby:
 - *WWTF operators must self-report all CSO and SSO releases within 4 hours*
 - *DEC staff must enter all other releases and illicit discharges to surface waters within 24 hours of discovery*



Regional Example: Vermont

VT DEC Webpage

<https://anrweb.vt.gov/DEC/WWInventory/SewageOverflows.aspx>

- In mid-September VT DEC brought on-line a new web based reporting system.
 - n-Form based and in the same system that will be used for electronic submittal of DMRs.
 - WWTF operators self report all CSO events, SSO events, and discharges of effluent that has received less than full treatment.
 - Reports are posted to the DEC web page immediately upon entry.
 - E-mail notification of a new event posting is sent to wastewater program staff, upper level VT DEC administration staff, and the Vermont Department of Health immediately upon entry.
- In the future the system will be expanded to include a map feature.
 - Discharge points can be geo-located and will provide a subscription notification service for the general public.



Regional Example: Vermont

- VT DEC requires the reporting of all CSO events, SSO events, and discharges of effluent that has received less than full treatment under the following categories:
 - Authorized wet weather CSO discharge
 - Discharged raw sewage
 - Discharged partially treated sewage
 - Discharged fully treated, non-disinfected effluent
 - Discharged fully treated, partially disinfected effluent
 - Discharged fully treated and disinfected, non-dechlorinated effluent
- Most CSO outfalls are not equipped with flow metering. Volume discharged can be entered as a specific volume (when known) or in estimated ranges:
 - <100 gallons
 - 100 – 1,000 gallons
 - 1,000 – 10,000 gallons
 - 10,000 – 100,000 gallons
 - 100,000 – 500,000 gallons
 - >500,000 gallons



Regional Example: Vermont

VERMONT
Waste Water Inventory

User Name: Password: Remember me next time.

[Home](#) [Facilities](#) [Permits](#) [Reports](#) [Maintenance](#) [Logins](#) [Watershed Management Website](#) [Drinking Water Website](#)

Sewage Overflows and Incidents Reported in Date Range

Enter values to look for and press SEARCH to find matches

Incident Start Date Between and

NOTE: This page displays three sets of data.
 The Newly Reported Overflows
 Authorized Wet Weather Combined Sewer Overflows
 All Other Overflows

NEWLY REPORTED OVERFLOWS. These overflows are pending review from DEC Wastewater staff

No Records Found

AUTHORIZED WET WEATHER COMBINED SEWER OVERFLOWS Reviewed by DEC Wastewater staff

	Start Date	End Date	Start/End Times	Municipality	Location	Waterbody	Nature of Incident	Estimated Volume (gallons)	Wastewater Treatment Facility	Contact Person	Submission Number
View	2015-09-13	2015-09-13	05:15 pm to 05:45 pm	Rutland	Calvary Cemetery, CSO#001; Meadow St.-Homeplate, CSO#002; School St.-3rd Base,C	Otter Creek and East Creek	Authorized Wet Weather CSO Overflow	>10,000 to 100,000 gallons	Rutland	Jeff Wennberg, Commissioner of Rutland City DPW	29K-HVCE-5H98
View	2015-09-13	2015-09-13	05:15 pm to 05:45 pm	Rutland	West Street Sewer	East Creek	Authorized Wet Weather CSO Overflow	>100 to 1,000 gallons	Rutland	Jeff Wennberg, Commissioner of City of Rutland DPW	29K-J8XQ-K14F

ALL OTHER OVERFLOWS Reviewed by DEC Wastewater staff

	Start Date	End Date	Start/End Times	Municipality	Location	Waterbody	Nature of Incident	Estimated Volume (gallons)	Wastewater Treatment Facility	Contact Person	Submission Number
View	2015-09-13	2015-09-13	05:40 pm to 06:12 pm	Burlington	Pine Street CSO	Barge Canal/Lake Champlain	Discharged untreated sewage	>100 to 1,000 gallons	Burlington Main	Laurie Adams Public Works Water Resources Director	29J-X5V3-W8H3
View	2015-08-31	2015-09-02	Ended by 1 pm	Burlington	Where Englesby Brook crosses under Crescent Terrace	Englesby Brook	Discharged untreated sewage	3,000 gallons	Burlington Main	Laurie Adams, Asst Director DPW Water Quality	

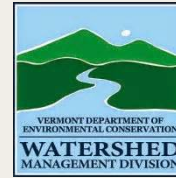
QUESTIONS????

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