

13th Annual EPA New England Industrial Pretreatment Coordinator Conference



EPA Update Pretreatment Program

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October 26-27, 2011

EPA New England 13th Annual Industrial Pretreatment
Coordinators Conference

EPA Headquarters Activities

- Water Permits Division (OWM)
 - Pretreatment Program Trainings and Guidance
 - Pesticide General Permit
 - Vessels General Permit
 - Sufficiently Sensitive Methods Rule
 - SSO Rulemaking and Peak Flows Rulemakings
 - Stormwater Rulemakings
 - Municipal Separate Storm Sewer System (MS4)
 - Construction & Development
- Engineering and Analysis Division (OST)
 - Effluent Guidelines Plan
 - Analytical Methods Update Rule
 - Website Revision
 - DMR Pollutant Loading Tool
- Office of Management and Budget (OMB)

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Pretreatment Training Opportunities

“Pretreatment 101” Webinar Series:

<http://www.epa.gov/npdes/training>

- Introduction to the National Pretreatment Program
- Industrial User Waste Survey Procedures
- POTW’s Procedures for Conducting Compliance Monitoring
- POTW’s Procedures for Conducting Compliance Inspections
 - *FAQs for the above documents coming soon*

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Pretreatment Training Opportunities (continued)

Recent “Pretreatment 101” Webinars:

- What “Pretreatment Standards” apply to Industrial Users? – Sept 27th, 2011
- Developing Local Limits to Prevent Pass Through and Interference -Sept 29, 2011
- Hauled and Trucked Waste
- Others?



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Pretreatment Guidance Manuals

- Introduction to the National Pretreatment Program – June 2011
- Industrial User Permitting Guidance Manual – *coming soon*

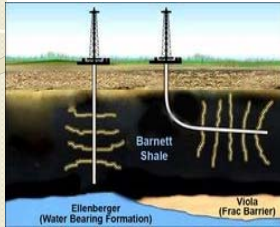
Updating 1983 manuals:

- Procedures Manual for Reviewing a POTW Pretreatment Program Submission
- Guidance Manual for POTW Pretreatment Program Development



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Additional Guidance, Training & Webinars



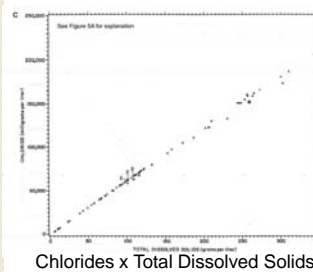
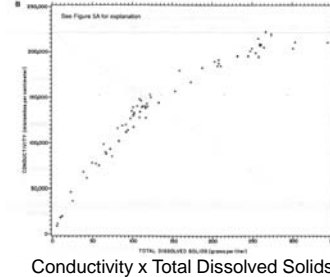
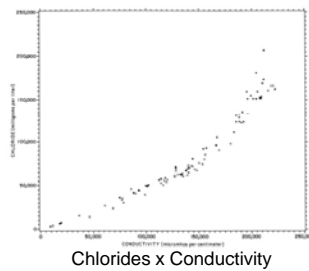
Often relies on horizontal drilling and hydraulic fracturing



Wastewater

- Quality
- Volume
- Disposal

Additional Guidance, Training & Webinars (continued) Wastewater Data from Hydraulic Fracturing Study



Chemistry and origin of oil and gas well brines in western Pennsylvania
Dresel, P. E., and Rose, A. W., 2010

Pennsylvania Geological Survey, 4th ser., Open-File Report OFOG 10-01.0

Additional Guidance, Training & Webinars (continued) Wastewater from Hydraulic Fracturing Activities

FAQ Memorandum – 3/17/2011

“Regulating Natural Gas Drilling in the Marcellus Shale under the NPDES Program”

- http://www.epa.gov/npdes/pubs/hydrofracturing_faq_memo.pdf
- http://www.epa.gov/npdes/pubs/hydrofracturing_faq.pdf

Coming soon:

Guidance for Permitting Authorities
and POTW Control Authorities
regarding Wastewater from Hydraulic
Fracturing Activities



Additional Guidance, Training & Webinars (continued)

- NPDES Permit Writers' Manual – Sept 2010
 - EPA-833-K-10-001
 - http://cfpub.epa.gov/npdes/writermanual.cfm?program_id=45
- MS4 Permit Improvement Guide – April 2010
 - http://www.epa.gov/npdes/pubs/ms4permit_improvement_guide.pdf
- Green Infrastructure Program
 - http://cfpub.epa.gov/npdes/home.cfm?program_id=298
 - <http://www.epa.gov/npdes/training>

Pesticide General Permit

Permit Scope:

- Mosquitoes and other Flying Insect Pest Control
- Weed and Algae Control
- Animal Pest Control
- Forest Canopy Pest Control

Permit Status:

- Draft Permit Proposed 6/4/2010
- Draft Final Permit prepublication version posted 4/1/2011
- Court extended PGP effective date to 10/31/2011

www.epa.gov/npdes/pesticides



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Vessels General Permit

Incidental discharges from the normal operation of vessels
(ballast water, bilgewater, graywater)

- Not military, commercial fishing or recreational vessels
- 2 Scientific Studies by NAS and EPA SAB
 - Includes risk evaluations and treatment technologies
 - Both available on EPA vessels webpage
- Report to Congress – August 2010
 - Commercial Fishing Vessels and Other Non-Recreational Vessels Less than 79 Feet
- Electronic *Notification of Intent (NOI)* to register
- Current VGP expires 12/19/2013
- Plan to propose new draft VGP 11/30/2012

www.epa.gov/npdes/vessels

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Sufficiently Sensitive Methods Rule



Draft Rulemaking Proposed June 23, 2010

Comments collected until 08/9/2010

Final Expected Winter 2011/2012

Revisions to NPDES Regulations:

- Application Requirements: 40 CFR 122.41(e)
- Monitoring Requirements for establishing limit standard: 40 CFR 122.44(i)
- Associated Clause in Part 136

www.epa.gov/npdes/regulations/ssmethods_fr_6-23-10.pdf

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SSO Rulemaking & Peak Flows

Federal Register Notice-June 1, 2010

- www.epa.gov/npdes/regulations/frn_sso.pdf

5 Listening Sessions- Summer 2010

SSO Workshop: July 14-15, 2011

- <http://www.gpo.gov/fdsys/pkg/FR-2011-06-16/pdf/2011-15003.pdf>
- Focus: How should a rulemaking address SSO control in the sanitary collection system and peak flow management at the POTW treatment plant

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Stormwater Rulemaking

- Rulemaking considerations:
 - Establish performance standard for discharges from newly developed and redeveloped sites of a specific size
 - Extend the protection of the MS4 program
 - Require larger regulated MS4s to reduce stormwater discharges in areas of existing development through retrofits
 - Consider specific requirements for the Chesapeake Bay watershed
- Proposed Rule December 2011; Final Rule November 2012
- www.epa.gov/npdes/stormwater/rulemaking.cfm

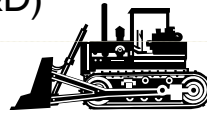
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Regulation of Stormwater from Construction & Development Sites

Construction & Development Rule (C&D)

Concerns:

- 600,000 acres of land developed annually
- Sediment and Turbidity are leading sources of impairment to receiving waters



Published December 1, 2009; Effective February 1, 2010

Applicability: Construction sites disturbing 1 or more acres

Numeric turbidity limit for large sites: 280 NTU*

(*currently being recalculated)

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Regulation of Stormwater from Construction & Development Sites (continued)

C&D Rule provisions must be incorporated into any new or reissued State or EPA Construction General Permit (CGP)

- EPA published proposed CGP April 25, 2011
<http://www.epa.gov/npdes/cgp>
- Comment period ended July 11, 2011

Archived Webinar on Proposed CGP (May 2011):

http://www.epa.gov/npdes/outreach_files/webcast/may2411/Archive/default.htm

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Effluent Guidelines Program Update

- 2010 Effluent Guidelines Program Plan
 - General Program Information
 - Dental Amalgam Categorical Standards
 - Unused Pharmaceutical Guidance
- Updating Clean Water Act Methods: Proposed Rule
- Effluent Guidelines Website Revision
- DMR Pollutant Loading Tool



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2010 Effluent Guidelines Program Plan Legislative Background

Under section 304(b) the CWA requires EPA to annually review its existing effluent guidelines for direct discharges and revise such guidelines “if appropriate.”

For point source categories with existing pretreatment standards:

- EPA must annually review these existing pretreatment standards and revise such guidelines “if appropriate (section 304(g)) or “from time to time, as control technologies, processes, operating methods, or other alternatives change” (section 307(b)).

For point source categories without existing pretreatment standards:

- EPA must establish pretreatment standards for pollutants not susceptible to treatment by Publicly Owned Treatment Works (POTWs) or that would interfere with the operation of POTWs (section 307(b)).

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2010 Effluent Guidelines Program Plan Legislative Background (continued)

The 1987 Clean Water Act Amendments added Section 304(m), which re-enforced Congress’ intent that effluent guidelines keep pace with pollution prevention and treatment technology.

Every other year: after proposal and public comment, EPA must publish a two-year plan for the guidelines program.

EPA provided updates on three studies with its publication of the preliminary 2010 plan (28 December 2009).

- Coalbed Methane Extraction;
- Health Care Industry (Unused Pharm./Dental Amalgam); and
- Ore Mining and Dressing.

EPA initiated an effluent guidelines rulemaking for dental offices (mercury amalgam) on 27 September 2010 (more on this later).

EPA submitted the final 2010 Plan to OMB on 24 January 2011.

EPA announced pre-publication version on web 10/20/11

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- **October 20, 2011 Press Release
EPA Announces Schedule to
Develop Natural Gas Wastewater
Standards**

2010 304(m) Plan published today

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2010 Effluent Guidelines Program Plan: Who were the Commenters?

- Key industry organizations that commented:
 - American Petroleum Institute, American Health Care Association, Independent Petroleum Association of America, NACWA, American Dental Association, AWWA, National Mining Association, Quicksilver Caucus
- 6 environmental groups
 - N. Plains Res. Council, Earth Justice, EIP, Powder River Basin Council -- CBM/shale gas extraction
- Seven States or state representing organizations
 - WY, MT, NY, WI, OR, FL, ID
- 22 Individuals:
 - A "letter-writing campaign" on the issue of the environmental impacts of hydraulic fracturing for CBM. Most of these are from individuals in NY and PA.
- One Tribal Nation: Northern Cheyenne
- 4 local organizations: Tompkins County SSC, St. Paul MetroCouncil, Bay Area Poll. Prev. Group, Albany Med. College

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2010 Effluent Guidelines Program Plan: What were the Key Topics?

Topics In order of abundance:

- Coal Bed Methane and shale gas extraction (**40** comments)
- Health Care Industry-- unused pharmaceuticals (**35** comments)
- Ore Mining and Dressing (**2** comments)
- Steam Electric (**2** comments)
- ELGs and 304m Plan process in general (**2** comments)
- Dental Mercury (**1** comment)
- Other (**2** comments)

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Dental Amalgam Categorical Standards



Why?

- Dental amalgams, or fillings containing mercury, account for **3.7 tons** of mercury discharged from dental offices annually.
- Approximately **50 percent** of mercury entering POTWs comes from dental amalgam waste.

Types of Controls or Treatment Available?

- EPA is focusing its analysis on amalgam separators because they are inexpensive, effective (> 98% removals), and currently the basis for many existing state and local requirements.
- EPA is also evaluating a range of BMPs to ensure proper operation of the amalgam separators and management of amalgam waste.
- EPA is focusing particular attention to the burden and costs for implementation, record-keeping, and reporting options for dental offices and POTWs.

Goal: The goal of the rulemaking is to recycle as much mercury waste with best available technology with an effective but efficient compliance program.

<http://water.epa.gov/scitech/wastetech/guide/dental/>

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Dental Amalgam Categorical Standards (continued)

- Detailed Study – Aug.2008
- MOU with NACWA, ADA, EPA – Dec. 2008
- Press Release Announcement –
Sept 27, 2010:
- Proposed Rule – Early 2012
- Final Rule – End of 2012

- Webinar broadcast 6/9/2009
<http://www.epa.gov/Npdes/training>



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Unused and Expired Pharmaceuticals - Detailed Study

Preliminary Observations

- Unused pharmaceutical management is a concern to state and local pretreatment programs.
- Current policies for managing unused pharmaceuticals include flushing, disposal in municipal trash, steam sterilization with medical waste, incineration, and using a reverse distributor to return unused pharmaceuticals.

Goals

- Scope includes Hospitals, Long Term Care Facilities (LTCFs), Doctors' Offices, Health Care Clinics, Hospices and Veterinary Facilities.
- Summarizing Federal and State Regulations.
- Identify current practices and best management practices.

http://water.epa.gov/scitech/wastetech/guide/unusedpharms_index.cfm



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Best Management Practices for Unused Pharmaceuticals at Health Care Facilities

- DRAFT Document – August 26, 2010
- Federal Register Notice – September 8, 2010
- Comments due – November 8, 2010
- Expected to be Final – Fall 2011

www.epa.gov/ost/guide

Where to bring unused or expired medications?

Collection sites in every community can be
found at:

www.dea.gov

National Take Back Initiative

- **October 29, 2011 10 AM – 2 PM**

Analytical Methods Updates Rulemaking

- EPA proposed updates to its CWA analytic methods on September 23, 2010.
- EPA proposed new and revised methods published by EPA, voluntary consensus organizations (e.g., ASTM) and commercial entities, for use in water quality monitoring programs. In particular, EPA proposed:
 - Method for flame retardants
 - New, very sensitive PCB method
- These changes and additional methods will provide increased flexibility to the regulated community and laboratories.
- Final rule is expected in Fall 2011
http://water.epa.gov/scitech/methods/cwa/update_index.cfm

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Revised Effluent Guidelines Website

- EPA's Office of Water is overhauling its website to make its content management easier.
- Please note that many URLs have changed.

<http://water.epa.gov/scitech/wastetech/guide/index.cfm>

- Please HELP US identify priorities for the next round of industry ELG webpages for updates:
 - Which industry ELG webpages do you want updated?
 - What topics would you like to see more information on to help you with your program?
 - Do you have any style or layout suggestions?



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Revised Effluent Guidelines Website (continued)

Industry Effluent Guidelines

You are here: [Water](#) > [Science & Technology](#) > [Wastewater Technology](#) > [Effluent Limitation Guidelines](#)

Effluent Limitation Guidelines

Best Management Practices for Unused Pharmaceuticals at Health Care Facilities – Draft for Public Comment

Notice of Availability of Preliminary 2010 Effluent Guidelines Program Plan

Airport Deicing Proposed Rule

Effluent guidelines are national standards, based on the performance of treatment and control technologies, for wastewater discharges to surface waters and municipal sewage treatment plants. We issue effluent guidelines for categories of existing and new sources.

Browse Industries	<ul style="list-style-type: none"> • Existing and proposed regulations • Fact sheets and supporting documentation • Preliminary studies • Guidance for specific industrial categories
Planning	<ul style="list-style-type: none"> • Information on EPA's current and previous reviews and plans for controlling industrial discharges
Implementation & Compliance	<ul style="list-style-type: none"> • Permitting, POTWs • Compliance and enforcement • For industry-specific documents, see Industries
Treatment Technologies	<ul style="list-style-type: none"> • Data sources on pollution prevention and treatment technologies.

Other sites

- Analytical Test Methods
- Cooling Water Intakes (E31.6b)

Contacts

- Effluent Guidelines Industrial Wastewater Contacts
- Direct Discharge Permit (NPDES) Contacts
- Indirect Discharge (Pretreatment) Contacts

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Revised Effluent Guidelines Website (continued)

Existing Regulations

The table below lists the effluent guidelines promulgated by EPA, sorted alphabetically by industry category. The links in the 'Industry Category' column provide an overview of the regulation and available EPA publications for the category. The links under '40 CFR' go directly to the Code of Federal Regulations (CFR).

For many of the newer guidelines (especially those promulgated after 1995), we provide individual industry pp. with the Federal Register notices of proposed and final rules, supplemental notices, fact sheets and other background information. For older guidelines, individual pp. are being developed. We provide an interim link to an EPA staff contact.

Existing Effluent Guidelines			
Industry Category	40 CFR Part	First Promulgated	Limitations and Standards
Aluminum Forming	467	1983	BPT, BAT, NSPS, PSES, PSNS
Asbestos Manufacturing	427	1974	BPT, BCT, BAT, NSPS
Battery Manufacturing	461	1984	BPT, BAT, NSPS, PSES, PSNS
Canned and Preserved Fruits and Vegetable Processing	407	1974	BPT, BCT, NSPS, PSES, PSNS
Canned and Preserved Seafood (Seafood Processing)	408	1974	BPT, BCT, NSPS

Clicking on industry category leads to industry specific page or contact

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Revised Effluent Guidelines Website (continued)

[Industry specific page](#)

Effluent Guidelines: Metal Finishing

The metal finishing effluent guidelines (40 CFR 433) were promulgated in 1983 and regulate wastewater from wide variety of industries performing various metal finishing operations. EPA estimates that there are approximately 44,000 facilities performing various metal finishing operations that discharge process wastewater directly to surface waters or indirectly to surface waters through POTWs. The metal finishing effluent guidelines are incorporated into NPDES permits for direct dischargers or permits or other control mechanisms for indirect dischargers.



On July 15, 1983, this regulation amended the pretreatment standards for existing source electroplaters (electroplating PSES), 40 CFR Part 413.

- [What is Metal Finishing?](#)
- [Facilities Covered](#)
- [Final Rule](#)
- [Guidance and Background Documents](#)
- [Additional Information](#)
- [Proposed Rule](#)

You will need Adobe Reader to view some of the files on this page. See EPA's PDF page to learn more.

What is Metal Finishing?

Metal finishing is the process of changing the surface of an object, for the purpose of improving its appearance and/or durability. Also, metal finishing is related to electroplating, which is the production of a thin surface coating of the metal upon another by electrodeposition.

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DMR Pollutant Loading Tool

- Similar to Toxics Release Inventory (TRI) – this new web tool is for CWA point source discharge monitoring data.
 - **Who** is discharging **What** and **Where**

- Calculates pollutant loads (pounds) from discharge monitoring data:

$$\text{Pollutant Discharge Concentration (mg/l)} \times \text{Flow (MGD)} \times 8.34 \text{ (Conversion Factor)}$$

- Significant implications for:
 - Enforcement targeting and compliance assistance (providing better sense of the importance of effluent discharges and permit limit violations)
 - Public access
 - Effective and timely communication on characterizing point source dischargers
 - Better data for watershed modeling and pollution budgets (TMDLs), developing effluent limits, enhancing EPA Regional and State NPDES program quality, and EPA rulemakings (effluent guidelines)

<http://cfpub.epa.gov/dmr/>

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DMR Pollutant Loading Tool (continued)

http://cfpub.epa.gov/dmr/ez_search.cfm

EZ Search

Instructions: Change the criteria in any of the boxes below and click the Search button to retrieve DMR pollutant loadings information.

Select Reporting Year:

1 Location or Watershed

Nationwide

Search by Location

Zip Code:

EPA Region:

OR

State:

City:

County:

Search by Watershed

Zip Code:

12-Digit HUC:

[Find 12-digit HUC on a map](#)

Major U.S. Watersheds:

2 Pollutant

All Pollutants

Specify Pollutant

Pollutant Name (or partial name):

Chemical Abstract Service Number (CAS) (without dashes):

Pollutant Categories

- Metals
- Nitrogen
- Organic Enrichment
- Pathogens Indicator
- Phosphorus
- Priority Pollutants
- Solids
- Temperature

3 Industry

All Point Sources

Publicly Owned Treatment Works (POTWs) Only

Industrial Point Sources

Point Source Category:

2-Digit SIC Code:

OR

Enter a 4-digit SIC Code:

[SIC Code lookup](#)

Industrial Category Rankings

[View EPA's current industrial category rankings](#)

If you would like more detailed information, try the [Advanced Search](#)

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DMR Pollutant Loading Tool (continued)


- Goal: To provide greater transparency and utility of DMR data in PCS and ICIS-NPDES.
- Data available for 23,720 facilities with discharge monitoring data.
- 2 main audiences for this on-line version of the tool:
 - General Public (Concerned Citizens, Researchers)
 - Technical Users (NPDES Permit Writers, Watershed Modelers, Regulatory Agencies, Researchers, Enforcement Targeting)
- EPA solicited public comments on the new web tool and received over thirty comments from a range of stakeholders
 - Most comments were positive with many providing input on potential improvements.
 - Publicly released on December 2, 2010 (EPA's 40th Anniversary)
- Current schedule is to incorporate as many of these comments into the tool as budget and schedule permits this FY.

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NPDES Electronic Reporting Rule

Clean Water Act Action Plan – Oct 15, 2009

Goals:

- Target enforcement to the most important water pollution problems
- Strengthen oversight of the states
- Improve transparency and accountability
- Public Meeting held July 13, 2010
 - 75 FR 38068, July 1, 2010
- NPDES  Exchange network:
 - <http://www.regulations.gov/exchange/topic/npdes>

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Streamlining Approvals in MA

41 of 48 or 85 % have complied
Yes, this is the **list!!!!**

- Adams
- Fall River
- Great Barrington
- Pittsfield
- South Essex Sewerage
- Ware
- Westborough

Program or Project Contacts

Name	Topic Area	Phone	E-mail
Bill Swietlik	Effluent Guidelines Planning	(202) 566 1129	swietlik.william@epa.gov
Damon Highsmith	Dental Amalgam Pretreatment Standards	(202) 566 2504	highsmith.damon@epa.gov
Meghan Hessenauer Samantha Lewis	Unused Pharmaceutical Guidance Document	(202) 566 1040 (202) 566 1058	hessenauer.meghan@epa.gov lewis.samantha@epa.gov
Eric Strassler	Effluent Guidelines Website	(202) 566 1026	strassler.eric@epa.gov
Carey Johnston	DMR Pollutant Loading Tool	(202) 566 1014	johnston.carey@epa.gov
Robin Danesi	Vessel General Permit	(202) 564 1846	Danesi.robin@epa.gov
Greg Schaner	Stormwater	(202) 564 0721	Schaner.greg@epa.gov
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Rick Stevens Jim Carleton	Sewage Sludge Study Sewage Sludge Risk Assessment	(202) 566 1135	Stevens.rick@epa.gov Carleton.jim@epa.gov
Jan Pickrel	Pretreatment	(202) 564 7904	Pickrel.jan@epa.gov
Andy Hudock	CWA Enforcement Action Plan Electronic Reporting Rule	(202) 564 6032 (202) 566 1014	Hudock.andrew@epa.gov Johnston.carey@epa.gov

Regional Meetings (MA, NH, ME and RI)

POTW's should attend these
quarterly meetings!!!!!!

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Contact Information

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