



2009 National Pretreatment and Pollution Prevention Workshop

Charlotte, NC

March 25, 2009





Overview

- Regulations in Development
- 304m Plan and Associated Studies
- NACWA/ADA/EPA MOU
- Contaminants of Emerging Concern
- NRDC Petition to Redefine Secondary Treatment
- What's New on Our Web



Regulations – Construction and Development Rule

- Nearly 600,000 acres of land are developed annually in the U.S. Construction stormwater contains sediment, nutrients, metals and other toxic pollutants. Sediment and turbidity are leading sources of impairment to receiving waters nationwide.
- Proposed rule published on Nov. 28, 2008
 - Construction sites 30 acres or larger that also meet rainfall/clay content criteria must meet an effluent limit of 13 NTUs (turbidity).
 - Sites between 1 and 10 acres – Best Management Practices (BMPs).
 - All other sites, BMPs plus properly sized sediment basins.
- Public comment period closed Feb. 26, 2009. Many comments from all directions.
- Under court order, final rule must be published in the Federal Register by Dec. 1, 2009.



Regulations – Airport Deicing

- About 330 commercial airports conduct occasional or frequent deicing operations producing an estimated 25 million gallons of Aircraft Deicing Fluid creating 128 million lbs of Chemical Oxygen Demand (COD) annually. Also, about 8.2 million lbs. of urea is applied to runways generating both ammonia and COD.
- Control Technologies – can collect the deicing fluid with Glycol Recovery Vehicles (GRV), Plug & Pump storm drains in aircraft spraying areas, and Deicing Pads.
- Treating the Collected Deicing Fluid -- onsite biological treatment systems or off-site options using POTW or contractor (centralized waste treatment/disposal).
- Expect proposed rule this summer.



304m Plan – Overview

- The Preliminary 2010 304m Plan will present the 2009 annual review of existing effluent guidelines and pretreatment standards for all 56 point source categories.
 - Will review pollutant discharges from the PCS, ICIS-NPDES, and TRI databases (2007 data).
 - Status updates and/or findings for three detailed studies and the preliminary study of Ore Mining and Dressing.
 - Soliciting public comment for 2010 annual review.
- Three detailed studies
 - Coalbed Methane Extraction
 - Steam Electric Power Generation
 - Health Care Industry (Unused Pharmaceutical Management)
- Timing for Preliminary Plan -- Fall 2009.



304m Studies – Coal Bed Methane

- Growing industry sector with potential environmental impacts from produced water; depends on quality and quantity of the water. Also beneficial water reuse issues.
- Quality of water can vary within and between basins.
- Objectives and Scope
 - Evaluate availability and affordability of technology options for CBM produced water discharges in current and future CBM basins.
 - Evaluate potential environmental issues associated with the discharge of CBM produced water.
- Timing
 - Survey of industry – 1st of two part survey recently sent to well owners. 2nd part later this year.
 - Final decision on whether to initiate a rulemaking in Final 2010 304m Plan currently scheduled for Fall 2010.



304m Study – Steam Electric

- In previous 304m Plan, industry ranked high on potential hazard list using PCS and TRI data.
- Multi-year study which includes sampling and site visits, and other data collection, including industry questionnaire.
- Key waste streams of interest are flue gas desulfurization wastewater and ash ponds.
- Timing -- study to be completed this year.



304m Study – Unused Pharmaceuticals

- Goals
 - Understand state of industry (hospitals, long-term care facilities, veterinary clinics, as well as several other sectors)
 - Identify Best Management Practices
 - Estimate amount of unused pharmaceuticals being flushed
- Lot of outreach; learning a great deal
- Preliminary observations
 - Unused pharmaceutical management is of is a national interest of concern to state and local pretreatment programs.
 - Management of unused pharmaceutical is greatly influenced by Federal regulations, ease of disposal, and costs.
 - Policies vary greatly.
- Timing
 - Plan to survey industry. First of two required Federal Register notices published in August 2008.
 - Plan to complete study by Final 2010 304m Plan in Fall 2010.



NACWA/ADA/EPA MOU

- Provides for voluntary program to promote the proper installation and maintenance of dental amalgam separators; signed in Dec. 2008.
- Provides for establishment of
 - Baseline of current separator usage,
 - Goals for increased usage, and
 - Tracking of progress.
- Parties agree to promote program, raise awareness, outreach.
- EPA works with ADA on recognition of dentists.
- More on this later in Agenda,



Contaminants of Emerging Concern (CEC)

- CECs include pharmaceuticals, personal care products, flame retardants
- Health Care Industry Study (previous slide)
- Nine POTW Study
 - Sampling of CECs at nine volunteer POTWs to determine if CECs are present and at what level. At some POTWs also sampled more traditional pollutants.
 - Developed two PPCP methods for study; used newly validated flame retardant method.
 - Report will contain POTW descriptions, all individual data points for each CEC, discussion of data limitations, observations.
 - Report this Spring/Summer.



More on CECs

- Treatment Effectiveness Literature Review Report
 - Review of best current literature on the removal of CECs from water and wastewater by treatment technologies.
 - Covers pharmaceuticals and personal care products, steriods and hormones, pesticides, nonlyphenols, flame retardants, PAHs, others.
 - Capturing data from studies in searchable database
 - Projected completion of draft in Summer 2009.
- Other Office of Science and Technology work
 - Assessing risks and the need for aquatic life criteria
 - Fish Tissue Study
 - Biosolids Report



NRDC Petition to Redefine Secondary Treatment

- NRDC (and others) petitioned EPA to
 - Assess current capabilities of secondary treatment and
 - Initiate rulemaking to establish nitrogen and phosphorus limits of 0.3 mg/l TP and 3 mg/l TN.
- NACWA letter requesting that EPA deny petition based on legal, cost, energy, and other concerns. Also, nutrients should be addressed on a site-specific basis.
- EPA currently analyzing data from internal and external sources.
- Plan response this year.

What's New on Our Web

- Web sites for both methods and Effluent Guidelines have been redesigned.
 - Methods – www.epa.gov/waterscience/methods
 - All Part 136 methods
 - Validated methods not in Part 136
 - Alternative Test Procedure Program
 - “Special Topics” such as Qs and As on O&G
 - “Current Activities”
 - Effluent Guidelines – www.epa.gov/guide
 - All industry sectors, including those under development
 - Continually adding detailed technical support documents to individual industry sectors
 - 304m planning
 - FAQs
- New web site on CECs (or PPCPs) – www.epa.gov/waterscience/ppcp

