MassDEP Alternative Compliance Strategies

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Staff & Workload FY 2002 - 2018

# Air, RCRA, UST, TURA, IWW
Inspectors

2002: 533 Entities per Inspector
2018: 2,333 Entities per Inspector
MassDEP Can No Longer Cover the Universe with Traditional Inspections

• Basic Air, RCRA, & UST EPA Compliance Monitoring Strategies (CMS) require 21.4 (of 20) FTEs
  1. Insufficient staff
  2. No time for other work (report review, assist., training)
  3. No time to inspect other facilities

• Even with approved Alternative CMS can only do 50 non-EPA inspections, such as complaints or sector audits, or non EPA majors
Assure Compliance in New Ways

• Prevent Non-Compliance at the Source
  – Each inspection hour requires 1 for enforcement

• Prevent Pollution at the Source
  – Fewer facilities to regulate

• Base Oversight Level on Environmental Performance

• Rely on Alternative Compliance Assurance Tools For ALL our sources
  – Can’t cover the universe with traditional inspections
New Compliance Assurance Tools

Compliance Certifications with Audit

• 20+ Compliance Certification Programs
  – One time programs cover 50 facilities per year
  – Annual/Biannual programs cover 7,200 facilities

• Statistical Audits Consistently Show Effectiveness
  – 100% of dentists had required mercury separators; 80% disposed of mercury properly
  – Dry Cleaners & Photo Processors had proper equipment; Sector performance improved & stayed up following initial certifications; Photo Processors did required wastewater testing
  – First Dry Cleaner certifications eliminated 546 pounds perchloroethylene emissions
New Compliance Assurance Tools

Third Party Oversight

• Approvals: Waste Site Clean-Up & Toxics Use Reduction Plans

• Inspections: Solid Waste & UST
  - UST inspectors licensed & trained by MassDEP
  - 60 randomly-selected inspections – (enough for a statistically valid result) per year instead of 1,300
  - Sector performance tracked via EPA’s measures of Significant Operational Compliance
  - Will be auditing third party inspectors
New Compliance Assurance Tools
Base Inspection Choices on Environmental Performance (i.e., Risk)

• Tracking sector environmental performance through statistical analysis of randomly-selected inspections
  – Key performance measures of concern in addition to enforcement / no enforcement bean
  – 13 formal audits, including EPA-funded multi-state Common Measures Project for RCRA Small Quantity Generators
    • Created reusable training program on statistical evaluations of sector performance
    • Multi-state data revealed successes – SQGs in Common Measures States with Technical Assistance Programs demonstrated better performance

• Tracking individual facility performance through desk audits, report reviews, & partial or screening inspections
New Compliance Assurance Tools

EPA-Approved Air & RCRA ACMS Based on Risk

• Substantially reduced inspection frequency for high performing LQGs & Air Title V sources
• Consistent report review of Air CMS Facilities
• 100 multi-media inspections of minors targeted on basis of substances used, amount & type of waste shipped, age of pollution control equipment, SIC code, EJ location, etc.
• Relative performance tracked on types of violations, including “Common Measures” for RCRA compliance
ACMS Results: FY13 – FY15

Most Environmental Problems Identified & Corrected at “Targeted Minors”

• Formal enforcement – Notice of Non Compliance (NON) or Administrative Order with Penalty (ACOP) – issued to
  – 49% of the “Minors”
  – 43% of the Air 80% Restricted Facilities
  – 36% of the Large Quantity Generators
  – 21% of the Title V air operating permit sources

• “Minors” had worse performance on all “Common Measures” except emergency response requirements

• More “mismanaged” hazardous waste at “Minors” than at LQGs due for inspection

• “Minors” had lower compliance rates for the air requirements to which they were most likely subject
Using the Compliance Assurance Tool Box for Majors & Minors
Feasible & Beneficial

• Many states lack resources to inspect “Minors”, despite their worse performance

• As a group, EPA CMS Facilities have excellent performance
  – <10% of those due for inspection received Administrative Order with Penalty in their “home” program (FY13-15)

• Alternative compliance assurance strategies already exist for Air Title V sources, LQGs, & UST facilities
Existing Alternative Compliance Assurance Measures for EPA CMS Facilities

• AIR Title V sources have annual compliance certifications & semi-annual monitoring reports & other mandatory reports
  – Air Title V sources have best performance of all ACMS facilities
  – MassDEP is more likely to find significant violations through report review than inspections

• LQG performance could be measured using the existing SQG Common Measures

• LQG Biennial Report could be expanded to include a compliance certification

• The UST program has national measures of Significant Operational Compliance in use by all states
Opportunity

• Use program specific “common measures” to evaluate performance of EPA CMS sectors
• If performance is adequate, use alternative approaches to maintain performance in lieu of full inspections (& do full inspections at identified poor performers)
• Free up resources to provide needed technical assistance targeted to problem areas
• Free up resources or work with smaller sources that pose bigger problems