Environmental Compliance Assurance and Performance Measurement

Alternative Compliance Strategies: A View from Massachusetts

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The Shared Challenge

How can we most effectively achieve environmental compliance/results, when are facing:

- More and more potential sources—and while many may be small, the cumulative human health and environmental impacts can be significant in the aggregate;
- A limited amount of staff and resources.
Setting the Stage for a New Approach

- Budgetary Realignment
  - State and Federal
- Transition to New Environmental Challenges
  - Success through “First Generation Efforts”
  - Improvement in Large Facilities Compliance
  - Need to Redeploy Limited Resources
    - New Ways to Maintain Large Source Compliance
    - Address Vast Array of Smaller Sources

Developing Effective Compliance Assurance Strategies

- Set Priorities Based on Relative Risk
- Establish Performance Measures Linked to Objectives and Compliance Rates
- Increase Responsibility on the Regulated Community
- Enhanced Information Management Systems and Advanced Technologies
Next Generation Compliance

• We are not achieving the health and environmental benefits envisioned by our regulations and permits due to high noncompliance.

• State and federal resources for onsite compliance assistance, individual inspections, and enforcement actions are not adequate to address large universe of regulated sources, especially smaller sources.

• Robust compliance monitoring and enforcement are critically important for addressing violations and promoting deterrence, but they will not solve our noncompliance problem by themselves.

• Time to make changes. Need a new paradigm.

MassDEP Alternative Compliance Strategy

Adopted a formal “Alternative Compliance Strategy” in FFY07 because:

• Majors had an acceptable compliance history

• We believed minors posed a greater potential threat but we could not inspect them routinely

• only able to visit air “minors” and RCRA SQGs once every 14 years (once every 30 years if VSQGs and smaller air sources are included).
FY07 Alternative Compliance Strategy

Balanced maintaining acceptable compliance at majors:
- Increased reliance on report review
- Decreased inspection frequency

While addressing potential problems at the minors:
- Multi Media Inspections to cover more “minor” waste streams per inspection
- Increased attention to report review
- Strategic targeting of suspected violators
- Statistical assessments of group compliance status to identify significant “systemic” problems

Five Years Later, the Results

- Successfully met all inspection targets
- Maintained the compliance status of the majors. At time of last compliance review:
  - 90 % of Air Operating Permit Sources
  - 92 % of RES M80 Sources
  - 95 % of LQGs
- Violations related to air exceedances were generally found through complaints (for things such as odors) or report reviews
FY13 ACMS—Air and RCRA

- Revised *minimum* inspection frequency:
  - Defer inspection of Air Operating Permit sources from every 3 to every 5 years, provided they had no “significant violations” since last inspection
  - New LQGs: within 5 years
  - Existing LQGs: every 8 instead of 5 years

- Inspect more frequently when indicated: e.g. complaints, observed problems, staff concern

- Observe or monitor stack tests at air majors

FYACMS—Use Saving To:

- Conduct a strategic initiative to identify and inspect 100 Air and RCRA minors that are:
  - “high risk” – have wastes or emissions of concern, are operating close to regulatory thresholds, or older control equipment OR
  - appear to be “under regulated” – in one program but not another OR
  - appear to be “outside the system”

- Increase capacity to respond to reported violations and complaints

- Address the reporting enforcement backlog
Enhanced Information Management Systems and Advanced Technologies

- automatically review reporting submissions, identifying violations or potential compliance issues
- facilitate sharing of compliance and monitoring data across programs, providing a holistic understanding of environmental conditions in a certain area
- measure effectiveness of compliance assurance efforts, better understand trends
- leverage greater transparency re regulated community activity’s to increase compliance
- new real time monitoring and remote sensing technologies, to identity environmental problems