

# **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



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## 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



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## 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.***



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## 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).



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## 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



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## 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



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## 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 identify environmental problems



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