

# **Performance Indicators for Environmental Enforcement and Compliance Programs: A Three Stage Model**

**Michael M. Stahl**

Director, Office of Compliance

U.S. Environmental Protection Agency

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Member, INECE Expert Working Group  
on Compliance and Enforcement  
Indicators

# Background on EPA Enforcement & Compliance Assurance Program

- Enforce most major U.S. environmental laws, e.g., Clean Air Act, Clean Water Act
- 3,311 employees to conduct inspections, bring enforcement cases, provide assistance, manage data
- Use a combination of compliance assistance, incentives for facility self-audits, inspections and investigations, civil and criminal enforcement
- States play major enforcement role through delegated authority

# Performance Indicator Three Stage Model

U.S. EPA has used a three-step approach:

- Identifying Better Indicators
- Designing & Implementing Better Indicators
- Using Better Performance Indicators

# I. Identifying Better Indicators

- a) Establish/refine program goals and objectives
  - 1. National program
  - 2. Specific initiative
- b) Develop definitions for types of measures
- c) Conduct meetings with external stakeholders and internal staff to solicit:
  - 1. Potential performance measures
  - 2. Criteria for evaluating potential measures
  - 3. Principles to guide the overall effort to develop and use indicators

## II. Designing and Implementing Better Indicators

- a) Select final measures using the criteria
- b) Establish internal work teams to:
  1. Define measures in more detail
  2. Review relevant data in existing data systems
  3. Develop new information collection and reporting processes
  4. Establish schedule for testing and implementing indicators
- c) Conduct pilot projects to test indicators and correct problems
- d) Use outside consultants as needed to resolve technical and methodological issues
- e) Execute implementation in phases

# III. Using Better Performance Indicators

- a) Report to external audiences
  - 1. Annual performance reports to legislative bodies, central budget authority, public
- b) Understand and improve performance
  - 1. Monthly reports to program managers about progress on key outputs and outcomes
  - 2. Quarterly discussions with regional and district managers
  - 3. In-depth performance analyses of selected program components
- c) Evaluate use of individual measures and identify measurement gaps

# Other Information Sources

- Enforcement and Compliance History Online (ECHO) - <http://www.epa.gov/echo/>
- EPA Annual Performance Reports - <http://www.epa.gov/ocfo/finstatement/apr.htm>
- INECE Indicators Forum - <http://www.inece.org/forumsindicators.html>

# Contact Information

Michael M. Stahl

U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., NW (MC 22221-A)  
Washington, DC 20460

Phone: 202-564-2280      Fax: 202-564-0027

e-mail: [stahl.michael@epa.gov](mailto:stahl.michael@epa.gov)

# Measures Definitions

- **Output:** quantitative or qualitative measures of activities, work products, or actions
- **Intermediate Outcome:** changes in knowledge, behavior, or conditions that result from program activities. Changes associated with, or needed to achieve the end outcome.
- **End Outcome:** the ultimate outcomes of program activities as compared to the intended purposes of the activities.



# Criteria for Evaluating Performance Indicator

- **Relevant:** to goals, objectives, and priorities
- **Transparent:** promotes understanding of program
- **Credible:** based on data that is complete and accurate
- **Functional:** encourages constructive behavior
- **Feasible:** value to program outweighs cost
- **Comprehensive:** covers important operational aspects



# Performance Indicator Development Principles

- Consult a broad array of stakeholders and address their needs
- Combination of outputs and outcomes need to be measured
- Indicators should be linked to goals and objectives
- Recognize outcomes are influenced by external factors
- Indicators should help evaluate progress in addressing environmental problems
- Indicators should be used to both report results to the public and manage programs



# EPA Performance Measures

- Pounds of pollutants reduced by enforcement actions
- Pounds of soil treated or removed; gallons of groundwater treated
- Number of companies/facilities self-disclosing violations under EPA Audit Policies
- Number of entities seeking assistance from EPA centers
- Percentage of enforcement cases requiring improvements in facility management of pollution
- Statistically valid compliance rates



# Monthly Management Reports

- Administrative Penalty Order Report
- Civil Referrals Report
- Judicial Conclusions Report
- Administrative and Judicial Penalty Report
- Administrative and Judicial Injunctive Relief Report
- Percentage of Settlements with SEPs
- Direct Environmental Benefits Report
- Outcomes and Settlements with Injunctive Relief



# Regional Office Reports

- Include data and trend information on regional:
  - Inspections
  - Enforcement Activity
  - Outcomes achieved
- Regional performance is compared to: other regions, national averages, and historical performance
- Performance issues identified for management attention

