

Performance Indicators for Environmental Enforcement and Compliance Programs: Basic Concepts and Best Practices

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Presentation Outline

- I. **Basic Concepts**
 - Need for Indicators
 - Types of Indicators
 - Audiences for Indicators
- II. **Best Practices**
 - Identifying Indicators
 - Designing & Implementing Indicators
 - Using Performance Indicators
- III. **Benefits of Indicators**

I. Basic Concepts

- Why do we need indicators for environmental compliance and enforcement programs?

Indicators serve three purposes:

- Monitor and control operations of compliance and enforcement programs
- Ensure accountability to legislative bodies, budget authorities, constituent groups, and the public
- Evaluate and improve effectiveness in achieving program mission

I. Basic Concepts (continued)

- What types of indicators are needed for environmental compliance and enforcement programs?
 - **Input:** personnel, funds, and other resources that contribute to an activity
 - **Output:** quantitative or qualitative measures of activities, work products, or actions (example: enforcement cases completed)
 - **Intermediate Outcome:** changes in knowledge, behavior, or conditions that result from program activities and are needed to achieve the end outcome (example: pounds of pollution reduced)
 - **End Outcome:** the ultimate outcomes of program activities (example: improvement in air quality)

I. Basic Concepts (continued)

- Who are the audiences and users of compliance and enforcement indicators?
 - National/state policy makers
 - Regulatory agencies
 - Industry sectors
 - Stakeholder and interest groups
 - General public
 - International bodies

II. Best Practices

1. Identifying Indicators

- Define scope of indicators needed
 - National program
 - Specific initiative or problem
- Develop definitions for types of measures
- Conduct meetings with external stakeholders and internal staff to solicit:
 - Potential performance measures
 - Criteria for evaluating potential measures (example: see slide 12)
 - Principles to guide the overall effort to develop and use indicators (example: see slide 13)

II. Best Practices (continued)

2. Designing and Implementing Indicators

- Select final measures using criteria (example: see slide 14)
- Establish internal work teams to:
 - Define measures in more detail
 - Review relevant data in existing data systems
 - Develop new information collection and reporting processes
 - Establish schedule for testing and implementing indicators
- Conduct pilot projects to test indicators and correct problems
- Use consultants as needed to resolve technical and methodological issues
- Execute implementation in phases

II. Best Practices (continued)

3. Using Performance Indicators

- Report to external audiences
 - Annual performance reports to legislative bodies, central budget authority, public
- Understand and improve performance
 - Monthly/quarterly reports to program managers about progress on key outputs and outcomes (example: see slide 15)
 - Quarterly discussions with regional and district managers (example: see slide 16)
 - In-depth performance analyses of selected program components
- Evaluate use of individual indicators and identify measurement gaps

III. Benefits of Indicators

- Improved control of program operations
- Improved ability to set goals and adjust strategies
- Improved decision-making for resource allocation
- Improved ability to identify and correct performance issues
- Improved ability to motivate employees
- Improved ability to communicate with the public

Other Information Sources

- INECE Indicators Forum -
<http://www.inece.org/forumsindicators.html>
- EPA Annual Performance Reports -
<http://www.epa.gov/ocfo/finstatement/apr.htm>
- EPA's National Performance Measures Strategy -
<http://cfpub.epa.gov/compliance/planning/results/npms/>

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Criteria for Evaluating Performance Indicators

- **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



Examples of EPA Outcome Indicators

- 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 Compliance Assistance Centers
- Percentage of enforcement cases requiring improvements in facility management of pollution
- Statistically valid compliance rates



Examples of Data for Monthly/Quarterly Reports

- Number of inspections conducted
- Number of enforcement actions issued
- Amount of fines/penalties assessed
- Amount of investments in pollution control/beneficial projects
- Enforcement actions resulting in pollution reductions
- Regulated entities reached through compliance assistance
- Increased awareness, improved practices, pollution reduction through compliance assistance

These data should be organized by type of activity, regional/provincial office, statute or program area.



Regional/Provincial 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

