



INECE-OECD

Environmental Compliance and Enforcement Indicators

Pilot Projects in Environment Canada:
Addressing Challenges

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November 4, 2003



Environment Canada Pilot Projects

- ◆ Frameworks for ECE Indicators
- ◆ Developing Pilots
 - ◆ Agriculture in Ontario
 - ◆ National pilot projects
- ◆ Challenges
- ◆ Learning through partnerships



ECE Indicators

We should be able to answer:

- Are we achieving appropriate compliance levels?
- Are we improving environmental performance?
- Are we increasing the effectiveness of the program?
- Are we demonstrating the value of our activities to the public?



Working with the Logic Model...

Component	Inputs	Activities	Outputs	Reach	Immediate Outcomes	Intermediate Outcomes	Final Outcomes
Desired Action							
Performance Measure							
Targets							
Action Required by:							
Responsible Authority for performance indicator (who develops)							
who implements							
Frequency of Action (measurement)							
Estimated P.I. cost							



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Outputs for Agriculture

Measure	Result
number of complaints	decrease in number of complaints
number/% of farms in violation	decrease in number/% of farms in violation
number of warnings	decrease in number of warnings
number of directions	decrease in number of directions
number of information packages for farms	increase in number of information packages for farms
number of meetings with farming associations	increase in number of meetings with farming associations



Outcomes for Agriculture

Measure	Result
number/% of cattle with unrestricted access to streams	decrease in the number/% of cattle with unrestricted access to streams
number/% of cattle in streams	decrease in the number/% of cattle in streams
number/% of km of fenced streams	increase in the number/% of km of fenced streams
compliance rate	increase in compliance rate
number of re-inspections required	decrease in the number of re-inspections required



Outcomes for Agriculture (cont'd)

Measure	Result
number/% of environmental farm plans prepared	increase in the number/% of environmental farm plans prepared
number/% of environmental farm plans implemented	increase in the number/% of environmental farm plans implemented
number/% of manure spill contingency plans prepared	increase in number/% of manure spill contingency plans prepared
investment by farmers	increase in investment by farmers



Outcomes for Agriculture (cont'd)

Measure	Result
number/% of farms requiring improvement in practices	decrease in the number/% of farms requiring improvement in practices
number of manure spills	reduction in number of manure spills
number and total quantity (kg) of direct discharges	reduction in number and total amount (kg) of waste discharged by direct discharges



Environmental Indicators for Agriculture

Measure	Result
ambient levels in streams	decrease in ambient levels in streams
amount of environmental restoration conducted	increase in amount of env restoration conducted
condition of stream/river banks	decrease in erosion of stream/river banks



Compliance Promotion and Enforcement Awareness Visits

- Aug 26-30, 2002
- 192 farms visited
- information packages distributed at each farm
- program staff discussed harmful effects of cattle access and manure run-off
- enforcement officers explained the Fisheries Act and enforcement options
- non-compliance (40 sites) addressed with compliance promotion



Enforcement Visits

- Aug 11-14, 2003
- 43 farms visited (40 identified in 2002)
- 18 in compliance
- 25 warnings issued



Preliminary Performance Measures (outputs)

- number of information packages (2002 = 192)
- number of information sessions (2002 = 112)
- number of inspections (2003 = 43)
- number of warning letters (2003 = 25)



Preliminary Performance Measures (outcomes)

- increase in compliance rate
 - 2002 = 149/192 (78%)
 - 2003 = 167/192 (87%)
- 1100 m fencing installed to prevent cattle access to water
- money invested (one farmer = \$10,000)
- 14 acres converted from pasture to prevent cattle access to water
- 3 applications submitted to funding agency



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Four Pilot Projects on Performance Indicators for Compliance Promotion

- ◆ Environmental Emergencies Planning (regulations)
- ◆ New Substances Notification Regulations
- ◆ VOC Guidelines (for certain consumer products)
- ◆ Notice requiring Pollution Prevention Planning for Dichloromethane (DCM)



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Environment Canada Pilot Projects

Challenges

- ◆ Resisting the drift
- ◆ Performance indicators too complicated
- ◆ Selecting the best indicator
- ◆ Obtaining the data



Environment Canada Pilot Projects

Challenges – Cont.

- ◆ Interpreting the data
- ◆ Extrapolating from pilots
- ◆ Lack of management interest
- ◆ Better performance information can be a threat



EC Pilot Projects

Fostering Learning Through Partnerships

- ◆ Many countries actively involved
- ◆ EC interested in collaborative efforts
 - EC ECE Indicator Workshop (Feb 24-25, 2004)
 - Concurrent pilot projects



Conclusion

- ◆ RMAF Logic Model provides useful framework
- ◆ EC actively developing pilot projects
- ◆ Challenges addressed as they occur
- ◆ Collaboration fosters faster learning