State Innovation Grant Program

Minnesota:

Environmental Results Program Applied to Feedlots

The EPA State Innovation Grant Program was established in 2002 to help strengthen EPA's innovation partnerships with States and Tribes and is a direct result of the Agency's innovation strategy, *Innovating for Better Environmental Results: A Strategy to Guide the Next Generation of Innovation at EPA* (http://www.epa.gov/innovation/strategy). To support the *Innovation Strategy,* the 2002 grant program focused its efforts on projects that related to one of four priority issues: reducing greenhouse gases, reducing smog, improving water quality, and reducing the cost of drinking water or wastewater infrastructure. In addition, EPA sought projects that test incentives that motivate "beyond-compliance" environmental performance, or move whole sectors toward improved environmental performance. This series of fact sheets features the State projects selected for funding under the Grant Program.

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Background

The Environmental Results Program (ERP) is a regulatory program used in sectors with numerous small facilities. These sectors are often historically underregulated in many states (auto body shops, junkyards, photo processors, dry cleaners, printers, etc.). In Minnesota, the swine and egg producers associations achieved environmental benefits through innovative quality or management system driven initiatives. The poultry producers are currently preparing similar initiatives. The Minnesota Pollution Control Agency (MPCA) seeks to apply the ERP model to feedlot operations across the state in order to achieve maximum environmental improvement.

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Project Description

To address pollution from agricultural runoff (phosphorus, nitrogen, biological oxygen demand, and disease-causing pathogens), MPCA implemented its updated feedlot rules in October 2000. The rules included a requirement that owners register their feedlots and manure storage areas. The MPCA has also focused state and county staff on permitting and inspecting the over 30,000 sites now registered. Even with that focus, however, at existing rates of inspection (given tight state and county budgets), the estimated time to reach all state feedlots is greater than 10 years.

This project will therefore test and implement an ERP approach for feedlots that fall below the federal definition seeking quicker improvements in environmental performance and compliance than might be possible under conventional inspections. The State Innovation Grant (SIG) funding will be used to develop and implement a pilot ERP within a segment of the feedlot population: dairies. The project also aims to extend the basic water quality protection and land application management aspects of Minnesota's feedlot rule to deal with odors, dusts, pests, ancillary and maintenance operations, related feed crop production, and many other aspects of operations, pushing toward a multi-media, "whole-farm" management system.

Self-certification, assistance in partnership with the Minnesota Milk Producers Association, and other ERP tools will help dairies improve environmental performance and compliance in a more timely way, and without the typical level of MPCA and county effort. Partnership with the producer association, counties, the Board of Water and Soil Resources, Soil and Water Conservation Districts and Clean Water Partnerships will aid development and distribution of the program. The project's results will also inform MPCA's decision whether to extend the pilot to other feedlot sectors, or whether to consider making ERP mandatory.

Should Minnesota be successful in applying the ERP approach to feedlots, this project could serve as a model to other states also working to improve the compliance and performance status of feedlots outside federal regulations.

Benefits of the Project

Likely outcomes from project implementation -

- Faster, broader adoption and results – MPCA expects that participating feedlots will self-audit for compliance and adopt environmental improvement techniques for more areas of the farmstead and sooner than under a conventional inspection program.
- Build on "lessons learned" – MPCA is adopting a process used and evolved successfully in other states. MPCA will be build on the work of producer associations and public/private pilots in Minnesota and other farm states, leveraging quality assurance programs, Farm Bill audit incentives, and EMS/auditing-based approaches promoted by producer associations.

Quantifiable environmental improvements include:

- self-corrections to ensure compliance
- Best Management Practices (BMPs) for feed and supplement BMPs
- soil-tested nutrients levels
- nutrient management plans (both on-farm and at application sites)
- reduction in energy-use
- water conservation
- increased compost volume
- buffer strips along rivers and streams to keep pollutants out of the water
- drain tile inlets capped

These measures will be developed further in the first phases of the project:

- improved administrative efficiency due to increased work load.
- cost savings and improved efficiency for producers due to reductions in:
  - energy and water use
  - soil loss
  - nutrient supplement for animals and feed crops

Project Plan

The pilot project has a three year life. The SIG project period is 1/1/05-12/31/06.

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