

US EPA ARCHIVE DOCUMENT

EPA Innovation Grant Request

Project Title: Thinking Ahead of the Machine: A Smarter Approach to Erosion Control and Stormwater Management

Coverage Area: Commonwealth of Pennsylvania

Applicant State Agency: Pennsylvania Department of Environmental Protection

Project Contact: Patrick McDonnell
Rachel Carson State Office Building
PO Box 2063
Harrisburg, PA 17105-2063
(T) 717-787-2814
(F) 717-705-4980
pmcdonnell@state.pa.us

Coordination with Federally Funded Program: The project would fund an approach to permitting under the National Pollutant Discharge Elimination System (NPDES).

Regulatory Flexibility Required from Federal Government: None

Special Deputy Secretary Barbara Sexton has reviewed and endorsed this proposal.

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Project Narrative

Under the Department's current approach to erosion and sediment control, permit and plan approvals occur sequentially with separate meetings and steps needed for permitting throughout construction activities, ultimately leading toward approval of a post construction stormwater management plan. Because of the sequential nature of the permit process, decisions made early in the process often limit the ability to change approaches to erosion and stormwater control later in the process. The process leads to a need for detailed, lengthy and multiple review letters between the County Conservation Districts or DEP and the applicant. Plans are often developed without engaging the expertise of the earthmoving contractor who is charged with carrying out the plan.

This project will improve the business process for reviewing soil erosion and sediment control plans, and authorizing NPDES Stormwater Permits for construction activities. It will build on the lessons learned from a pilot project in Berks County and will include training sessions across the state for Conservation District staff, DEP staff, municipal officials, consulting engineers, contractors, lenders and the regulated community; and direct assistance to DEP regional offices and County Conservation District staff during the start-up phase in each location. The process advocates a team approach that includes regulatory agencies, developers, engineers, contractors, and lending and bonding institutions. On the ground, this encompasses properly phasing and sequencing construction activities to minimize environmental damage while ensuring a steady source of revenue from the lenders. Ultimately, the process forces the developer, engineer, and contractor to work together in partnership. This represents a fundamental change to the current approach. The approach includes a generalized soil erosion and sediment control plan being made part of the contract bid documents and requires the contractor to be involved in the design of the final control plan.

DEP conducted a pilot of this approach in Berks County with favorable results. While the final report has not yet been received, the pilot resulted in fewer hours spent in meetings throughout the process and financial savings for the applicant. Because the proposed approach eliminates some of the constraints that the current sequential process imposes, the Commonwealth should realize better erosion and sediment control and better long-term stormwater control.

The ultimate long-term impact of this innovative approach to erosion and stormwater planning means the Department should be able to use its resources more strategically while water quality should ultimately improve due to better erosion and stormwater design.

The basic steps of the process include:

- Conducting a pre-application review meeting among District or DEP staff, the applicant and the designer where the permit application, a conceptual erosion and sediment control plan that includes the establishment of project work zones and a post-construction stormwater management plan, will be jointly reviewed (a fee would be charged for this consultation). A letter of adequacy

could be issued at the conclusion of the meeting.

- The developer/applicant placing the conceptual plan in the bid documents (this requires the bidding contractors to establish the phases within each work zone including the sequence, methods and scheduling in each phase, along with a separate soil erosion and sediment control plan for each phase), and selecting a contractor for the development.
- The District or DEP conducting a final permit application and erosion and sediment control plan review meeting with the applicant, the earthmoving contractor and the plan designer. The final erosion and sediment control plan and a review fee would be submitted at that time. At the conclusion of the meeting the reviewing agency has an obligation to issue or deny the NPDES permit, and determine the adequacy of the soil erosion and sediment control plan within ten working days.

This process will save regulatory agencies and builders time and money by eliminating multiple deficiency letters and by significantly accelerating permit processing. The approach will result in improved protection of Commonwealth waters and fewer permit violations by ensuring that everyone involved has a clear understanding of their responsibilities throughout the entire life of the project, through the proper phasing and sequencing of construction activities, and by incorporating post construction stormwater management concepts in to the project design. It will also save District and DEP personnel substantial office time that can be devoted to an increased field presence.

The funding request is for consultant assistance to conduct the training and outreach sessions, to provide direct consultative services to DEP and County Conservation District staff, and for ancillary costs associated with planning, advertising, and conducting the outreach, training and meetings. Once refined and deployed, the principles of this process could be applied anywhere in the country and the initiative could serve as a national model. DEP will place information related to the implementation of this approach on its website and disseminate the information more broadly to other states through associations and individual state contacts. The approach proposed here includes training for Department staff to ensure that we are truly changing the culture of the organization as we improve the relationship between the state, counties and applicants involved with these programs.

State and federal law require the permits that would be impacted by this proposal. Erosion and sediment control plans are required as outlined in the Pennsylvania Code, Title 25, Chapter 102. The NPDES permits are required under 40 CFR Part 122 and the Pennsylvania Code, Title 25, Chapter 92.

The proposal supports elements of the EPA 2003-2008 Strategic Plan, specifically under the goal of "Clean and Safe Water". Objectives met under this goal are: "Protect Human Health" and "Protect Water Quality". The project will be measured in time saved by staff in a reduced number of meetings as well as the percentage of money saved by the applicants. These amounts will be determined based on the outcomes of a pilot of the approach that was conducted in Berks County.

In addition to supporting the national strategic plan, the proposal will help the Commonwealth meet commitments under its Performance Partnership Agreement. This project will also help implement elements of the Chesapeake Bay Tributary Strategy and the Schuylkill Action Network, both of which are priorities for EPA's Region 3 office.

DEP has demonstrated the technical feasibility of the approach through the pilot project in Berks County. The grant request will allow the Department to apply the approach to the entire Commonwealth.

In order to implement the proposal, DEP will partner with the county conservation districts to implement the program. The districts are delegated responsibilities for permitting and compliance activities under the affected programs so partnership with them will be critical to success.

In terms of institutional readiness and commitment, the Department has already committed its own funds to the pilot project in Berks County as well as portions of the statewide rollout. DEP staff has already worked on piloting this project and are using the lessons learned to develop a statewide approach. Staff in DEP's Central and Regional Offices as well as the County Conservation Districts have extensive experience in managing these programs in the past.

The pre-application process allows for improved communication with external stakeholders including the applicant and the county conservation districts. Public participation is built into our various permitting processes associated with the program.

Deliverables and Schedule

Year One:

- Complete "Pennsylvania Program Guidelines Handbook" for Thinking Ahead of the Machine
- Conduct initial one-day orientation meetings with representatives of 15 additional conservation districts that want to be part of the expanded statewide program during year one of the program
- Conduct intensive two-day training workshops for all conservation district staff who will be involved with the pilot project
- Direct preparation for, and assist in, conducting the first set of project review meetings in each participating conservation district (one day of preparation, and two meetings with the applicant's team) for the first project submitted in each participating district
- Assist conservation district employees conduct the initial and final project review meetings for the second project submitted in the process in each pilot county (two meetings)
- Conduct three on-site inspections for the first two projects being constructed under the pilot program in each county
- Answer all questions posed by district staff during the life of the first two construction projects submitted under the pilot program, by phone or in person if necessary.
- Conduct a two-day intensive training workshop for staff in the Watershed Management Program in each of the six DEP regional offices

- Document the success and failures of each pilot project through photographs and written reports, and make written recommendations for continuous improvement
- Conduct quarterly meetings with the Pennsylvania Builders Association
- Provide written progress reports to DEP, Bureau of Watershed Management staff no later than 15 days following the end of each month to document successes, problems and failures, and recommend appropriate adjustments to the program.
- Make at least two PowerPoint presentations to interested associations, groups, or public officials to explain the project and seek participation by their constituency
- Meet monthly with DEP Bureau of Watershed Management staff to discuss statewide progress and present the monthly written progress report

Year Two:

- Conduct six educational and training sessions across Pennsylvania for municipal officials, consulting engineers, developers and contractors.
- Conduct six educational and training sessions across Pennsylvania for lending institutions, bonding companies, attorneys and realtors.
- Conduct initial one-day orientation meetings with representatives of 10 additional conservation districts that want to be part of the expanded statewide program
- Conduct intensive two-day training workshops for all conservation district staff who will be involved with the pilot project
- Direct preparation for, and assist in, conducting the first set of project review meetings in each participating conservation district (one day of preparation, and two meetings with the applicant's team) for the first project submitted in each participating district
- Assist conservation district employees conduct the initial and final project review meetings for the second project submitted in the process in each pilot county (two meetings)
- Conduct three on-site inspections for the first two projects being constructed under the pilot program in each county
- Answer all questions posed by district staff during the life of the first two construction projects submitted under the pilot program, by phone or in person if necessary
- Conduct a two-day intensive training workshop for staff in the Watershed Management Program in each of the six DEP regional offices
- Document the success and failures of each pilot project through photographs and written reports, and make written recommendations for continuous improvement
- Provide written progress reports to DEP, Bureau of Watershed Management staff no later than 15 days following the end of each month to document successes, problems and failures, and recommend appropriate adjustments to the program
- Meet monthly with DEP Bureau of Watershed Management staff to discuss statewide progress and present the monthly written progress report

Budget Summary Page

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