Mississippi Department of Environmental Quality

2003-2004 State Innovation Grant Program Application

I. Project Summary Information

Project Title and Location: Improving Permitting for Environmental Results through Multi-Media Performance Management Tools – Mississippi Department of Environmental Quality

State and Agency: Mississippi Department of Environmental Quality (MDEQ)

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• This is a multi-media project that includes a significant component related to hazardous waste management and permitting under the Resource Conservation and Recovery Act.

• This project is not being executed in cooperation with or funded by another Federal Program.

• No regulatory flexibility will be required to implement this project.

• This project is endorsed by the Executive Director of the Mississippi Department of Environmental Quality. A written letter of endorsement will be sent with the final application and proposal.
II. Project Narrative

The Mississippi Department of Environmental Quality (MDEQ) is proposing a project that builds upon existing innovation within MDEQ’s permitting activities by developing cross-media, cross-sector application tools for managing permitting for environmental results. These tools will facilitate and improve broad strategic planning and management of resources and environmental concerns in the state of Mississippi.

The goal of this project is to develop reporting and accountability measures to quantify performance metrics. The outcome of this project will be functional electronic tools that can establish real-time performance, trends, and identify gaps in performance. A rudimentary method currently exists that provides the baseline against which the outcome of this project will be measured.

Background

MDEQ has made bold advances in the improvement of its business processes for permitting activities. A reengineering effort that began in 1996 culminated in February 1998 with a new division that supports MDEQ’s permitting functions.

Today, the Environmental Permitting Division (EPD) manages virtually all of the permitting activities within MDEQ. EPD branches are organized by industrial sectors and support all regulatory media within those sectors.

![Environmental Permits Division Diagram]

Each sector branch within EPD has all of the expertise necessary to issue any environmental permit required for the facilities within that sector. MDEQ has successfully implemented a true single point of contact for permitting of all environmental media associated with a facility. A key element in the successful implementation of a multi-media approach to facility regulation is having electronic tools available so that permit writers can view a facility holistically, considering impacts of each media permit to conditions in other media permits.

In order to support its new business processes, MDEQ implemented its integrated environmental information management system, enSite (electronic Environmental Site Information System) in October 2000. enSite supports daily activities of the permitting staff, providing the necessary multi-media, holistic facility view; and, provides critically
needed management tools required to manage resources in an ever increasing resource restrictive environment. These performance tools have helped management identify performance improvements, where additional resources are required, and address specific staff and branch performance issues, including limited metrics for permitting for environmental results.

This chart shows a 71% productivity increase in permit actions since the advent of reengineering and enSite.

Permit backlog reduction is a key EPA environmental performance indicator. This chart illustrates permit issuance backlog vs. applications received. This data provided the basis for a strategic decision to add resources to this program area in an effort to reduce permit backlog.

Project Proposal

Consistent with the national movement to permit for environmental results, MDEQ is proposing to expand its management toolset. Under this grant award, MDEQ will develop tools utilizing data tracked in enSite and other databases that will improve permitting for environmental results. Tools are needed to expand management’s ability to track detailed performance metrics to evaluate successes and deficiencies. MDEQ’s enSite system provides the data needed to do this in a cross-media environment as well as across industrial sectors. The toolset will be web-enabled and will include some GIS functionality. Additionally, a primary responsibility of MDEQ is sharing environmental information with the public and other interested parties. As part of this project proposal, MDEQ will expand its current public access tool, enSearch Online, to allow for a broader universe of direct inquiries of electronic data with GIS components where appropriate.

Because MDEQ’s enSite System utilizes the TEMPO software, these tools will be

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transferable to other TEMPO states at no cost, including New Mexico, New Jersey, Kentucky, and Maryland. These tools will also be available at no cost to non-TEMPO states upon request, providing a conceptual model for managing environmental data and resources.

MDEQ proposes to develop tools such as the following:

- The data to evaluate true environmental results exists in electronic systems at MDEQ. The design and development of an interface between MDEQ’s regulatory and scientific data will facilitate the ability to begin making these evaluations. Additional reports and maps to support holistic project awareness will allow the permit writer to consider the complex matrix of multi-media concerns.

- To more effectively direct permitting resources, a tool will be developed to track permitting efficiencies, productivity, and application of specific environmental requirements in industrial sectors.

- MDEQ will develop tools utilizing enSite data to identify facilities or sectors that need to have new environmental/ regulatory requirements applied to them and will allow us to identify specific types of facilities with specific requirements in their permits.

- MDEQ has developed competency-based requirements for job classifications that have formed the basis for a comprehensive multi-level, multi-media permit writer development program. In this era of declining training resources tools will be developed to help identify competency gaps and allow training dollars to be focused on the deficiencies.

- A reduction in transaction costs will be realized by the enhancement of enSearch Online to allow for a broader universe of online queries by the general public as an alternative to the current FOIA process.
Project Schedule and Time Frame

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<tr>
<th>MILESTONE TASKS</th>
<th>TIME FRAME</th>
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<tbody>
<tr>
<td>Prioritize toolset needs</td>
<td>Fall 2004</td>
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<tr>
<td>Design of performance tools</td>
<td>Winter 2004-2005</td>
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<tr>
<td>Design of GIS applications</td>
<td>Spring 2005</td>
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<tr>
<td>Development of performance tools including management reports, charts, and GIS tools</td>
<td>Summer-Fall 2005</td>
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<tr>
<td>Identify priority public access tools</td>
<td>Winter 2005-2006</td>
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<tr>
<td>Enhance enSearch Online for public access</td>
<td>Spring 2006</td>
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The ability to track performance metrics will provide a basis for permit requirements necessary to improve environmental results such as permits that implement TMDLs. New reports will be used to associate permitting requirements such as water quality based limitations and TMDL implementation with their effectiveness as measured by such methods as ambient monitoring.

Meeting Program Criteria Requirements

- **5.2.1 Target Priority Environmental Issues.** The development of cross-media and cross-sector management tools will allow MDEQ to focus on priority issues such as restoring and maintaining water quality and other environmental media by associating media impacts to things such as TMDLs, emissions from CAFOs, and historical activities at potential brownfields sites.

- **5.2.2 Likely Improvement in Results from Project Implementation.**
  - 5.2.2.1 This project encompasses virtually every permitting program in MDEQ including Air, Title V, NPDES, Storm Water, RCRA, Solid Waste, Recycling and Pollution Prevention activities and Pretreatment. The new tools will provide the ability to capture data from multiple databases and associate them with a particular facility.
  - 5.2.2.2 This project builds upon existing performance tools already developed that have proven useful in effective program management.
  - 5.2.2.3 MDEQ will be able to effectively measure a multiplicity of environmental outcomes electronically.
  - 5.2.2.4 This project will allow evaluation of the environmental return on investment of resource assignment and use that data for strategic planning of resource allocation.
  - 5.2.2.5 Permit holders and regulated entities will benefit in reduced costs and efficiencies by increased, on-demand, electronic public access to data associated with a facility or permit.

- **5.2.3 Measuring Improvement and Accountability.** The State will make information about the project, including performance data available to stakeholders on its website and enSearch Online. Results will be achievable according to the project timeframe outlined above.
5.2.3.1 The goals for environmental improvement are improved water quality, increased brownfield development, and effective use of resources.

5.2.3.2 Environmental improvement indicators
   - Ambient improvements as the result of permit requirements
   - Resource savings or redirection to priority environmental areas

5.2.3.3 Rudimentary baseline data currently exists and will be refined within six months of project implementation.

5.2.3.4 Project performance will be measured continuously as tools are developed. Final evaluation will be approximately one year after completion of the toolset.

5.2.3.5 Short-term benefits (1-3 years) will be more productive use of resources and implementation of permit requirements addressing environmental problems such as TMDLs.

5.2.3.6 Long-term benefits will be measured against environmental improvement indicators and will be reported in documents such as the 305B Reports. They will be measured through the various methods used to develop these reports and will occur over a five to 10 year period.

Transferring Innovation.

5.2.4.1 The outcomes and methods of this project will be documented in MDEQ’s Annual Report which will be available electronically and by hard copy.

5.2.4.2 These tools will demonstrate the benefits of using innovative eBusiness processes for environmental management. They will have specific application to other TEMPO states and will provide a conceptual model for non-TEMPO states.

5.2.4.3 This innovation will facilitate organizational self-evaluation by clearly identifying opportunities for better resource utilization and increased productivity.

5.2.4.4 MDEQ has provided mentoring and consulting services to states interested in improved management of environmental information including Arkansas, New Mexico, Tennessee, Kentucky, and Wyoming. MDEQ will continue that commitment in support of these innovative tools to other TEMPO states as well as to non-TEMPO states interested in implementing similar innovations.
### III. Proposal Budget Summary Page

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*<Budgetary Information Withheld by U.S. EPA>*