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Michael F. Easley, Governor

William G. Ross Jr., Secretary  
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E. Director  
Division of Water Quality

## **FY2006 State Innovation Grant Program Project Summary Information Page**

**Project Title:** Electronic Submittal of Pre-Construction Notification (PCN) Form (ePCN) for 401 Certification Application

**Location:** Raleigh, North Carolina

**Name State Agency:** North Carolina (NC) Department of Environment and Natural Resources (DENR), Division of Water Quality (DWQ)

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### **Other Required Information:**

- This proposed project would not be executed in cooperation with or funded by another federal or EPA program.
- This proposed project does not require any regulatory flexibility.
- This proposed project is not focused on hazardous waste management and permitting under the Resource Conservation and Recovery Act (RCRA).
- The NC DENR Secretary, William Ross, Jr., fully supports the execution of this proposed project.



## ePCN Pre-Proposal Narrative

**Introductory Paragraph:** The North Carolina Division of Water Quality (DWQ) currently requires the submission, to the DWQ Central Office in Raleigh, of a paper copy of its 12-page Pre-Construction Notification (PCN) Application Form for Section 401 General Water Quality Certifications. This application is checked for completeness and then manually entered into DWQ's 401 Certification application tracking and recordkeeping system prior to mailing to the appropriate Regional Office for further disposition. Incomplete applications must be returned, via the US Postal Service, to the applicant for correction. Currently, the Division receives approximately 2,000 PCN applications per year, which then must be manually checked for completeness, entered into the tracking system, and finally mailed, to the appropriate Regional Office. This current methodology for processing these applications is a burden that expends huge amounts of staff time in purely administrative functions and also significantly reduces the timeliness of the application approval process and, consequently, our service to the regulated community. Funding of this proposal would allow for the development of an electronic submittal option for the PCN Form (ePCN) that would automatically check the application for completeness, when submitted, and would allow the submitted applications to be electronically entered into DWQ's functional Basinwide Information Management System (BIMS) for permit tracking and recordkeeping. Additionally, as a part of this ePCN project, an on-line tutorial to guide and assist end-users in the completion and submittal of the electronic 401 application will be produced and made available on the DWQ website. This electronic submittal option would foster innovation in North Carolina's water quality permitting programs, as it would constitute the first available electronic permitting submittal mechanism within DWQ. This proposal would clearly support EPA's innovation in permitting strategy. Not only would this project serve as a pilot study for the pursuit of other innovative electronic permit submittal processes within North Carolina, but it would also enhance the timeliness and efficiency of NC's 401 General Water Quality Certification application process. This would provide an elevated level of service to North Carolina's regulated community. In addition, valuable staff time would be freed from the requirement to manually process the 2,000 PCN forms received on an annual basis and would allow these assigned personnel more available time to inspect 401 permitted projects in the field to ensure compliance and to provide technical assistance. At present less than 10% (200) of the 2,000 annual 401 Certification projects receive some type of field technical assistance visit/compliance evaluation. These inspections are primarily prompted by citizen complaints. It is estimated that the implementation of the ePCN system would reduce the processing time by approximately 1 to 2 hours, on average, per application. With this extra available time (2,000 to 4,000 person-hours per year) the Division estimates that the current number of 401 project site visits could reach 400 or more per year. This would represent a truly significant increase in the percentage of 401 Certification projects receiving on-site technical assistance/compliance evaluations and would directly support EPA Strategic Goal #2 – Clean and Safe Water – by affording DWQ's limited 401 regulatory personnel the opportunity to spend greater time in the field ensuring compliance with applicable water quality protection requirements. The reduced permit processing times and the subsequent increased number of field visits/inspections of active 401 projects would be fully documented and recorded. The documentation of these accomplishments would be made available for EPA review as described in detail in the Guaranteeing Measures and Accountability portion of this proposal.

### Project Schedule and Time Frame:

It is estimated that the ePCN initiative will begin in October 2006 and end in September 2008.



	Start Date	Activity	Deliverables	Completion Date
Plan	Jan 2006	Submit grant pre-proposal	Grant pre-proposal	Jan 2006
	Spring 2006	EPA selection decision	Favorable selection decision.	Spring 2006
	Summer 2006	Submit final application package.	Application Package	Summer 2006
	Summer 2006	Receive grant award	Grant award	Summer 2006
Build	Oct 2006	Design and build ePCN application system	Functional ePCN operating system	Sept 2007
	Sept 2007	Pilot ePCN system	Pilot facility feedback – streamlined system	Mar 2008
	Mar 2008	Assess program “readiness” – Develop operational procedures	Report of Program Readiness – Operational procedures	May 2008
Manage	May 2008	Fully implement ePCN.  Press releases to notify stakeholders/public	Summary Report of Successes Achieved through ePCN Implementation.	Sept 2008

Following the proposed grant award in the summer of 2006, it is estimated that it will take approximately two years to design, build, and implement the electronic Pre-Construction Notification Form/401 Application system. The above schedule would result in an operational ePCN ready for field-testing in September 2007. If few obstacles are encountered during the pilot testing stage, full-scale implementation of the project could be accelerated accordingly.

### Program Criteria

**Target Priority Environmental Issues:** The project clearly supports the EPA’s Innovation Strategy by fostering innovation in North Carolina’s 401 Certification application process that will result in Streamlined and Enhanced Permitting through the Application of Innovative Information Technology Systems. At present, there are no existing protocols in North Carolina that provide for the electronic submittal of any type of water quality-related permit application. This proposed project would be the first of its kind in this State and would facilitate a full-scale evaluation of this type of electronic submittal process for expansion to other permitting programs within the NC Division of Water Quality. North Carolina’s regulated community would particularly welcome the ePCN process. At present, the Division receives over 2,000 completed PCN applications per year. The wide spectrum of the regulated population that submits these application forms has repeatedly requested a means to submit these PCN forms through an electronic medium. An electronic PCN option would substantially expedite the application process and significantly increase DWQ’s level of service to its regulated community. In addition, the 2,000 to 4,000 hours of staff time that would be released from the burdensome administrative functions associated with the processing of these comprehensive paper applications would support EPA’s Strategic Goal #2 of Clean and Safe Water by enhancing the maintenance of water quality throughout the State through an increase to 400 or more inspections of ongoing 401 Certification projects. The staff time that is now dedicated to the processing and review of paper applications could be transferred to field operations



where these environmental professionals could perform additional technical assistance and compliance inspection duties. Currently, only a small percentage, less than 10%, of the 2,000 401 projects that are executed within North Carolina's borders on an annual basis are targeted for field inspection visits. By removing the requirement to process paper applications the ePCN system would allow these limited staff resources to inspect and review a greater percentage of these 401 Certification projects in the field. As previously discussed, the resulting savings in staff time from the adoption of the ePCN system could result in a doubling or greater increase of the number of 401 Certification projects inspected in the field on an annual basis. This enhanced compliance and inspection posture would help to maintain clean and safe waters for the citizens of North Carolina.

**Improvement in Results from Project Implementation:** The proposed ePCN project represents a true innovation in North Carolina's traditional permitting processes in that there is currently no means for the regulated community to submit an electronic permit application for any of NC DWQ's water quality-related permits. This proposed project would clearly be "the first of its kind" within this State and would result in the implementation of a more expeditious and efficient permitting program that would ultimately benefit DWQ, the regulated community, and the citizens of North Carolina. The implementation of the ePCN would result in reduced 401 Certification application processing times, which would benefit the regulated community. These applications would be processed in a more efficient manner, which would benefit both the regulated community and the Division of Water Quality. DWQ contends that this greater permitting efficiency would subsequently release the limited staff resources to conduct more than twice the current number of field visits and inspections, which would benefit North Carolina's water quality and all the citizens of this State. The quantifiable improvements anticipated by the implementation of this project would be reduced 401 Certification application processing times, reduced staff time in person-hours processing these applications by 2,000 to 4,000 man-hours, and an increased number of field technical assistance visits/compliance evaluations of 401 projects to more than 400 projects, which will enhance the maintenance of North Carolina's water quality. The ePCN system would significantly improve administrative efficiency in the processing and handling of 401 Certification application submittals and would more efficiently utilize DWQ's limited staff resources. Program operational costs will not be reduced, but these resources will be more efficiently utilized to protect the surface waters of this State. The enhanced administrative efficiency in the 401 Certification application process that would be provided by the adoption of the ePCN system would clearly result in reduced costs and time-savings to the regulated community and permit holders by substantially reducing the time required to process and approve a 401 Certification application. Additionally, the ePCN system will automatically check PCN forms for completeness at the time of submittal, thereby resulting in a cost and time savings by reducing the lengthy permit application re-submittal process for incomplete applications. During the pilot testing of the ePCN system public input will be continuously solicited to seek ways to improve and enhance the design and function of this project. As a component of the ePCN project, an on-line tutorial will be created to assist end-users in the completion and submittal of the electronic 401 applications. This tutorial will greatly reduce costs to the regulated community by allowing the casual or first-time applicant to submit a complete and acceptable PCN application without the costly assistance of an environmental consultant. In addition, it will allow remote, disadvantaged, and less-fortunate members of the regulated community with access to a computer at the local public library to submit a complete 401 Certification application.

**Guaranteeing Measures and Accountability:** Once the ePCN system becomes publicly available, the DWQ Public Information Officer will issue statewide press releases notifying North Carolina's citizens of the availability of this enhanced application process and how it may be accessed. Improvements gained through the implementation of the ePCN system will be measured through a variety of indicators. Reduction in 401 Certification application processing times will be measured in the number of hours reduced per application. The baseline (pre-ePCN application processing time) will be compared with the post-ePCN application processing time after the electronic application system has been fully implemented





for a period of six months. A significant reduction in processing time is anticipated. The increased number of 401 technical assistance site visits/compliance evaluations conducted will measure the enhanced protection of the State's surface waters. This increase will be gauged on an annual basis by measuring the number of visits conducted in the year preceding the implementation of the ePCN (baseline) against those performed every year after full-scale ePCN implementation. Another indicator for the measurement of the enhanced protection of water quality will be the number of 401 project-associated Notices of Violations (NOVs) issued as a result of the increased number of field compliance evaluations. This increase will be gauged on an annual basis by measuring the number of 401 associated NOVs issued in the year preceding the implementation of the ePCN (baseline) against those issued every year after full-scale ePCN implementation. All of this information will be forwarded to the appropriate EPA offices and will also be made publicly available. The success achieved in the reduction of permit processing times will be noticed in a public release to the affected community.

**Transferring Innovation:** The successful implementation of the ePCN system will be broadly noticed and recognized throughout North Carolina. As previously stated, press releases will be issued notifying the general public of the development and availability of this system. Once the system is successfully operating, DWQ Staff will summarize the results of the projects and highlight the successes and process improvements achieved by its implementation. This summary document will be made publicly available on the DWQ website and will be forwarded to all those listed on the DWQ Wetlands mailing list. Additionally, the routine measurement of the indicators of project success discussed previously in this document will also be posted on the Division's website. The potential for widespread use of this system is extremely high. It is anticipated that after the successful implementation of the ePCN system that other environmental permitting programs both with DWQ, and within the other regulatory agencies of the North Carolina Department of the Environment and Natural Resources, will consider the adoption of similar electronic permit application systems. This would allow a broader regulated community within this State to benefit from this proposal. The ePCN system will be highly transferable to the Army Corps of Engineers (ACOE), which utilizes an application process very similar to the PCN form for its 404 permitting program. At present the ACOE in North Carolina does not utilize an electronic submittal option but has expressed an interest in reviewing the DWQ introduction of this methodology. All states have some form of 401 Certification Program and, because of this, it is anticipated that the ePCN system would be highly transferable to other states both within EPA's Region 4 and outside of the southeastern United States. The Division would be eager to dispatch involved staff members to appropriate symposia and conferences to disseminate information regarding the adoption of the ePCN system. North Carolina proposes to mentor and share its experiences, documentation, and technologies with all other states and agencies interested in the implementation of similar systems.

#### **Qualitative Selective Factors:**

**State Leveraging Funds:** [withheld by EPA]

**Feasibility:** The likelihood for successful implementation is extremely high (see below).

**Institutional Readiness:** DWQ maintains a highly experienced and well-trained staff of Information Technology professionals who would be more than capable of implementing the ePCN project. In addition, the Division has invested large amounts of capital into its automated Basinwide Information Management System (BIMS), which would directly interface with the ePCN project. DWQ's commitment and capability to implement innovative information technology-related projects and its desire to pursue this project is clear. In addition the NC Division of Water Quality has a documented history of successfully developing and introducing technological projects that are very similar to this proposal.



**Environmental Justice:** This proposal incorporates environmental justice considerations by providing all the citizens of this state with an equal opportunity to submit acceptable 401 Certification applications without the requirement to incur the costs associated with a professional environmental consultant.

