

# **Fiscal Year 2007 Environmental Information Exchange Network Grant Program**

## **Solicitation Notice**

**U.S. Environmental Protection Agency  
Office of Environmental Information  
Office of Information Collection  
Information Exchange and Services Division  
Information Exchange Partnership Branch  
September 2006**



# **Fiscal Year 2007 Environmental Information Exchange Network Grant Program Solicitation Notice**

## **Table of Contents**

### **Overview Information**

#### **I. Funding Opportunity Description**

1. Introduction
2. Program History
3. Assistance Activities

#### **II. Award Information**

1. General Information
2. Assistance Instrument: Grant or Cooperative Agreement
3. Funding Mechanism: Direct Funding and/or In-Kind Services
4. Performance Partnership Grants or Consolidated Grants

#### **III. Eligibility Information**

1. Eligible Applicants
2. Cost Sharing or Matching
3. Other Eligibility Information

#### **IV. Application and Submission Information**

1. Address to Request Application Package
2. Content and Form of Application Submission
3. Submission Date and Time
4. Intergovernmental Review
5. Funding Restrictions
6. Other Submission Requirements

#### **V. Application Review Information**

1. Evaluation Criteria
2. Review and Selection Process
3. Anticipated Award Dates

#### **VI. Award Administration Information**

1. Award Notices
2. Administrative and National Policy Requirements
3. Reporting
4. Dispute Resolution Provision

#### **VII. Agency Contacts**

## **VIII. Other Information**

1. Exchange Network References
2. Other EPA Financial Assistance Programs

### **Appendices**

Appendix A: Definitions

Appendix B: Suggested Exchange Network Data Exchange Activities

Appendix C: Activities Related to Mentoring, Planning and Training Group

Appendix D: Detailed Application Instructions

Appendix E: Quality Assurance Guidelines

Appendix F: Semi-Annual Performance Progress Reports

# FY 2007 Environmental Information Exchange Network Grant Program Solicitation Notice

## Overview Information

**Agency Name and Office:** U.S. Environmental Protection Agency (EPA), Office of Environmental Information (OEI)

**Funding Opportunity Title:** Fiscal Year (FY) 2007 Environmental Information Exchange Network Grant Program

**Announcement Type:** Initial Announcement; Subject to Availability of Funding Solicitation Notice

**Funding Opportunity Number:** EPA-OEI-07-01

**Catalog of Federal Domestic Assistance (CFDA) Number:** 66.608

**Dates:** November 20, 2006 – Deadline for submitting applications to EPA  
June 2007 – Issuance of FY 2007 Exchange Network Grant Program awards

**Executive Summary:** EPA, states, territories, and tribes are working together to develop a nation-wide Environmental Information Exchange Network. The Exchange Network is an Internet- and standards-based, secure information network that facilitates the electronic reporting, sharing, integration, analysis, and use of environmental data from many different sources. The Exchange Network will make it easier to obtain the timely, accurate information needed to make decisions concerning human health and the environment.

The Exchange Network Grants Program provides funding to states, territories, tribes, and inter-tribal consortia to help them develop the information management and information technology (IM/IT) capabilities they need to participate in the Exchange Network. This grant program also supports the exchange of data; mentoring, planning and training activities; and collaborative work related to the Exchange Network. This grant program may include the standardization, exchange and integration of geospatial information to address environmental, natural resource, and related human-health issues.

The FY 2007 Exchange Network Grant Program includes four groups of activities:

- Infrastructure – supports the development or upgrade of Nodes or Node clients to participate in the Exchange Network;
- Data Exchange and Integration – supports the development of the capability and the exchange of data through the Exchange Network;
- Mentoring, Planning and Training – supports Exchange Network activities such as mentoring other partners, planning activities, and developing training materials and conducting training on specific topics; and

- Collaboration – supports collaborative, multi-partner projects that demonstrate the value of the Exchange Network.

EPA's priority will be on proposals that focus on deploying regulatory data exchanges. The data exchanges of highest priority are those that have been established or will be established before the end of FY 2009. Priority will also be given to proposals that result in data being published and partners establishing Nodes. Funds may also be provided for innovative projects.

# Full Text of Announcement

## **FY 2007 Environmental Information Exchange Network Grant Program Solicitation Notice**

### **I. Funding Opportunity Description**

#### **I-1. Introduction**

The U.S. Environmental Protection Agency (EPA) and its state, tribal, and territorial partners are working together to develop a nation-wide Environmental Information Exchange Network (Exchange Network). The impetus for developing the Exchange Network arose from discussions between EPA and state environmental agencies about the challenges of collecting, sharing, and using environmental information to facilitate more informed decisions about human health and the environment. In 1998, EPA and the states formed the State/EPA Information Management Work Group (IMWG). The IMWG developed the conceptual design for a nation-wide, secure network to collect and exchange environmental information more efficiently and effectively. In 2004, the IMWG commissioned the Network Planning Action Team (NPAT) to develop a Business Plan for the Network. The NPAT's *Exchange Network Business Plan* (March 2005) contains proposals, strategies and a vision intended to guide the Network's growth as it moves into a period of managing implementation and expansion.

The Exchange Network Grant Program supports the continuing development of the Exchange Network by providing funding for the following: development of computer hardware and software needed to connect to the Exchange Network; data exchange activities; mentoring, planning and training activities; and collaborative efforts needed to effectively implement the Exchange Network. This grant program may also include the standardization, exchange, and integration of geospatial information to address environmental, natural resource, and related human-health issues.

The statutory authority for the Exchange Network Grant Program comes from the following statutes: Clean Water Act, Section 104(b)(3); Federal Insecticide, Fungicide, and Rodenticide Act, Section 20; Clean Air Act, Section 103; Solid Waste Disposal Act, Section 8001; Safe Drinking Water Act, Section 1442; Toxic Substances Control Act, Section 10; Marine Protection, Research and Sanctuaries Act, Section 203; Comprehensive Environmental Response, Compensation and Liability Act, Section 311; and the Indian Environmental General Assistance Program Act.

**Environmental Results:** The overall goal of this program is to improve compliance and environmental stewardship by facilitating the collection, sharing, analysis, and integration of high-quality data that supports environmental decision-making. This grant program supports Goal 5 (Compliance and Environmental Stewardship), Objective 2 (Improve

Environmental Performance through Pollution Prevention and Innovation), Sub-objective 4 (Environmental Policy Innovation) of the 2003-2008 EPA Strategic Plan. The Program Results Code assigned to the funding for this program is consistent with this strategic goal/objective/sub-objective.

It is EPA policy to link proposed assistance agreements to the Agency's Strategic Plan and Government Performance and Results Act architecture. This policy ensures that outputs and outcomes are appropriately addressed in assistance agreements, work plans and performance reports. (Please see Appendix A for definitions of the terms "outcome" and "output.") This allows EPA to consider how the environmental results from assistance agreements contribute to the Agency's programmatic goals and objectives. Examples of the intermediate outcomes and outputs that should be addressed in the application are discussed below.

The overall outcome expected from the FY 2007 Exchange Network assistance agreements is more informed environmental decisions through improved access to, and exchange of, higher quality environmental data. To achieve this outcome, the grant program supports a number of intermediate outcomes that include the following:

- increased speed and timeliness of data exchange by allowing data exchanges to happen more frequently, thereby decreasing the lag between partner systems;
- increased efficiency of data exchange by reducing administrative burden, including reducing or eliminating manual intervention for tasks such as scheduling, resubmissions, or security;
- improved quality of data through additional and more efficient error checking and/or earlier detection of errors and discrepancies, as well as electronic collection;
- improved standardization and comparability by using common data standards and formats to provide additional definition, structure, and integration opportunities;
- economies of scale through shared infrastructure and shared tools to achieve reduced costs and expanded functionality;
- increased amounts of data shared among partners by encouraging more data exchanges over the Network and among more partners;
- increased data use and the potential to integrate data across institutional boundaries by leveraging a common strategy for environmental Web Services; and
- improved business processes that facilitate burden reduction on the regulated community.

The Exchange Network Grant Program has four groupings of assistance activities that can be utilized to develop proposals. The groupings are: Infrastructure; Data Exchange and Integration; Mentoring, Planning and Training; and Collaboration. An applicant's work plan will need to have an output that is measurable for each of the activities that are included. Examples of an Infrastructure group output include the development of an Exchange Network Node, or the implementation of information technology hardware and software needed to participate in the Exchange Network. Data Exchange and Integration group output examples include implementation of a suggested Exchange Network data exchange activity or demonstration of the use of data and the publishing of a Web Service by other Exchange Network partners. An output from the Mentoring, Planning

and Training group could be the development of an Exchange Network training course for states, tribes or territories who are becoming actively engaged in the partnership. The number of times the training is given would be another output. Collaboration group outputs could include any of these examples, implemented in a shared partnership between multiple Exchange Network partners.

## **I-2. Program History**

The FY 2007 President's proposed budget includes \$15,000,000 for the Environmental Information Exchange Network Grant Program. This funding Solicitation Notice is subject to the availability of funds for this program in the FY 2007 annual appropriations for EPA. Authorization for the Exchange Network Grant Program over the past five years has been provided by the annual appropriations for EPA: FY 2002 (Public Law 107-73), FY 2003 (Public Law 108-7), FY 2004 (Public Law 108-199) FY 2005 (Public Law 108-447) and FY 2006 (Public Law 109-54). From FY 2002 to FY 2006, EPA has provided approximately \$105,000,000 for state, tribal, and territorial awards and associated program support awards through the Exchange Network Grant Program. FY 2007 will be the sixth year of the Exchange Network Grant Program.

In a relatively short period of time, the Exchange Network has become a reality. As of July 2006, all 50 states, 44 tribes and 4 territories and the District of Columbia have participated in developing the Exchange Network at some level. Forty-one states and one tribe have established their Exchange Network Node and have exchanged data with another partner. While much remains to be done to fulfill the potential of the Exchange Network, it is now a tangible Internet- and standards-based, secure information network used to report and share environmental data from many different sources. The Exchange Network is making it easier to obtain the timely, accurate information needed to make decisions concerning human health and the natural environment.

EPA has provided Exchange Network grant funds to partners for the exchange of data related to the following: Beaches (beaches water quality and closure data), Air Facility System (AFS), Air Quality System (AQS), Drinking Water Laboratory Results, electronic Discharge Monitoring Reports (e-DMR), electronic Drinking Water Reports (eDWR), Electronic Document Repository – CAA Compliance/Enforcement/Permitting Documents, Facility Registry System (FRS), Institutional Controls Tracking System (ICTS), Integrated Compliance Information System/National Pollutant Discharge Elimination System (ICIS-NPDES), National Emissions Inventory (NEI), National Hydrography Dataset /Reach Address Database, National Pollution Prevention (P2) Results System, Resource Conservation and Recovery Act Information System (RCRAInfo), Safe Drinking Water Information System (SDWIS), Source Water Protection (SWP), Toxics Release Inventory System (TRIS), Underground Injection Control (UIC), and Water Quality Monitoring, Water Quality Standards, Integrated Reporting and Water Quality Standards. The Exchange Network is also supporting innovative data exchange developments that meet the business needs of the partners.

For information on state, territorial, and tribal activities, please see the grant activities that are described on the Exchange Network Grant Program Web site at

<http://www.epa.gov/exchangenetwork/grants/index.html>. For information on the progress of the data exchanges, please see <http://www.exchangenetwork.net>.

### **I-3. Assistance Activities**

The FY 2007 Exchange Network Grant Program will provide funding for the following groups of activities:

- Infrastructure – supports the development or upgrade of Nodes or Node clients to participate in the Exchange Network;
- Data Exchange and Integration – supports the development of the capability and the exchange of data through the Exchange Network;
- Mentoring, Planning and Training – supports Exchange Network activities such as mentoring other partners; planning activities; and developing training materials and conducting training on specific topics; and
- Collaboration – supports collaborative, multi-partner projects that demonstrate the value of the Exchange Network.

EPA's priority will be on proposals that focus on deploying regulatory data exchange. The data exchanges of highest priority are those that have been established or will be established before the end of FY 2009. Priority will also be given to proposals that result in data being published and partners establishing Nodes. Funding may also be provided for innovative projects.

This Solicitation Notice is designed to help states, territories, tribes, and inter-tribal consortia develop proposals that are focused on the priorities of the Exchange Network and support the business needs of Exchange Network partners. At the same time, the guidance is flexible enough to provide applicants the opportunity to design innovative assistance agreements appropriate to their needs. Applicants may select activities from any or all of the groups of assistance activities to prepare their proposal. Applicants are encouraged to attend Exchange Network User's meetings as a way of sharing accomplishments and obtaining useful information on Exchange Network projects and technology.

EPA will not fund any activity that has previously received funding by the same applicant. If a proposal is similar to previously funded activity, applicants should briefly discuss how previous assistance agreements and their current proposal differ or explain how the current proposal will build on the work that was previously done. If the proposal does not clearly distinguish between activities in current proposal and how they differ from work previously funded, the proposal will be deemed ineligible for funding, and treated accordingly.

The activity groups are described in more detail in the following paragraphs. Applicants should refer to Appendices A – D when developing their proposal. Appendix A provides relevant definitions of terms. Appendix B describes the status and plans for EPA Program Office activities related to environmental information systems and suggested data exchange activities for Network partners to consider. This information should be used by applicants to align their proposals with the Program Office milestones.

Appendix C provides more information on activities that could be included from the Mentoring, Planning and Training group. Appendix D provides detailed grant application instructions.

For those applicants that receive funding, Appendix E contains guidance on preparing the tailored Quality Assurance Project Plan and is designed to help states, territories, and tribes plan and implement high-quality Exchange Network projects. This Appendix is also useful when developing the goals, tasks, outcomes and outputs, which are elements of the work plan. Appendix F provides the template for Semi-Annual Performance Progress Reports that applicants will use to report progress on their projects.

**Infrastructure:** The Infrastructure group supports the development of basic IM/IT capabilities that are needed to participate in the Exchange Network, as well as upgrades that are specifically related to the applicant's participation on the Exchange Network. Priority will be given to applicants that are establishing new Nodes. The following types of activities could be proposed for funding:

- Develop an Exchange Network Node (i.e., buy software and hardware needed to implement a Node or Node client, such as servers, processors, storage devices/media, telecommunications products/services, and computer peripherals); or
- Upgrade existing Node technology needed to operate more effectively; and
- Deploy infrastructure that supports implementation of the Cross-media Electronic Reporting Rule (CROMERR).

**Data Exchange and Integration:** The Data Exchange and Integration group supports the development and exchange of data through the Exchange Network. Priority will be given to deployment of regulatory data exchanges. Applicants proposing to develop new data exchanges are expected to do so in accordance with the guidance available at [http://www.exchangenetwork.net/dev\\_schema](http://www.exchangenetwork.net/dev_schema). Applicants who propose deploying a new exchange must agree to develop a Flow Configuration Document. Applicants who propose deploying an existing exchange must agree to do so in accordance with existing implementation guidance and resources (e.g., XML schema, Flow Configuration Documents) as listed at <http://www.exchangenetwork.net/exchanges>.

Data exchange implementation includes things such as developing or obtaining the appropriate XML schema that are based on data standards, establishing a Central Data Exchange (CDX) Web account, mapping the applicant's data to the XML schema, verifying the data format, and submitting the data to EPA. The data may be exchanged with other Exchange Network partners in order to test schema and data quality.

This group includes the following types of activities:

- Implement or upgrade one or more of the following regulatory data exchanges using the Exchange Network (listed alphabetically):
  - AFS
  - AQS
  - e-DMR
  - ICIS-NPDES

- National Assessment and TMDL Tracking System (NATTS)
- NEI
- RCRAInfo
- SDWIS
- TRIS
- UIC Database
- Implement or upgrade one or more non-regulatory data exchanges using the Exchange Network:
  - eBeaches
  - FRS
  - Institutional Controls Tracking System (ICTS)
  - National Pollution Prevention (P2) Results System
  - Water Quality Exchange
- Develop innovative data exchanges that inform state, tribal, or territorial environmental and health business needs;
- Develop unique analytical tools that enhance data quality and integration;
- Develop Web Services, security enhancements, or automated data quality checking, validation tools that will enhance the availability, integrity, quality, and utility of data exchange over the Exchange Network;
- Demonstrate the use of data, published as Web Services by other Exchange Network partners. This use could include the display, analysis, combination, and/or integration of data into local applications. (See <http://www.exchangenetwork.net>, “Build a Node” for a listing of available Web Services.);
- Develop schemas for additional data publishing that increases the body of knowledge available to Network partners;
- Provide data through published Web Services that enhance the ability of Exchange Network partners to analyze, integrate, and use those data. These Web Services could be selected from the Web Services listing on the Exchange Network Web site or developed by the recipients. XML schema should be registered on the Exchange Network Registry. New Web Services should be registered in the Exchange Network Discovery Service;
- Provide data that will enhance the effectiveness of the state, tribal, or territorial environmental and/or health protection system;
- Use the Exchange Network to exchange geospatial data to enhance environmental decision-making and programmatic operations. Such a project might require the development of the dataset before exchange; and
- Enhance information security controls, such as identity proofing, to ensure the security of data transactions among Exchange Network partners.

**Mentoring, Planning and Training:** The Mentoring, Planning and Training group supports activities that further the development of the Exchange Network. Applicants are encouraged to read the discussion in Appendix C related to this group. The following types of activities are included in the Mentoring, Planning and Training group:

- Mentoring activities such as assisting:
  - New or existing Exchange Network partners in establishing Nodes or new data exchanges; and

- Cities (i.e., major metropolitan statistical areas) in establishing connections to the Exchange Network through partnerships;
- Planning activities include, but are not limited to:
  - Convening a community of interest to formulate a plan for collaborative work in a clearly defined data area, e.g., respiratory illness related to environmental contaminants or management of solid waste facilities on tribal lands;
  - Planning and participating in the development of a data standard for use by Exchange Network partners.
- Training activities including, but are not limited to, the development and conduct of training related to:
  - Maximizing the use of the Exchange Network after a Network Node is established;
  - Methods for modernizing data collection, analysis and availability, within a state, tribe, or territory, or identifying business needs that can be served by the Exchange Network within an area; and,
  - New or existing Exchange Network partners in obtaining infrastructure or developing data exchanges.

Note that the training activities do not include the funding of training of grantee personnel on various software or computer languages, but is intended for the development of training by the grantee in relation to activities within the scope of the applicant's work plan.

**Collaboration:** The Collaboration group supports the planning, development, and implementation of collaborative, multi-partner projects that demonstrate the value of the Exchange Network. EPA encourages applicants to collaborate with other state, tribal, or territorial agencies, as well as other organizations that could make a valuable contribution to the development and use of the Exchange Network, particularly if these organizations are not eligible to apply directly to EPA for funding from this grant program. An example of a co-regulator organization is the Association of State and Territorial Solid Waste Management Officials (ASTSWMO). Partners identified in the work plan must have clearly described roles, responsibilities and deliverables that support the goals of the project. *See Section III-3 for examples of the organizations that may be interested in collaborating with applicants and for eligibility limitations. See Section IV-6 for information on roles and responsibilities of partners.*

The following types of activities could be proposed for funding under the Collaboration group:

- Pursue any of the activities listed under any of the groups above, provided these activities are done in collaboration with other Exchange Network partners;
- Planning and executing a conference on the sustainability of the Exchange Network, e.g., the expansion of the Exchange Network to include other partners;
- Exchanging data that have not previously been available, e.g., environmentally-related human health data; data needed to fill current data gaps; or data related to pollution prevention practices, technologies, or case studies. An example might be to

- develop a collaborative project to share UIC data (including geospatial coordinates) with EPA to support a national UIC program; and
- Exchanging data needed to address regional environmental issues (e.g., for the Great Lakes, Long Island Sound, Chesapeake Bay, U.S./Mexico border, Gulf of Mexico, etc.). One example of such a project would be to use the Exchange Network to share watershed monitoring data and the analytical results produced by watershed analysis tools.

## **II. Award Information**

### **II-1. General Information**

In FY 2007, EPA expects to award approximately 30 to 40 awards for amounts ranging from \$75,000 to \$500,000. The exact number of awards will depend on the amount of EPA's appropriation for the grant program, the number of applications submitted to EPA by the application deadline, and the competitive review of the applications received. EPA anticipates most of the awards will be in the \$75,000 to \$300,000 range, with a limited number of awards up to \$500,000, depending on the complexity and breadth of the proposed assistance activities. Applicants are encouraged to develop integrated proposals containing activities from multiple assistance activity groupings. For 2007, EPA will limit individual awards to an agency to no more than \$300,000. Collaborative, multi-partner grant project budgets cannot exceed \$500,000. EPA will set aside approximately ten percent of the appropriated funds for tribal assistance agreements, but the number and total amount of tribal assistance agreements may be greater, depending on the merit of tribal applications submitted and on the competitive review of those applications. EPA expects to issue the FY 2007 Exchange Network Grant Program awards in June 2007, and the standard period of performance for each project will be two years. EPA reserves the right to partially fund proposals/applications by funding discrete activities, portions, or phases of proposed projects. If EPA decides to partially fund a proposal/application, it will do so in a manner that does not prejudice any applicants or affect the basis upon which the proposal/application, or portion thereof, was evaluated and selected for award, and that maintains the integrity of the competition and selection process. EPA also reserves the right to reject all proposals and make no awards.

### **II-2. Assistance Instrument: Grant or Cooperative Agreement**

Assistance agreements are used by EPA to transfer money, services, or anything of value to a recipient to accomplish a public purpose. Assistance agreements funded through the Exchange Network Grant Program may be issued in the form of a grant or a cooperative agreement. EPA has the authority to determine whether a grant or cooperative agreement is the most appropriate vehicle for a particular assistance agreement, but EPA will consider the applicant's preference when making this determination. If EPA anticipates having substantial involvement in a proposed project or if all or part of an award is to be issued as EPA-provided in-kind services (i.e., in lieu of direct funding), then EPA will issue the assistance agreement as a cooperative agreement, rather than a grant.

If applicants expect to need only minimal involvement by EPA during the proposed project, then applicants should request assistance in the form of a *grant*. If applicants

expect to need substantial involvement by EPA during the project, then applicants should request assistance in the form of a *cooperative agreement*. Substantial involvement by EPA may involve the following: 1) intense monitoring by EPA; 2) joint operational involvement, participation, and/or collaboration between EPA and the recipient; 3) prior review or approval of project phases or the substantive provisions of proposed contracts found within the scope of the agreement; 4) EPA approval of key recipient personnel; and/or 5) EPA collaboration regarding the scope of work, organizational structure, staffing, mode of operation and other management processes. The principal purpose of the project *cannot* be to acquire goods or services for EPA. Assistance recipients that are awarded cooperative agreements are required to work closely with the EPA Regional Project Officer and other EPA personnel, as determined by EPA, during the performance of the project.

### **II-3. Funding Mechanism: Direct Funding and/or In-Kind Services**

Applicants may request assistance in the form of a cooperative agreement. If they do, they must indicate whether they would prefer to receive an award as direct funding, as EPA in-kind services (in lieu of direct funding), or as a combination of both direct funding and in-kind services. EPA will consider applicants requests for in-kind services, but EPA has the authority to decide whether in-kind services will be provided. This decision generally depends on whether: 1) the project can be accomplished more efficiently by utilizing EPA in-kind services, 2) the scope of the proposed project is within the scope of the vehicle that EPA might use to provide in-kind services (e.g., an existing contract or interagency agreement), and 3) the vehicle that EPA might use to provide in-kind services has sufficient capacity to handle the additional workload. If EPA decides to issue an award in the form of in-kind services, the delivery of these in-kind services must be directed and overseen by EPA, and *not* by the recipients. EPA's provision of in-kind services generally includes, but is not necessarily limited to, developing contract Statements of Work, providing technical direction to the contractor, reviewing/approving deliverables, and reviewing/approving progress reports and invoices. In-kind services will only be provided if the applicant demonstrates that it will be the primary beneficiary of the in-kind services. The applicant must clearly state in its work plan how the in-kind services will benefit the applicant's project.

### **II-4. Performance Partnership Grants or Consolidated Grants**

An applicant whose organization has an existing Performance Partnership Grant (PPG) with EPA, may request that if his/her FY 2007 Exchange Network grant application is recommended for funding, that the award be incorporated into the PPG. The authority to incorporate Exchange Network Grants into PPGs is discussed in a notice entitled, "Performance Partnership Grants," that was published in the *Federal Register* on August 20, 2004 (69 FR 51756, <http://www.epa.gov/fedrgstr/EPA-GENERAL/2004/August/Day-20/g19152.pdf>).

Similarly, a territorial applicant whose territory has a Consolidated Grant (CG) with EPA may request that if his/her FY 2007 Exchange Network grant application is recommended for funding, that the award be incorporated into the CG (Public Law 95-134, Title 5, Omnibus Territories Act of 1977).

### **III. Eligibility Information**

The Catalog of Federal Domestic Assistance number for the Exchange Network Grant Program is 66.608 (<http://www.cfda.gov>). This funding Solicitation Notice is the initial announcement concerning the FY 2007 grant program, and no other announcements are planned at this time.

#### **III-1. Eligible Applicants**

Eligible applicants for the Exchange Network Grant Program include states, the District of Columbia, U.S. territories (e.g., American Samoa, Guam, Puerto Rico, and the U.S. Virgin Islands), federally recognized Indian tribes, and inter-tribal consortia of federally recognized tribes.

An inter-tribal consortium is eligible to apply for assistance from the Exchange Network Grant Program if it meets the following criteria:

- the majority of the consortium's members are federally recognized Indian tribes;
- all of the consortium's federally recognized tribal members have authorized the consortium to apply for and receive assistance (if awarded) from the Exchange Network Grant Program; and
- the inter-tribal consortium has adequate accounting controls to ensure that only federally recognized tribal members will benefit directly from the award and receive and manage the awarded funds.

Regional air pollution control districts may apply for assistance if they are legally considered to be agencies or instrumentalities of the state under applicable state laws.

The following entities are not eligible to apply for funding from the competitive Exchange Network Grant Program: state, tribal, or territorial universities; city, town, county, or regional governments; nonprofit organizations, including organizations that represent the interests of co-regulators/co-implementors in executing environmental programs. EPA encourages all applicants to work with organizations that could contribute to the development, expansion, and use of the Exchange Network, even if such organizations are not themselves directly eligible to apply for a grant. (See Section III-3 for examples.) Recipients of Exchange Network grant funds awarded to provide administrative support for the state and tribal Exchange Network recipients are not eligible to receive additional Exchange Network funds unless explicitly stated in an applicant's work plan.

#### **III-2. Cost Sharing or Matching**

No cost-sharing or matching of funds is required by applicants.

#### **III-3. Other Eligibility Information**

Applicants are encouraged to submit integrated proposals, choosing activities from the Infrastructure; Data Exchange and Integration; Mentoring, Planning and Training; and/or Collaboration groups, as needed. Based on the activities described in this guidance for the different activity groupings, applicants should submit a well thought out proposal, accompanied by a detailed work plan, including a detailed budget. Partners are encouraged to develop one integrated proposal addressing multiple data exchanges, as opposed to several, separate proposals that address one data exchange each.

### **Threshold Criteria Eligibility**

EPA will not fund any activity that has previously received funding by the same applicant. If a proposal is similar to a previously funded activity, applicants are to briefly discuss how the previous assistance agreement and their current proposal differ or explain how the current proposal will build on the work that was previously done. If the proposal does not clearly distinguish between activities in the current proposal and how they differ from work previously funded, the proposal will be deemed ineligible for funding, and treated according to the method discussed in IV-6, Other Submission Requirements.

**Substantial Compliance:** Applications/Proposals must substantially comply with the application/proposal submission instructions and requirements set forth in Section IV of this announcement or else they will be rejected. Where a page limit is expressed in Section IV with respect to the proposal/application and/or parts of the application/proposal, pages in excess of the page limitation will not be reviewed. (Section IV.2 establishes a 10-page single-spaced proposal page limit; any single spaced proposal in excess of 10 pages will not be reviewed).

In addition, applications/proposals must be postmarked by received by the EPA (or through [www.grants.gov](http://www.grants.gov)) on or before the solicitation closing date published in Section IV-3 of this announcement. (No later than midnight Eastern Standard Time, November 20, 2006.)

Applications/Proposals received after the published closing date will be returned to the sender without further consideration.

**Collaboration with Other Organizations:** Organizations not directly eligible for funding from this grant program may be interested in collaborating with eligible applicants to advance the development and use of the Exchange Network. EPA encourages all applicants to work with such organizations in developing their applications and implementing funded projects. Such organizations might include the following: state, tribal, and territorial universities; city, town, county, or regional governments; nonprofit organizations, including organizations that represent the interests of co-regulators/co-implementors in executing environmental programs. Examples include co-regulator or co-implementor organizations such as the State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials (STAPPA/ALAPCO), < <http://www.cleanairworld.org> >; the Association of State Drinking Water Administrators (ASDWA), < <http://asdwa.citysoft.com/> >; the Association of State and Territorial Solid Waste Management Officials (ASTSWMO),

<<http://www.astswmo.org>>; the National States Geographic Information Council (NSGIC), <<http://www.nsgic.org/>>; the National Pollution Prevention Roundtable (NPPR), <<http://www.p2.org>>; and the Pollution Prevention Resource Exchange (P2R) <<http://www.p2rx.org>>. Applicants should clearly indicate if a subaward will be made to an entity not otherwise eligible to receive an Exchange Network grant. In addition, applicants should be aware that any procurement of goods or services, including a procurement from a non-eligible collaborator, must be consistent with the procurement requirements contained in EPA's regulation at 40 CFR §31.36.

## **IV. Application and Submission Information**

### **IV-1. Address to Request Application Package**

This Solicitation Notice is available electronically on the Exchange Network Grant Program Web site, <http://www.epa.gov/exchangenetwork/grants/index.html>. The required application forms are available from EPA's Office of Grants and Debarment at <http://www.epa.gov/ogd/AppKit/application.htm>. Applicants who are unable to download the forms from this Web site may contact Edward Mixon at (202)-566-2142 to request copies of the application forms by fax.

### **IV-2. Content and Form of Application Submission**

Please use the checklist at <http://www.epa.gov/ogd/> to ensure the application is complete. Each application package *must* include the following materials<sup>1</sup> no matter the mode of submission:

1. Cover letter that outlines the following information:
  - A. Contact information for the applicant's package
  - B. Number of copies of the full application
  - C. Data exchanges and data standards for which the applicant is requesting funding
  - D. Any additional partners on the grant
  - E. The amount of funds requested
  - F. Coordination efforts between the IM/IT and Environmental/Health Programs
2. Standard Form (SF) 424, Application for Federal Assistance
3. SF-424A, Budget Information for Non-Construction Programs
4. SF-424B, Assurances for Non-Construction Programs
5. Certification Regarding Lobbying or Grants.gov Lobbying form
6. EPA Form 4700-4, Pre-Award Compliance Review Report
7. EPA Form 5700-54, Key Contacts Form
8. A list of no more than five (5) Federally or non-Federally funded assistance agreements performed in the last three (3) years) of similar size and scope to the current proposal
9. Project Narrative Attachment Form – Work Plan, Including a Quality Assurance Narrative Statement
10. Detailed Itemized Budget
11. SF-LLL, Disclosure of Lobbying Activities

---

<sup>1</sup> Please see Appendix D for more information.

12. Copy of Negotiated Indirect Cost Rate Agreement, if indirect costs are included in the budget
13. Biographical Sketch for the Project Manager(s)

Appendix D outlines the format for the work plan (no more than ten-single-spaced pages, 10 pt. font size) and provides more detailed application instructions. EPA will not review pages in excess of page limitation of ten (10) pages. If the proposal is funded, the recipients would be required to submit a separate, tailored Quality Assurance Project Plan based on the guidance in Appendix E.

Applicants must submit a list of Federal or non-Federally funded assistance agreements of similar size and scope performed in the last three (3) years (no more than five (5)). If applicable, current and/or prior Exchange Network grants must be included in the list. Applicants must describe in the work plan how they documented and/or reported on whether they made progress towards achieving the expected results (e.g., outcomes and results) under the assistance agreements. If the applicant did not make progress, the work plan needs to indicate whether, and how, this was documented. In evaluating applicants under this factor, EPA will consider the information provided by the applicant, the semi-annual and final reports for Exchange Network grants, and may also consider relevant information from other sources including agency files (e.g., to verify and/or supplement the information supplied by the applicant). An applicant's score under this factor will be reduced if any of the semi-annual or final reports are missing. Please indicate if you are an applicant who has never had a Federal or non-Federally funded assistance agreement.

An inter-tribal consortium that wishes to apply for the FY 2007 Exchange Network Grant Program must include written documentation in the application package that demonstrates the following:

- a formal partnership exists among the Indian tribal governments that are members of the inter-tribal consortium, and the majority of the members are federally recognized Indian tribes; and,
- the consortium's federally recognized tribal members have authorized the consortium to apply for and receive assistance (if awarded) from the Exchange Network Grant Program.

#### **IV-3. Submission Date and Time**

If submitted in hard copy, the *original application package and two copies* must be submitted to EPA Headquarters and postmarked no later November 20, 2006 (i.e., midnight, Eastern Standard Time). If submitting an application electronically, rather than in hard copy, please submit the application through the Grants.gov Web site, <http://www.grants.gov>. Electronic applications must be submitted to this Web site no later than midnight Eastern Time on November 20, 2006.

#### **IV-4. Intergovernmental Review**

This funding opportunity is *not* subject to Executive Order (EO) 12372, "Intergovernmental Review of Federal Programs." (EO 12372 asks Federal agencies to rely on state and local processes for consulting with state and local government officials

who would be directly affected by proposed federal assistance or who would provide non-federal funds for the proposed activities.)

#### **IV-5. Funding Restrictions**

Applicants may use funding from the FY 2007 Exchange Network Grant Program for costs associated with personnel salaries and fringe benefits, Intergovernmental Personnel Act Agreements (IPAs) travel, travel related to Exchange Network activities, equipment, supplies, contractual costs, in-kind services provided by EPA, and indirect costs. Applicants may *not* use funding from the FY 2007 Exchange Network Grant Program for construction costs. (See Appendix A for definition.)

**Operations and Maintenance:** Proposed projects should generally focus on Exchange Network planning, development, and implementation activities, rather than on operations and maintenance (O&M). However, it may be appropriate to include some O&M costs in the proposed project budget, such as the O&M costs associated with making the transition from a legacy information system to a modernized system or with enhancing an information system to accommodate a new Exchange Network data exchange. O&M costs should *not* account for a major portion of the proposed budget.

**Workshops and Conferences:** Applicants may propose to conduct workshops/conferences, but such workshops/conferences must be initiated, advertised, and conducted for the benefit of the recipient and other state, tribal, territorial, or local representatives or public participants. (Please see discussion in Section I-3.) Such events may not be conducted primarily for EPA's benefit. If applicants expect to receive any program income (e.g., from collecting registration fees), then the anticipated program income must be included in the applicants' budget. Program income may be earned, but it must be deducted from the total allowable costs of the project unless the applicant requests that a term and condition be included in the assistance agreement allowing the recipient to add program income to support the project objectives. Please see 40 C.F. R. §31.25 (g).

**Pre-Award Costs:** Applicants may request funds to cover pre-award costs that are incurred 90 days or less before the award date. If EPA determines that the requested pre-award costs comply with the Office of Management and Budget (OMB) Circular A-87 (*Cost Principles for State, Local, and Indian Tribal Governments*, [http://www.whitehouse.gov/omb/circulars/a087/a87\\_2004.html](http://www.whitehouse.gov/omb/circulars/a087/a87_2004.html)), and that the costs are justified as allocable to the project, then these costs may be included as allowable expenditures at the time that the assistance award document is prepared. However, if for any reason, EPA does not fund the application or the amount of the award is less than applicants anticipated, then EPA is under no obligation to reimburse applicants for these costs. Thus, applicants incur pre-award costs at their own risk.

#### **IV-6. Other Submission Requirements**

**Work Plans:** Work plans should be limited to ten (10) pages, single-spaced, in a readable 10 pt. font size. **EPA will not review pages in excess of page limitation** of ten

(10) pages. Work plans submitted electronically must be in Microsoft Word (97 or 2003), the EPA standard. Applicants are required to submit work plans that address the Environmental Results information discussed in Section I-1, and will be reviewed using the Evaluation Criteria in Section V, below. As noted in Section I-1, it is EPA policy to link proposed assistance agreements to the Agency's Strategic Plan and Government Performance and Results Act architecture. This policy ensures that outputs and outcomes are appropriately addressed in assistance agreements, work plans and performance reports. This allows EPA to consider how the environmental results from assistance agreements contribute to the Agency's programmatic goals and objectives.

**Pre-proposal/Application Assistance and Communications:** In accordance with EPA's Assistance Agreement Competition Policy (EPA Order 5700.5A1), EPA staff will not meet with individual applicants to discuss draft proposals, provide informal comments on draft proposals, or provide advice to applicants on how to respond to ranking criteria. Applicants are responsible for the contents of their applications/proposals. However, EPA will respond to questions in writing from individual applicants regarding threshold eligibility criteria, administrative issues related to the submission of the proposal, and requests for clarification about the announcement.

**Coordination between Environmental Program and IM/IT Offices:** All applicants must ensure that there is coordination between their organization's IM/IT offices and the appropriate environmental or health media programs, or other appropriate state, tribal or regional agencies. An integrated approach is essential in ensuring that the Exchange Network is developed in ways that best address business needs. Coordination that has already occurred and will continue to occur between the IT/IM offices and environmental Program Offices should be described in the applicant's cover letter and work plan.

**Roles and Responsibilities of Partners:** Those applicants whose projects include Collaboration activities must have one or more formal partners. Proposals with one or more formal partners, must clearly describe the roles and responsibilities, deliverables and products of each partner. Each partner must independently either hold or have the independent means to collect, improve or interpret information to share on the Network using its own or a shared Node. These partners could be other agencies within the same state, territory, or tribe, or agencies in other states, territories, or tribes. However, they cannot be departments within the same agency nor agencies within the same secretariat. EPA programs, regional offices, or contractors, cannot be formal project partners, even though EPA may have significant involvement in the project if the award is a cooperative agreement. The application must be submitted by a single lead organization, and the work plan must clearly indicate the roles and responsibilities of each project participant and how the funds will be distributed by the lead organization if an award is issued. Applicants must include in their work plan information regarding any subgrants that are to be awarded. The lead organization must assume full responsibility for overseeing the project and for distributing funds to the other project partners.

**Submission of Applications:**

Please note that you may choose to apply under this announcement in *one of two ways*. If you wish to apply with a hard copy submission, please follow the instructions under “Hard Copy Submission” below. If you wish to apply electronically via Grants.gov, please follow the appropriate instructions under “Electronic Submission” below. EPA encourages applicants to submit their application/proposal materials electronically through <http://www.grants.gov>.

### **Hard Copy Application Submission Directions**

Applicants who choose to submit hard copy applications must submit an *original application package plus two copies* to Edward Mixon, Exchange Network Grant Program Manager. The hard copy application should follow the guidelines for submission in Section IV-2, Content and Form of Application Submission. The application must be post-marked by the application deadline (midnight, November 20, 2006, Eastern Time). For hard copy applications, *EPA recommends the use of overnight mail delivery services to avoid processing delays*. Applicants that do not submit their application through grants.gov should provide a self addressed envelope and request acknowledgement of receipt of their grant application. If you requested acknowledgement and have not received a confirmation of receipt from EPA regarding the submission of your hard copy grant application within 30 days of the application deadline, please contact Edward Mixon, Exchange Network Grants Manager, at (202)-566-2142. Failure to do so may result in your application not being considered.

Applicants must send their applications to one of the following addresses:

#### *U.S. Postal Service Deliveries:*

Edward Mixon  
U.S. Environmental Protection Agency  
Office of Environmental Information  
Office of Information Collection  
1200 Pennsylvania Ave., NW, Mail Code 2823-T  
Washington, DC 20460

#### *Overnight Courier/Mail Deliveries:*

Edward Mixon  
U.S. Environmental Protection Agency  
Office of Environmental Information  
Office of Information Collection  
1301 Constitution Avenue, NW, 6<sup>th</sup> Floor, #6146-V  
Washington, DC 20460  
Phone: (202)-566-2142

**Submission of Optional Electronic Application:** If submitting a hard-copy application, you are also encouraged, but not required, to submit an electronic copy of the project work plan to Edward Mixon via email to [mixon.edward@epa.gov](mailto:mixon.edward@epa.gov). This electronic copy must be in Word, (97 or 2003) the EPA standard. A hard-copy application package, plus two copies, must still be submitted to EPA, even if applicants submit an electronic copy of the work plan via email. Applications made only through email will not be accepted unless hard copy applications are also submitted.

### **Grants.gov Submission Directions**

If you wish to apply electronically via Grants.gov, the electronic submission of your proposal/ application must be made by an official representative of your institution who is registered with Grants.gov and authorized to sign applications for Federal assistance.

For more information, go to <http://www.grants.gov> and click on “Get Registered” on the left side of the page. *Note that the registration process may take a week or longer to complete.* If your organization is not currently registered with Grants.gov, please encourage your office to designate an AOR and ask that individual to begin the registration process as soon as possible.

To begin the application process under this grant announcement, go to <http://www.grants.gov> and click on the “Apply for Grants” tab on the left side of the page. Then click on “Apply Step 1: Download a Grant Application Package and Instructions” to download the PureEdge viewer and obtain the application package and instructions for applying under this announcement using grants.gov. You may retrieve the application package and instructions by entering the Funding Opportunity Number, EPA-OEI-07-01, or the CFDA number 66.608, in the space provided. Then complete and submit the application package as indicated. You may also be able to access the application package by clicking on the button “How To Apply” at the top right of the synopsis page for this announcement on <http://www.grants.gov> (to find the synopsis page, go to <http://www.grants.gov> and click on the “Find Grant Opportunities” button on the left side of the page and then go to Search Opportunities and use the Browse by Agency feature to go to EPA opportunities).

Appendix D provides detailed instructions on preparing and submitting the application package for grants.gov.

Application/proposal materials submitted through grants.gov will be time/date stamped electronically. If you have not received a confirmation of receipt from EPA (not from grants.gov) within 30 days of the application deadline, please contact Edward Mixon, Exchange Network Grant Program Manager, at (202)-566-2142. Failure to do so may result in your application not being reviewed.

Please be sure to view the additional instructions for applying electronically under this announcement through use of grants.gov that are available for download on Grants.gov.

If you have any technical difficulties while applying electronically, please refer to <http://www.grants.gov/help/help.jsp>.

**EPA Handling of Late or Ineligible Applications:** EPA will not review or fund any applications that are postmarked after November 20, 2006 (i.e., midnight Eastern Standard Time), or that are received from ineligible applicants. EPA will not return late or ineligible applications to the submitters. Applications submitted through <http://www.grants.gov> will be automatically rejected if submitted after midnight Eastern Time, November 20, 2006.

**Confidential Business Information:** In accordance with 40 CFR 2.203, applicants may claim all or a portion of their application/proposal as confidential business information. EPA will evaluate confidentiality claims in accordance with 40 CFR Part 2. Applicants must clearly mark applications/proposals or portions of applications/proposals they claim

as confidential. If no claim of confidentiality is made, EPA is not required to make the inquiry to the applicant otherwise required by 40 CFR 2.204(c)(2) prior to disclosure.

**Data Universal Number System (DUNS):** Please note that the applicant's Dun and Bradstreet (D&B) Data Universal Number System (DUNS) number must be included on the SF-424. Organizations may obtain a DUNS number at no cost by calling the toll-free DUNS number request line at 1-866-705-5711.

## **V. Application Review Information**

### **V-1. Evaluation Criteria**

Each application will be evaluated and scored using the criteria outlined below. The most highly scored proposals will be provided to the Selection Official for funding consideration. See Section V-2 for more details on the review and selection process.

**Expected Environmental Outputs, Outcomes and Environmental Results (required) (20 points):** EPA will evaluate the project proposal based on how well and clearly the applicant has articulated project outputs, outcomes and environmental results, and whether they are tied to the intermediate outcomes as defined in Section I of this Solicitation Notice (i.e., burden reduction, cost savings, improved quality of data, etc.). EPA will also evaluate the applicant's work plan for tracking and measuring their progress towards achieving the expected outputs, outcomes, and environmental results of the project proposal.

**Feasibility/Approach (20 points):** The work plan will be evaluated based on the feasibility of the design of the project and the relationship between project goals, outputs, outcomes, and environmental results. The work plan will also be evaluated on how clearly it articulates the roles and responsibilities of each partner, the clarity of milestones, and how well the work is supported by a schedule that ensures the work will be accomplished during the project period. The work plan will be evaluated to determine whether the applicant identified potential problem areas and project dependencies.

**Relevance/Significance (30 points):** The work plan will be evaluated based on how well it advances the Exchange Network program objectives, and on the extent and quality to which the proposed work is consistent with the following Exchange Network priorities: deploying regulatory data exchanges as described in Appendix B; establishing Nodes with new partners; and publishing data. Activities related to mentoring, planning and training will be evaluated on how consistent they are with the examples discussed in Appendix C.

**Resources and Key Personnel (10 points):** The budget will be evaluated based on its adequacy to support and complete the proposed work within two years and the sufficiency of its detail in describing the cost associated with the activities outlined in the work plan. The proposal will be evaluated on whether it highlights the key personnel needed to complete the project, in terms of experience, expertise, qualifications and/or availability.

**Environmental Results Past Performance** (20 points): Applicants will be evaluated based on the extent and quality to which they adequately documented and/or reported on their progress towards achieving the expected results (e.g., outcomes) under federally and/or non-federally funded assistance agreements performed within the last three years (no more than 5), including any current or prior Exchange Network Grants. If progress was not made, applicants need to adequately document and/or report why not. In evaluating applications under this factor, EPA will consider the information provided by applicants, the semi-annual and final reports for Exchange Network grants, and may also consider relevant information from other sources including agency files (e.g., to verify and/or supplement the information supplied by applicants). Applicants without any available or relevant past performance history will receive a neutral score (10 points) for this factor.

**Other Evaluation Factors:** In making the final funding recommendations from among the most highly scored proposals, the EPA selection officials may consider one or more of the following factors:

- EPA Program Offices' ability and/or readiness to support the proposed activities;
- geographic distribution of funds;
- balance among data exchange activities or other assistance activities;
- EPA's ability to provide requested in-kind services and whether the applicant is the primary beneficiary of the in-kind services;
- potential for other Exchange Network partners to build on the results of the proposed project, if successful;
- overlap in proposals from the same agency; and
- clear coordination between IM/IT and Environmental/Health Programs.

## **V-2. Review and Selection Process**

Each eligible application will be evaluated and ranked by a panel of EPA representatives. The reviewers will base their evaluation on the criteria listed in Section V-1. The EPA reviewers will submit comments and rankings and make funding recommendations to the Assistant Administrator of the Office of Environmental Information (OEI) or his/her delegate. Final funding decisions will be made by the Assistant Administrator of OEI, or his/her delegate. OEI may ask applicants whose applications received a favorable review to modify their work plans or budgets before making final funding recommendations. Applicants will not be asked or permitted to make any changes to their work plans/budgets that would affect the basis upon which the application (or portions of the application) was recommended or selected for funding.

## **V-3. Anticipated Award Dates**

EPA plans to issue the awards in June 2007.

## **VI. Award Administration Information**

### **VI-1. Award Notices**

EPA plans to issue the awards in June 2007. The written Assistance Agreement issued by EPA's Grants Administration Division (GAD) is the authorizing document. The agreement will be mailed to the recipient via the U.S. Postal Service. The original must be signed, dated, and returned to the GAD within three calendar weeks after it is received by the recipient or within any extension of time as may be granted by EPA.

### **VI-2. Administration and National Policy Requirements**

Each Assistance Agreement will include a set of Administrative Conditions and Programmatic Conditions. Examples and excerpts of some of the conditions are outlined below. *Not all of the conditions described below would necessarily apply to all award recipients.*

**Electronic Method of Payment:** By accepting this agreement for the electronic method of payment through the Automated Clearing House (ACH) network using the EPA-ACH payment system, the recipient agrees to do the following: a) request funds based on the recipient's immediate disbursement requirements by presenting an EPA-ACH Payment Request to the EPA Servicing Finance Office; b) provide timely reporting of cash disbursements and balances in accordance with the EPA-ACH Payment System Recipient's Manual; and c) impose the same standards of timing and reporting on sub-recipients, if any. Failure on the part of the recipient to comply with the above conditions may cause the recipient to be placed on the reimbursement payment method.

**Financial Status Report:** As required by EPA regulations, the recipient agrees to submit a final Financial Status Report (Standard Form 269) within 90 days after the end of the budget period to EPA's Las Vegas Financial Management Center. When the recipient submits a final FSR, the recipient will make an adjustment for the amount of Federal funds, if any, received in excess of the EPA share of the reported total budget period costs.

**Payment to Consultants:** EPA participation in the salary rate (excluding overhead) paid to individual consultants retained by recipients or by a recipient's contractors or subcontractors shall be limited to the maximum daily rate for Level IV of the Executive Schedule (formerly GS-18), to be adjusted annually. This limit applies to consultation services of designated individuals with specialized skills who are paid at a daily or hourly rate. As of January 1, 2006, the limit is \$548.08 per day and \$68.51 per hour. This rate does not include transportation and subsistence costs for travel performed and the recipient will pay these costs in accordance with his/her organization's normal travel reimbursement practices.

**Indirect Cost Rates:** If the recipient does not have a previously established indirect cost rate, the recipient must agree to prepare an indirect cost rate proposal and/or cost allocation plan in accordance with OMB Circular A-87, *Cost Principles for State, Local, and Indian Tribal Governments*. If EPA is the cognizant federal agency, the state

recipient must submit its indirect cost rate proposal within six months after the close of the governmental unit's fiscal year to EPA's Financial Analysis and Rate Negotiation Service Center, Office of Acquisition Management, 1200 Pennsylvania Ave., NW, MC 3802R, Washington, DC 20460.

**In-Kind Services:** If an assistance agreement involves the provision of in-kind services by EPA in lieu of direct funding for all or part of the award, the delivery of these in-kind services must be directed and managed by EPA. The recipient may not direct the activities of an EPA contractor or a contractor whose services EPA has obtained through an interagency agreement with another federal agency. EPA's involvement may include, but is not necessarily limited to, developing contract Statements of Work, providing technical direction to the contractor, reviewing/approving deliverables, and reviewing/approving progress reports and invoices. In order to ensure that the in-kind services provide a direct benefit to and are consistent with the recipient's work plan, the recipient must communicate regularly with the EPA Regional Project Officer and other EPA personnel as appropriate. (See Appendix A for definition.)

**Pre-Award Costs:** Upon reviewing the applicant's request for pre-award costs, EPA has determined that requested pre-award costs comply with OMB Circular A-87, *Cost Principles for State, Local, and Indian Tribal Governments*, and that the costs are justified as allocable to the project. These costs are included as allowable expenditures under the assistance agreement, at the time the assistance award document is prepared. If for any reason, EPA does not fund the applicant's proposed project or the amount of the award is less than anticipated, then EPA is under no obligation to reimburse the applicant or recipient for these costs. Applicants/recipients incur pre-award costs at their own risk.

### **VI-3. Reporting**

**Semi-Annual Performance Progress Reports:** Reporting is an important obligation that award recipients agree to undertake when they sign an Assistance Agreement. Both EPA and the recipients are accountable to Congress and to the public for the proper and effective use of Exchange Network assistance funds. The award recipient must submit *Semi-Annual Performance Progress Reports* to the EPA Regional Project Officer electronically (i.e., via email), with a copy to the Exchange Network Grant Program Manager at EPA Headquarters. EPA expects all award recipients to submit complete and timely reports, and it will consider compliance with reporting requirements when evaluating future applications for financial assistance. The EPA Project Officer will be assigned when the award is issued.

These progress reports must be submitted within one month of the end of the reporting period. The reporting periods are from October through March (report due April 30) and from April through September (report due October 31). The first reporting period for the FY 2007 Exchange Network assistance agreements will be from the start of the project period through March 31, 2008 and the first semi-annual report will be due to EPA on April 30, 2008. Please use the *Semi-Annual Performance Progress Reports* form in Appendix F.

In addition to the semiannual reports, the recipient agrees to submit to the EPA Project Officer within 90 days after the expiration or termination of the approved project period a final report using the *Semi-Annual Performance Progress Reports* form. (Please see Appendix F.)

**Final Financial Status Report:** As indicated in Section VI – 2, award recipients must submit a final Financial Status Report to EPA within 90 days after the end of the project budget period.

#### **VI-4. Dispute Resolution Provision**

Assistance agreement competition-related disputes will be resolved in accordance with the dispute resolution procedures published in 70 FR (Federal Register) 3629, 3630 (January 26, 2005) which can be found at <http://a257.g.akamaitech.net/7/257/2422/01jan20051800/edocket.access.gpo.gov/2005/05-1371.htm>. Copies of these procedures may also be requested by contacting Edward Mixon (202-566-2142 or [mixon.edward@epa.gov](mailto:mixon.edward@epa.gov)). All other disputes will be resolved in accordance with EPA regulations at 40 C.F.R. §30.36 or 40 C.F.R. §31.70, as appropriate.

### **VII. Agency Contacts**

General information about the Exchange Network Grant Program and past awards is available at <http://www.epa.gov/exchangenetwork/grants/index.html>. The primary EPA Headquarters point of contact is Edward Mixon, the Exchange Network Grant Program Manager. Contact information is as follows: Office of Information Collection, Office of Environmental Information, U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Mail Code 2823-T, Washington, DC 20460; phone, 202-566-2142; email, [mixon.edward@epa.gov](mailto:mixon.edward@epa.gov).

### **VIII. Other Information**

#### **VIII-1. Exchange Network References**

The following Web sites and documents may be of interest to assistance agreement applicants and other Exchange Network partners:

- Exchange Network Grant Program: <http://www.epa.gov/exchangenetwork/grants/index.html>  
See state and tribal activities for examples of previous Exchange Network activities.
- Central Data Exchange (CDX): <http://www.epa.gov/cdx>  
This site provides information about CDX, which is EPA's Node on the Exchange Network.
- Exchange Network: <http://www.exchangenetwork.net>  
This site provides more information on current Exchange Network documents, Nodes, data exchanges, and includes the Registry of XML Schema.
- State/EPA Network Blueprint Team, *Blueprint for a National Environmental Information Exchange Network*, report to the State/EPA Information Management

Work Group, October 20, 2000

[http://www.epa.gov/OEI/imwg/pdf/final\\_blueprint.pdf](http://www.epa.gov/OEI/imwg/pdf/final_blueprint.pdf)

- State/EPA Information Management Work Group, National Planning Action Team, *Exchange Network Business Plan*, March 15, 2005.  
<http://www.epa.gov/exchangenetwork/publications/exchangenetworkbusinessplan.pdf>
- The Environmental Data Standards Council: <http://www.envdatastandards.net/>. This Web site provides authoritative information on data standards and related information.

## **VIII-2. Other EPA Financial Assistance Programs**

EPA offers a number of other financial assistance programs at various times of the year that may be of interest to states, territories, tribes, and inter-tribal consortia. General information about financial assistance programs can be found on the Office of Grants and Debarment Web site at <http://www.epa.gov/ogd>.

Additional information can be found at the following Web sites:

- American Indian Environmental Office (AIEO):  
<http://www.epa.gov/indian/tgrant.htm>
- Office of Air and Radiation (OAR): [http://www.epa.gov/air/grants\\_funding.html](http://www.epa.gov/air/grants_funding.html)
- Office of Enforcement and Compliance Assurance (OECA):  
<http://www.epa.gov/compliance/state/grants/stag/index.html>
- Office of Prevention, Pesticides, and Toxic Substances (OPPTS)/Office of Pollution Prevention and Toxics (OPPT):  
<http://www.epa.gov/oppt/p2home/grants/ppis/ppis.htm>
- Office of Solid Waste and Emergency Response (OSWER)/Brownfields Cleanup and Redevelopment: <http://www.epa.gov/brownfields/pilot.htm>
- Office of Water (OW): <http://www.epa.gov/water/funding.html>

# Appendix A

## Definitions

### Central Data Exchange (CDX)

EPA's CDX is the point of entry on the Environmental Information Exchange Network (Exchange Network) for environmental data exchanges to the Agency. CDX provides the capability for submitters to access their data through the use of Web Services. CDX enables EPA and participating Program Offices to work with stakeholders - including state, tribal and local governments and regulated industries - to enable streamlined, electronic submission of data via the Internet.

### Communities of Interest

A community of interest is a group of Exchange Network stakeholders who share an interest in the exchange of a specific set of environmental data.

### Construction

Construction is the erection, building, alteration, remodeling, improvement, or extension of buildings, structures or other property. Construction also includes remedial actions in response to a release, or a threat of a release, of a hazardous substance into the environment as determined by the CERCLA of 1980.

### Data Standard

A data standard depicts the required content and format in which particular types of data are to be presented and exchanged. Exchange Network partners must use data standards that have been approved by the Exchange Network Leadership Council (ENLC). The ENLC has subsumed the activities of the Environmental Data Standards Council (EDSC). A list of ENLC/EDSC-approved data standards is shown in Appendix C. Also see information at <http://www.envdatastandards.net>.

### Data Element

A data element is the smallest unit of information stored in and exchanged among Exchange Network partners' information systems. Examples of data elements are the facility name, DUNS number, and inspection date.

### Data Exchange Template

A data exchange template is a standardized format that identifies the types of information required/allowed in a particular document or data exchange. Data exchange templates contain no data, but they define the format for exchange according to data standards and trading partner agreements.

## **Environmental Information Exchange Network (Exchange Network)**

The Exchange Network is an Internet and standards-based information network among EPA and its partners in states, tribes, and territories. It is designed to help integrate information, provide secure real-time access to environmental information, and support the electronic collection and exchange of high-quality data and information. The Exchange Network provides a more efficient way of exchanging environmental information at all levels of government. It significantly improves the way EPA and its state, tribal, and territorial partners send and receive information.

## **Extensible Markup Language (XML)**

Extensible Markup Language is a flexible language for creating common information formats and sharing both the format and content of data over the Internet and elsewhere. XML, a formatting language recommended by the World Wide Web Consortium (W3C). For guidance on the development of XML schema for the Exchange Network or related activities of the Network Technical Group, see the Exchange Network Web site at <http://www.exchangenetwork.net>.

## **Flow Configuration Documents (FCDs)**

FCDs are the principle document that captures the detailed data exchange processing roles governing the data exchange using narrative text, diagrams and examples. For more information refer to the Flow Configuration Checklist v1.1 at: [http://www.exchangenetwork.net/dev\\_schema/FlowDocChecklist\\_v1.1.pdf](http://www.exchangenetwork.net/dev_schema/FlowDocChecklist_v1.1.pdf).

## **Geographic Information Systems**

Geographic Information Systems (GIS) include software and hardware systems that relate and display collected data in terms of geographic or spatial location. GIS allow users to collect, manage, and analyze large volumes of geospatial data and metadata. EPA and its partners use GIS systems to conduct complex environmental analyses.

## **Geospatial Data**

Geospatial data are data that identify, depict, or describe the geographic locations, boundaries, or characteristics of the Earth's inhabitants or its natural or human-constructed features. Geospatial data include geographic coordinates (e.g., latitude and longitude) that identify a specific location on the Earth; data that are linked to geographic locations or have a geospatial component (e.g., socio-economic data, land use records and analyses, land surveys, homeland security information, environmental analyses). Geospatial data may be obtained using a variety of approaches and technologies, including things such as surveys, satellite remote sensing, Global Position System (GPS) hand-held devices, and airborne imagery and detection devices.

## **Geospatial Technologies**

Geospatial technologies include the computer hardware and software that are commonly used to collect, import, store, manipulate, analyze, and display digital geospatial data. These technologies include GIS, global positioning systems (GPS), remote sensing, and visualization systems.

## **In-Kind Services**

Services provided by EPA contractors and consultants on specific parts of the project for the recipient. The recipient can request this type of service as part of the grant proposal, if the in-kind work is directly related to the recipient's proposal and the applicant is the primary beneficiary of the work. However, EPA reserves the right to decide whether or not in-kind services will be provided. The recipient may not direct the work provided through in-kind services. These services are managed by EPA.

## **Integrated Project Team**

A group of individuals comprised of partner and EPA staff, support contractors and technology vendors organized to design and implement a specific exchange.

## **Metadata**

Metadata are data or information that describes other data. Examples include data that describe how or where the data were collected, whether or not the data comply with agreed-upon data standards, or how the data will be used.

## **Network Authorization and Authentication Services**

Network Authorization and Authentication Services (NAAS) are a set of centralized information security services that Exchange Network partners can use to authenticate and authorize their users. NAAS provides an efficient way for Exchange Network participants to exchange data with many trusted partners, without them each having to authenticate and authorize each user themselves. All NAAS operations are conducted over a Secure Socket Layer (SSL) channel using 128-bit encryption.

## **Node**

A Node is a Web server (hardware with appropriate software) that provides a point for exchanging information over the Internet. Exchange Network Nodes can gain access to and transmit information using Web Services. In order to achieve interoperability among Nodes, all Nodes must be set up according to the Exchange Network specifications. Specifications and protocols for building a functioning Exchange Network Node are available at <http://www.exchangenetwork.net>.

## **Node Client**

A Node client is an application (software code) that can generate Web service messages using the Exchange Network. A Node client can do the following:

- Submit data in XML format to EPA or other partners using the Exchange Network;
- Request data in XML format from EPA or other partners using the Exchange Network; *and*
- Receive data in XML format from EPA or other partners using the Exchange Network.

Unlike Nodes, Node clients can *not* publish data on the Exchange Network (i.e., they can not respond to data queries from other Exchange Network partners).

## **Operational Exchange Network Node**

An Exchange Network Node is *operational* if it meets all of the following criteria:

- Demonstrates *all* nine Exchange Network Web methods – authenticate, solicit, query, get status, submit, notify, Node ping, download, and Node services (see *Exchange Network Node Implementation Guide v.1.0*, April 2003, <http://www.exchangenetwork.net>, Tool Box);
- Implements the minimum Exchange Network security practices (e.g., including the use of Network Authorization and Authentication Services);
- Submits data in XML format to EPA or other Exchange Network partners;
- Receives data in XML format from EPA or other Exchange Network partners; and
- Demonstrates ability to publish data to the Exchange Network by responding to specific data queries from authorized Exchange Network partners.

When developing Exchange Network Nodes, applicants should refer to the “Build a Node” section on the Exchange Network Web site. (See <http://www.exchangenetwork.net> .) This site contains technical specifications and protocols, implementation guidance and testing tools.

## **Outcome**

The term “outcome” means the result, effect or consequence that will occur from carrying out an environmental program or activity that is related to an environmental or programmatic goal or objective. Outcomes may be environmental, behavioral, health-related or programmatic in nature, must be quantitative, and may not necessarily be achievable within an assistance agreement funding period.

## **Output**

The term “output” means an environmental activity, effort, and/or associated work products related to an environmental goal or objective, that will be produced or provided over a period of time or by a specified date. Outputs may be quantitative or qualitative but must be measurable during an assistance agreement funding period.

## **Schema**

An XML schema defines the structure of an XML document. An XML schema defines things such as which data elements and attributes can appear in a document; how the data elements relate to one another; whether an element is empty or can include text; which types of data are allowed for specific data elements and attributes; and what the default and fixed values are for elements and attributes. The schemas can be found at <http://www.exchangenetwork.net> Web site. Click on Network Registry to find the XML registry.

## **Schematron**

A schematron is an open source application that can create an XSLT style sheet to validate XML documents by combining the XML schema and a file containing a set of business rules. The XSLT style sheet is then used to validate the instance document and return a list of errors.

## **Web Form**

A standard interface that can be downloaded from the Internet. A Web form contains text boxes for a user to enter data. Users can then submit the form (e.g., environmental reports) to the receiver.

## **Web Publishing**

Web Publishing is a term that refers to using Web Services as a query mechanism against local databases. These data services publish content from databases as Web Services in an XML format. Once these data services are deployed, they can be used in a number of ways such as populating Web pages, synchronizing data between sites, viewing data in a Web service client, or building new sources of data into an integrated application. In other words, Web publishing is a specific subset of the many possible types of Web Services. Other Web service types include data submission, security, quality assurance, notification, and status.

## **Web Services**

Web Services are automated information services that are conducted over the Internet, using standardized technologies and formats/protocols that simplify the exchange and integration of large amounts of data over the Internet. They make it easier to conduct work across organizations regardless of the types of operating systems, hardware/software, programming languages, and databases that are being used.

# Appendix B

## Suggested Exchange Network Data Exchange Activities

This Appendix outlines the data exchange activities that applicants should consider when applying for the FY 2007 Exchange Network Grant Program. The Appendix contains three subsections: Regulatory Data Exchanges, Non-Regulatory Data Exchanges and Standard Milestones for Data Exchanges. This Appendix highlights the EPA Program Office activities related to flows and provides suggested activities for applicants to consider when developing their proposal.

The Exchange Network Grant Program supports a variety of activities, including the development of common data standards, formats, and trading partner agreements for sharing data over the Exchange Network and implementation of collaborative, innovative uses of the Exchange Network. It also supports the standardization, exchange, and integration of geospatial information to address environmental, natural resource, and related human-health issues.

The success of the Exchange Network will ultimately depend on how EPA and its partners use the data and information that are exchanged to enhance decision-making and programmatic operations. EPA encourages all partners to use the Exchange Network to meet their business needs. This could include exchanging data that supports national environmental systems, as well as data that support particular state, territorial, and tribal needs.

### I. Standard Milestones for National System Data Exchanges

This section will assist EPA Programs and Exchange Network partners in better understanding the EPA Program Office activities and establish consistency across all data flows by further defining each milestone. These activities may be already completed, in process or planned at the time of release of this guidance.

**Report on compliance with data standards:** EPA Program Office reports to OEI on the status and plans for conformance of the data system to the data standards as published at <http://www.envdatastandards.net>. The report would identify where the program does meet and does not meet standards at the time of the report, the time frames in which the non-conforming standards will be addressed.

**Test XML Schema: (Version X):** Schema has completed EPA testing and is ready for limited release to Exchange Network partners that will support the testing process with EPA to identify any potential issues from real data exchanges. This includes the use of

real data sets in the XML instances documents. At this stage, partners will have the constructs for mapping data to their own systems and sufficient time would be needed by these partners to complete that process once the schema(s) is released.

**Release final XML Schema – (Version X):** Schema has undergone conformance review and is ready for posting to the Exchange Network Web site for access by all Exchange Network partners ([www.exchangenetwork.net](http://www.exchangenetwork.net)).

**National database available for testing:** National database is ready for testing to exchange data in a format that complies with agreed upon standards and rules. For example, database can support testing the receipt and processing of XML instance documents or a converted format as part of the exchange process.

**Availability of EPA Node services for testing:** EPA Node services include all central services the Program Offices need or choose to enable a more efficient data exchange among exchange partners. Examples include XML validation (Schema and Schematron), Network Authentication and Authorization Service (NAAS), XML Gateway services, and the Universal Description and Discovery Integration tool.

**Readiness for complete end-to-end testing by Exchange Network Partners:** At this stage, the XML schema(s) (at a minimum) are ready for testing by Network partners and the national database and EPA Node services are available for testing. In addition, all EPA accounts have been established for testing (e.g. privileges to NAAS and authorization to the database)

**Flow Configuration Document completed or updated:** Flow Configuration Documents identify and standardize the minimum information needed by trading partners to execute a data exchange. They describe the technical configuration and business processes used to exchange data between trading partners.

**System ready to receive or publish:** This status indicates that a sufficient amount of end-to-end testing has occurred and all problems addressed, the XML schema(s) has been released, supporting documentation has been finalized, all production readiness reviews have been completed, if applicable the Program Office has received approval from the National Computing Center for deploying new code to production, and the appropriate parties (e.g. helpdesks) have been notified of release and have the necessary tools to support Exchange Network Partners' inquiries.

**Other Exchange Network activities (optional):** This provides an opportunity to identify key milestones for unique activities associated with a particular project. Some examples are upcoming national conferences to conduct training, additional Web Services to be deployed, a strategic roll-out plan and related post-production activities.

## II. Regulatory Data Exchanges

Applicants could propose to implement one or more of the following data exchanges. These exchanges are organized by media: EPA's priority will be on proposals that focus on deploying regulatory data exchanges. Each of these data exchanges is briefly described below, along with related EPA Program Office information and a concise description of milestones for the development of data flow within the FY 2007-2009 timeframe. In some cases, additional activities for the data exchange are listed. Applicants need to align their activities with the milestones described. Priority will also be given to proposals that result in data being published.

### Air

- Air Quality System (AQS) B-4
- National Emissions Inventory (NEI) B-5

### Office of Enforcement and Compliance Assurance (OECA)

- Air Facility System (AFS) - CAA Compliance/Enforcement Data System B-6
- Integrated Compliance Information System – National Pollutant Discharge Elimination System (ICIS-NPDES) B-8
- Electronic Discharge Monitoring Reports (e-DMR) B-10

### Waste

- Resource Conservation and Recovery Act Information System (RCRAInfo) B12

### Water

- National Assessment and TMDL Tracking System (NATTS) B-13
- Safe Drinking Water Information System (SDWIS) B-14
- Underground Injection Control (UIC) Database B-15

### Other

- Toxics Release Inventory System (TRIS) B-16

## Air Quality System (AQS)

**Description:**

AQS is a national database that contains ambient air quality monitoring data collected by state, tribal, and local governments. The data volume that flows into AQS is large, with thousands of files submitted per year containing a total of about 80,000,000 discrete data points.

| <b>Exchange Network Program Office Activities</b>          |                               |
|--|-------------------------------|
| <b>Milestones</b>  | <b>Target Completion Date</b> |
| Report out on compliance with data standards               | Completed                     |
| Test XML schema - (Version 2.0)                            | Completed                     |
| Release XML Schema – (Version 2.0)                         | 08/31/2006                    |
| Availability of database or system for testing             | Available                     |
| Availability of Node services for testing*                 | Available                     |
| Readiness for complete end-to-end testing by states/tribes | Ready                         |
| System readiness to receive production data to EPA         | 08/31/2006                    |
| Flow Configuration Document completed or updated           | 08/31/2006                    |

\* An AQS test environment account is required for system or end-to-end testing.

**Activities to be considered by Grant Applicants**

The new schema for this data flow will be in production in the fall of 2006. Grant applicant activities could include mapping data elements to XML schema and configuring the Node/Web Services to flow this dataset to EPA and other partners.

## National Emission Inventory (NEI)

**Description:**

NEI is a national database of air emissions information, which includes input from numerous state and local air agencies, tribal nations, industry, and other federal databases. The NEI database contains information on stationary and mobile sources that emit criteria air pollutants and precursors, as well as hazardous air pollutants. NEI data are used for air dispersion modeling; tracking emission trends; and developing risk assessments, regulations, and regional pollution control strategies.

| <b>Exchange Network Program Office Activities</b>          |                               |
|--|-------------------------------|
| <b>Milestones</b>  | <b>Target Completion Date</b> |
| Report out on compliance with data standards               | Done                          |
| Test XML schema - (Version 3)                              | Done                          |
| Release XML Schema – (Version 3)                           | Done                          |
| Availability of database or system for testing             | Done                          |
| Availability of Node services for testing                  | Done                          |
| Readiness for complete end-to-end testing by states/tribes | Done                          |
| System readiness to receive production data to EPA         | Done                          |
| Flow Configuration Document completed or updated           | Done                          |

**Activities to be considered by Grant Applicants**

The proposed Air Emission Reporting Rule shortens the reporting period for state, local, and tribal agencies to report their emissions data to EPA. Development of new approaches and tools to shorten the time required for facilities to submit quality-reviewed NEI point source data, using XML schema and quality control validation routines would be a suggested activity. A successful project could result in the development of "toolkits" that could be used by other agencies and regulated facilities to facilitate the reporting of NEI data. The experiences of some states, those already receiving Web-based emissions reports from regulated facilities, indicate that it may be possible to achieve substantial reductions in the amount of time required to transfer data from facilities to the states and then from states to EPA. EPA believes it may be possible for it to receive quality assured data faster than the current regulatory requirement of 17 months from the end of the calendar year.

**Air Facility System (AFS)  
- -CAA Compliance Enforcement Data System**

**Description:**

EPA receives a significant amount of air stationary source compliance and enforcement (C/E) data through Office of Management and Budget approved Information Collection Requests (ICR), program delegation assistance agreements or as a result of specific federal regulations or program policy. AFS is a mainframe system that houses C/E data based on Minimum Data Requirements (MDRs) as outlined in approved ICRs with the ability to house limited permit information and other optional information. Data is reported by EPA Regional Offices, states and local agencies. AFS is scheduled to be modernized via incorporation into the Integrated Compliance Information System (ICIS) application. Modernization timelines are not established, however, efforts are underway to establish an XML schema for reporting to AFS via the use of the Universal Interface program, a mapping application written and maintained by EPA to facilitate reporting batch files to AFS. The availability of the XML schema provides state/local agencies with the ability to generate C/E data in a sharable format even though the AFS network exchange has not yet been established. Draft schema and testing is expected to be completed during FY07. States are encouraged to develop regulatory data exchanges to increase their efficiency (e.g., facility-to-state, state-to-EPA, etc.), prepare for the modernization of AFS as well as develop state capacity and experience with XML and EPA’s CDX reporting of C/E information, including documents.

| <b>Exchange Network Program Office Activities</b>  |                               |
|--|-------------------------------|
| <b>Milestone</b>   | <b>Target Completion Date</b> |
| Report out on compliance with data standards   | Completed                     |
| Participate in the planning, design and development of the modernization of AFS to include updating needs of assessment materials, closeness of fit, structure/design and XML compatibility maintenance. | Ongoing                       |
| Test Beta-XML schema for AFS-MDRs - (Version 1.0)  | 03/30/2007                    |
| Release Final XML Schema for AFS and XML-UI-(Version 1.0)  | 01/30/2008                    |
| Availability of database or system for testing:  | 01/30/2008                    |
| Readiness for complete end-to-end testing by states/tribes   | 01/30/2008                    |
| System readiness to receive production data to EPA   | 01/30/2008                    |
| (Optional “piloting” task) Share eDocs and “collaborate” with partners, through sharing document(s) “meta data” for querying state servers through OTIS/ECHO   | 03/30/2008                    |

**Activities to be considered by Grant Applicants**

- Implementation or enhancement of XML capability for in/out processing of state/local AFS MDR data with the Universal Interface version 4.0 (UI). XML capability will allow agencies to develop their air C/E data exchange in anticipation of network exchange while maintaining reporting requirements to AFS. Schema enhancement can include development of data exchanges, preparation for

modernization, or developing experience with XML reporting. Upgrades to the XML schemas and/or XML-UI are fundable if demonstrated to be integral to state/local critical regulatory data exchange.

- Regulatory Data Exchange: Development of XML based data exchange for C/E documents (e.g. facility-to-state, state-to-EPA, state-to-state sharing, etc.). States/locals and EPA handle a great deal of compliance/enforcement/permit (C/E/P) information regarding regulated facilities that support program implementation and public access (e.g., through Efacts/ECHO). Currently, much of this information is quantitative or summary in nature. However, states have detailed electronic documents (e.g., eDocs) that could provide an invaluable resource to a wide range of stakeholders. To “link” the summary data to these supporting documents, EPA is soliciting grant proposals that will enable access to these documents. The development of state data exchange of representative C/E/P document(s), using approved XML schema, and establish exchange flow thru CDX portal is EPA’s ultimate goal and must be a commitment by potential grantees. This suggested activity would occur after the AFS network exchange was established. However, before the AFS CDX node is established, states may “pilot” sharing access or collaborate with state partners to access their C/E/P documents which reside on state servers. This pilot sharing/collaboration could be established through identifying state’s C/E/P documents with “meta data” meeting national data standards and sharing these data with OECA on a periodic basis.

**Integrated Compliance Information System  
National Pollutant Discharge Elimination System (ICIS-NPDES)**

**Description:**

ICIS-NPDES is the modernized version of the Permit Compliance System (PCS). It supports traditional NPDES wastewater discharge program functions (e.g., permitting, compliance monitoring, and enforcement), as well as new functions for special regulatory programs, such as concentrated feeding operations (CAFO). ICIS-NPDES will allow for data exchanges using XML and Web services via the Exchange Network and provide links to other EPA databases (e.g., FRS).

| <b>Exchange Network Program Office Activities</b>  |                               |
|--|-------------------------------|
| <b>Milestone</b>   | <b>Target Completion Date</b> |
| Report out on compliance with data standards   | Completed                     |
| Test (Instance or Examples) ICIS-NPDES XML Schema for Discharge Monitoring Report (DMR) data.                    | 10/31/2006                    |
| Release ICIS-NPDES XML Schema for DMR data.  | 10/31/2006                    |
| Flow Configuration Document for DMR data.  | 10/31/2006                    |
| Test (Instance or Examples) ICIS-NPDES XML Schema for all remaining non-DMR data.                                | 12/31/2006                    |
| Release ICIS-NPDES XML Schema for all non-DMR data.  | 12/31/2006                    |
| Flow Configuration Document for non-DMR data.  | 12/31/2006                    |
| Availability of database or system for testing for DMR Flow (receipt of DMRs into ICIS)                          | 4/30/2007                     |
| Availability of Node services for testing for DMR Flow   | 4/30/2007                     |
| Readiness for complete end-to-end testing for DMR Flow by states/tribes*   | 6/30/2007                     |
| System readiness to receive production data for DMR Flow to EPA*   | 9/30/2007                     |
| Readiness for complete end-to-end testing by facilities for NetDMR Flow in ICIS-NPDES implemented states/tribes* | 3/31/2008                     |
| System readiness to receive production data for NetDMR Flow to EPA*  | 8/31/2008                     |
| Availability of database or system for testing for ICIS-NPDES Non-DMR Flow                                       | 4/30/2009                     |
| Availability of Node services for testing for ICIS-NPDES Non-DMR Flow  | 4/30/2009                     |
| Readiness for complete end-to-end testing for ICIS-NPDES Non-DMR Flow by states/tribes*                          | 6/30/2009                     |
| System readiness to receive production data for ICIS-NPDES Non-DMR Flow to EPA*                                  | 9/30/2009                     |
| Flow configuration document updated for ICIS-NPDES Non-DMR Flow  | 9/30/2009                     |

\* Contingent on partners completing data clean up and data migration from PCS to ICIS-NPDES.

## **ICIS-NPDES (cont.)**

### **Activities to be considered by Grant Applicants**

ICIS-NPDES Grant Applicants should consider the following steps prior to data submissions to EPA.

- Continue ICIS-NPDES data migration activities in coordination with EPA Headquarters, Regions, states, and Data Migration Workgroup participants.
- Participate on Integrated Project Teams (IPTs), monitor progress, and test the submission process with EPA.
- Participate in testing processes (e.g., Node-to-Node communication with CDX) for submissions to EPA, which require an extensive amount of state involvement and commitment.
- Develop capability to generate final XML schema for ICIS-NPDES data flow.
- Extract and convert the data from state NPDES systems into the XML format needed to submit data to ICIS-NPDES.
- Modify state systems to accommodate the new/revised data requirements for ICIS-NPDES.
- Implement Node-to-Node communication with CDX.
- Develop requirements and design for extraction tool to pull data out of ICIS-NPDES via the Network and import to state database. Develop and implement extraction tool.

**Electronic Flow of Discharge Monitoring Report (eDMR)**

**Description:**

E-DMR is an application allowing facilities to transmit DMRs via an online system that is hosted by a state permitting authority. Data is eventually transmitted to ICIS-NPDES. NetDMR refers to an ongoing collaboration of more than 10 states to build a common, centrally-hosted E-DMR application directly compatible with ICIS-NPDES. While most NetDMR states will use the centrally-hosted application, NetDMR’s open source configuration also allows use of shared code hosted on a state system.

| <b>Exchange Network Program Office Activities</b>   |                               |
|---|-------------------------------|
| <b>Milestone</b>  | <b>Target Completion Date</b> |
| Report out on compliance with data standards (ICIS-NPDES)   | Completed                     |
| Test (Instances or Examples) of XML schema for ICIS-NPDES DMR data                                  | 10/31/06                      |
| Release XML Schema for ICIS-NPDES DMR data  | 10/31/06                      |
| System Readiness to receive production data for Discharge Monitoring Report (DMR) Flow FromsStates* | 09/30/07                      |
| Flow configuration document updated for NetDMR  | 10/31/07                      |
| Availability of ICIS-NPDES for NetDMR testing (Facility to CDX)                                     | 10/31/07                      |
| Availability of Node services for NetDMR testing (facility to CDX to ICIS-NPDES)                    | 10/31/07                      |
| Readiness for complete end-to-end testing by facilities in ICIS-NPDES implemented states/tribes*    | 3/31/08                       |
| System readiness to receive production data to EPA for ICIS-NPDES implemented states/tribes*        | 8/31/08                       |

\* Contingent on partners completing data clean up and data migration from PCS to ICIS-NPDES.

**Activities to be considered by the Grant Applicants**

The 2007 grant process will support collaborative efforts to operationalize the NetDMR tool (Area 1), as well as efforts by other states to flow DMR data from the permittee to ICIS-NPDES via a state-run E-DMR system (Area 2).

*Area 1 - States that Use (or Will Use) NetDMR to Flow DMR Data to ICIS-NPDES*

Applications should include provisions for further developing the functionality of NetDMR by: completing system testing and deployment in a centralized architecture (e.g. CDX), adapting NetDMR source code to work with state NPDES information management systems, and/or reaching out to the regulated community of users to facilitate their transition from paper to electronic DMR submittal. Enhancements to the first version of the NetDMR tool will lead to increased use.

*Area 2 – States that Use (or Will Use) Existing E-DMR Tools to Flow DMR Data to ICIS-NPDES*

A state applicant should delineate how the assistance agreement would either: a) enable an existing E-DMR state system to flow data to ICIS-NPDES (rather than PCS), or b) begin a new state E-DMR data flow through the Exchange Network by leveraging or adapting another state's existing state E-DMR system.

*Under Areas 1 and 2, the grantee should indicate whether the state plans to require mandatory use of electronic submission of DMRs for permits that are renewed after the NetDMR/ E-DMR system is put in production. A state's participation in either Area 1 or 2 is contingent upon its completion of data clean up and migration from PCS to ICIS-NPDES.*

## **Resource Conservation and Recovery Act Information (RCRAInfo)**

### **Description:**

RCRAInfo is a comprehensive EPA information system, providing access to data supporting the RCRA of 1976 and the Hazardous and Solid Waste Amendments of 1984. RCRAInfo contains both programmatic and enforcement information regarding the solid/hazardous waste program, including facility status, regulated activities, and compliance data.

In 2007, EPA intends to revise its Permitting and Corrective Action modules and release them in 2008 in direct response to the requirements of the Permitting and Corrective Action Programming Area Analysis Workgroup. This workgroup consists of EPA and state stakeholders. States are encouraged to apply for assistance agreements for mapping to the revised modules (Version 4.0).

| <b>Exchange Network Program Office Activities</b>                                  |   |
|--|---|
| <b>Milestone</b>   | <b>Target Completion Date</b>               |
| Report out on compliance with data standards                                       | 10/01/2009                                  |
| System Readiness to receive production Handler data to EPA (Version 3.0)           | Done  |
| System Readiness to receive production Permitting data to EPA (Version 3.0)        | Done  |
| System Readiness to receive production Corrective Action data to EPA (Version 3.0) | Contingent upon State testing and Readiness |
| System Readiness to receive production CME data to EPA (Version 3.0)               | 11/30/2006                                  |
| Test XML schema - Permitting and Corrective Action (Version 4.0)                   | 4/01/2008                                   |
| Release XML Schema – Permitting and Corrective Action (Version 4.0)                | 9/01/2008                                   |
| Readiness for complete end-to-end testing by States/ Tribes (Version 4.0)          | 10/01/2008                                  |
| System readiness to receive production data to EPA (Version 4.0)                   | 12/31/2008                                  |
| Flow configuration document completed or updated (Version 4.0)                     | 12/31/2008                                  |

### **Additional Activities to be considered by Grant Applicants**

The readiness of Version 3.0 of Permitting and Corrective Action is noted in table for informational purposes only. States are also encouraged to apply for Version 3.0 of the Handler and Compliance Monitoring and Enforcement (CME) Modules will not change during this upgrade. EPA encourages recipients to participate on Integrated Project Teams, monitor progress, and work closely with EPA to test the submission process. The testing process for submissions is a critical stage that requires an extensive amount of state involvement and commitment in partnership with EPA to work through issues that can only be recognized through ‘real’ data submissions.

## National Assessment and TMDL Tracking System (NATTS)

### Description:

EPA maintains NATTS to document assessment decisions reported for Clean Water Act § 305(b) and §303(d), and to track the progress of established Total Maximum Daily Loads (TMDLs) to restore impaired waters. This information is critical to measuring environmental outcomes under the EPA Strategic Plan and the Office of Water National Water Program Guidance. NATTS is the merger of the Assessment Database with the National TMDL Tracking System.

| <b>Exchange Network Program Office Activities</b>          |                               |
|--|-------------------------------|
| <b>Milestones</b>  | <b>Target Completion Date</b> |
| Report out on compliance with data standards               | 09/30/2007                    |
| Test XML schema - (Version 1.0)                            | 09/30/2006                    |
| Release XML Schema – (Version 1.0)                         | 12/30/2006                    |
| Availability of database or system for testing             | 03/30/2007                    |
| Availability of Node services for testing                  | 06/30/2007                    |
| Readiness for complete end-to-end testing by states/tribes | 12/30/2007                    |
| System readiness to receive production data to EPA         | 03/30/2008                    |
| Flow Configuration Document completed or updated           | 12/30/2007                    |

### Activities to be considered by Grant Applicants

- Participate in an IPT to adopt/enhance XML Schema for Integrated Reporting (IR) and TMDL data exchange.
- Implement available tools for translating information to the schema.
- Incorporate existing IR and National Hydrography Database georeferencing XML Schema into Web-based services and applications.
- Develop shared tools for determining assessment decisions from Water Quality System information.

## Safe Drinking Water Information System (SDWIS)

### Description:

The Safe Drinking Water Information System (SDWIS) receives and stores basic inventory and regulatory compliance data for all public drinking water systems in the country. Data flows using XML from state primacy agencies to EPA.

| <b>Exchange Network Program Office Activities</b>           |                               |
|---|-------------------------------|
| <b>Milestone</b>  | <b>Target Completion Date</b> |
| Report out on compliance with data standards                | Completed                     |
| Test XML schema - (Version 2.0)                             | Completed                     |
| Release XML Schema – (Version 2.0)                          | Completed                     |
| Availability of database or system for testing              | Completed                     |
| Availability of Node services for testing                   | Anytime                       |
| Readiness for complete end-to-end testing by States/ Tribes | Anytime                       |
| System readiness to receive production data to EPA          | Completed                     |
| Flow configuration document completed or updated            | Completed                     |
| Laboratory to State reporting using XML schema              | 12/30/2006                    |

### Additional Activities to be considered by Grant Applicants

EPA is working to build a laboratory reporting tool to allow laboratories to report sample results electronically to state primacy agencies.

## Underground Injection Control (UIC) Information System

### Description:

EPA is investing in a new UIC national information system which is expected to be deployed in Spring 2007. The new information system will include program information from over 70 existing state and EPA Direct Implementation (DI) databases (e.g., well-level data, UIC inventory (linked to FRS), permit information, geospatial information, inspection data, violation information, and enforcement actions).

| <b>Exchange Network Program Office Activities</b>  |   |
|--|---|
| Test XML schema - (Version 1.0)  | 10/31/2006  |
| Release XML Schema – (Version 1.0)   | 12/31/2006  |
| Availability of database or system for testing   | 12/31/2006  |
| Availability of Node services for testing  | 12/31/2006  |
| Readiness for complete end-to-end testing by states/tribes   | 3/31/2007   |
| System readiness to receive production data to EPA   | 4/30/2007   |
| Flow Configuration Document completed or updated   | 4/30/2007   |
| Mapping and conversion of state data from non standard or non existent state UIC databases (particularly for Class V) into EPA’s XML schema. | Ongoing (until all states fully populate and update UIC database) |
| Validation of data by the state using EPA’s validation business rules before populated XML schema is transmitted through CDX.                | Ongoing   |

### Activities to be considered by Grant Applicants

- Participate in an IPT, monitor progress, and test the submission process with EPA.
- For Class V state programs with no database, consider working with EPA to adapt EPA’s data model and definitions for core set of data in state database.

## Toxic Release Inventory System (TRIS)

**Description:**

The TRI State Data Exchange provides for simultaneous submission of TRI reports to both EPA and states via CDX. Benefits of the TRI State Data Exchange include:

- For participating states and EPA, elimination of duplicative data entry, improved data quality, elimination of state data reconciliation, and faster access to the data.
- For facilities, reduced burden through simultaneous submission to both EPA and the state.

| <b>Exchange Network Program Office Activities</b>             |                                |
|---|--------------------------------|
| <b>Milestones</b>   | <b>Target Completion Date</b>  |
| Define/Modify State/EPA Data Requirements                     | Ongoing                        |
| Modify XML Schema   | FY 2007 (1 <sup>st</sup> half) |
| Modify Web Services for data transfer and retrieval           | FY 2007 (1 <sup>st</sup> half) |
| Identify additional data requirements from the FY2007 process | FY 2008 (1 <sup>st</sup> half) |
| Test and Support operational Node-to-Node data exchanges      | Ongoing                        |

**Activities to be considered by Grant Applicants**

- Work with the TRI Program to test XML data exchange from EPA to state Nodes.
- Work with the TRI Program to modify existing tools and develop new tools/applications that states can use for TRI data that can be made available through Web Services using the TRI State Data Exchange.
- States should develop procedures that enable the import/export of TRI data into their systems. The procedures should support data received via their state Node and eliminates the reliance on the UTIL software.
- Work with EPA to develop process/tools that allow facilities to report to EPA only; facility data would be available to both EPA and states simultaneously.
- Use the TRI XML schema and develop loading/converter tools to populate the state database directly from incoming data sources such as CDX.

### III. Non-Regulatory Data Exchanges

This section of Appendix B highlights non-regulatory data exchanges that meet specific business needs. These data exchanges could support environmental decision-making and operations, address cross-cutting environmental issues, or support specific state, territorial, or tribal environmental programs. In addition to the data exchanges described below, applicants can submit proposals for innovative data exchanges. Examples of innovative data exchanges can be found on the Exchange Network Web site (<http://www.exchangenetwork.net>).

Applicants could also propose to implement geospatial data and tools to flow environmental information. Exchange Network partners could play an important role in helping the geospatial community at large realize the benefits of building interoperable solution to share and re-use data. By adhering to applicable geospatial standards and measurement guidelines for metadata creation and publishing, and by implementing Open Geospatial Consortium (OGC) compliant Web mapping service capabilities, Network partners can take important steps to ensure the development and maintenance of shareable geospatial data resources. To avoid duplicative data acquisitions, applicants can utilize the existing cataloged information available in the Geospatial One Stop (GOS) portal (<http://www.geodata.gov>) prior to buying, creating or collecting geospatial data needed for proposed projects. Once projects are underway, partners can create metadata about geospatial datasets acquired and publish their existence through registration at the GOS portal.

#### Non-regulatory

- e-Beaches B-18
- Critical Geospatial Coverage Datasets B-19
- Facility Registry System (FRS) B-20
- Institutional Controls Tracking System (ICTS) B-21
- National Pollution Prevention (P2) Results System B-22
- Water Quality Exchange B-23

## eBeaches

### Description:

eBeaches is the electronic data transmission system that allows EPA to instantaneously and securely receive and display state beach water quality and swimming advisory data as soon as state and local agencies send the data. eBeaches supports the Beaches Environmental Assessment and Coastal Health (BEACH) Act requirement to collect, store, and display beach public right-to-know pollution occurrence data.

| <b>Exchange Network Program Office Activities – PRAWN*</b> |                               |
|--|-------------------------------|
| <b>Milestones</b>  | <b>Target Completion Date</b> |
| Report out on compliance with data standards               | 2005                          |
| Test XML schema - (Version 1.2)                            | 06/30/2006                    |
| Release XML Schema – (Version 1.2)                         | 07/31/2006                    |
| Availability of database or system for testing             | Completed                     |
| Availability of Node services for testing                  | Completed                     |
| Readiness for complete end-to-end testing by states/tribes | Completed                     |
| System readiness to receive production data to EPA         | Completed                     |
| Flow Configuration Document completed or updated           | 7/31/2006                     |

| <b>Exchange Network Program Office Activities – Beach WQX**</b> |                               |
|---|-------------------------------|
| <b>Milestones</b>   | <b>Target Completion Date</b> |
| Report out on compliance with data standards                    | 11/30/2006                    |
| Test XML schema - (Version 1.0)                                 | 10/31/2006                    |
| Release XML Schema – (Version 1.0)                              | 11/30/2006                    |
| Availability of database or system for testing                  | 03/01/2007                    |
| Availability of Node services for testing                       | 03/01/2007                    |
| Readiness for complete end-to-end testing by states/tribes      | 03/01/2007                    |
| System readiness to receive production data to EPA              | 05/01/2007                    |
| Flow Configuration Document completed or updated                | 03/01/2007                    |

\* PRAWN was previously known as Beach Monitoring.

\*\* Beach WQX was previously known as Beach Notifications.

### Activities and Suggestions to be considered by Grant Applicants

Applicants should consider the following steps prior to data submissions.

- Read all support documentation.
- Consolidate beach water quality and advisory/closing data into one central repository which meets all data requirements.
- Map systems to the approved national XML schemas.
- Quality check sample station to beach name (beach\_id) relationship/link to ensure correct stations are linked to corresponding beach.
- Check with other internal state offices for existing Node capability and before developing Node capability for each beach data flow.
- Validate XML instance documents prior to submission via CDX or Node.
- Participate in monthly Beach and STORET/WQX conference calls.

### Critical Geospatial Coverage Datasets

Office of Management and Budget (OMB) Circular No. A-16 (revised August 19, 2002) identifies 34 critical geospatial data coverages (referred to as “themes”) that are essential to the National Spatial Data Infrastructure. Geospatial data are information that represents features on the earth expressed as lines, points or polygons and are used by geospatial information systems to support analysis in a geospatial context. The A-16 geospatial data coverages include environmental datasets (biodiversity, wetlands, watershed boundaries, soils, hydrography, etc.) essential to environmental analysis and decision-making across government.

| <b>Exchange Network Program Office Activities</b>   |                               |
|---|-------------------------------|
| <b>Milestones</b>   | <b>Target Completion Date</b> |
| Evaluate existing standards and schema (XML/GML) to support coverages                           | 02/01/2008                    |
| Develop XML/GML schema and concept of operations for discovery, update or exchange of coverages | 06/01/2008                    |
| Release XML Schema  | 08/30/2008                    |
| Conduct/complete testing  | 02/01/2009                    |
| Complete readiness evaluation for implementation  | 05/01/2009                    |
| Readiness for complete end-to-end testing by states/tribes                                      | 08/01/2009                    |
| System readiness to implement geospatial data production discovery/exchange                     | 12/01/2009                    |

#### **Activities to be considered by Grant Applicants**

The intent is not to fund the creation of new data (e.g. conducting water sampling) or exchange entire national coverages, but to facilitate the sharing of important state or local geospatial data and their attributes across the Network partnership where practical. Two projects, one for updating the National Hydrography Dataset (Minnesota Challenge Grant, the other for establishing flows for critical habitat data (Delaware/NatureServe Challenge Grant) demonstrate how the Network can be employed to support the flow and update of geospatial datasets. Another project with Wisconsin is demonstrating how the Exchange Network can be used to support the discovery of geospatial data across Exchange Network partners.

Applicants are encouraged to leverage existing and Open GIS Consortium compliant standards (e.g., Federal Geographic Data Commission metadata standards), tools and services to adapt XML/GML schema to support the discovery, exchange and update of these critical layers. Equally important is the creation and publication of Web Services to make these coverages accessible to the Network. Applicants are encouraged to demonstrate how their work fosters collaboration across a broader community of interest (e.g., USGS, State Cartographic Agencies, etc.) and supports the establishment of these coverages.

## Facility Registry System (FRS)

### Description:

FRS is a centrally managed database that provides access to a single source of comprehensive information on facilities subject to environmental regulations or of particular environmental interest. This integration of accurate and comprehensive environmental information into environmental program data allows the EPA and the public to gain access to all environmental information reported from and about specific facilities. New schema will be available in FY 2007, which will add new tribal data elements and more latitude and longitude data to the schema.

| <b>Exchange Network Program Office Activities</b>                       |                               |
|---|-------------------------------|
| <b>Milestones</b>   | <b>Target Completion Date</b> |
| Report out on compliance with data standards                            | 01/01/2004                    |
| Test XML schema – New Facility ID Version 3.0 replacing Facility ID 2.3 | 10/01/2006                    |
| Release XML Schema – New Facility ID Version 3.0                        | 12/31/2006                    |
| Availability of database or system for testing                          | 12/01/2006                    |
| Availability of Node services for testing                               | 12/01/2006                    |
| Readiness for complete end-to-end testing by states/tribes              | 12/01/2006                    |
| System readiness to receive production data to EPA                      | 01/02/2007                    |
| Flow Configuration Document completed or updated                        | 12/31/2006                    |

### Activities to be considered by Grant Applicants

IPT involvement is encouraged to assist in building out Web Services to help publish facility identification data more easily through out the Exchange Network. EPA's FRS team has only built out a very basic set of Web Services and will look to the states and tribes to expand the number of Web service queries available. Defining, vetting and building a comprehensive standard set of Web Services for facility data would advance the Network and serve as a model for other data service publishing.

States and tribes are encouraged to submit geo-spatial locational data (latitude and longitude data) to EPA's FRS for partners interested in locating and mapping facility data. Applicants are encouraged to submit applications for assistance to map and develop database loading procedures to the new Facility ID schema. Another activity would be to develop the implementation procedures to publish or consume facility data through Web Services.

## Institutional Controls Tracking System (ICTS)

**Description:**

Institutional controls (ICs) are non-engineered instruments such as administrative or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use. ICs are an important component of federal, state, tribal, local government as well as industry lead cleanups. The need to track ICs using management systems and tools has prompted the development of an IC data standard necessary to transfer this information consistently between parties.

| <b>Exchange Network Program Office Activities</b>  |                          |
|--|--------------------------|
| <b>Milestones</b>  | <b>Target Completion</b> |
| Report on compliance with data standards   | Complete                 |
| Release XML Schema (Version 1.2)   | 10/1/2006                |
| National database available for testing  | 1/1/2007                 |
| Identify and evaluate potential trading partner databases for data standard integration                          | 1/1/2008                 |
| Flow Configuration Document completed or updated   | 10/31/2008               |
| Develop IC data standard implementation plans and implement necessary activities such as mapping to the standard | 10/31/2008 and ongoing   |
| Establish Trading Partner Agreements   | 10/31/2008 and ongoing   |
| Readiness for complete end-to-end testing by Exchange Network partners   | 10/31/2008               |
| Support operational (State-to-EPA) data exchanges  | 3/31/2009 and ongoing    |

**Activities to be considered by Grant Applicants**

Applicants are encouraged to submit applications for assistance in incorporating and/or mapping to the IC standard/schema. This would include developing standard integration plans, negotiating Trading Partner Agreements, developing Web Services that can be used to query IC data, completing mapping based on the national IC schema, completing XML file transfers, and enabling data transfer via Web Services. EPA also encourages applicants to participate on IPTs to foster exchange at the federal, state, tribal and local level, as well as with other entities.

## National Pollution Prevention (P2) Results System

### Description:

The P2 Results Data System is a cooperative initiative between EPA, state and local P2 programs, the National Pollution Prevention Roundtable (NPPR), and the Pollution Prevention Resource Exchange (P2Rx) Centers, to present the results of P2 programs on both a regional and national basis using common metrics and definitions. A national P2 results database with regional aggregation modules, a state-level query database and subsequent XML schema for Node exchanges, and training and promotional materials, is being developed in preparation for inputting and aggregating available P2 results data.

| <b>Exchange Network Program Office Activities</b>   |                               |
|---|-------------------------------|
| <b>Milestones</b>   | <b>Target Completion Date</b> |
| Establish an Exchange Network Node meeting data standards for P2 data exchanges   | 12/31/06                      |
| Document Region 10 data aggregation tool to inform development of XML schema for P2 results data exchanges  | 3/31/07                       |
| Develop national P2 results database and XML schema to transfer data from state databases to regional aggregation modules and the national database | 6/30/07                       |
| Test data exchanges between state databases, regional aggregation modules, national P2 results database, and Exchange Network                       | 9/30/07                       |

### Activities to be considered by Grant Applicants

- Contribute to further elaboration of the P2 Results System's data dictionary, including coordination with metrics used by Performance Track, Compliance Assistance, and other related programs;
- Complement state-level database and subsequent XML schema for P2 results data exchanges with Exchange Network and the National P2 Results Data System;
- Contribute to further development of data collection policies (e.g., required documentation of results; how to handle recurring results); and
- Develop and share tools to assist data collection in the field.

## Water Quality Exchange (WQX)

**Description:**

WQX defines the methods and the data systems by which EPA compiles water quality monitoring data that are collected by a number of entities via a shared schema. The purpose of the compilation of this data is to provide a seamless collection of monitoring data that is not restricted by jurisdictional boundaries. The Water Quality Exchange will replace the local operated version of STORET by September 2009.

| <b>Exchange Network Program Office Activities</b>   |                               |
|---|-------------------------------|
| <b>Milestones</b>   | <b>Target Completion Date</b> |
| Report out on compliance with data standards (ESAR)   | 08/31/2006                    |
| Test XML schema - (Physical/Chemical/Fish Tissue v1.0)  | 08/31/2006                    |
| Release XML Schema – (Physical/Chemical/Fish Tissue v1.0)   | 09/30/2006                    |
| Flow Configuration Document completed   | 09/30/2006                    |
| Availability of database or system for testing – (Physical/Chemical/Fish Tissue v1.0)             | 11/15/2006                    |
| Availability of Node services for testing – (Physical/Chemical/Fish Tissue v1.0)                  | 11/15/2006                    |
| Readiness for complete end-to-end testing by states/tribes – (Physical/Chemical/Fish Tissue v1.0) | 11/15/2006                    |
| System readiness to receive production data to EPA – (Physical/Chemical/Fish Tissue v1.0)         | 01/31/2007                    |
| Begin Pilot for Biological/Habitat Data flow  | 11/15/2006                    |
| Biological Pilot Complete   | 10/01/2007                    |
| Release XML Schema – (Biological/Habitat)   | 11/30/2007                    |
| Availability of database or system for testing – (Biological/Habitat)                             | 03/01/2008                    |
| Availability of Node services for testing – (Biological/Habitat)                                  | 03/01/2008                    |
| Readiness for complete end-to-end testing by states/tribes – (Biological/Habitat)                 | 03/01/2008                    |
| System readiness to receive production data to EPA – (Biological/Habitat)                         | 05/31/2008                    |
| Flow Configuration Document updated   | 05/31/2008                    |

**Activities to be considered by Grant Applicants**

- Develop applications that use EPA WQX Web Services for partner analyses.
- Adopt all applicable data standards.
- Build tools that integrate water quality data from various sources to present a common view of water quality data.
- Participate in the development of exchange schema for biological monitoring data.

## **WQX**

- Develop shareable translation and validation tools to facilitate water quality and biological data exchange.
- Begin linking station locations consistent with the NHD and the Geospatial One Stop Hydrography Standard.
- Coordinate activities with National Water Program Guidance for 2007-2009.
- Identify collaborative and innovative approaches for transitioning from local STORET to WQX.

# Appendix C

## Activities Related to the Mentoring, Planning and Training Group

The Mentoring, Planning and Training group activities support the further development of the Exchange Network through collaborative efforts. Applicants are encouraged to combine the suggested activities from the Mentoring, Planning and Training group with those of the Infrastructure group and the Data Exchange and Integration group to facilitate, as appropriate, the development of integrated proposals. Examples of the types of activities in the Mentoring, Planning and Training group are discussed below.

Applicants may also suggest other related activities that support the expansion of the Exchange Network through collaborative efforts. Also, attached is a list of final data standards and standards that are currently under development by the Environmental Data Standard Council Action Teams.

### Mentoring Activities

The mentoring subgroup focuses on providing assistance to potential Exchange Network partners, new Exchange Network partners, and/or partners that need a specific expertise that applicants can provide. An applicant that includes mentoring activities in a proposal should describe the type and level of expertise that can be provided and the targeted recipients of such mentoring. For example, applicants can:

- Sponsor meetings with new partners or existing partners that support greater and enhanced use of the Exchange Network.
- Assist other state, tribal or territorial agencies that have not participated in the Exchange Network. This may include providing specific one-on-one assistance to potential new partners and sharing of documentation and experience.
- Facilitate the connection of major metropolitan statistical areas to Exchange Network information through partnerships. These activities should focus on areas where significant environmental, health, and natural resources exist, and that the Exchange Network would benefit from their participation in the Network.

### Planning Activities

The planning subgroup focuses on meetings and activities that help to formulate plans that would foster cooperation among the Exchange Network partners and result in improved collaboration, cooperation, and integration across the environmental programs within and between the states, tribes, or territories. For example, applicants can:

- Convene a community of interest and formulate a plan for collaborative work. (See Appendix A for definition.) The community of interest can, for example, define the

data area (scope), linkages to other data areas, an inventory of current Network projects, and a list of major information gaps. Applicants, through the community of interest, would develop a plan, a list of opportunities for collaboration, Network services that support the community of interest, and a list of relevant partners.

- Plan and participate in the development of a data standard for use by Exchange Network partners. Applicants would be responsible for establishing a data standard action team and supporting the data standard through finalization. For more information on final data standards and standards that are under development, please see the end of this Appendix.
- Plan and participate in a multi-partner collaboration to develop solutions that can be shared with Exchange Network partners for CROMERR compliance. Applicants would be responsible for establishing a multi-partner team to collaborate on CROMERR compliance for electronic reporting.

### **Training Activities**

The training subgroup focuses on activities related to the development and provisions of training on the Exchange Network. Applicants are encouraged to work with associations that represent the interests of EPA's co-regulators and co-implementors to identify training needs specific to the Exchange Network. Applicants are also encouraged to discuss in their proposals whether they intend to develop a group similar to an Integrated Project Team (IPT) for training development, how the training will be made available to Network Partners, and how the training can be used across the Network (i.e., the applicability of the training to all relevant partners). Suggested topics for consideration include, but are not limited to:

- An Exchange Network beginner training course that would provide an introduction for new participants on the Network. This training would address the fundamentals of the Exchange Network, including how to establish a Node, use of XML to exchange data, use of data standards, and developing trading partner agreements.
- Maximizing the use of the Exchange Network after a Network Node is established. This training could be used to provide information on the available data standards, XML schema, data exchange development, and the status of Nodes on the Network.
- Methods and approaches for modernizing data collection, analysis and availability for the Exchange Network partners, aligning and integrating Exchange Network efforts within a state, tribe, or territory; and identifying and defining business needs that can be served by the Exchange Network within the state, tribe or territory.

**EPA/ENLC Final Data Standards List:\*** (as of 8/21/2006)

Please see <http://www.envdatastandards.net> for the most recent data standards list

- Biological Taxonomy - Version 2 (2005)
- Chemical Identification - Version 2 (2000)
- Contact Identification - Version 2 (2005)
- Enforcement/Compliance - Version 1 (2002)
- Facility Identification - Version 2 (2005)
- Latitude/Longitude - Version 1 (2001)
- Permitting Information - Version 2 (2005)
- SIC/NAICS - Version 2 (2005)
- Tribal Identifier - Version 2 (2005)
  
- \*Environmental Sampling, Analysis and Results (ESAR)
  - Primary Data Standards under ESAR:
    - Project
    - Monitoring Location
    - Field Activity
    - Analysis and Results
  
  - \*Supporting Data Standards under ESAR:
    - Attached Binary Object
    - Representation of Date and Time
    - Sample Handling
    - Well Identification
    - Compositing Activity
    - Bibliographic Reference
    - Equipment
    - Measure
    - Method
    - Quality Assurance and Quality Control
  
- Institutional Controls – (2006)

**\*ESAR and supporting standards finalized January, 2006**

# Appendix D

## Detailed Application Instructions

Applicants for the FY 2007 Exchange Network Grant Program must submit a complete application package to EPA by November 20, 2006. Applicants may submit their applications in hard copy through the U.S. Postal Service or an overnight mail or courier delivery service *or* electronically through the Grants.gov Web site (<http://www.grants.gov>). This Appendix provides detailed instructions on preparing the application package.

### Overview of Application Package

The application package *must* include the following materials:

1. Cover letter that outlines the following information (template at end of this appendix):
  - A. Contact information for the applicant's package
  - B. Number of copies of the full application
  - C. Data exchanges (and data standards) for which the applicant is requesting funding
  - D. Any additional partners on the grant
  - E. The amount of funds requested
  - F. Coordination efforts between the IM/IT and Environmental/Health Programs
2. Standard Form (SF) 424, Application for Federal Assistance
3. SF-424A, Budget Information for Non-Construction Programs
4. SF-424B, Assurances for Non-Construction Programs
5. Certification Regarding Lobbying or Grants.gov lobbying form
6. EPA Form 4700-4, Pre-Award Compliance Review Report
7. EPA Form 5700-54, Key Contacts Form
8. A list of no more than five (5) Federally or non-Federally funded assistance agreements performed in the last three (3) years) of similar size and scope to the current proposal. The list must include the following information: the type of grant; the applicant's accomplishments under the assistance agreements; dates of the assistance agreement's project period; and; the awarding agency and name and contact information for the grant project officer. If the applicant has a current and/or prior Exchange Network grant, it must be included in the list.
9. Project Narrative Attachment Form – Work Plan, Including a Quality Assurance Narrative Statement: (Work plans must address the Evaluation Results (Section I-1) and Evaluation Criteria (Section V) in your work plan.)
10. Detailed Itemized Budget
11. SF-LLL, Disclosure of Lobbying Activities.
12. Copy of Negotiated Indirect Cost Rate Agreement, if indirect costs are included in the budget
13. Biographical Sketches for the Project Manager(s)

### **Submitting a Hard-Copy Application Package**

If submitting a hard-copy application, please include: 1) the original application package, including all of the materials outlined above, plus two copies of the entire package; and 2) one self-addressed envelope to request acknowledgement of receipt of their grant application. If you requested acknowledgement and have not received a confirmation of receipt from EPA regarding the submission of your hard copy grant application within 30 days of the application deadline, please contact Edward Mixon, Exchange Network Grants Manager, at (202)-566-2142. Failure to do so may result in your application not being considered.

The forms above are available from EPA's Office of Grants and Debarment at <http://www.epa.gov/ogd/AppKit/application.htm>. If you have any difficulty downloading the forms from this site, you may contact Edward Mixon at (202)-566-2142 to request copies of the forms by fax.

For instructions on developing the work plan or completing specific forms, please see the electronic application instructions below. Hard-copy applications must be postmarked or delivered to an overnight mail or courier service by November 20, 2006 (Eastern Standard Time). *EPA recommends the use of overnight delivery or courier services to avoid any unnecessary delays.*

Applicants should send their hard-copy applications to one of the following addresses:

#### *U.S. Postal Service Deliveries:*

Edward Mixon  
U.S. Environmental Protection Agency  
Office of Environmental Information  
Office of Information Collection  
1200 Pennsylvania Ave., NW, Mail Code 2823-T  
Washington, DC 20460

#### *Overnight Delivery or Courier Services*

Edward Mixon  
U.S. Environmental Protection Agency  
Office of Environmental Information  
Office of Information Collection  
1301 Constitution Avenue, NW, 6<sup>th</sup> Floor, #6146-V  
Washington, DC 20460  
Phone: (202)-566-2142

If submitting a hard-copy application, you are also encouraged, but not required, to submit an electronic copy of the project work plan to Edward Mixon via email at [mixon.edward@epa.gov](mailto:mixon.edward@epa.gov).

## Submitting an Electronic Application Package

If submitting an application electronically, rather than in hard copy, please submit the application through the Grants.gov Web site, <http://www.grants.gov>. The Funding Opportunity Number for this announcement is **EPA-OEI-07-01**. Electronic applications must be submitted to this Web site no later than **midnight, Eastern Time on November 20, 2006**. EPA advises applicants to submit their electronic applications early, so that if any technical difficulties arise, there will still be time to address them before the application deadline.

The electronic submission of your application must be made by an official representative of your institution who is registered with Grants.gov. For more information, go to <http://www.grants.gov> and click on “Get Registered” on the left side of the page. *Note that the registration process may take a week or longer.* If your organization is not currently registered with Grants.gov, please encourage your office to designate an AOR and ask that individual to begin the registration process as soon as possible.

To begin the application process under this grant announcement, go to <http://www.grants.gov> and click on “Apply for Grants” on the left side of the page. Then click on “Apply Step 1: Download a Grant Application Package and Instructions” to download the PureEdge viewer and obtain the application package. You may retrieve the application package by entering the Funding Opportunity Number, EPA-OEI-07-01, or the appropriate CFDA number (CFDA 66.608), in the space provided. Then complete and submit the application package as indicated. You may also be able to access the application package by clicking on the button “How To Apply” at the top right of the synopsis page for this announcement on <http://www.grants.gov> (to find the synopsis page, go to <http://www.grants.gov> and click on the “Find Grant Opportunities” button on the left side of the page and then go to Search Opportunities/Browse by Agency and then go to EPA opportunities).

## Description of Application Materials

The application package *must* include all of the following materials:

1. **Cover letter:** The cover letter must outline the following information (suggested format at end of this Appendix):
  - A. Contact information for the applicant’s package
  - B. Number of copies of the full application
  - C. Data exchanges for which the applicant is requesting funding
  - D. Any additional partners on the grant
  - E. The amount of funds requested
  - F. Coordination efforts between the IM/IT and Environmental/Health Programs.
2. **Standard Form (SF) 424, Application for Federal Assistance:** Complete the form. There are no attachments. Please note that the applicant’s Dun and Bradstreet (D&B) Data Universal Number System (DUNS) number must be included on the SF-424. Organizations may obtain a DUNS number at no cost by calling the toll-free DUNS number request line at 1-866-705-5711.

3. **SF-424A, Budget Information for Non-Construction Programs:** Complete the form. There are no attachments. The total amount of federal funding requested for the two-year project period should be shown on line 5(e) and on line 6(k) of SF-424A. If indirect costs are included, the amount of indirect costs should be entered on line 6(j). The indirect cost rate (i.e., a percentage), the base (e.g., personnel costs and fringe benefits), and the amount should also be indicated on line 22. If indirect costs are requested, a copy of the Negotiated Indirect Cost Rate Agreement must be submitted as part of the application package. (See instructions for document 12 below.)
4. **SF-424B, Assurances for Non-Construction Programs:** Complete the form. There are no attachments.
5. **Lobbying Form – Certification Regarding Lobbying or Grants.gov Lobbying Form:** Complete the form, even if your organization does not lobby. There are no attachments.
6. **EPA Form 4700-4, Pre-Award Compliance Review Report:** Complete the form. There are no attachments.
7. **EPA Form 5700-54, Key Contacts Form:** Complete the form. There are no attachments. If additional pages are needed, attach these additional pages to the electronic application package by using the “Other Attachments Form” in the “Optional Documents” box. (See Application Preparation and Submission Instructions below for more details.)
8. **List of previous assistance agreements from the last three years:** Please submit a list of no more than five (5) Federally or non-Federally funded assistance agreements performed in the last three (3) years of similar size and scope to the current proposal. The list must include the following information: the type of grant; the applicant’s accomplishments under the assistance agreement; dates of the assistance agreement’s project period; and; the awarding agency and name and contact information for the grant project officer. If the applicant has a current and/or prior Exchange Network grant, it must be included in the list. Attach these additional pages to the electronic application package by using the “Other Attachments Form” in the “Optional Documents” box. (See Application Preparation and Submission Instructions below for more details.)
9. **Project Narrative Attachment Form – Work Plan, Including a Quality Assurance Narrative Statement:** Prepare the work plan and attach it by clicking on “Project Narrative Attachment Form” and then “Add Mandatory Project Narrative File.” (See Application Preparation and Submission Instructions below for more details.) The work plan should be no more than ten single-spaced pages, with a 10 pt font size. EPA is not required to review more than ten (10) pages. The work plan should include a discussion on how coordination will occur between the IM/IT and

the Environmental/Health programs. The work plan should include the information outlined below:

**A. General Project Information:**

1. Fiscal funding year and name of grant program (i.e., FY 2007 Exchange Network Grant Program)
2. Name of the applicant organization (i.e., state, territory, tribe and agency or department)
3. DUNS number
4. Title of Project – a short descriptive title (i.e., no more than 70 characters)
5. Project Description – a 3-5 sentence project description that highlights the major activities that are being proposed (i.e., infrastructure, data exchange/integration, and/or planning/mentoring/training activities)
6. Project Manager – name and contact information (i.e., mailing address, phone number, fax number, and email address)
7. Head of Agency/Department – name, title, and contact information (i.e., for EPA’s use in sending a notification letter, if the application is selected for funding)
8. Requested funding
  - total amount
  - portion of total requested as direct funding
  - portion of total requested as EPA-provided in-kind services, if any
9. Preferred assistance vehicle
  - grant or cooperative agreement (A cooperative agreement should be requested for projects that require substantial EPA involvement or the applicant is requesting EPA-provided in-kind services.)
  - amendment to an existing Performance Partnership Grant (PPG) or Consolidated Grant.

**B. Project Goals, Tasks, Target Dates, and Outputs/Outcomes:** Describe the major goals of the project covering *the two-year project period*. For each goal, outline the tasks that will be accomplished, along with the expected outputs and outcomes for each task. See Appendix E (Quality Assurance Guidelines) for some examples of possible project goals, tasks, target completion dates, and expected outputs/outcomes. Please note that the examples in Appendix E are not intended to limit the scope or types of projects that the applicant could propose. In addition, concisely describe the coordination and relationship between the IM/IT and Environmental/Health Programs on this project.

**C. Total Project Budget and Goal-Specific Costs:** List the *total project budget* and the *total costs associated with each goal*. Clearly indicate whether particular project goals must be completed before other goals can be pursued (e.g., a goal to implement an operational Exchange Network Node would need to be achieved before implementing Node-to-Node data Exchanges). This goal-specific budget information is important, since EPA may wish to consider partially funding some projects. More detailed budget information must be included in the Detailed

Itemized Budget. (See document 8 below.) Applicants are strongly encouraged to add funds for travel to national, regional and area Exchange Network conferences.

**D. Formal Project Partners – Roles/Responsibilities and Distribution of Funds:**

If the proposed project involves formal project partners – partners who will actively participate in implementing the project – please outline the following:

1. the roles and responsibilities of each partner in carrying out each of the project goals (i.e., as outlined in section B of the work plan);
2. how the funding, if awarded, would be distributed by the recipient among other project partners, if at all; and
3. how the applicant would ensure ongoing coordination and collaboration among the partners during the two-year project period (e.g., regular teleconferences, meetings, and/or written status reports).

**F. Programmatic Resources and Key Personnel:** Briefly describe the programmatic resources and key personnel that will be involved in the project. Highlight any expertise or past experiences that may be particularly helpful in carrying out the project. (Biographical sketches of the Project Manager(s) should be included in the application package, as described under section 13 below.)

**G. Relevance to the Exchange Network:** Describe how the project is relevant to the Exchange Network. This could include a description of how the project addresses one or more data exchange areas described in Appendix B of this document or the planning, mentoring, and/or training activities described in Appendix C. This section could also be used to describe how the project would involve using the Exchange Network in innovative ways to help address an environmental issue. This section could also be used to discuss how the project will build on the previous work of other Exchange Network partners.

**H. Past Performance:** Using the list of Federal or non-Federally funded assistance agreements of similar size and scope performed in the last three (3) years (no more than five (5), applicants must describe in the work plan how they documented and/or reported on whether they made progress towards achieving the expected results (e.g., outcomes and results) under the assistance agreements. If applicants did not make progress, the work plan needs to indicate whether, and how, this was documented. In evaluating applicants under this factor, EPA will consider the information provided by applicants, the semi-annual and final reports for Exchange Network assistance agreements, and may also consider relevant information from other sources including agency files (e.g., to verify and/or supplement the information supplied by applicants).

**10. Budget Narrative Attachment Form – Detailed Itemized Budget:** Prepare the Detailed Itemized Budget and attach it by clicking on “Budget Narrative Attachment Form” and then “Add Mandatory Budget Narrative.” (See Application Preparation and Submission Instructions below for more details.)

The *total project budget and the costs associated with each major goal* should be described in a detailed itemized budget. The budget must include the level of detail outlined below. Please note that if the following budgetary information is not included, it will delay the review of your application.

- A. Personnel – List all staff positions by title. Give the annual salary of each individual, the percentage of the individual’s time that would be assigned to the project, and total personnel cost for the budget period.
  - B. Fringe Benefits – Identify the fringe benefit rate (i.e., percentage), the basis for its computation, and the types of benefits included.
  - C. Travel – Specify the mileage, per diem, and estimated number of trips (i.e., specifying in-state and out-of-state trips) and other costs for each type of travel. Applicants are strongly encouraged to add funds for travel to national, regional and area Exchange Network conferences.
  - D. Equipment – Identify each item of equipment to be purchased which has an estimated acquisition cost of \$5,000 or more per unit and a useful lifetime of more than one year. Items with a unit cost of less than \$5,000 are deemed to be supplies, pursuant to 40 CFR 31.3 and 30.2.
  - E. Supplies – Supplies include all tangible personal property other than “equipment.” The detailed budget should identify categories of supplies to be procured (e.g., laboratory supplies or office supplies).
  - F. Contractual – Identify each proposed contract vehicle and specify its purpose and estimated cost.
  - G. Other – List each item in sufficient detail for U.S. EPA to determine whether the costs are reasonable or allowable.
  - H. Indirect Charges – If indirect charges are included in the budget, outline the approved indirect cost rate (i.e., must be verified based on the Indirect Cost Rate Agreement), a description of the base used to calculate indirect costs and total cost of the base, and the total indirect charges requested (i.e., product of rate times the base).
11. **SF-LLL, Disclosure of Lobbying Activities (i.e., required if your organization is involved in lobbying):** Complete and submit the form, even if your organization is not involved in lobbying activities.
12. **Other Attachments Form – Negotiated Indirect Cost Rate Agreement (if indirect costs are included in the project budget):** Use the “Other Attachments Form” in the “Optional Documents” box to attach a copy of your organization’s Indirect Cost Rate Agreement, if applicable. (See Application Preparation and Submission Instructions below for more details.) You must submit a copy of your

organization's Indirect Cost Rate Agreement as part of the application package if your proposed budget includes indirect costs.

**13. Other Attachments Form – Biographical Sketches for the Project Manager(s):**

Use the "Other Attachments Form" in the "Optional Documents" box to attach a copy of the biographical sketch of each project manager for the proposed project. Each biographical sketch should outline the education, work history, and knowledge/expertise of the individual that relate to managing the proposed project.

**Grants.gov Application Preparation and Submission Instructions**

**Documents 2 through 10 (except 8)** listed under Application Materials above should appear in the "Mandatory Documents" box on the Grants.gov Grant Application Package page.

For documents 2 through 7 and 10, click on the appropriate form and then click "Open Form" below the box. The fields that must be completed will be highlighted in yellow. Optional fields and completed fields will be displayed in white. If you enter an invalid response or incomplete information in a field, you will receive an error message. When you have finished filling out each form, click "Save." When you return to the electronic Grant Application Package page, click on the form you just completed, and then click on the box that says, "Move Form to Submission List." This action will move the document over to the box that says, "Mandatory Completed Documents for Submission." Follow the same general procedures for attaching documents 10 – the Detailed Itemized Budget – using the "Budget Narrative Attachment Form."

For documents 1, 8, and 9 you will need to attach electronic files. These documents may be added using two different functions "Add Optional Project Narrative File" and "Add Mandatory Project Narrative File." Prepare your cover letter as outlined above (see document 1 under Application Materials and suggested format at the end of this appendix) and save the document to your computer as an MS Word file. (U.S. EPA prefers to receive documents in MS Word.) Prepare your list of federally and/or non-federally funded assistance agreements as outlined above (see document 8 under Application Materials) and save the document to your computer as an MS Word file. To add the cover letter and the list of previous assistance agreements, click "Add Optional Project Narrative File" and then attach your documents (previously saved to your computer) using the browse window that appears. Prepare your project Work Plan as outlined above (see document 9 under Application Materials) and save the document to your computer as an MS Word file. When you are ready to attach your Work Plan to the application package, click on "Project Narrative Attachment Form," and open the form. Click "Add Mandatory Project Narrative File," and then attach your Work Plan (previously saved to your computer) using the browse window that appears. You may then click "View Mandatory Project Narrative File" to view it. Enter a brief descriptive title of your project in the space beside "Mandatory Project Narrative File Filename;" the filename should be no more than 40 characters long. When you have finished attaching the necessary documents, click "Close Form." When you return to the "Grant Application Package" page, select the "Project Narrative Attachment Form" and click

“Move Form to Submission List.” The form should now appear in the box that says, “Mandatory Completed Documents for Submission.”

**Documents 11 through 13** are listed in the “Optional Documents” box, but *please note that these so-called “optional” documents must also be submitted as part of the application package, if applicable to your organization.* You are required to submit document 11 – SF-LLL, Disclosure of Lobbying Activities – even if your organization is NOT involved in lobbying activities. You are required to submit document 12 – Negotiated Indirect Cost Rate Agreement – if you have included any indirect costs in your proposed budget. You must submit document 13 – Biographical Sketches for Project Manager(s). To attach document 12 and document 13, use the “Other Attachments Form” in the “Optional Documents” box. After attaching the documents, please remember to highlight the “Other Attachments Form” and click “Move Form to Submission List” in order to move the documents to the box that says, “Optional Completed Documents for Submission.”

Once you have finished filling out all of the forms/attachments and they appear in one of the “Completed Documents for Submission” boxes, click the “Save” button that appears at the top of the Web page. *It is suggested that you save the document a second time, using a different name, since this will make it easier to submit an amended package later, if necessary.* Please use the following format when saving your file: “Applicant Name – FY 2007 Exchange Network – 1<sup>st</sup> Submission” or “Applicant Name – FY 2007 Exchange Network – Back-up Submission.” If it becomes necessary to submit an amended package at a later date, then the name of the 2<sup>nd</sup> submission should be changed to “Applicant Name – FY 2007 Exchange Network – 2<sup>nd</sup> Submission.”

Once your application package has been completed and saved, send it to your AOR for submission to U.S. EPA through Grants.gov. Please advise your AOR to close all other software programs before attempting to submit the application package through Grants.gov.

In the “Application Filing Name” box, your AOR should enter your organization’s name (i.e., abbreviate where possible) and the words, “FY 2007 Exchange Network.” The filing name should not exceed 40 characters. From the “Grant Application Package” page, your AOR may submit the application package by clicking the “Submit” button that appears at the top of the page. The AOR will then be asked to verify the agency and funding opportunity number for which the application package is being submitted. If problems are encountered during the submission process, the AOR should reboot his/her computer before trying to submit the application package again. [It may be necessary to turn off the computer (not just restart it) before attempting to submit the package again. It may also be necessary to change to another computer.] If the AOR continues to experience submission problems, he/she may contact Grants.gov for assistance by phone at 1-800-518-4726 or email at <http://www.grants.gov/help/help.jsp> or call Edward Mixon at 202-566-2142. You are encouraged to submit your application early, in case problems are encountered that result in delays.

If you have not received a confirmation of receipt from EPA (not from grants.gov) within 30 days of the application deadline, please contact Edward Mixon, Exchange Network Grant Program Manager, at (202)-566-2142. Failure to do so may result in your application not being reviewed.

## Suggested template for cover letter

### *Letterhead*

Mr. Edward Mixon  
U.S. Environmental Protection Agency  
Office of Environmental Information  
Office of Information Collection  
1200 Pennsylvania Ave., NW, Mail Code 2823-T  
Washington, DC 20460

Dear Mr. Mixon:

I am pleased to submit [state, tribe or territory name here] [Name of Department or Agency]'s application for the FY 2007 Exchange Network Grants. The contact for this grant application is:

Name of Contact  
Title of Contact  
Name of Office or Division  
Name of Department or Agency  
Full Mailing Address  
Phone Number  
Fax Number  
Email address

[This package contains one original with signatures, and two copies of the full application package.] OR [This application was sent via Grants.gov.] [Name of Office or Division] [Name of Department or Agency] [Name of State, Tribe or Territory] in [name your EPA Region] are applying for [Amount of Funds applying for] in funding. We plan to develop [number of data exchanges] data exchanges: [name of data exchanges (with acronyms)] or the following data standards [list data standards].

We have ['no' or number of partners] partners in this grant proposal. [Our partners are: name partners].

[Detail collaboration between IM/IT Departments and Environmental/Health programs]:

- E.g., Attach letter from director of IM/IT in organization stating collaboration has occurred and in what ways.
- Description of collaboration efforts

If there are any questions, please feel free to call either myself or the contact named in this letter.

Sincerely,

Name of AOR or Director  
Name of Office or Division  
Name of Department or Agency

Attachment

# Appendix E

## Quality Assurance Guidelines

This appendix is designed to help states, territories, and tribes plan and implement high-quality Exchange Network projects. The success of Exchange Network projects depends on the achievement of definitive outputs and outcomes and on the quality of the products, services, and capabilities that are delivered. For example, the utility and interoperability of the Exchange Network depends on the use of compatible computer hardware/software and technical processes and on the use of agreed-upon data standards and XML schema.

The table below outlines some of the goals, tasks, outputs, outcomes, and relevant quality assurance guidance documents that may be useful to applicants when developing their proposed project work plans. *The goals and tasks included in this table are only examples of the types of activities applicants may wish to propose, and they are not intended to limit the types of projects or activities that applicants may propose.*

Applicants for the FY 2007 Exchange Network Grant Program are not required to submit a Quality Assurance Project Plan (QAPP) as part of the application package. Each applicant who receives an award will be required to submit a QAPP that is tailored to the activities in his/her particular proposal within a specified period of time after the award is issued, as a programmatic condition of the Assistance Agreement. See the attached table as a framework to ensure that all activities are covered.

**FY 2007 ENVIRONMENTAL INFORMATION EXCHANGE NETWORK GRANT PROGRAM  
QUALITY ASSURANCE GUIDELINES**

| GOAL  | TASK                                    | OUTPUT                                    | OUTCOME  | QUALITY ASSURANCE GUIDANCE DOCUMENTS  |
|---|---|---|--|---|
| <b>Activity Group: Infrastructure Development</b> |   |   |  |   |
| Develop and implement an Exchange Network Node    | Review demonstrated Node configurations | Appropriate Node configuration identified | The state/territory/tribe understands the requirements for developing an Exchange Network Node in the information technology environment of that state/territory/tribe | <p>Refer to the “Node Developer Tool Box” at <a href="http://www.exchangenetwork.net/Node/dev_toolbox/index.htm">http://www.exchangenetwork.net/Node/dev_toolbox/index.htm</a></p> <p>See the Demonstrated Node Configuration (DNC) documents available at <a href="http://www.exchangenetwork.net/Node/dnc/index.htm">http://www.exchangenetwork.net/Node/dnc/index.htm</a></p>  |
|   | Develop an Exchange Network Node        | Node developed, but not yet tested        | The state/territory/tribe understands the Exchange Network Node specifications and requirements that will enable automated data exchanges                              | <p>See the “30 Minute Guide to Developing and Implementing an Exchange Network Node,” at <a href="http://www.exchangenetwork.net/Node/dev_toolbox/Node_guide_v1.1.doc">http://www.exchangenetwork.net/Node/dev_toolbox/Node_guide_v1.1.doc</a></p> <p>See the “Network Node Functional Specification, Version 1.1” at <a href="http://www.exchangenetwork.net/Node/dev_toolbox/Node_functional_spec_v1.1.pdf">http://www.exchangenetwork.net/Node/dev_toolbox/Node_functional_spec_v1.1.pdf</a></p> <p>See the “Network Exchange Protocol, Version 1.1” at <a href="http://www.exchangenetwork.net/Node/dev_toolbox/network_exchange_protocol_v1.1.pdf">http://www.exchangenetwork.net/Node/dev_toolbox/network_exchange_protocol_v1.1.pdf</a></p> <p>See the “Network Security Guidelines and Recommendations,” at <a href="http://www.exchangenetwork.net/Node/dev_toolbox/security_guidelines_041603.pdf">http://www.exchangenetwork.net/Node/dev_toolbox/security_guidelines_041603.pdf</a></p> |

| GOAL | TASK   | OUTPUT  | OUTCOME   | QUALITY ASSURANCE GUIDANCE DOCUMENTS   |
|------|--|---|---|--|
|      | Test the Node to verify compliance with Exchange Network Node functional specifications and address any shortcomings | Node tested and compliant with functional specification verified  | Better understanding of how to meet the Network Node specifications within a particular information technology environment  | See the Node “Integration Test Tool” at <a href="http://www.exchangenetwork.net/node/configurations.htm">http://www.exchangenetwork.net/node/configurations.htm</a>  |
|      | Implement an operational Node  | <p>Operational status of Node verified by EPA’s Central Data Exchange or other means</p> <p>Demonstrated ability to exchange data automatically through the Node with other Exchange Network partners</p> | <p>Increased speed and timeliness of data exchanges</p> <p>Increased efficiency of data exchanges by reducing administrative burdens and need for manual interventions</p> <p>Lower costs and expanded functionality of infrastructure due to the sharing of information technology components and tools among partners</p> | See “Exchange Network Node Implementation Guide, Version 1.0” at <a href="http://www.exchangenetwork.net/Node/dev_toolbox/implementation_guide_v1.0_032504.pdf">http://www.exchangenetwork.net/Node/dev_toolbox/implementation_guide_v1.0_032504.pdf</a> |

| GOAL   | TASK   | OUTPUT   | OUTCOME  | QUALITY ASSURANCE GUIDANCE DOCUMENTS  |
|--|--|--|--|---|
| Enhance other infrastructure capabilities to improve Exchange Network capabilities | Assess current infrastructure capabilities: security controls, Web procedures, and data management processes that would identify any areas where enhancements are needed | Assessment of security controls in comparison to recommended controls                  | Better understanding of security threats and vulnerabilities and the types of controls needed to minimize risks  | See the “Network Security Guidelines and Recommendations,” at <a href="http://www.exchangenetwork.net/Node/dev_toolbox/security_guidelines_041603.pdf">http://www.exchangenetwork.net/Node/dev_toolbox/security_guidelines_041603.pdf</a>   |
|  | Implement the security controls, Web procedures, and data management processes that are needed to participate in the Exchange Network                                    | Security controls that comply with the Network security guidelines and recommendations | Implementation of the security controls needed to ensure that the availability, integrity, and if necessary, the confidentiality of the data will not be compromised |   |
| <b>Activity Group: Data Exchange and Integration</b>                               |  |  |  |   |
| Develop and implement an Exchange Network data exchange                            | Identify data exchanges that are of most interest to Exchange Network partners   | Verification that the data exchange is of interest to other Exchange Network partners  | Clearer understanding of the data that are needed or of value to other states/territories/tribes and that could be exchanged using the Exchange Network              | Refer to Appendix B of the FY 2007 Solicitation Notice for EPA Program Office suggestions<br><br>See the “Core Reference Model,” an inventory that organizes and identifies commonalities among current/potential state and EPA data exchanges, <a href="http://www.exchangenetwork.net/dev_schema/crm_v1_033103.pdf">http://www.exchangenetwork.net/dev_schema/crm_v1_033103.pdf</a> |

| GOAL | TASK  | OUTPUT  | OUTCOME   | QUALITY ASSURANCE GUIDANCE DOCUMENTS  |
|------|---|---|---|---|
|      | Work with other partners to specify the data exchange requirements                          | Data exchange requirements specified  | Identification of the initial areas to be addressed by partners when developing Trading Partner Agreements                                | Refer to Appendix B of the FY2007 Solicitation Notice for EPA Program Office suggestions  |
|      | Determine whether approved data standards exist that may apply to the data exchange         | Relevant data standards identified  | The use of data standards in data exchanges will facilitate the preparation of XML schema or the mapping of data to registered XML schema | See Environmental Data Standards Council (EDSC)-approved data standards, <a href="http://www.envdatastandards.net">http://www.envdatastandards.net</a>  |
|      | Incorporate approved data standards into the data that are collected, stored, and exchanged | Incorporation of approved data standards into Exchange Network data exchanges | Enhanced partner capabilities for analyzing, comparing, and integrating data due to the use of common data standards and formats          | See Environmental Data Standards Council (EDSC)-approved data standards, <a href="http://www.envdatastandards.net">http://www.envdatastandards.net</a>  |
|      | Obtain approved XML schema, if available  | XML schema obtained   | Enhanced ability of a partner to participate in a particular Exchange Network data exchange   | See the Exchange Network XML Registry for a list of approved XML schema and schema components at <a href="http://oaspub.epa.gov/emg/xmlsearch\$.startup">http://oaspub.epa.gov/emg/xmlsearch\$.startup</a><br><br>See the “Shared Schema Components Usage Guide and Technical Reference” at <a href="http://www.exchangenetwork.net/dev_schema/SharedSchemaComponents-UsageGuide_v2.0.pdf">http://www.exchangenetwork.net/dev_schema/SharedSchemaComponents-UsageGuide_v2.0.pdf</a> |

| GOAL | TASK   | OUTPUT   | OUTCOME  | QUALITY ASSURANCE GUIDANCE DOCUMENTS   |
|------|--|--|--|--|
|      | If an XML schema for the data exchange of interest is not available, establish or participate in a EPA Integrated Project Team (IPT) to develop a schema | Participation in an IPT  | Enhanced collaboration among Exchange Network partners to implement data exchanges of interest                 |  |
|      | Develop an XML schema  | New or revised XML schema developed, but not yet tested                          | Contribution to XML schema modules listed in the Exchange Network XML Registry and to the Core Reference Model | See the “XML Schema Development” at <a href="http://www.exchangenetwork.net/dev_schema/index.htm">http://www.exchangenetwork.net/dev_schema/index.htm</a> and the “XML Design Rules and Conventions” at <a href="http://www.exchangenetwork.net/dev_schema/EN_XML_Schema_Design_Rules_v1.1.pdf">http://www.exchangenetwork.net/dev_schema/EN_XML_Schema_Design_Rules_v1.1.pdf</a>  |
|      | Test the XML schema for compliance with the Exchange Network Design Rules and Conventions and justify, document, and address any deviations              | Documentation of XML schema testing and follow-up schema revisions, if necessary | Contribution to the XML Registry and Core Reference Model for possible reuse by other partners                 | See the “XML Schema Review Process” at <a href="http://www.exchangenetwork.net/dev_schema/CRMv2_0.doc?bcsi_scan_79C1E2FF29C0C6D8=1">http://www.exchangenetwork.net/dev_schema/CRMv2_0.doc?bcsi_scan_79C1E2FF29C0C6D8=1</a><br><br>See the Schema Design Tool for the Facility Registry System (FRS) at <a href="http://www.epa.gov/enviro/html/frs_demo/design_tool.html">http://www.epa.gov/enviro/html/frs_demo/design_tool.html</a> |
|      | Post new or revised XML schemas on the Exchange Network XML Registry   | New or revised XML schema posted   | Use of common XML schema allows multiple partners to share data across the Exchange Network                    | See the Exchange Network XML Registry for a list of approved XML schema and schema components at <a href="http://oaspub.epa.gov/emg/xmlsearch\$.startup">http://oaspub.epa.gov/emg/xmlsearch\$.startup</a>   |

| GOAL | TASK  | OUTPUT  | OUTCOME  | QUALITY ASSURANCE GUIDANCE DOCUMENTS   |
|------|---|---|--|--|
|      | Map data in partner databases to the approved XML schema  | Data mapped to XML schema   | Increased availability of data from a particular partner to other Exchange Network partners    |  |
|      | Develop schema validation and data error-checking tools   | Availability of schema validation and error-checking tools to improve the quality of data exchanged over the Exchange Network | Availability of higher-quality data for decision-making and programmatic operations            |  |
|      | Establish Trading Partner Agreements (TPAs) or similar agreements that describe the parameters for exchanging the data with other Exchange Network partners | TPAs established with other Exchange Network partners   | Agreed-upon exchanges of data through the Exchange Network to address partners' business needs | "Trading Partner Agreements: Analysis and Best Practices" at <a href="http://www.exchangenetwork.net/exchanges/TPA_Final_Report_Best_Practices.pdf">http://www.exchangenetwork.net/exchanges/TPA_Final_Report_Best_Practices.pdf</a> |
|      | Implement an operational Exchange Network data exchange   | Exchange Network data exchange becomes operational  | Electronic availability of standardized, timely, high-quality data over the Exchange Network   |  |

| GOAL  | TASK  | OUTPUT  | OUTCOME  | QUALITY ASSURANCE GUIDANCE DOCUMENTS  |
|---|---|---|--|---|
| Analyze or integrate data that are shared through the Exchange Network to address an environmental or related issue | Identify data analysis needs  | Description of data analysis needs  | Better understanding of data analysis needs and capabilities                                       | See 2003 Draft Report on the Environment,”<br><a href="http://www.epa.gov/indicators/roe/html/roeTOC.htm">http://www.epa.gov/indicators/roe/html/roeTOC.htm</a>   |
|   | Identify relevant data that are available through the Exchange Network  | List of relevant data that are available from Exchange Network partners               | Better understanding of how the Exchange Network can be used to address data and information needs | See State Information Technology Profiles available from the Environmental Council of the States (ECOS) at<br><a href="http://www.ecos.org/section/committees/information_management">http://www.ecos.org/section/committees/information_management</a> |
|   | Establish Trading Partner Agreements (TPAs) or similar agreements with other Exchange Network partners to share relevant data | TPAs established with other Exchange Network partners                                 | Agreed-upon exchanges of data using the Exchange Network to address partners’ business needs       | “Trading Partner Agreements: Analysis and Best Practices” at<br><a href="http://www.exchangenetwork.net/exchanges/TPA_Final_Report_Best_Practices.pdf">http://www.exchangenetwork.net/exchanges/TPA_Final_Report_Best_Practices.pdf</a>                 |
|   | Develop data analysis tools and protocols   | Availability of data analysis tools and protocols to other Exchange Network partners  | Greater capability to analyze data available through the Exchange Network                          |   |
|   | Develop or utilize Web Services to address identified business needs  | Increased availability and use of Web Services available through the Exchange Network | Increased use, analysis, and integration of data across institutional boundaries                   |   |

| GOAL  | TASK  | OUTPUT  | OUTCOME  | QUALITY ASSURANCE GUIDANCE DOCUMENTS   |
|---|---|---|--|--|
|   | Conduct data analyses using data available through the Exchange Network | Data analysis results that can be shared with other Exchange Network partners | Enhanced understanding of an environmental or related issue  |  |
| Use the Exchange Network to exchange geospatial data to enhance environmental decision-making and programmatic operations. Such a project might require the development of the dataset before exchange. | Prepare standard geospatial metadata for geospatial datasets            | Relevant geospatial metadata is developed and published                       | Preparation of standard metadata ensures geospatial data can be easily searched and discovered by Network partners       | See Federal Geographic Data Commission Web site for federal geospatial data standards, <a href="http://www.fgdc.gov/metadata">http://www.fgdc.gov/metadata</a><br><br>See Geospatial One Stop Web site for publishing geospatial datasets, <a href="http://gos2.geodata.gov/wps/portal/gos">http://gos2.geodata.gov/wps/portal/gos</a> |
|   | Determine if geospatial dataset already exists                          | Relevant geospatial datasets identified                                       | The re-use of existing datasets prevents duplicative efforts, reduces costs and ensures consistency across network Nodes | See Geospatial One Stop Web site for existing geospatial datasets, <a href="http://gos2.geodata.gov/wps/portal/gos">http://gos2.geodata.gov/wps/portal/gos</a>   |

**Activity Group: Planning, Mentoring, and Training**

|   |   |   |  |  |
|---|---|---|--|--|
| Address key training and mentoring needs of Exchange Network partners | Identify the training and mentoring needs of current and potential Exchange Network partners and conduct pre-training and mentoring assessments | Identification of organizations that need training and mentoring and assessment of pre-training and mentoring levels of knowledge | Better understanding of Exchange Network partners training and mentoring needs   |  |
|   | Develop training and mentoring materials and courses  | Availability of training and mentoring materials and courses that can be used by other partners                                   | Increase or enhance participation in the Exchange Network by states/territories/tribes                                       |  |
|   | Distribute training and mentoring materials and conduct training and mentoring courses  | Number of training and mentoring sessions conducted   | Increased knowledge about the Exchange Network and how it can be used to enhance decision making and programmatic operations |  |

|  |  |   |  |   |
|--|--|---|--|---|
|  | Conduct post-training and mentoring assessments and address any shortcomings in the training and mentoring materials/courses | Assessment of post-training and mentoring level of knowledge and revised training and mentoring materials/courses | Continuing improvements in the training and mentoring available to Exchange Network partners             |   |
| Engage in collaborative planning activities to address data and information needs using the Exchange Network | Identify data and information needs that could be addressed using the Exchange Network                                       | Identify major data and information needs   | Better understanding of shared data and information needs among Exchange Network partners                | <p>Refer to Appendix B of the FY 2007 Solicitation Notice for EPA Program Office descriptions of key data exchanges</p> <p>See the “Core Reference Model,” an inventory that organizes and identifies commonalities among current/potential partner and EPA data exchanges,<br/> <a href="http://www.exchangenetwork.net/dev_schema/crm_v1_033103.pdf">http://www.exchangenetwork.net/dev_schema/crm_v1_033103.pdf</a></p> <p>See 2003 Draft Report on the Environment,”<br/> <a href="http://www.epa.gov/indicators/roe/html/roeTOC.htm">http://www.epa.gov/indicators/roe/html/roeTOC.htm</a></p> |
|  | Outline the planning project activities and expected outputs/outcomes  | Written documentation of project goals, activities, and expected outputs/outcomes                                 | Clearer understanding of the steps that need to be taken to address the identified data/information need |   |

|  |  |  |   |  |
|--|--|--|---|--|
|  | <p>Identify and establish collaboration among relevant partners</p>  | <p>Written documentation of partner roles, responsibilities, and expectations</p>  | <p>Increase collaboration among partners to address major data and information needs</p>                                      |  |
|  | <p>Describe what resources are needed to carry out the project and how they will be distributed among the project partners</p> | <p>Written documentation of how available funds will be distributed across the project among the partners</p>  | <p>Increased knowledge about the needs, capabilities, and expertise of other Exchange Network partners</p>                    |  |
|  | <p>Implement the planning project, record the results, and outline the next steps</p>  | <p>Description of the results of the planning process that can be used as a foundation for the development and implementation of new Exchange Network capabilities</p> | <p>Multi-partner foundation for collaboratively developing and implementing new or enhanced Exchange Network capabilities</p> |  |

**Activity Group: Collaboration**

Engage in multi-partner collaboration to undertake the activities under the Data Exchange and Integration and the Mentoring, Planning and Training groups

Tasks may include any of those listed above.

See the outputs listed above.

See the outcomes listed above.

Refer to the guidance documents listed above. Also see Section III-1 for Eligibility criteria.

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
Quality Assurance Reporting Form  
for Use by Recipients of Assistance Agreements**

|   |   |
|---|---|
| <b>Recipient Organization:</b><br><br><b>Name:</b><br><br><b>Address:</b> | <b>EPA Award Number:</b>  |
|   | <b>Project/Program Period(starting and ending dates, mm/dd/yyyy):</b> |

**Activity Group:**     Infrastructure Development                       Planning, Mentoring, and Training  
(check all that apply)     Data Exchange, Analysis and Integration             Challenge

| Goal | Task | Output | Outcome | Quality Assurance Measures |
|------|------|--------|---------|----------------------------|
|      |      |        |         |                            |
|      |      |        |         |                            |

**Instructions:**    - Please submit electronically to your Project Officer within 90 days of award.  
                           - For Quality Assurance Measures, please refer to the current Solicitation Notice Quality Assurance Guidelines.  
                           - For Goals, please refer to goals outlined in your assistance agreement work plan.

**Paperwork Reduction Act (PRA) Burden Statement:** The public reporting and recordkeeping burden for this collection of information is estimated to average one hour per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

# Appendix F

## **Semi -Annual Performance Progress Reports**

Reporting is an important obligation that award recipients agree to undertake when they sign an Assistance Agreement. Both EPA and the recipients are accountable to Congress and to the public for the proper and effective use of Exchange Network assistance funds. The award recipient must submit *Semi-Annual Progress Reports* to the EPA Regional Project Officer electronically (i.e., via email), with a copy to the Exchange Network Grant Program Manager at EPA Headquarters. EPA expects all award recipients to submit complete and timely reports, and it will consider compliance with reporting requirements when evaluating future applications for financial assistance. The EPA Project Officer will be assigned when the award is issued.

These progress reports must be submitted within one month of the end of the reporting period. The reporting periods are from October through March (report due April 30) and from April through September (report due October 31). The first reporting period for the FY 2007 Exchange Network assistance agreements will be from the start of the project period through March 31, 2008, and the first semi-annual report will be due to EPA on April 30, 2008. Please use the form provided here.

In addition to the semiannual reports, the recipient agrees to submit to the EPA Project Officer within 90 days after the expiration or termination of the approved project period a final report using the *Semi-Annual Performance Progress Reports* form.

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
Exchange Network Grant Program Progress Reporting Form  
for Use by Recipients of Assistance Agreements**

|   |   |  |  |  |
|---|---|--|--|--|
| Please Check:<br><input type="checkbox"/> Semi-annual report<br><input type="checkbox"/> Final Report | <i>Instructions: This form is for Exchange Network Grant recipients to report their progress. Recipients should send these to their regional grant project officer for spring reports by April 30 for the period October 1-March 31. Fall reports are due to the regional project officer by October 31 for the period April 1-September 30.</i>  |  |  |  |
| <b>Recipient Information:</b><br><br><b>Agency Name:</b>  | <b>EPA Grant Number – Program Code, Number, and Amendment Number (e.g., OS – 12345678 – 0):</b><br><br><b>For grants awarded before 2006 Exchange Network Grant Category (i.e., One Stop, Readiness, Implementation, or Challenge):</b>   |  |  |  |
| <b>Project Manager:</b><br><br><b>Name:</b><br><br><b>Phone:</b><br><br><b>Email:</b>                 | <b>Funding Year:</b><br><b>Award Amount:</b><br><b>Expenditures during this reporting period:</b><br><b>Funds Remaining:</b><br><br><table border="1" data-bbox="879 987 1980 1096"> <tr> <td data-bbox="879 987 1430 1096"> <b>Reporting Period (starting and ending dates, mm/dd/yyyy):</b> </td> <td data-bbox="1430 987 1980 1096"> <b>Date Report Submitted (mm/dd/yyyy):</b> </td> </tr> </table> <b>EPA Project Officer to Whom Report is Submitted:</b><br><br><b>Name:</b><br><br><b>EPA Region/Program:</b> |  | <b>Reporting Period (starting and ending dates, mm/dd/yyyy):</b> | <b>Date Report Submitted (mm/dd/yyyy):</b> |
| <b>Reporting Period (starting and ending dates, mm/dd/yyyy):</b>                                      | <b>Date Report Submitted (mm/dd/yyyy):</b>  |  |  |  |
| <b>Focus:</b>   |   |  |  |  |

**Progress Report Instructions:**

1. List major goals and each goal's outputs as described in the work plan.
2. In the "Scheduled Date" column enter the dates from the grant work plan
3. In the "Completion Date" column enter the date each output completed as of the period covered by this report
4. In the Outcomes column, briefly outline how the goal or output will enhance the recipient's ability to carry out its mission or result in other benefits.
5. Use **bold type** for the outputs or outcomes you achieved during the current reporting period.
6. Insert more rows if you need them by using the tab key in the last cell of the last row.

**EXAMPLE**

| <i>Goals</i>   | <i>Outputs</i>                                     | <i>Scheduled Date</i> | <i>Completion date</i> | <i>List Outcomes for Each Goal, and, if they differ, each Output</i>                                 |
|--|--|-----------------------|------------------------|--|
| <i>1. Begin flowing ambient air quality data through the Exchange Network.</i> | <i>1. Develop XML schema by.</i>                   | <i>mm/yyyy</i>        | <i>mm/yyyy</i>         | <i>Enhanced environmental decision-making due to more timely access to ambient air quality data.</i> |
|  | <i>2. Initiate first test data flow by mm/yyyy</i> | <i>mm/yyyy</i>        |                        |  |

| <i>Goals</i> | <i>Outputs</i> | <i>Scheduled Date</i> | <i>Completion date</i> | <i>List Outcomes for Each Goal, and, if they differ, each Output</i> |
|--------------|----------------|-----------------------|------------------------|--|
|              |                |                       |                        |  |
|              |                |                       |                        |  |
|              |                |                       |                        |  |
|              |                |                       |                        |  |
|              |                |                       |                        |  |

| <i>Goals</i> | <i>Outputs</i> | <i>Scheduled Date</i> | <i>Completion date</i> | <i>List Outcomes for Each Goal, and, if they differ, each Output</i> |
|--------------|----------------|-----------------------|------------------------|--|
|              |                |                       |                        |  |
|              |                |                       |                        |  |
|              |                |                       |                        |  |
|              |                |                       |                        |  |

|  |
|--|
| <p><b>Comments</b><br/> Instructions: If you have had any problems during the current period please report them here. In accordance with 40 C.F.R. §30.51(f) and 40 C.F.R. §31.40(d), a recipient of an EPA assistance agreement must notify EPA of any problems, delays, or adverse conditions that will materially impair the recipient's ability to achieve the outputs/outcomes specified in the assistance agreement work plan.</p> |
| <p><b>Current problems during this reporting period:</b><br/><br/> Describe any actions your organization has taken or plans to take to resolve the problem:</p>   |
| <p><b>If you need help from EPA you may request it here:</b></p>   |
| <p><b>Other comments:</b></p>  |
| <p><b>Definitions</b><br/> • <b>Project/Program Goal:</b> A major objective or endpoint identified in the assistance agreement work plan. A work plan may include one or more</p>  |

project/program goals. Use the goals as described in the assistance agreement work plan.

- **Output:** A product, service, or implementation target that will be produced or achieved during the project/program. Outputs may be *qualitative or quantitative*, but *they must be measurable during the assistance agreement funding period*.
- **Outcome:** Changes or benefits resulting from the successful achievement of the project/program activities and outputs. Outcomes may be environmental, behavioral, health-related, or programmatic in nature, but they must be *quantitative*. *Outcomes may not necessarily be achievable within the assistance agreement funding period*, and they can be described as short-term, intermediate, or long-term:
  - 1) *short-term* – changes in learning, knowledge, attitudes, or skills;
  - 2) *intermediate* – changes in behavior, practices, or decisions; or
  - 3) *long-term* – changes in environmental, human health, or other conditions.

**Paperwork Reduction Act (PRA) Burden Statement:** The public reporting and recordkeeping burden for this collection of information is estimated to average one hour per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.