

enfoTech

Sales: 609.896.9777
Fax: 609.896.2555
www.enfotech.com

October 6, 2009

Ms. Roberta Wagner
West Virginia Department of Administration
Purchasing Division
Building 15
2019 Washington Street, East
Charleston, WV 25305-0130

Subject: RFQ EHS10018 – Centralized Data Node Exchange

Dear Ms. Wagner:

enfoTech & Consulting, Inc. is pleased to submit the enclosed Bid to the State of West Virginia to provide development and implementation services for a Centralized Data Node Exchange.

This submittal contains one (1) original signed bid and one (1) copy in a sealed envelope.

The proposal outlines enfoTech's project approach and technical implementation plan to ensure successful completion of the project. We strongly feel that we offer the state of West Virginia unsurpassed knowledge and project experience and are very confident that we will be able to deliver services that will meet/exceed the State's expectations.

enfoTech thanks you for the opportunity to present this Bid. We look forward to continuing to explore opportunities to serve the state of West Virginia.

Sincerely,


Tony C. Jeng
Executive Vice President

Enclosures

RECEIVED

2009 OCT -7 A 9:36

PURCHASING DIVISION
STATE OF WV

DEVELOP AND IMPLEMENT A CENTRALIZED DATA NODE EXCHANGE: TECHNICAL PROPOSAL

RFQ#: EHS10018

Prepared for
**West Virginia Department of Health & Human
Resources**

October 7, 2009

enfoTech

11 Princess Road, Unit A
Lawrenceville, New Jersey 08648
www.enfotech.com

Restriction on Use and Disclosure of Proposal Information

This proposal includes data that should not be disclosed outside the business entity for which it was intended, indicated as the recipient on this title page; and should not be duplicated, used, or disclosed – in whole or in part – for any purpose other than to evaluate this proposal. However, if a contract is awarded to enfoTech & Consulting, Inc. as a result of – or in connection with – the submission of this data, the business entity will have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the business entity's right to use information contained in this data if it is obtained from another source.

Copyright © 2001 – 2009 by enfoTech & Consulting Inc. All Rights Reserved.



Tables of Contents

- 1 INTRODUCTION.....5**
- 2 COMPANY QUALIFICATIONS7**
 - 2.1 CORPORATE PROFILE.....7
- 3 TECHNICAL INFORMATION9**
 - 3.1 OVERVIEW9
 - 3.2 **1** DELIVERABLE 1: EXCHANGE NETWORK NODE 10
 - 3.3 **2** DELIVERABLE 2: EXCHANGE INTERFACE TO LAB-TO-STATE..... 19
 - 3.4 **3** DELIVERABLE 3: EXCHANGE INTERFACE FOR ELECTRONIC MOR SUBMISSION31
 - 3.5 **4** DELIVERABLE 4: EXCHANGE INTERFACE FOR SWOCS35
- 4 PROJECT APPROACH.....37**
 - 4.1 PROJECT MANAGEMENT PRINCIPLES.....37
 - PROJECT MANAGEMENT PRINCIPLES37**
 - 4.2 GENERAL PROJECT ROLES & RESPONSIBILITIES.....37
 - 4.2.1 ENFOTECH RESPONSIBILITIES.....38
 - 4.2.2 WV-DHHR'S RESPONSIBILITIES.....38
 - 4.3 PROJECT TASKS, DELIVERABLES, AND ROLES/RESPONSIBILITIES39
 - 4.4 DELIVERY AND INSTALLATION/TRAINING OF NODE SOFTWARE40
 - 4.5 REQUIREMENTS & DESIGN PHASE.....40
 - 4.6 DEVELOPMENT PHASE.....41
 - 4.7 DEPLOYMENT/ACCEPTANCE TESTING PHASE.....42
 - 4.8 KNOWLEDGE TRANSFER / DOCUMENTATION PHASE43
 - 4.9 PRODUCT DEPLOYMENT PHASE.....43
 - 4.10 PROJECT SCHEDULE.....44
- 5 PRICE PROPOSAL47**
 - 5.1 BID SHEET47
 - 5.2 DETAILED COST ESTIMATES.....48
 - 5.3 PAYMENT SCHEDULE.....48

1 Introduction

enfoTech & Consulting, Inc. (enfoTech) is pleased to submit this proposal to provide products and services in response to West Virginia Department of Health and Human Resources' (WV-DHHR) Centralized Data Node Exchange solicitation.

This document outlines our technical and business approaches proposed to address the Centralized Data Node Exchange project requirements. Below are highlights from the proposal that we feel illustrate how the technical solution and project approach we propose would offer significant benefits to WV-DHHR:

- **Proven Exchange Network Node Implementation Experience:** enfoTech has been a widely recognized leader in developing Exchange Network Node solutions since 2002. We were a member of the Node beta workgroup in 2002 and since that time have implemented over 50 Exchange Network data flows for 16 state and tribal partners. We have developed a strong working relationship with state and tribal partners for Node and Node data flow development. We have been actively participating in/contributing to the Exchange Network core technology innovation and development, from its inception up through the latest Node 2.0 specifications. This experience in Exchange Network core technologies allows enfoTech to offer unique technical expertise to WV-DHHR for this project.
- **Proven e-MOR and e-DWR Online Reporting Solution:** enfoTech's E2 Software is a proven solution to allow public water systems (PWS) to report a variety of monthly operating reports online (e-MOR), using either manual upload or online entry approaches. The Java-based E2 software has been used by public agencies to report MOR data in a format similar to the forms currently in use at WV-DHHR. This will allow the project team to reuse a several key items such as the MOR XML reporting schema and MOR data validation processes, which are beneficial to meeting the 12 month project deadline.
We have also specialized in developing laboratory-to-state drinking water e-Reporting systems (e-DWR), having developed electronic drinking water e-Reporting solutions for New Jersey DEP, Ohio EPA, Rhode Island DOH, and Michigan DEQ. enfoTech led the multi-state e-DWR Exchange Network Challenge Grant to develop a nationally consistent electronic laboratory reporting format. We are the original author of the e-DWR XML schema for this purpose and worked with EPA to harmonize the SDWIS reporting XML schema with the e-DWR XML schema.
- **SDWIS/State Integration:** Integration with EPA's SDWIS/State is essential for this project for both laboratory data (via Lab to State) and MOR data (via direct interface). enfoTech has extensive experience in integrating e-DWR and e-MOR e-reporting solutions with SDWIS/State. As a part of our past project experience, we have developed comprehensive bi-directional exchanges with SDWIS/State to ensure relevant information is provided to the PWS and laboratories, and submissions are fully validated prior to import back into SDWIS. This in-depth knowledge of the SDWIS application and data model is valuable in protecting the data integrity of your data management system.
- **CROMERR Compliant Solution:** E2 provides comprehensive user authentication, access authorization, e-signature management, and copy-of-record management (along with many additional security features) to help our customers meet their

CROMERR requirements. In addition, we are experienced in working with our State customers during the CROMERR application process to ensure that E2 is compliant with all CROMERR requirements. CROMERR features are available for all electronic reports (including e-DWR and e-MOR reporting forms) submitted through E2.

- **High Quality CMMI-3 Implementation Services:** enfoTech is a CMMI Level 3 candidate corporation and is expected to receive a full certification by the end of 2009. We have included a CMMI-3 quality management plan to guide the project implementation and to ensure that deliverables are of good quality, on time, and within budget.

We understand WV-DHHR's business needs and are committed to delivering the proposed solution on-time and within budget. This project requires a unique combination of **Node experience, e-DWR/e-MOR experience, and CROMERR compliance experience.** Our experience is particularly suited to meet this unique combination of requirements and will allow us to hit the ground running without a costly learning curve.

Our proposal response includes the following components:

1. Overview of Company Qualifications (**Section 2**)
2. Technical Proposal (**Section 3**)
 - o Deliverable #1: Exchange Network Node (**Section 3.1**)
 - o Deliverable #2: Exchange Interface for Lab to State (**Section 3.3**)
 - o Deliverable #3: Exchange Interface for MORs (**Section 3.3**)
 - o Deliverable #4: Secured SWOCS Website (**Section 3.1**)
3. Project Approach (**Section 4**)
 - o Project Tasks
 - o Deliverables
 - o Project Schedule
4. Project Bid Sheet (**Section 5**)

2 Company Qualifications

2.1 Corporate Profile

Founded in 1994, enfoTech & Consulting, Inc. is a software and consulting company dedicated to the development, support, and implementation of computer systems committed to solutions for environmental and health compliance applications. We provide software solutions and consulting services to help our customers manage compliance and increase productivity. enfoTech's turnkey system solutions have proven to be a critical component of effective and informed decision-making for our clients.

Since 2001, enfoTech has been actively involved with States, ECOS, and the USEPA partners to support the National Environmental Information Exchange Network (Exchange Network). We participate in the development of Exchange Network Nodes, environmental data standards, Core Reference Model, XML schema, DET Design Policy, and XML Registry. Our past EN project experiences will be very valuable to this project.

Office Location: enfoTech's office is located in Central New Jersey. Our office address is:

11 Princess Road
Unit A
Lawrenceville, NJ 08648
Phone: (609) 896-9777
Fax: 609-896-2555
Web site: <http://www.enfotech.com>

Responsible Official: All questions or comments should be directed to:

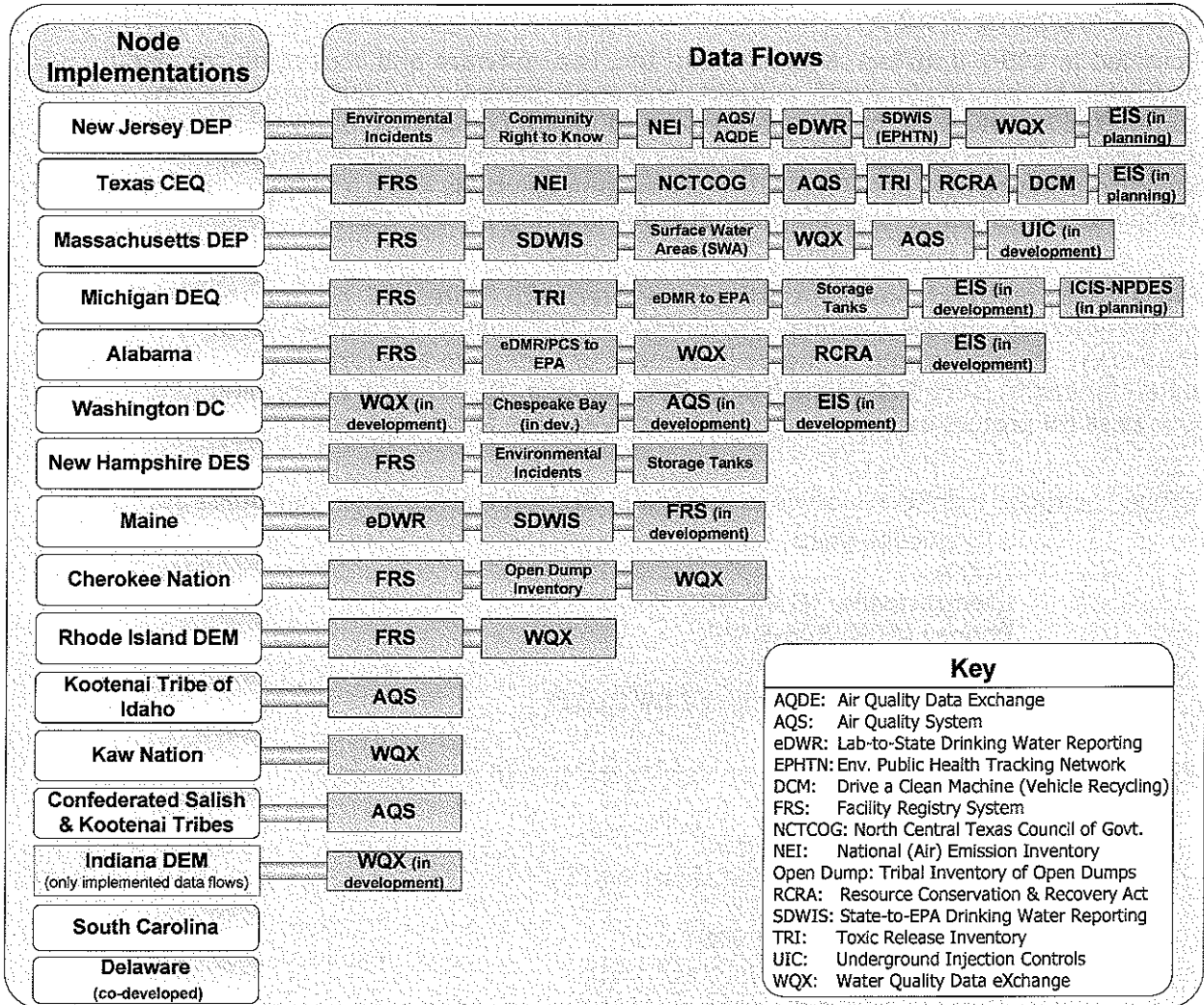
Tony Jeng
Executive Vice President
enfoTech & Consulting, Inc.
11 Princess Road, Unit A
Lawrenceville, NJ 08648
Email: tony_jeng@enfotech.com
Phone: (609) 896-9777, Ext. 107

2.1.1 Node Experience

Since 2001, enfoTech has been actively involved with State, Tribal, and USEPA partners to support the National Environmental Information Exchange Network (Exchange Network). We participate in the development of environmental data standards, Exchange Network Node, Core Reference Model, XML schema, DET Design Policy, and XML Registry. enfoTech is one of the early pioneers to work with EPA and states to implement the Exchange Network Node and to provide technical input for the Node technical specifications. enfoTech was a member of the Node Beta workgroup in 2002 that worked with states to create and refine the original Node specifications.

We have been involved in the Node construction since 2002 and have successfully implemented Nodes and Node data flows for 16 states and tribes, as indicated in the following diagram:

EnfoTech Exchange Network Node and Node Data Flow Implementation Experience



enfoTech brings unique qualifications to the WV-DHHR for successful implementation of this project. Our unique qualifications are supported by our combined environmental domain knowledge, IT expertise, and a proven project management process resulting from many enterprise-wide environmental information projects. Most importantly, we feel very confident that our corporate experience and technical qualifications allow us to introduce new perspectives to offer alternative workflow options (for streamlining business processes) and XML data flow implementations that deliver value-added final products to the overall system deliverables.

3 Technical Information

3.1 Overview

The diagram below outlines our technical approach for this project:

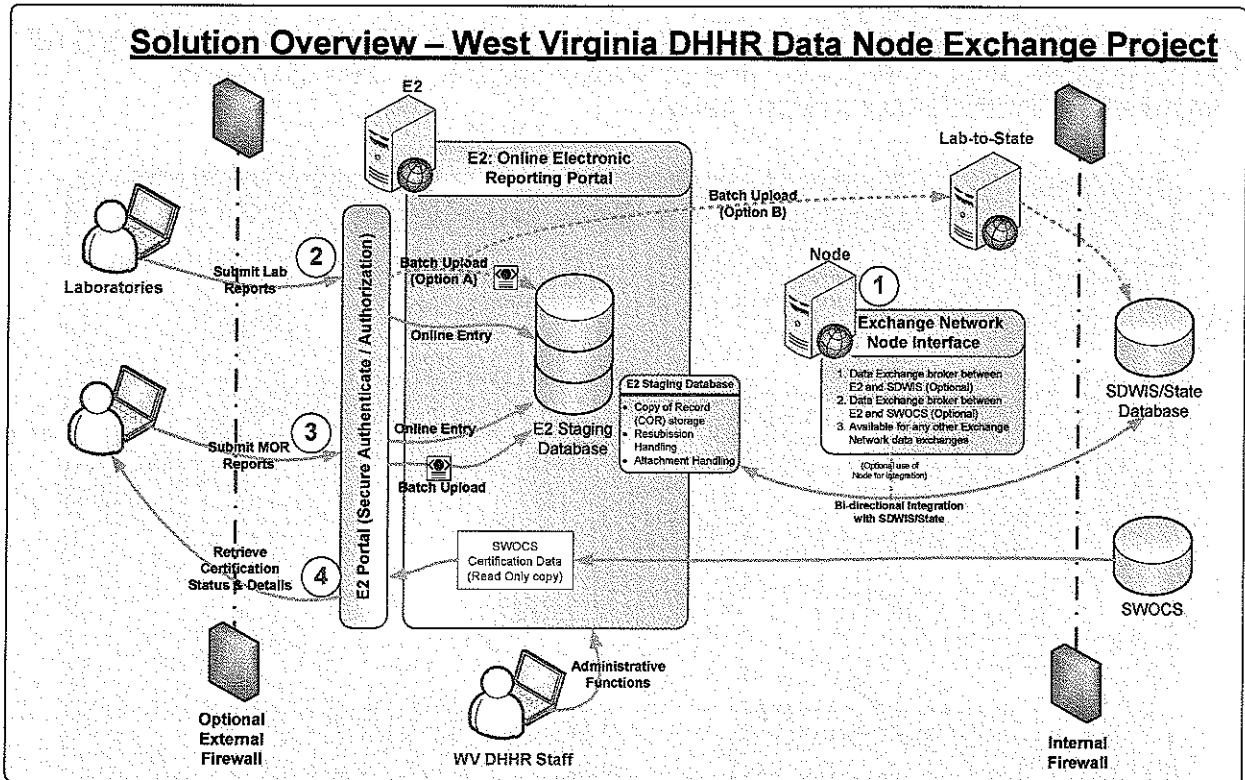


Figure 3-1 Proposed Solution Overview

This proposed solution consists of the following major components:

1. Exchange Network Node
2. E2 Software for Accepting Drinking Water Laboratory Reports, including integration with Lab-to-State
3. E2 Software for Accepting Monthly Operating Reporting from PWS, including integration with SDWIS/State
4. Expansion of E2 software to allow read-only access of operators and driller to view certification status and certification details

Each of these 4 major components is further described in the following sections.

3.2 1 Deliverable 1: Exchange Network Node

3.2.1 Overview

enfoTech has developed an Exchange Network node in both .NET and Java environments that is compatible with the Node 2.0 specifications. This product is currently marketed as the e-Node2008 Software Suite and is available for purchase as a Commercial off the Shelf (COTS) product. The e-Node2008 Software Suite consists of a series of software components identified in the diagram below:

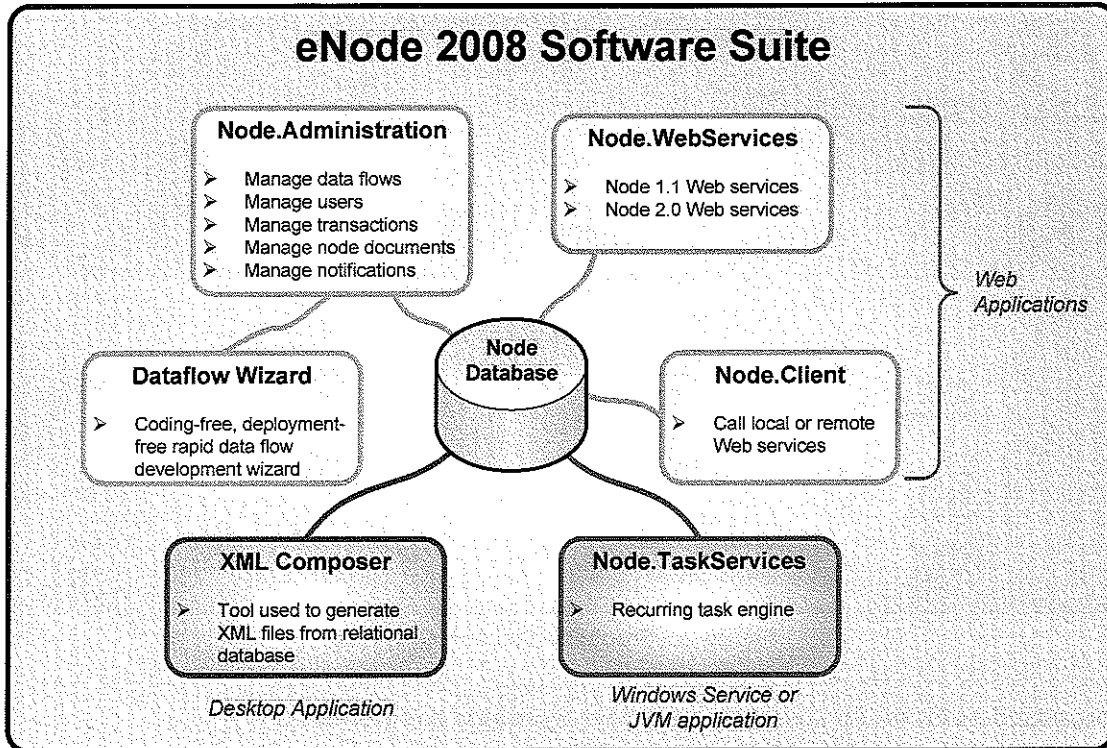


Figure 3-2 Components of the e-Node2008 Software Suite

Each of these components is described briefly below:

- **Node.Administration:** A Web interface that allows Node and Domain administrators to configure the Node and manage data flows. The Node.Administration application serves as an interface to configure the Node.WebServices, Node.TaskServices, Node.Client, and (if applicable) Dataflow Wizard applications.
- **Node.WebServices:** A Web Service engine that controls the logic for responding to Web Service requests on the Node, providing the web services outlined in the Node 1.1 and 2.0 Specifications. When responding to a Web service request, Node.WebServices will execute logic plugged in for a particular data flow.
- **Node.Client:** A simple Web interface that allows individuals to invoke Node 1.1 or 2.0 Web Services on any Node, including the e-Node2008. This application can be useful for either testing your Node functionality, or can serve as a simple Node client to invoke Web services on other Nodes.
- **Node.TaskServices:** Provides the capability to execute tasks on a scheduled basis, which allows you to schedule and initiate Web service exchanges. These scheduled

tasks typically involve the invocation of Web Services on other Nodes, such as EPA's Node. The scheduled tasks are defined by the task plug-in and are configured by a Domain Admin for a particular data flow.

- **Dataflow Wizard:** An optional add-on for e-Node2008 that allows data flow developers to rapidly create new dataflows with minimal coding and deployment required by using a drag-and-drop interface to select the actions to be performed in the data flow.
- **XML Composer:** An optional add-on for e-Node2008 that provides a user interface to map XML data structures such as XML schema or XML instance files to database structures to allow rapid development of XML composition or decomposition procedures.

3.2.2 Typical Node System Requirements

The eNode system has the following minimum hardware requirements:

Web/App Server(s):

Table 1: Web/App Server's Hardware Requirements

Web Server	Minimum Requirements	Recommended System
Load Balancing	Not Required	Network Load Balancing
Processor	Pentium IV 2.4 GHz or higher	Pentium IV 2.8 GHz or higher
Memory	1 GB of RAM	2 to 4 GB of RAM or higher
Disk Space	20 GB free hard disk space	40 GB free hard disk space or higher

eNode(.NET) will run on Microsoft IIS6 or IIS7 web server; eNode(Java) can run on any J2EE compatible application server, and has been tested on most major Java application servers including WebLogic, WebSphere, Tomcat, SunOne, JRun, and JBoss.

Node Database Server:

Table 2: Node Database Server's Hardware Requirements¹

Database Server	Minimum Requirements	Recommended System
Processor	Pentium IV 2.4 GHz or higher	Pentium IV 2.8 GHz or higher
Memory	1 GB of RAM	4 GB of RAM or higher
Disk Space	40 GB free hard disk space	80 GB free hard disk space or higher

Currently, our e-Node 2008 has been tested to work with the following Node data sources:

Platform	Node Data Sources

¹ This is a generic recommendation. Memory/Processor specifications will vary depending on the amount of data

.NET	<ul style="list-style-type: none"> • Oracle 9i or later • SQL Server 2000 or later
Java	<ul style="list-style-type: none"> • Oracle 9i or later

Both our .NET and Java Nodes are capable of flowing data from many different database platforms. There is no limitation in the source backend databases for dataflows, since custom coding can be written for the dataflow plug-in in either C# or Java to pull from the particular non-traditional database. For example, we implemented the RCRA Data Flow for Texas to pull data from their Ingres database.

We have always maintained both .NET and Java versions of our e-Node software. During the upgrade process to Node 2.0 compatibility, the .NET Node was upgraded first and completed in September 2008. Our Java Node was completed in December 2008 using the .NET design as a template. As a result, the look-and-feel of our Java and .NET Nodes are very similar. The following diagram shows the technologies used in each tier of the Java Node:

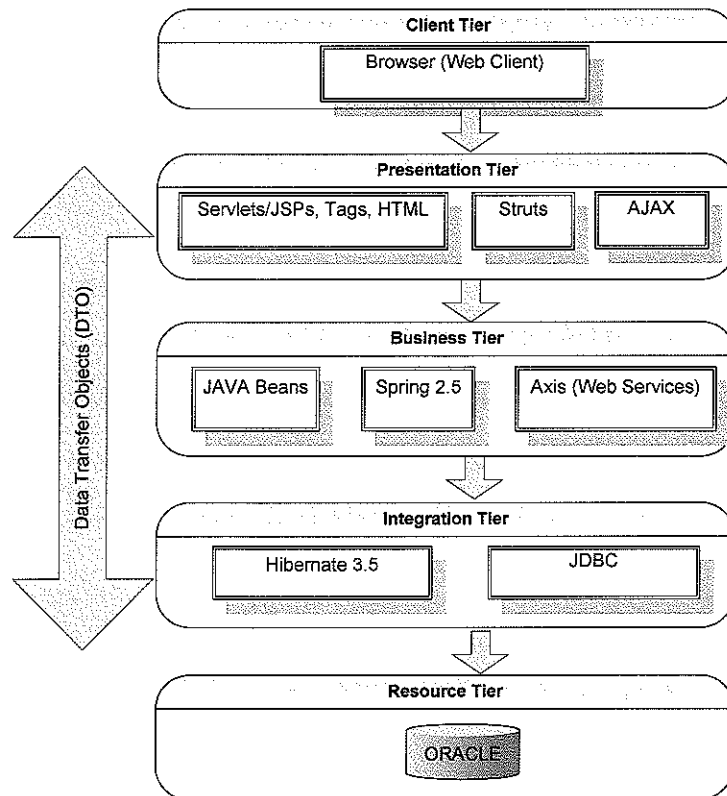


Figure 3-3 Java e-Node Technologies

3.2.3 Node Documentation

The following documentation will be provided to WV-DHHR for this project:

1. **Node Installation Guide (Java):** Provides instructions on how to install the Java Node application and database. Includes an identification of minimum requirements and high-level application architecture.
2. **Node Administration Guide:** Provides instructions on how to administer the Node

3. **Node User's Guide:** Provides instructions on how to use the Node Client application to call web services. This document is typically useful for external partners that need to interact with a State's Node by either soliciting data from or submitting data to the Node.
4. **Node Data Flow Developer's Guide:** Provides instructions for data flow developers on how to develop new node data flows and add them to the Node.

3.2.4 Node Installation & Training

We will conduct a 1-day onsite visit for first time Node installation and training. We recommend establishing remote VPN-type access to allow us to configure the Node prior to onsite installation/training, and to conduct remote support as needed.

Node training will contain the following topics:

- Node Administration
 - How to Manage Existing Dataflows
 - How to Manage Node Users and Access Rights
 - Node Document and Transaction Management
 - Node Client Usage
 - Node Task Usage
- How to Build Node Dataflows
- Node Installation & Maintenance

3.2.5 Node Administration

A robust Node Administration dashboard is provided, as shown here:

The screenshot displays the Node Administration Dashboard for Node 2.0. The interface is divided into several panels:

- Node Status:** Shows the node is currently running with process name 'ssids' and 'ssids'.
- Node Domain:** Lists domains including DCM, E2, EDWR, and Google, each with a 'Go to Operations' link.
- Node Transaction Log:** Displays a list of transactions, including 'SubmitDCRReport' and 'DEFAULT', with details on operation type, web service name, domain name, and status.
- Node Document:** Shows document details for 'DCM' documents, including document name, domain name, transaction ID, and submitted date.
- Scheduled Tasks:** Lists tasks such as 'ReSubmitRCRATask' and 'ACSGGetStatus' with their domain names, status, and completion dates.
- Configuration of the Node:** Provides links to Node Configuration, Email Configuration, and Client Configuration.
- Favorites Links:** Includes links for Node User, Node Registration, Node Client, and Google.
- Node Notifications:** Shows notification details like node address and creation date.

Figure 3-4 Node Administration Dashboard

The Node Administration Dashboard consists of a collection of configurable Web Parts. A brief description of each Web Part is given below:

- **Node Configuration:** allows the Node Administrator to control general node settings. This page is accessible only to Node Administrators.
- **Node Domains:** allows Node Administrators to create and manage Domains. This menu option also provides Node and Domain Administrators with the ability to create and manage operations (i.e. dataflows) under the domains.
- **Node Monitoring (Node Transaction Log):** allows the user to view a log of all activity captured by the Node. Node Administrators can view logging for all data flows, while Domain Administrators can only see logging for the domains they have access to. This web part allows viewing of logging for web service requests as well as Scheduled Tasks.
- **Node Documents:** provides the capability to search, upload, or download any documents that are stored in the Node. This can be documents either submitted to the Node or prepared for outgoing submission.
- **Favorite Links:** allows Node Administrator to add any URL for easy access. The following links are provided by default:
 - Node Users: allows Administrators to create and manage users (both Node Users and Administration Console Users).
 - Node Registration: allows Administrator to add/update data service's meta data to the e-Node2008.
 - Node Client: A link to access Node.Client Application.
- **Node Status:** Display the status of the Node and lists any current running background processes.
- **Scheduled Tasks:** allows the user to view the logs for scheduled tasks.
- **Node Notifications:** allows the user to view a listing of any notifications received from other Nodes.

3.2.6 Node WebServices (1.1 and 2.0)

The Node.WebServices application provides simultaneous support for both Node 1.1 and Node 2.0 specifications. Because two separate Node 1.1 and Node 2.0 end-points must be maintained, the Node installation instructions call for two copies of Node.WebServices application to be deployed (typically Node.WebServices and Node.WebServices2 directories).

Even though there are two separate Node end-points, both Node 1.1 and Node 2.0 data flows can be administered using the same Node Administration Console. Users simply need to click the tab at the top of the screen corresponding to the Node version they wish to administer:

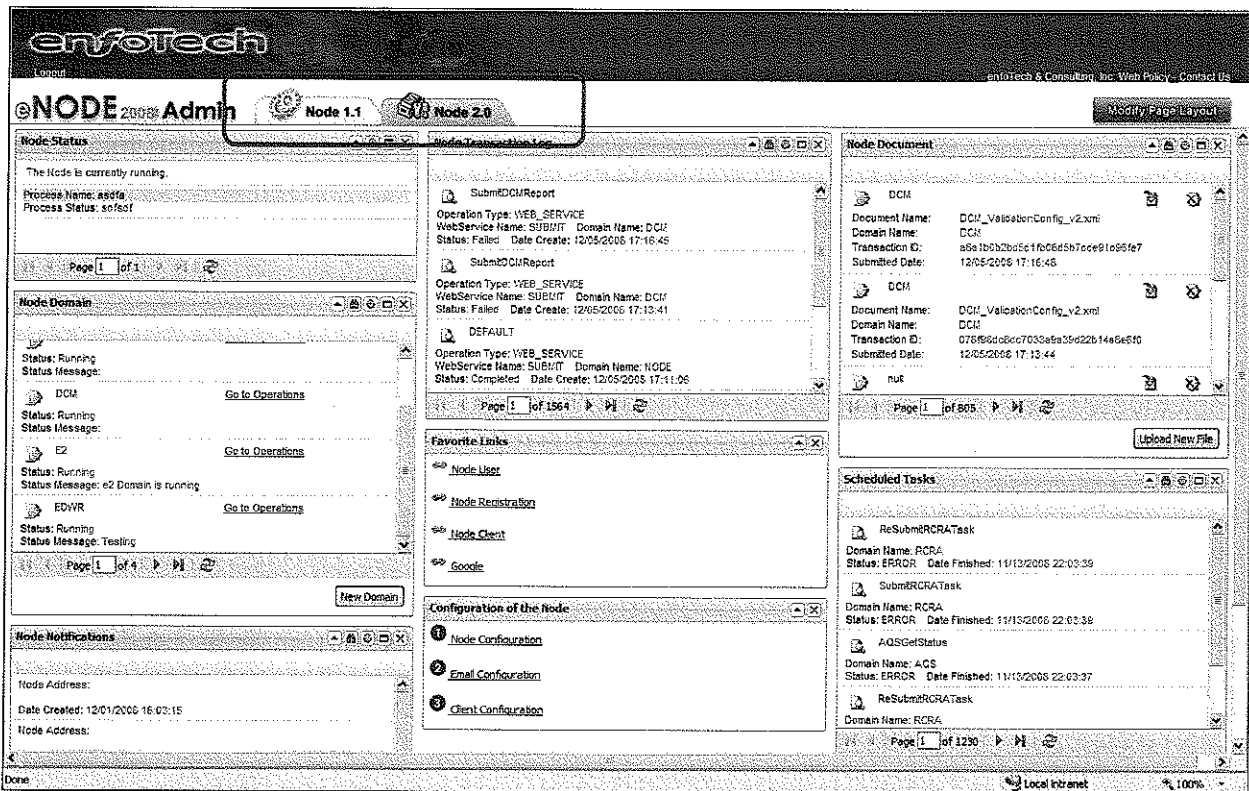


Figure 3-5 Node Administration Supporting Node 1.1 and Node 2.0 Data Flow Administration

Two options are available regarding the Node database. A separate Node 1.1 and Node 2.0 database can be set up, or they can reuse the same database. This is managed via one configuration setting during Node installation.

In addition, backward compatibility is achieved by allowing data flows built in Node 2.0 to make Node 1.1 web service calls and vice versa.

3.2.7 Adding & Configuring Exchange Network Data Flows

enfoTech's e-NODE2008 Software Suite is designed to allow data flows to be plugged into the Node without modifying the code of the core node solution. There are two primary mechanisms for Node data flow development. They are:

1. Non-Data Flow Wizard
2. Data Flow Wizard

The pros and cons of developing the data flow using the Data Flow Wizard are listed below:

- Data Flow Wizard:
 - Pros:
 - Rapid data flow development
 - No J2EE or .NET coding knowledge required
 - No need for file deployment on application server
 - Migration of flows from TEST to PROD is easier
 - More easily able to share solution with other e-Node customers

- Cons:
 - If complex logic is required, Data Flow Wizard may require additional programming support to accommodate the flow's complexity
 - High-level data flow processing control (instead of low-level) might not be appealing to developers
 - Less control over processing performance

3.2.8 Data Flow Wizard

The Data Flow Wizard is an optional add-on to the Node Administration Console. When implemented, data flow developers have the option to add new data flows according to the traditional method outlined in Section 3.2.7, or by using the Data Flow Wizard.

Note: The Data Flow Wizard is an additional Optional Component not included in our project costs for Deliverables 1-4. The cost for this Add-On is \$20,000. This Add-On is not required to use the Node or build dataflows as described in Section 3.2.7.

The Data Flow Wizard allows data flow developers to create Node 1.1 or Node 2.0 data flows (including tasks) without any coding or deployment. An innovative drag-and-drop interface allows data flow developers to drag available services into the Web Service Orchestration Path (shown here) to define the order of steps that will occur.

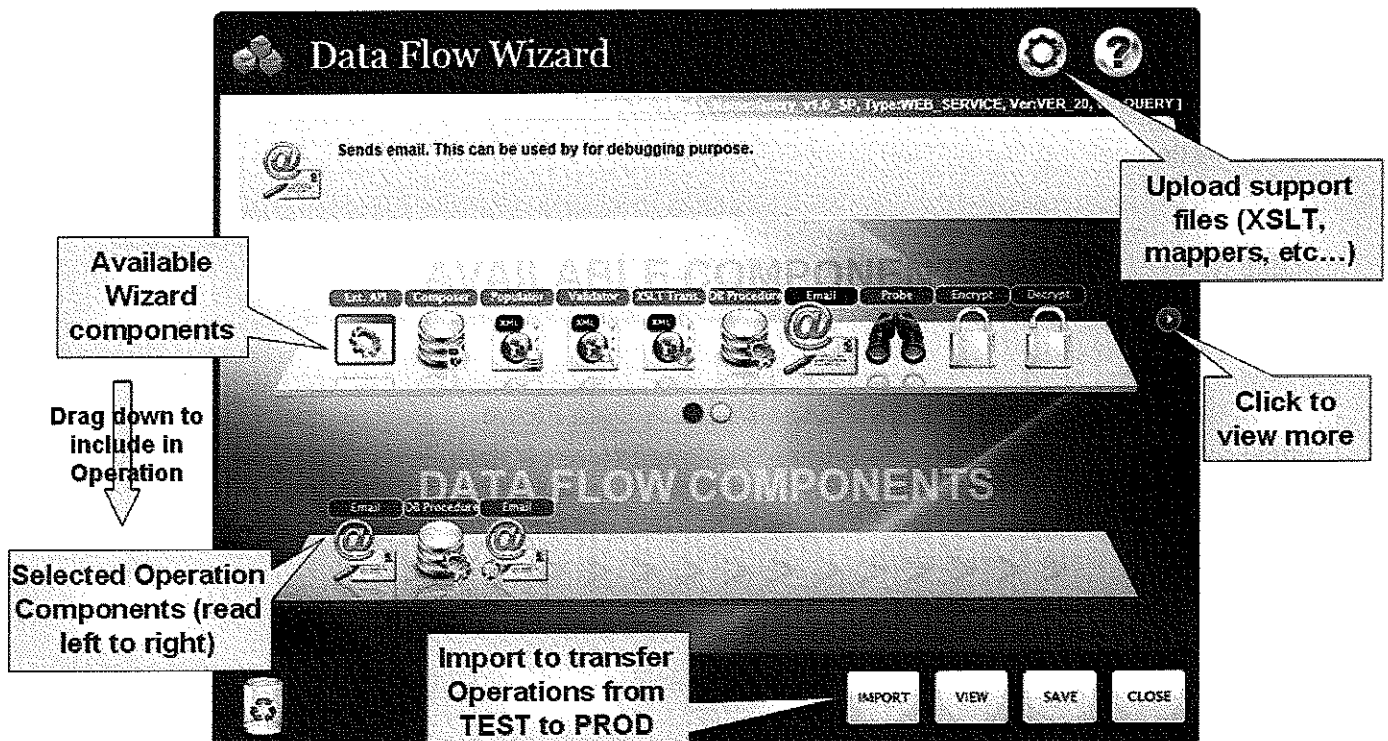


Figure 3-6 Data Flow Wizard

Available pluggable components include:

- XML Composer
- XML Validate
- XML Transform

- Stored procedure calls
- Web Service calls
- Email Notification
- Encrypt/Decrypt
- Compress/Decompress
- Probing
- External API

3.2.9 Non-Data Flow Wizard

Steps involved to plug-in a data flow using the non-Data Flow Wizard are provided below:

Step 1: Create a Domain: To add a new dataflow to the Node, the Node Administrator will first need create a Domain. A Domain is a collection of operations (or dataflows). Operations are organized into domains to allow for operation management. (For example, you may have 3 web service operations called GetDrinkingWaterResults, GetDrinkingWaterInventory, and GetDrinkingWaterViolations. By grouping these 3 operations into 1 domain, you can set up 1 domain administrator who would be able to manage all 3 operations.)

Step 2: Create Operation: After a Domain is created, a new Operation can be created. An "Operation" is the equivalent of a "Data Flow".

Step 3: Writing Custom Web Service or Task Service Classes: In order to write custom code that you want to plug in to the Node, the Data Flow Developer will need to write custom code in either .NET (for .NET Node) or Java (for Java Node).

This mechanism has been a proven solution to allow 3rd party vendors to plug data flows into the e-Node solution. The mechanism described in this section applies to the creation of both Node 1.1 and Node 2.0 data flows.

3.2.10 Node Task Scheduler

The e-Node includes a task scheduling feature, which allows operations to be scheduled to occur at a recurring frequency. When a data flow developer creates a new data flow, he can choose for this operation to be a Task operation. When this is specified, the administrator has many options in specifying the frequency of the scheduled task operation.

3.2.11 Node Client

The Node Client is the main interface for a user to access the call Web Services supplied by a target Node. After entering the Node Client, there is a list of the nine Web Services that can be performed on the left hand side of the screen. To invoke any of the services, click the corresponding button in this section of the screen:

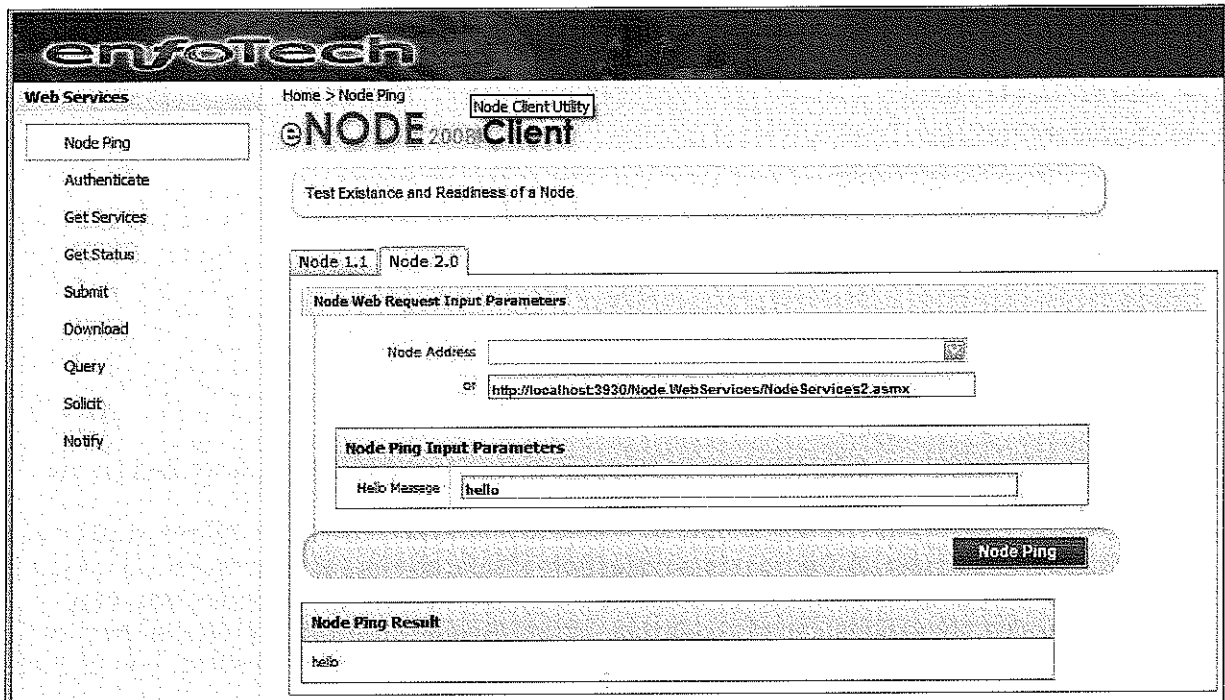


Figure 3-7 User Management - Local User Details

The Node Client supports interaction with both Node 1.1 and Node 2.0 Web Services.

3.2.12 XML Composer

Note: The XML Composer is an additional Optional Component not included in our project costs for Deliverables 1 through 4. The cost for this Add-On is \$20,000. This Add-On is not required to use the Node or build dataflows as described in Section 3.2.7.

The XML Composer is an optional add-on tool that provides a user interface to allow data flow developers to populate XML files by mapping a relational data source (including MS Access, Oracle, or SQL Server) to an XML target structure. The XML Composer supports complex relational-to-XML mapping features such as nested looping, unlimited if...then conditional branching, transformation, multiple mapping nodes, and mapping to specific XML node indices. This add-on is especially useful for individuals who need to construct XML files, but do not have .NET, Java, or stored procedure development expertise.

An example screen is shown here:

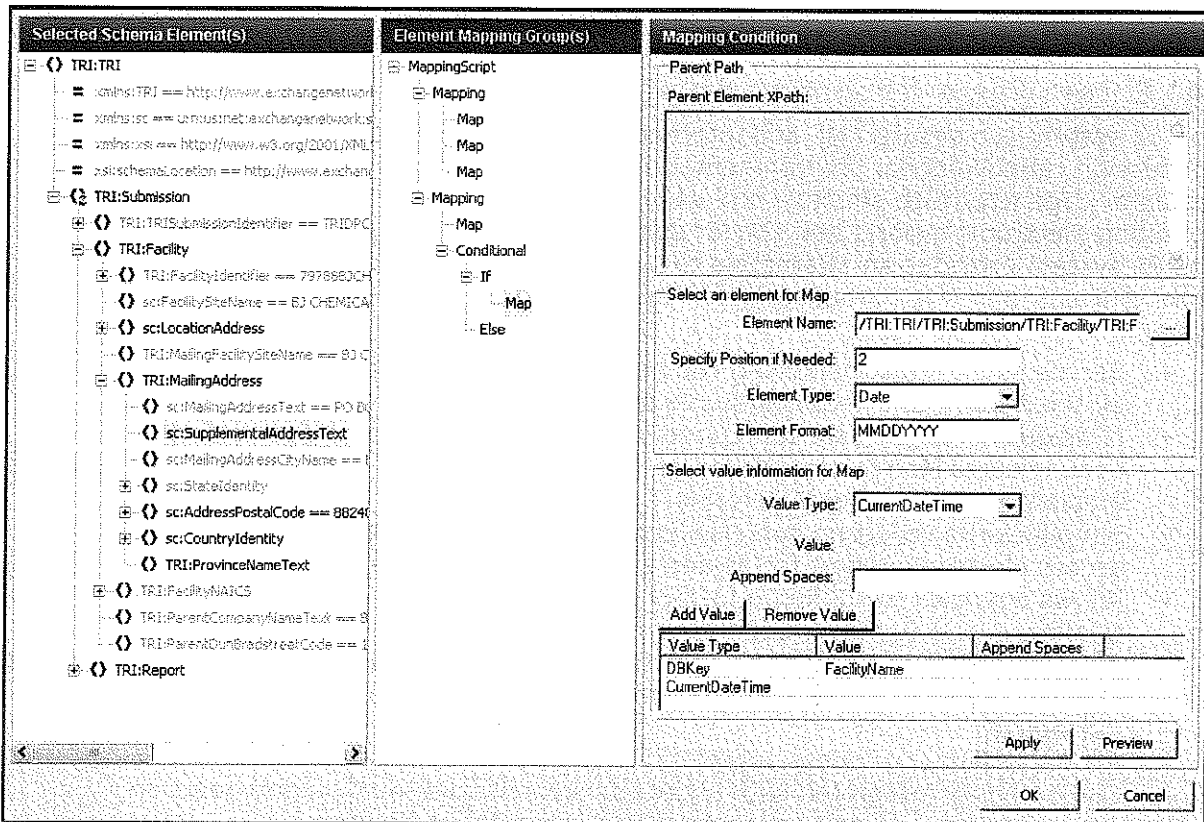


Figure 3-8 XML Composer

3.3 2 Deliverable 2: Exchange Interface to Lab-to-State

enfoTech has developed e-Reporting solutions for the reporting of laboratory drinking water data for New Jersey DEP, Ohio EPA, Rhode Island DOH, and Michigan DEQ. The solution we have provided to these states to support the electronic reporting is the E2 system, which is a secure XML and internet based application.

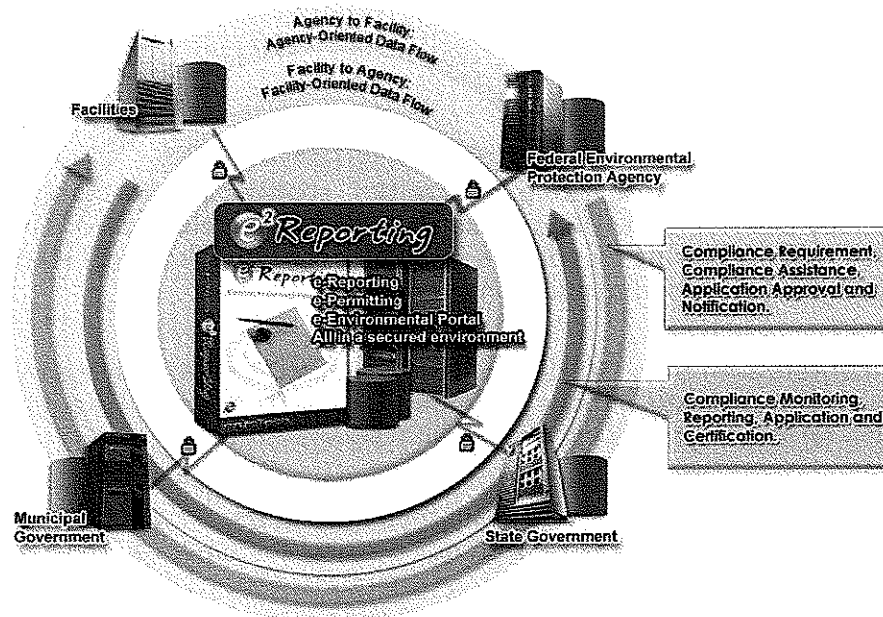
enfoTech will integrate with SDWIS/State to assure that MOR data received in the E2 is made available in SDWIS/State without compromising the application data integrity. We offer two options for Lab reporting integration with SDWIS State:

- **Option A:** Lab reports their SDWIS data through E2. E2 then passes the data onto the SDWIS "XML Sampling" module, which will then read in the SDWIS XML files and import to SDWIS. This is the preferred approach our existing customers who have both E2 and SDWIS/State have taken.
- **Option B:** When the user logs into E2, they will be prompted which option they wish to submit their laboratory reports:
 - **Online Entry:** if they select this option, E2 will provide the online entry forms and generate the SDWIS XML to pass onto SDWIS "XML Sampling" module
 - **Batch Upload:** if they select this option, E2 will pass the user onto the "Lab to State" application for further processing.

(A) Enterprise e-Reporting Solution:

The E2 system is a secure XML and internet based application that provides electronic submission capabilities for environmental reporting information. The E2 system provides regulatory agencies with effective and easy to use functions for registering, tracking, and accepting electronic reports and similar documents for their regulated facilities and activities. The E2 system provides an alternative to submitting paper-based reports that is faster, more efficient, and less burdensome for both the regulated facility and the agency. The E2 system:

- Serves as an "electronic filing cabinet" to manage reporting requirements provided by the Agency and receives/stores submitted reports.
- Is flexible enough to be configured for a variety of reporting types, such as Groundwater Monitoring, Discharge Monitoring Reports, Drinking Water Reports, and ambient Water Quality Monitoring.
- Simplifies the reporting submission processes for facilities by providing one site to access electronic report forms and submit reports online.
- Allows agencies to configure facility and users; and supports different access levels to allow a user to view, prepare, or certify reports.
- Allows facilities to print blank reporting forms with permit limit data and allows many different options for facilities to submit report data either by manual entry or by uploading.
- Allows facilities to access submitted report information.
- Can be easily integrated with other applications to directly import reporting requirements or export reporting data for regulated facilities.



E2 System Overview

(B) Comprehensive e-Reporting Capabilities

The E2 Reporting System offers users three options for submitting laboratory e-DWR Reports electronically:

- Online Web form Entry:** The user can prepare and submit an electronic report by data entering report information into a series of online entry web forms. This option is best suited for data reporters without their own eReport generation capabilities. The following screen shows an example of online webform entry for Groundwater monitoring:

GROUND WATER MONITORING REPORT - PART D
(Key Date: 12/22/2004)

Monitoring Well: **MWC-3**

COUNTY: DUVAL PERMITTEE NAME: JACKSONVILLE BEACH, CITY OF PERMIT NUMBER: FL0020231 MONITORING PERIOD: 2003-08-01 - 2003-08-31	MONITORING WELL ID: MWC-3 WELL TYPE: DESCRIPTION: GW-3 CMPLNC DATE SAMPLE OBTAINED: (CCYY-MM-DD) TIME SAMPLE OBTAINED: (HH:MM:SS)
WAS THE WELL PURGED BEFORE SAMPLING? <input type="radio"/> YES <input type="radio"/> NO	

PARAMETER	PARAM CODE	SAMPLE MEASUREMENT	PERMIT REQUIREMENT	UNITS	STATISTICAL BASE CODE	MONITORING FREQUENCY	DETECTION LIMITS	ANALYSIS METHOD	SAMPLING EQUIPMENT USED	SAMPLES FILTERED (L/FM)
WATER LEVEL RELATIVE TO NGVD	02545	<input type="text"/>	Report	FEET	SING RDG	1/QUARTER	<input type="text"/>	<input type="text"/>	METER	<input type="text"/>
NITRITE PLUS NITRATE TOTAL 1-DET. (AS N)	00630	<input type="text"/>	10	MGL	MAXIMUM	1/QUARTER	<input type="text"/>	<input type="text"/>	GRAB	<input type="text"/>
TDS SOLIDS TOTAL DISSOLVED CONDUCTIVITY METER	70304	<input type="text"/>	500	MGL	MAXIMUM	1/QUARTER	<input type="text"/>	<input type="text"/>	GRAB	<input type="text"/>
CHLORIDE (AS CL)	00940	<input type="text"/>	250	MGL	MAXIMUM	1/QUARTER	<input type="text"/>	<input type="text"/>	GRAB	<input type="text"/>
COLIFORM, FECAL WF, M-FC BROTH, 44 5C	31816	<input type="text"/>	1	#100ML	MAXIMUM	1/QUARTER	<input type="text"/>	<input type="text"/>	GRAB	<input type="text"/>
PH FIELD	00406	<input type="text"/>	Report	SU	SINGSAMP	1/QUARTER	<input type="text"/>	<input type="text"/>	GRAB	<input type="text"/>
SULFATE TOTAL (AS SO4)	00845	<input type="text"/>	250	MGL	MAXIMUM	1/QUARTER	<input type="text"/>	<input type="text"/>	GRAB	<input type="text"/>

Done Internet

- Excel XML File Generation:** The user can download a blank Microsoft Excel Template file provided by the E2 Reporting System to prepare data offline. The Excel Template file contains a macro which will generate an XML File for the user, which can then be uploaded to the E2 Reporting System using the same approach as the XML File Upload option above. Alternatively, the user can use the Data Checker in E2 to validate submissions prior to submission to the system.
- XML File Upload:** The user can prepare data offline in a predefined XML Schema format and upload the XML file to the E2 Reporting System.

(C) Data Standards-Based Submissions

The E2 System is an XML driven application system. All reporting forms are created and built based on XML Schema. Using the XML approach for data flow development has the following advantages:

- Standardizing the reporting data flow:** XML schema data elements in the E2 System are based on reusable XML Schema data blocks from the Exchange Network’s Core Reference Model and the Environmental Data Standard Council’s Environmental Data Standards. Those data elements are developed by the Exchange Network workgroups to flow the data among different parties and different sources. With the reusable XML schema components (i.e., CRM data

blocks), the data can be easily transported in a consistent manner and interpreted among various parties in a standard fashion.

- **Ease of expansion:** Adding a new data element or a new data flow to the E2 System becomes easy and fast by reusing common XML schema components or extensions of the common XML schema components. When a new data element is introduced to a data flow, we simply extend the common XML schema components (i.e., data blocks in CRM) by adding new data elements or business logic. Extensions of the common XML schema components WILL NOT affect the existing data flows. If a new flow is needed for the E2 System, it will be mapped to the existing XML schema components (or extensions of those existing components).
- **Portable in different platforms:** Since the XML is a standard language which can be interpreted by any system, the XML instance file which contains the data can be transported to many systems and platforms.
- **Ease for data exchanges/transport among different systems:** XML based data flow provides the possibility of using Web Services to exchange/transport the reporting data among the State databases.
- **Ease to transform to various data formats:** The submitted reporting form is actually an XML file, therefore, by applying different style sheets, the form can be transformed to various formats: HTML, ASCII, XML file with a different structure, Excel, etc.

E2 adopts most of the EPA approved schema for electronic reporting. The schema registry information is available from the following link: [http://oaspub.epa.gov/emg/xmlsearch\\$.startup](http://oaspub.epa.gov/emg/xmlsearch$.startup)

(D) CROMERR-Compliant User Account and e-Submission Security:

The E2 software will operate, without any additional effort or actions from the user, in compliance with the EPA's CROMERR requirements.

E2 is mature and at its 3rd release. It was used by the CROMERR workgroup as a reference system in 2002-2003 during the rule development. In addition, the E2 was used by MDEQ to work with EPA as a pilot project for CROMERR compliance review and compliance certification application process. From 12/2005 to 6/2006, enfoTech supported MDEQ to work with EPA to develop the nation's 1st CROMERR compliance certification package. The package consists of 21 documents to support the CROMERR compliance certification. During the process, we have successfully verified and documented E2's functions/procedures to meet CROMERR requirements. In particular, the following requirements have been successfully reviewed, met and documented in the certification application package.

1. Identity proofing of registrant
2. Determination of registrant's signing authority
3. Issuance (or registration) of a signing credential in a way that protects it from compromise
4. Electronic signature agreement
5. Binding of signatures to document content
6. Opportunity to review document content before submission
7. Opportunity to review certification statements and warnings
8. Transmission error checking and documentation
9. Opportunity to review copy of record
 - a. Notification that copy of record is available
 - b. Creation of copy of record in a human-readable format

10. Procedures to address submitter/signatory repudiation of a copy of record
11. Procedures to flag accidental submissions
12. Automatic acknowledgment of submission
13. Credential validation
 - a. Determination of credential ownership
 - b. Determination that credential is not compromised
14. Signatory authorization
15. Procedures to flag spurious credential use
16. Procedures to revoke/reject compromised credentials
17. Confirmation of signature binding to document content
18. Creation of copy of record
 - a. True and correct copy of document received
 - b. Inclusion of date and time of receipt
 - c. Inclusion of other information necessary to record meaning of document
 - d. Ability to be viewed in human-readable format
19. Timely availability of copy of record as needed
20. Maintenance of copy of record

On 12/8/2006, EPA issued a confirmation to MDEQ to confirm that MDEQ CROMERR compliance package is complete under the 40 CFR Part 3, Section 3.1000.

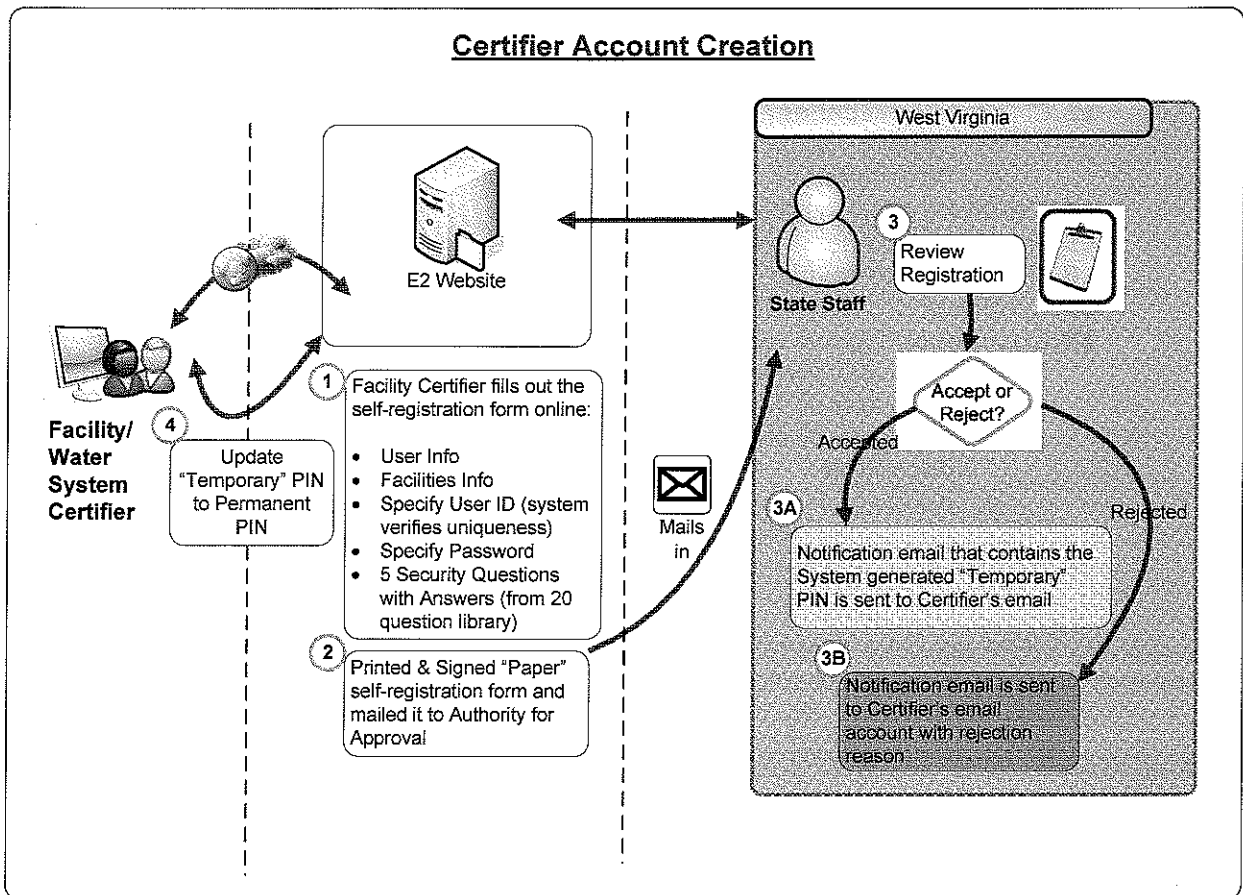
E2 Features to Meet CROMERR Requirements:

E2 provides comprehensive user authentication, access authorization, copy-of-record along with many security features to help WV-DHHR to meet CROMERR requirements. Features will be available to all electronic reports (such as drinking water monitoring data, wastewater discharge reports, air emission reports, etc.) submitted through E2. The following paragraphs use drinking water reporting to illustrate how E2 will support the business processes to comply with CROMERR.

- A. Certifier account creation
- B. Non-Certifier account creation
- C. Certify reports and submit
- D. Forgot Password, Forgot PIN, Reset Security Questions, & Certifier's Account Reactivation Process

(A) Certifier Account Creation Process

The Certifier is the responsible official who sign compliance reports for the reporting entity. A high level overview of certifier account creation is provided below:



1.) Certifier (regulated entities, drinking water systems, etc.) registers for an account ONLINE via WV-DHHR's E2 website and provides the following info:

- User Info (First Name, Last Name, Title, email)
- Facility(s) Info (Facility name, address, etc.)
- Specify Password
- Specify PIN
- Answer five (5) Security Questions (from 20 question library)

During the self-registration process, the certifier may identify multiple water systems that he/she is responsible for. The Certifier picks his/her own User ID during the self-registration step. The System will check for User ID's uniqueness in the system before saving the record. One Certifier (with a unique User ID) may be associated with multiple Facilities/Water Systems.

- 2.) Facility Certifier printed & signed the "paper" self-registration form and mailed it to DOH for approval. The user password, PIN, and Security Questions/Answers are not included on "printed" copy of the self-registration form.
- 3.) When the applicant finishes the self-registration process in E2, the system will send an "Account Created Acknowledgement" email to Certifier's email account with an account activation link. The certifier simply clicks on the link in the "Account Created Acknowledge" Email to activate the new account.

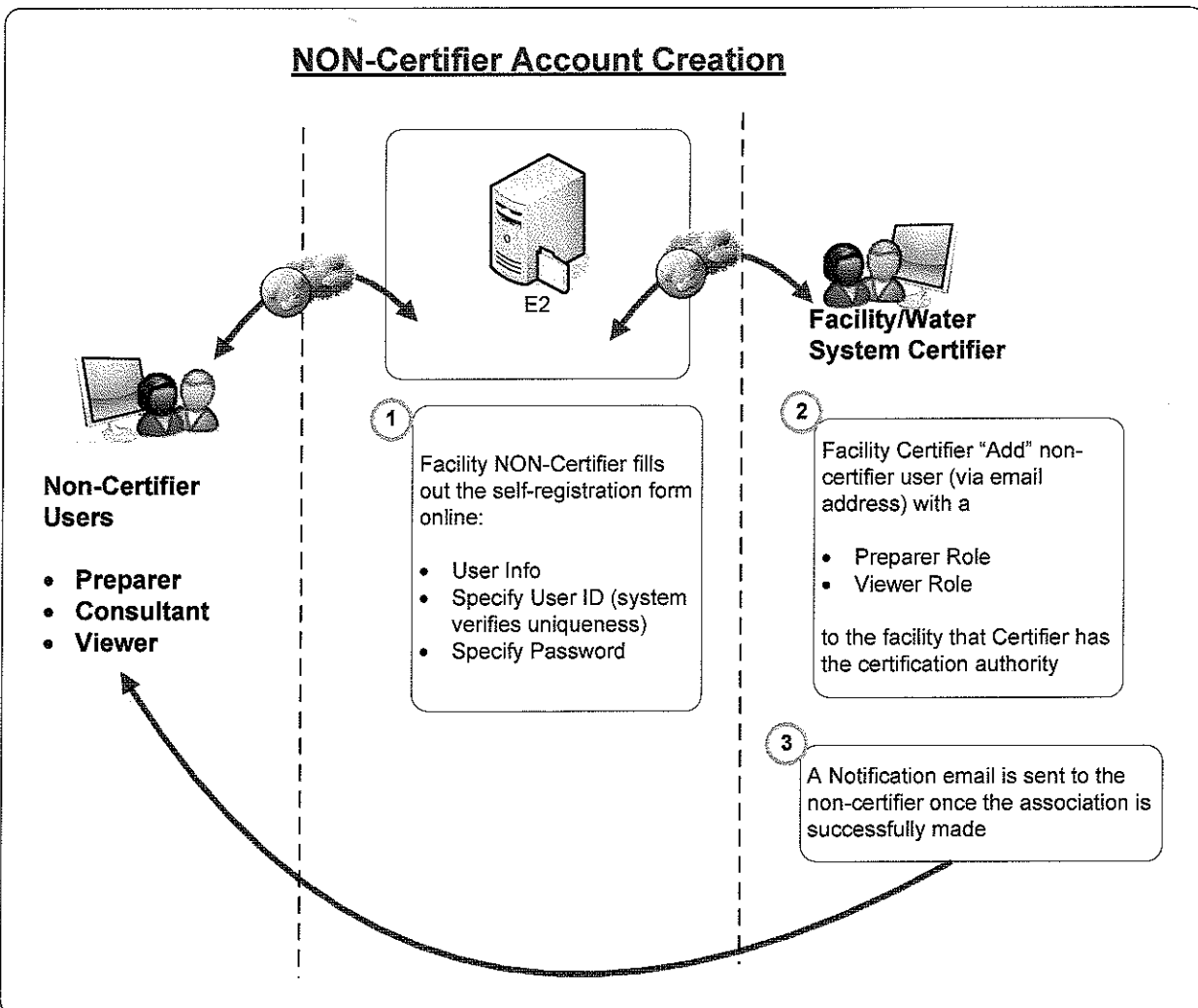
4.) DOH Staff review and approve the signed the "paper" self-registration form. The following events will occur if certifier is approved or rejected:

- a) If approved, the System will send an "Acceptance Acknowledgement" Email to Certifier's email account with an acceptance confirmation link. The certifier simply clicks on the link in the "Acceptance Acknowledgement" email to confirm his/her Certifier Role at the defined Facility.
- b) If rejected, the notification email that contains the rejection reason will be sent to Certifier's email account

(B) Non-Certifier Account Creation Process

The non-Certifiers are persons who assist in preparing compliance reports for the reporting entity, but do not have the authority to certify the reports (e.g, laboratory technicians, consultants, water system clerks, etc.). The Certifier will manage all non-Certifier accounts he/she wants them to assist in the drinking water reporting that are associated with the Certifier's facility/water system.

A high level overview of non-Certifier account creation is provided below:

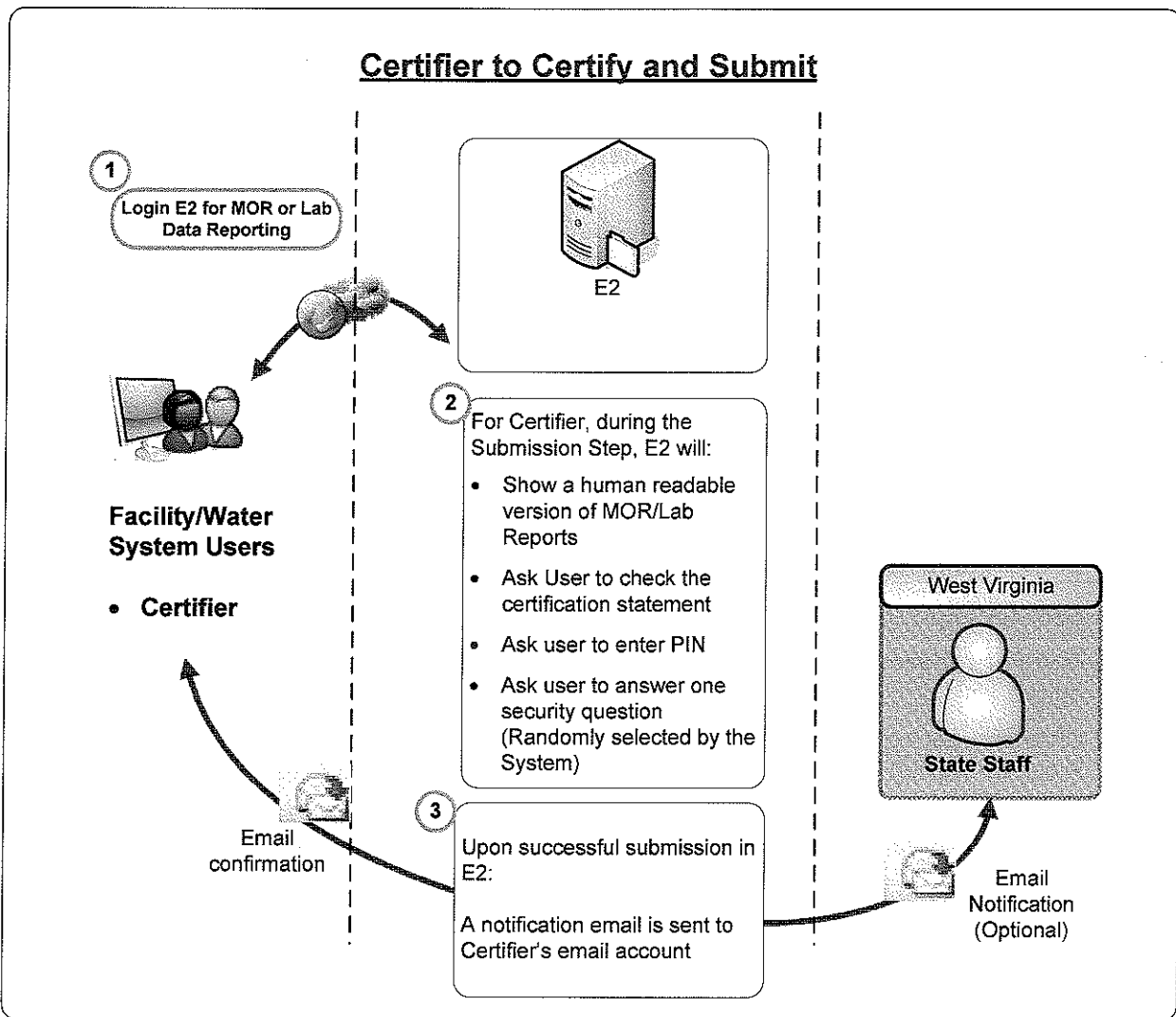


1.) Non-Certifier user accounts are also obtained via the self-registration feature in the E2 System. The Non-Certifier user provides the following info to create an account:

- User Info (First Name, Last Name, Title, email)
 - Specify User ID (system will verify that user id is unique in E2 System)
 - Specify Password
- 2.) When the applicant finishes the self-registration process in E2, the system will send an "Account Created Acknowledgement" email to Non-Certifier's email account with an account activation link. The non-certifier simply clicks on the link in the "Account Created Acknowledge" Email to activate the new account.
- 3.) In order for the Non-Certifier user accounts to see the reports for the desired facility, the Certifier must "Add" non-certifier user to prepare / view facility data (but not to certify).
Procedures to "Add" are as follows:
- a.) Include non-certifier's email address
 - b.) Specify User Role at selected facility(s):
 - Preparer
 - Viewer
- 4.) Once added, System will send a Notification Email to Non-Certifier's email address notifying that their account has been added to access the facility data. A link to accept the defined role / privilege at the selected facility is included in the email.
- 5.) A Non-Certifier simply clicks on the link in the notification email to accept the defined role / privilege at the selected facility.

(C) Certify Reports and Submit

A high level overview of report certification and submission process is provided below



- 1.) Certifier login the System with a valid user id and password
- 2.) On the submission page, the System will:
 - Show a human readable version of MOR or Lab Report
 - Ask Certifier to check the certification statement
 - Ask Certifier to enter a valid PIN
 - Ask Certifier to answer one Security Question (randomly picked by E2)
- 3.) Upon successful submission in E2, an "Report Received Acknowledgement" email for the report received is sent to the Certifier's email account and an optional email account designated by DOH
- 4.) If the Certifier is unable to provide a valid PIN or answer the security questions correctly, the System will suspend user's Certification privilege after 3 tries. Moreover, the System will send "Suspension" emails to Certifier's and System program administrator's email address

(D) Forgot Password, Forgot PIN, Reset Security Questions, & Certifier’s Account Reactivation Process

(D.1.) Forgot Password:

- 1.) On the “Forgot Password” Screen, the user enters user account’s email address to Request a “Temporary” Password
- 2.) If the provided user account’s email address is found, the System will issue a “Temporary” password to the User Account’s email address
- 3.) User use “temporary” password to login the System and reset the Password

(D.2.) Forgot PIN:

- 1.) Certifier login the System with a valid user id and password
- 2.) On the “Forgot PIN” Screen, the user answers a Security Question to reset the PIN
- 3.) Once the PIN is reset, the System will send a “PIN Reset Acknowledgement” email to Certifier’s email address

(D.3.) Reset Security Questions, & Certifier’s Account Reactivation Process:

- 1.) Certifier login the System with a valid user id and password
- 2.) Certifier request certification privilege be restored (or reset Security Questions) online
- 3.) Once the request is made, the System will send an email request to the Agency’s Program Admin for approval
- 4.) If the Agency’s Program Admin approves the request, the System will send an “Account Reset Acknowledgement” email to Certifier’s email address. Moreover, the System will Reset Certifier’s Security Questions and Re-Activate Certifier’s Account
- 5.) The next time when the Certifier login the System, he/she is prompted to Answer 5 Security Questions.
- 6.) The Certification privilege is restored, (or Security Questions reset) when the 5 Security Questions with answers are saved successfully.

(E) E2 Major Functionalities Overview:

The following table lists major functionalities of the E2 system:

Featured Functions for Data Reporters	
User Account Management	<ul style="list-style-type: none"> Users can edit account fields as determined by program staff. “Forgot Password” function allows user to retrieve lost password by email. Users can reset their password at any time
Data Reporting Group Association	<ul style="list-style-type: none"> User can quickly access the facility/water system/laboratory information that is currently associated with his/her account User may manage the facility/laboratory association if allowed by the agency.

Featured Functions for Data Reporters	
Reporting Options	<p>E2 system provides four different report submission options:</p> <ul style="list-style-type: none"> • Print a blank PDF report and submit the report by paper. • Fill out web entry form, and submit the report electronically through E2 • Store the reporting data in an Excel file, and copy-paste it into E2 online web entry form. • Download reporting requirements in XML format from E2, and upload the XML reporting file online
Automatic Email Notification	<p>Email will be automatically triggered on various critical events in the E2 system, which includes:</p> <ul style="list-style-type: none"> • User account related information: to ensure the security of all user account information, users will be notified via registered Email for all account related activities including: Email updates, password resets, requesting a PIN, etc. • Report submission receipt (received by state agency) • Report status update (accepted or rejected by state agency)
Report Wizard	<p>Complete step-by-step guidance to help a user fill out reporting forms</p> <ul style="list-style-type: none"> • Online Help provides detailed instructions on filling out each field • File Uploading wizard allows electronic submission for report supplemental materials • Dynamic data validation is performed before submission • Report Review step allows a user to review reporting data and uploaded attachments prior to final submission step • Error messages are easy to understand and are displayed on the fields where errors occur which helps the user quickly correct the invalid data • Form certifying step ensures that only authorized personnel can submit the reports to the E2 system
Attachment Uploading with Automatic Virus Scan	<ul style="list-style-type: none"> • If facility user wishes to submit supplemental files along with their submission, he/she can submit them electronically using E2 via attachment uploading functions. • Virus scan will be automatically performed by the E2 system during the uploading process. If a virus is detected, the file will be removed from the system immediately and a message will be displayed on the web page to notify the user. • Certain restrictions for file uploading may be applied as required by the program. For instance, the issuing agency may restrict the maximum file size that can be accepted electronically, or the file types that can be accepted or viewed by the issuing agency. XML based design makes the configuration as easy as one step.
Saving Multiple Unfinished Reports	<p>A facility user is not required to complete the report in one session. Instead, a user may save his/her draft in the E2 system, and come back to finish it in the Edit an Open Report module at a later time.</p>

Featured Functions for Data Reporters																	
<p>Chain of Custody and Submission Receipt</p>	<p>For each submitted report, the E2 system will keep a Chain-of-Custody as well as a submission receipt</p> <ul style="list-style-type: none"> Chain-of-Custody records the submitter’s name, submission date and time, submission ID, etc. Submission receipt provides a summary of submitted report, including report type, uploaded attachments, etc. <p>A unique submission ID will be assigned to each successfully submitted report.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <div style="text-align: right; border-bottom: 1px solid black; margin-bottom: 5px;"> View Lab Submissions View Lab Reports View Lab Samples </div> <p>View Lab Submission - Chain of Custody</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: small;">Certifier's name:</td> <td>admin enfoTech</td> </tr> <tr> <td style="font-size: small;">Certifier's TCP/IP address:</td> <td>172.46.131.89</td> </tr> <tr> <td style="font-size: small;">Date and time the file was selected:</td> <td>Not available (Based on atomic server time)</td> </tr> <tr> <td style="font-size: small;">Date and time the file was sent:</td> <td>01/03/2006 11:07:28 (Based on atomic server time)</td> </tr> <tr> <td style="font-size: small;">Date and time the file was received:</td> <td>01/03/2006 11:07:28 (Based on atomic server time)</td> </tr> <tr> <td style="font-size: small;">Date and time acknowledgement was sent:</td> <td>01/03/2006 11:07:28 (Based on atomic server time)</td> </tr> <tr> <td style="font-size: small;">Submission ID:</td> <td>23</td> </tr> <tr> <td style="font-size: small;">CRC Check:</td> <td>A checksum validation performed now verified that the current file on record with the E2 system is identical to the original submission.</td> </tr> </table> </div>	Certifier's name:	admin enfoTech	Certifier's TCP/IP address:	172.46.131.89	Date and time the file was selected:	Not available (Based on atomic server time)	Date and time the file was sent:	01/03/2006 11:07:28 (Based on atomic server time)	Date and time the file was received:	01/03/2006 11:07:28 (Based on atomic server time)	Date and time acknowledgement was sent:	01/03/2006 11:07:28 (Based on atomic server time)	Submission ID:	23	CRC Check:	A checksum validation performed now verified that the current file on record with the E2 system is identical to the original submission.
Certifier's name:	admin enfoTech																
Certifier's TCP/IP address:	172.46.131.89																
Date and time the file was selected:	Not available (Based on atomic server time)																
Date and time the file was sent:	01/03/2006 11:07:28 (Based on atomic server time)																
Date and time the file was received:	01/03/2006 11:07:28 (Based on atomic server time)																
Date and time acknowledgement was sent:	01/03/2006 11:07:28 (Based on atomic server time)																
Submission ID:	23																
CRC Check:	A checksum validation performed now verified that the current file on record with the E2 system is identical to the original submission.																
<p>Submittal History Tracking</p>	<p>When a revision is submitted, E2 will automatically link it to the previous submission. In E2, a user can track all related historical submission and view the submission details.</p>																
<p>Submitting Revised Submission</p>	<p>E2 allows a user to submit a revision after original submission. Modified data is tracked in E2 and displayed for easy identification.</p>																
<p>Submission Reminder</p>	<p>E2 provides submission reminders to a user based on the reporting requirements defined in each month. A user can easily identify how many and which reports are to be submitted before the due date.</p>																
<p>On-Time Submission Checking and Notification</p>	<p>E2 can perform an on-time submission check. If the submission is past the due date, a warning email will be automatically sent to the facility user and/or program staff.</p>																
<p>Three-Level Certifying Roles for Submitting a Report</p>	<p>Secure and flexible Rights feature allows administrators to delegate a facility user appropriate role in electronic report submission process. There are three levels for users:</p> <ul style="list-style-type: none"> View - Allows user to view reports that have been electronically submitted Prepare - Allows user to both view reports and enter report data without certifying or submitting a report Certify - Allows user to view, fill out reports and certify reports to be submitted electronically. 																

3.4 **3** *Deliverable 3: Exchange Interface for Electronic MOR Submission*

enfoTech has developed e-Reporting solutions for the reporting of Monthly Operating Reports for New Jersey DEP and Ohio EPA. The solution we have provided to these states to support the electronic reporting is the E2 system, which is a secure XML and internet based application.

We will provide an online reporting solution for the following MOR report:

- Groundwater Systems Form
- Purchase Systems Form
- Surface Water Series Form
- Fluoride Form



For each form, we will provide the following capabilities:

- Analyze form to identify fields not already in MOR XML Schema
- Modify existing MOR XML schema to accommodate new XML elements
- Provide online entry form
- Provide batch upload capability, including ability for PWS to download a blank XML file template to use as a starting point for batch entry.
- Provide a "human readable" form for the PWS to view prior to e-signature, available for both online entry and batch upload options

The previous section provides additional details describing the standard capabilities of the E2 reporting system.

Below is an example human readable form we have used for Ohio EPA:

OhioEPA Water Plant / Distribution Monthly Operating Report (MOR) - Windows Internet Explorer

Water Plant/Distribution System Monthly Operating Report (MOR)

Division of Drinking and Ground Waters

PWS ID: _____
 STU ID: _____
 Reporting Lab Certification Number: _____
 Reporting Month / Year: _____

Fluoride Compound Applied: _____		FL Plant Tap Highest Value: _____		Iron/Manganese QC Laboratory Check Data	
FL QC Check Sample Date: _____		Date of Highest Value: _____		Iron Date: _____	Mn Date: _____
FL QC Check Sample (P/F): _____				Iron (mg/L): _____	Mn (mg/L): _____

Date	Production (MGD)	Calc. Fluoride Dosage (mg/L)	Fluoride Reporting			pH	Alkalinity			Hardness (mg/L)	Phosphate as Total P (mg/L)	Ortho-phosphate as PO ₄ (mg/L)	Iron (mg/L)	Manganese (mg/L)	Copper (mg/L)
			Plant Lab Analysis				Plant Tap / Entry Point								
			Raw (mg/L)	Plant Tap (mg/L)	Distribution (mg/L)		Phenol (mg/L)	Total (mg/L)	Stability (mg/L)						
1/1															
1/2															
1/3															
1/4															
1/5															
1/6															
1/7															
1/8															
1/9															
1/10															
1/11															
1/12															
1/13															
1/14															
1/15															
1/16															
1/17															
1/18															
1/19															
1/20															
1/21															
1/22															
1/23															
1/24															
1/25															
1/26															
1/27															
1/28															
1/29															
1/30															
1/31															
Min.															
Max.															
Avg.															
Total															

While this format and fields differ from WV-DHHR's requirements, we can use the same technical approach for providing the display of a human readable form prior to submission.

The next page provides a few examples of online entry forms for a Water Plan/Distribution MOR developed for Ohio EPA. While the format differs from WV-DHHR, we will use a similar technical approach for the development of the MOR online entry forms for this project:

Home Help

Create New Report
Edit Existing Report
Submittal Reason

Credible Data
Create or Update SWS
Create New Reports
Edit Data Points
Submittal Reason
Display Test Results
View Reports for Submittal Process

Laboratory
Create New Report
Review Lab Report
Review Lab Report
Review Lab Report
Review Lab Report
Review Lab Report

Water System
View Submittal
Create New Reports
Review Lab Report
Review Lab Report
View Submittal

Admin Tools
Security Configuration
System Configuration
Facility Management
Equipment Management
Reports
New Reports
Management
General Template Configuration
Data Analysis Configuration
Data Validation Test
Help Text
Data Flow Manager

Water Plant / Distribution MOR: Distribution

PWS ID - Name: **OH1563012 - 1ST CHRISTIAN CHURCH OF KENSINGTON**

Number of Samples:

Chlorine Residual (Total):

Avg. Value (mg/L):

Date	Lowest		Distribution										
	Chlorine Residual (Free) (mg/L)	Chlorine Residual (Combined) (mg/L)	Chemical		Type		FIRST CUSTOMER (FC)			Residence Time in Distribution			
			Chloride	Chlorine Dioxide	Routine	Followup	< 5 hrs	> 5 hrs	> 12 hrs	Avg (AT)	Max (AT)		
10/1/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/2/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/3/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/4/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/5/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/6/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/7/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/8/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/9/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/10/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/11/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/12/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/13/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/14/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/15/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/16/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/17/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/18/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/19/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/20/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/21/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/22/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/23/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/24/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/25/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/26/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/27/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/28/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
10/29/2009			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							

Done
Local Intranet | Protected Mode: Off
80%

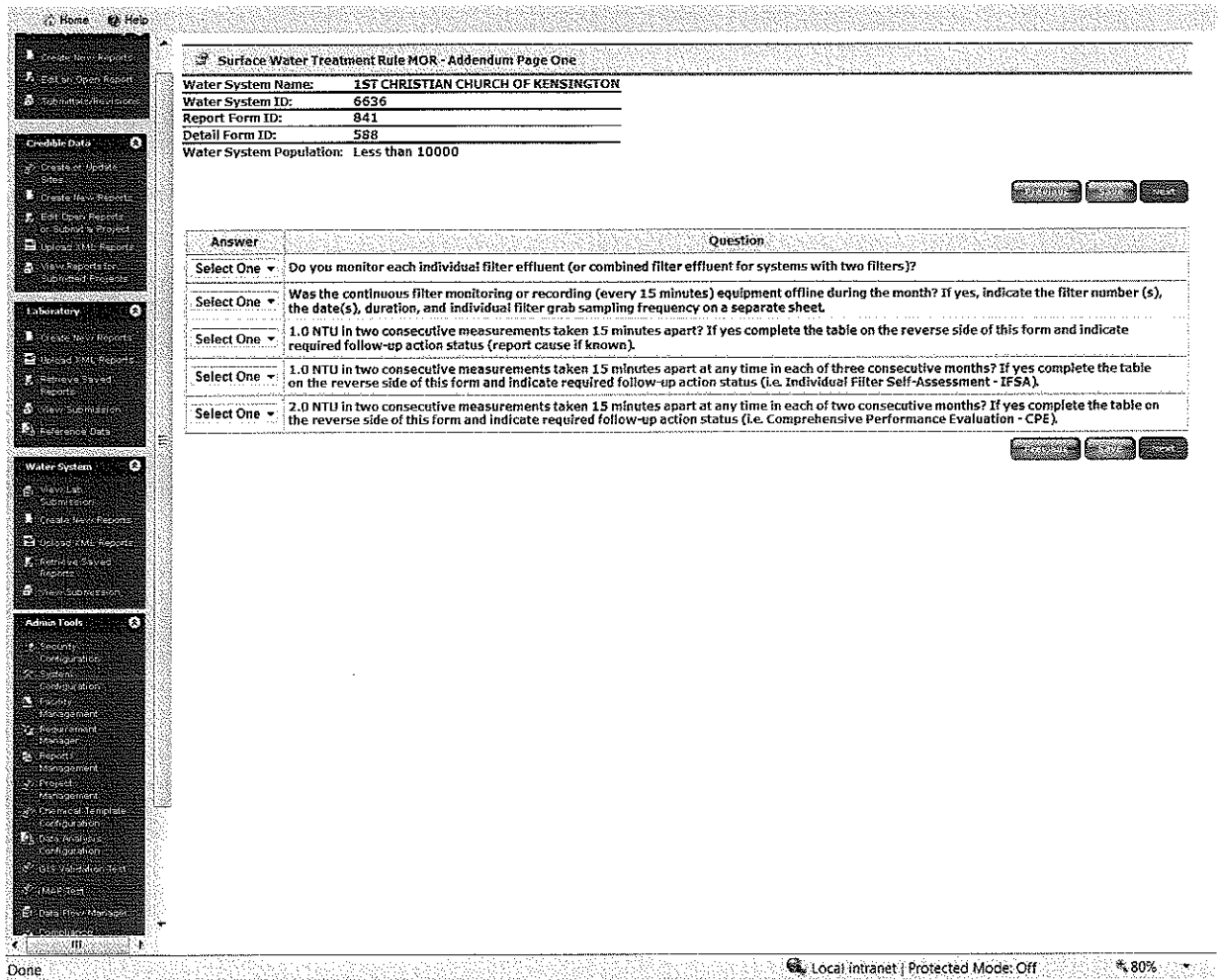
Home Help

Surface Water Treatment Rule MOR - Disinfectant

Water System Name: **1ST CHRISTIAN CHURCH OF KENSINGTON**
 PWS ID: **OH1563012**
 Report Form ID: **841**
 Detail Form ID: **<<New>>**

Day (2009)	Lowest Residual Disinfection at Entrance to Distribution		Duration Residual Disinfection Fell Below Requirement (0.1 hr)	Peak Hourly Treatment Flow(gpm)	Highest pH	Lowest Temp (C)	Lowest Clearwell Operating Depth Level (ft)	Lowest Disinfectant Conc. (mg/l)	Effective Disinfectant Contact Time (min)	Minimum Actual CT (min x mg/l)	Required CT (min x mg/l)	Interpolation?	Raw Alkalinity (mg/L)
	Free	Combined											
10/1												No	
10/2												No	
10/3												No	
10/4												No	
10/5												No	
10/6												No	
10/7												No	
10/8												No	
10/9												No	

Done Local intranet | Protected Mode: Off 80%



Typically the specific format of MOR forms vary from state-to-state, so we implement customized online entry and human readable forms that closely mimic their existing paper forms.

3.5 4 Deliverable 4: Exchange Interface for SWOCS

WV-DHHR would like to provide a web interface to allow water and wastewater operators plus water well driller and pump installers to view their personal certification status and details. Because this web application will need to be secured to restrict access to only allow a user to view their own certification information, we recommend using the application security already established within E2.

We propose adding an additional menu option under the "My Account" menu group in E2, as shown here:

Home Help

Discharge Monitoring

Credible Data

Laboratory

Water System

Admin Tools

My Account

- Basic Information
- Associated Water System
- Associated Laboratory

Welcome to the Environmental Electronic (E2) Reporting System!

The E2 system allows facilities regulated by the Ohio EPA Division of Surface Water (DSW) and Division of Drinking and Ground Waters (DDAGW) to create and submit Discharge Monitoring Reports (DMRs) electronically.

The Electronic Environmental Reporting System is comprised of two modules:

- e-DMR** - Discharge Monitoring Reports - for Surface Water (NPDES) permits - individual, general, and indirect discharge
- e-DWR** - Drinking Water Reports - for Drinking Water Analysis and Monthly Operating reports

Welcome to DDAGW's Electronic Drinking Water Reporting (eDWR) Page

The e-DWR system allows Public Water Systems (PWSs) and Laboratories to create and submit Monthly Operating Reports (MORs) electronically to Ohio EPA - Division of Drinking and Ground Waters.

EDWR Content Goes Here!

e-DMR

The e-DMR module allows users to create and submit the following Discharge Monitoring Reports (DMRs) formerly referred to as DMRs:

- 4500 form** - required for individual and general permits
- 4519 form** - required for indirect discharge permits
- CSO/SSO form** - required for some individual permits

The e-DMR module allows DMRs to be completed and submitted in three formats:

- Manually in an online DMR form.
- Download a DMR template, enter data on your PC, then cut & paste into e-DMR.
- For advanced users. Download XML template, populate data using your data system, then upload to e-DMR.

For more information and operating instructions: click here (above left), or click here to view the e-DMR web page.

Welcome to Credible Data Reporting Page

The e-DMR Credible Data Home Page Introduction Goes Here.

New Menu Option called "Certification Details" will appear here.

When the user logs into E2, they will see a menu option called "Certification Details". When they click on the link, E2 will retrieve the latest certification information from SWOCS/SDWIS. This includes:

- Certifications held
- Date of Issuance
- Date of expiration
- CEH's credited

E2 application security will ensure that users will only see their own individual data.

4 Project Approach

4.1 Project Management Principles

enfoTech’s project management goal is to build a strong partnership with WV-DHHR to achieve the project objectives and to exceed WV-DHHR’s expectations. Our project management principles include:

Project Management Principles

Management Principle	Objectives and Benefits
Team Building	<ul style="list-style-type: none"> • Create an integrated project team with a strong synergy that shares a common project vision, objectives, and goal. • Clearly define roles and responsibilities among team members
Effective Communication	<ul style="list-style-type: none"> • Improve project deliverables and shorten acceptance review via effective communication (requirements and expectation) • Help team members to stay focused • “No surprises”
Quality Assurance	<ul style="list-style-type: none"> • Quality assurance is an integral part of our practices and processes (see Section 5). • Pertinent to the EPA (<i>EPA Requirements for Quality Assurance Project Plans</i>, EPA QA/R-5 (March 2001) and the enfoTech Life Cycle Management procedure, a QA process will be incorporated into the overall project plan.
Cost Management	<ul style="list-style-type: none"> • Consider product/deliverables oriented approach to manage project cost (instead of time and material based) • Maximize the development of re-usable IT components to save resources and costs
Risk Management	<ul style="list-style-type: none"> • Apply expertise to identify potential risk factors and communicate with all team members • Understand the risk factors and develop a plan to avoid or manage risk • Document lessons learned to minimize any future risk factors

Our integrated project management approach consists of two major components: 1) a well-designed Management Process for this project, and 2) a set of Management Tools to facilitate management tasks. A detailed description of each component is provided in the following sections.

4.2 General Project Roles & Responsibilities

enfoTech proposes the following general project roles and responsibilities for the project Team.

4.2.1 enfoTech Responsibilities

- enfoTech will provide a single point of contact for (1) providing overall project facilitation services, (2) all project-related communications, (3) coordinating the attendance of enfoTech project member at project meetings, (4) addressing the client's comments on deliverables, and (5) providing overall coordination from enfoTech members during the execution of the project.
- Develop and maintain a project plan with a project schedule. enfoTech will post the project plan to the Project Team Web site and, when revised, update the Web site with the newest version or issue the change as a separate addendum. The project plan will be provided as a Gantt chart, Microsoft Project file, or PDF file.
- Throughout the project implementation period, host project status WebEx conference calls, no more often than every other week, as necessary, for 1-2 hours/call, for project members to discuss project-related issues. enfoTech will set up call logistics, prepare draft agendas, document minutes of the conference calls, and post the minutes on the Project Team Web site.
- Provide technical services to follow up on action items developed from the conference calls
- enfoTech's project manager will submit monthly project reports to the WV-DHHR's project manager. The monthly project report shall include accomplishments, upcoming tasks, project schedule updates, action items, issues, and proposed resolutions for the issues.

4.2.2 WV-DHHR's Responsibilities

- WV-DHHR will provide a single point of contact for (1) all project-related communications, (2) coordinate the attendance of representatives from applicable member agencies at project meetings, and compile and deliver consolidated comments on deliverables (including comments from applicable member agencies), and (3) provide overall direction during the execution of the project.
- WV-DHHR will provide subject matter experts (SME) identified for this project and provide overall project requirements.
- If available, the WV-DHHR will provide a secured VPN connection to the enfoTech project manager during the project to allow enfoTech to provide system support
- WV-DHHR will provide related hardware/software, hosting environment, and Internet capacity required to support the project
- WV-DHHR will review deliverables and provide enfoTech with consolidated written comments on all of the draft deliverables within five business days of receipt for documents that are less than 100 pages, and within ten business days of receipt for documents that are more than 100 pages. Feedback on System review should be completed within 10 days of delivery.

4.3 Project Tasks, Deliverables, and Roles/Responsibilities

This section provides a complete list of proposed deliverables to meet the project requirements. enfoTech proposes a 7-phase project plan. Each project phase represents a logical progression in system life cycle development methodology. The project phases are:

- Project Startup Phase
- Delivery and Installation/Training of Node Software
- Requirements & Design Phase
- Development Phase
- Deployment/Acceptance Testing Phase
- Knowledge Transfer / Documentation Phase
- Product Deployment Phase

4.3.1 Project Startup Phase

During the Project Planning Phase, enfoTech will provide the following deliverables to WV DHHR.

Deliverables for the Planning Phase

- **Project Development Plan (PDP).** Deliver a Project Development Plan that provides the schedule for major milestones; outlines project roles and responsibilities; and establishes an issues management plan, risk management plan, and a project implementation schedule for all aspects of the project. It also finalizes the review procedures for all deliverables and establishes system acceptance criteria.
- **Bi-Weekly Project Status.** Hold Bi-Weekly project status teleconferences and give status reports (1 hour each)
- **Monthly Project Reports.** Deliver twelve (12) months of monthly project reports

enfoTech proposes the following technical approach for the deliverables required during the Planning Phase:

- **Project Development Plan (PDP):** A PDP will be developed that outlines project roles and responsibilities, issues a project management plan. The Plan will include discussion for:
 - Project background and scope of work
 - Deliverables and time line
 - A system development plan
 - A Quality Assurance plan
 - A project implementation plan
 - Issue tracking and resolution plan
 - A risk management plan
 - Deliverable acceptance plan
 - General project management practices, communication procedures, and reporting frequency and methods

The document will be the baseline that all aspects of the project will follow.

4.4 Delivery and Installation/Training of Node Software

During the Node Delivery, Installation, and Training Phase, enfoTech will provide the following deliverables to WV DHHR.

Deliverables for the Node Installation/Training Phase

- **Onsite Preparation, Delivery, and Installation of eNode Software:** enfoTech will prepare the eNode installation package. The eNode provides several configuration settings to allow each State to customize the Node based on their unique settings. enfoTech will work with WV-DHHR to customize the following configuration settings:
 - Email server and address settings
 - Proxy server settings (if applicable)
 - Interface customization
 - Node server settings
 - Database connection settings

enfoTech will install the eNode during a 1-day onsite installation visit and may supplement this with additional remote eNode installation support. During this visit, enfoTech will meet with WV-DHHR to provide Node Administration training.
- **Testing of eNode Against CDX Testing Site:** EPA's criteria for an operational Node is that the Node passes the Node 2.0 testing tool provided by EPA/CDX. enfoTech will assist WV-DHHR in testing the installed Node against the CDX Testing Site.
- **Preparation & Delivery of eNode Documentation:** enfoTech will prepare and deliver the following eNode documentation:
 - eNode Installation Guide: Step-by-step installation instructions
 - eNode Administrator's Guide: Instructs eNode Administrators how to modify the eNode configuration settings, manage eNode users, and plug in new data flows (FRS, NEI, etc) into the Node.
 - eNode Data Flow Developer's Guide: Explains how new data flows can be plugged into the Node, intended for data flow developers.

4.5 Requirements & Design Phase

During the Design Phase, enfoTech will provide the following deliverables to WV DHHR.

Deliverables for the Requirements Verification and Design Phase

- One 1-Day Onsite Requirement Gathering / Design Workshop
- An overall System Design Document (SDD) that includes "AS IS" and "TO BE" business process work flows, and a Requirements Matrix for online e-DWR, e-MOR, and SWOCS components of the project

enfoTech proposes the following technical approaches for the major deliverables required during the Requirements Verification and System Design Phase.

- **Onsite Requirements Gathering / Design Workshop:** enfoTech will conduct one 1-day on-site requirements gathering working sessions with WV DHHR project members to analyze business processes, verify requirements, capture and prioritize their functional requirements for all major project deliverables, including system interfaces with SDWIS and SWOCS. Team decisions will be captured in the SDD document.
- **System Design Document (SDD):** The project will produce a System Design Document that will provide the detailed description on how E2 will be modified to meet the requirements for this project. The objective is to make sure that all project components will work cohesively to address the overall project objectives.

4.6 Development Phase

During the System Enhancement Phase, enfoTech will provide the following deliverables to WV-DHHR.

Deliverables for the Development Phase
<ul style="list-style-type: none"> • Modified E2 to provide interface for Laboratory Reporting with integration with EPA's Lab to State software • Modified E2 to provide interface for MOR reporting and integration with SDWIS/State • Modified E2 to provide interface for read only access to certification status and certification details from SWOCS • System Test Plan covering all E2 modifications

enfoTech will undertake the following tasks to provide the deliverables listed above during the Development Phase.

- **Establish new development environment (DB & code):** enfoTech will establish a new internal project environment specific to WV-DHHR.
- **Modify E2-Java to be CROMERR Compliant:** enfoTech will make necessary modifications to E2 to ensure compliance with CROMERR.
- **MOR Database Changes:** Make necessary database changes to E2 to support new MOR elements not previously identified.
- **MOR XML Schema modifications:** Make necessary database changes to the MOR XML schema we have previously used for MOR reporting to support new MOR elements not previously identified.
- **Develop Online Entry forms:** Develop the online webform entry capabilities for the following 4 MOR forms:
 - Groundwater Systems Form
 - Purchase Systems Form
 - Surface Water Series Form
 - Fluoride Form
- **Online validation:** Develop online form validation to ensure all validation checks required by WV-DHHR are made prior to acceptance of MOR submissions. This will ensure that all data entering SDWIS/State is clean and PWS submitters have made all corrects to their submissions prior to receiving an "acceptance" from the E2 system.

- **Develop stylesheets for 4 MORs:** enfoTech will develop an XML stylesheet for each MOR. These stylesheets are used to render the MOR forms in a "human readable" format prior to final submission from the PWS and are an essential component of CROMERR acceptability.
- **Develop batch upload validation:** enfoTech will develop the batch upload validation for the 4 MOR forms (sometimes this validation differs from online entry due to slightly different nature of bulk uploading process).
- **Develop integration with EPA's Lab to State system:** enfoTech will integrate with SDWIS/State to assure that MOR data received in the E2 is made available in SDWIS/State without compromising the application data integrity. We offer two options for Lab reporting integration with SDWIS State:
 - **Option A:** Lab reports their SDWIS data through E2. E2 then passes the data onto the SDWIS "XML Sampling" module, which will then read in the SDWIS XML files and import to SDWIS. This is the preferred approach our existing customers who have both E2 and SDWIS/State have taken.
 - **Option B: When the user logs into E2, they will be prompted which option they wish to submit their laboratory reports:**
 - **Online Entry:** if they select this option, E2 will provide the online entry forms and generate the SDWIS XML to pass onto SDWIS "XML Sampling" module
 - **Batch Upload:** if they select this option, E2 will pass the user onto the "Lab to State" application for further processing.
- **MOR Integration with SDWIS/State:** enfoTech will integrate with SDWIS/State to assure that MOR data received in the E2 is made available in SDWIS/State without compromising the application data integrity.
- **Develop SWOCS Website:** enfoTech will develop the read-only SWOCS page as described in the technical approach section of this proposal.
- **Develop System Test Plan:** enfoTech will develop a comprehensive test plan which covers all new modifications to the system (covering both laboratory, MOR reporting, and SWOCS page).

4.7 Deployment/Acceptance Testing Phase

During the System Acceptance Test Phase, enfoTech will provide the following deliverables to WV-DHHR.

Deliverables for the System Acceptance Phase

- Develop Release Package for Test Environment
- Onsite deploy of Solution To Customer's Test Environment
- Execute System Test Plan in Client's Test Environment
- User Acceptance Testing (UAT) Support & Address UAT Feedback

enfoTech recommends the following technical approaches for the deliverables required during this Phase.

- **Develop Release Package for Test Environment:** enfoTech Release Manager will prepare a release package which includes all application and database installation files, along with Installation Instructions.
- **Deploy Solution To Customer's Test Environment:** enfoTech will conduct an onsite visit to deploy the E2 solution in WV-DHHR's test environment.
- **Execute System Test Plan in Client's Test Environment:** enfoTech will execute the test plan in the WV-DHHR test environment
- **User Acceptance Testing (UAT) Support & Address UAT Feedback:** After all the system deliverables pass the initial testing, WV-DHHR will conduct acceptance testing. User feedback will be captured and will be resolved before it is released for production. We will make modifications to the system that address issues raised during the acceptance testing period.

4.8 Knowledge Transfer / Documentation Phase

During the Documentation and Training Phase, enfoTech will provide the following deliverables to the WV-DHHR.

Deliverables for the Knowledge Transfer / Documentation
<ul style="list-style-type: none"> • User Guide (both paper and electronic copy) • System Administration Guide • Installation Guide

The System Administration Guide will detail all steps to be taken in the event of system failure and what is needed to return it to working order. Geared towards Network, Development, and Database staff, it will provide all the information needed to restart the system in the event of failure after the contractor has disengaged from the project. The System Administration Guide document will also include technical overview of the following:

The User Guide will be geared toward end users with instructions on how to use the System.

4.9 Product Deployment Phase

The System Go-Live will transition WV-DHHR operations over to the new solution. enfoTech will work closely with WV-DHHR to ensure that the transition is smooth and to minimize operation interruptions. We will provide the following deliverables.

Deliverables for the Product Deployment Phase
<ul style="list-style-type: none"> • Develop Release Package for Production Environment • Install production-ready version

enfoTech recommends the following technical approach for the deliverables required for a smooth system go-live:

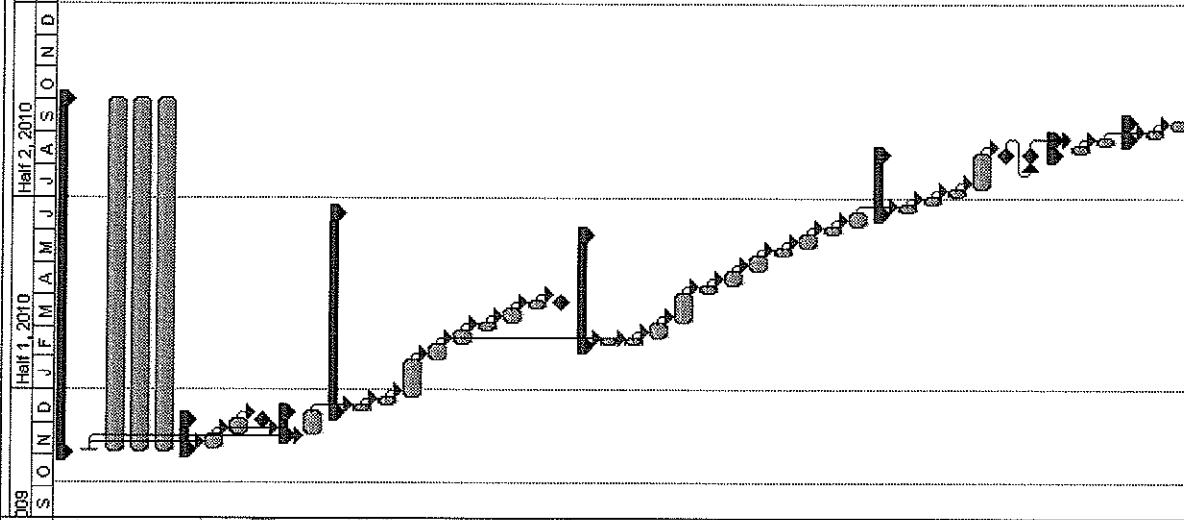
- **Production Ready Release:** All releases will have passed WV-DHHR's acceptance testing and be prepared to conform to their infrastructure environment.
- **Installation Support:** enfoTech will provide documentation and phone support to WV-DHHR to successfully install all system components.

4.10 Project Schedule

enfoTech estimates that the Project can be completed in approximately 12 months. enfoTech will work with West Virginia DHHR at the onset of the project to develop a comprehensive project plan, determine implementation priority, and to finalize a project schedule.

Develop and Implement a Data Node Exchange: Technical Proposal

ID	Task Name	Duration	Start	Finish	Resource Names
1	(1) Project Startup Phase	240 days	Mon 11/2/09	Fri 10/1/10	
2	Project Plan Document	3 days	Mon 11/2/09	Wed 11/4/09	Doug Timms
3	Conduct Periodic Project Monitoring Team Meetings (WebEx)	12 mos	Mon 11/2/09	Fri 10/1/10	Doug Timms
4	Software License Fee (E2)	12 mos	Mon 11/2/09	Fri 10/1/10	
5	Software License Fee (Node)	12 mos	Mon 11/2/09	Fri 10/1/10	
6	(2) Delivery of Host Product	20 days	Thu 11/5/09	Wed 12/2/09	enfoTech
7	Prepare & Print Training Materials	10 days	Thu 11/5/09	Wed 11/18/09	2 Doug Timms
8	Onsite Installation and Training Session(s)	10 days	Thu 11/19/09	Wed 12/2/09	7 Doug Timms
9	Milestone Deliverable 1 Completed	0 days	Wed 12/2/09	Wed 12/2/09	
10	(3) Requirements & Design Phase	16 days	Thu 11/19/09	Wed 12/9/09	7 enfoTech
11	Develop & Deliver System Design Document	15 days	Thu 11/19/09	Wed 12/9/09	2 RDOH
12	(4) Development Phase	136 days	Thu 12/10/09	Wed 6/16/10	
13	Establish new development environment (DB & code)	5 days	Thu 12/10/09	Wed 12/16/09	11 Natalius Huang_Lijk
14	Modify E2-Java to be CROMERR Compliant	5 days	Thu 12/17/09	Wed 12/23/09	13 Natalius Huang_Lijk
15	Develop integration with EPA's Lab to State system	25 days	Thu 12/24/09	Wed 1/27/10	14 Natalius Huang_Lijk
16	Develop System Test Plan	10 days	Thu 1/28/10	Wed 2/10/10	15 Doug Timms
17	Internal Testing	10 days	Thu 2/11/10	Wed 2/24/10	16 Doug Timms
18	Deploy Version with Lab Reporting Interface to WVDHHR	5 days	Thu 2/25/10	Wed 3/9/10	17 Natalius Huang_Lijk
19	WVDHHR Acceptance Testing of Lab Reporting Solution	10 days	Thu 3/4/10	Wed 3/17/10	18 WVDHHR
20	Address issues reported by WVDHHR in Lab Reporting Solution	5 days	Thu 3/18/10	Wed 3/24/10	19 Natalius Huang_Lijk
21	Milestone Deliverable 2 Completed	0 days	Wed 3/24/10	Wed 3/24/10	
22	MOR Modifications	75 days	Thu 2/11/10	Wed 5/26/10	
23	MOR Database Changes	5 days	Thu 2/11/10	Wed 2/17/10	16 Nicki Chang
24	MOR XML Schema modifications	5 days	Thu 2/11/10	Wed 2/17/10	16 Lije Xu
25	Develop Online Entry form (2 small MOR)	10 days	Thu 2/18/10	Wed 3/3/10	24 Natalius Huang_Lijk
26	Develop Online Entry form (2 large MOR)	20 days	Thu 3/4/10	Wed 3/31/10	25 Natalius Huang_Lijk
27	Online validation (2 small MOR)	5 days	Thu 4/1/10	Wed 4/7/10	26 Lije Xu
28	Online validation (2 large MOR)	10 days	Thu 4/8/10	Wed 4/21/10	27 Lije Xu
29	Develop stylesheets for 4 MORs	10 days	Thu 4/22/10	Wed 5/5/10	28 Lije Xu
30	Develop batch upload validation	5 days	Thu 5/6/10	Wed 5/12/10	29 Natalius Huang_Lijk
31	MOR integration with SDWIS/State	10 days	Thu 5/13/10	Wed 5/26/10	30 Natalius Huang_Lijk
32	Develop SWOCS Website	5 days	Thu 5/27/10	Wed 6/2/10	31 Natalius Huang_Lijk
33	Internal Testing	10 days	Thu 6/3/10	Wed 6/16/10	32 Doug Timms
34	(5) Deployment / Acceptance Testing Phase	40 days	Thu 6/17/10	Wed 8/11/10	
35	Develop Release Package for Test Environment	5 days	Thu 6/17/10	Wed 6/23/10	33 Natalius Huang_Lijk
36	Deploy Solution To Customer's Test Environment	5 days	Thu 6/24/10	Wed 6/30/10	35 Natalius Huang_Lijk
37	Execute System Test Plan in Client's Test Environment	5 days	Thu 7/1/10	Wed 7/7/10	36 Lije Xu
38	User Acceptance Testing (UAT) Support & Address UAT Feedback	25 days	Thu 7/8/10	Wed 8/11/10	37 Natalius Huang_Lijk
39	Milestone Deliverable 3 Completed	0 days	Wed 8/11/10	Wed 8/11/10	
40	Milestone Deliverable 4 Completed	0 days	Wed 8/11/10	Wed 8/11/10	
41	(6) System Knowledge Transfer & Documentation	10 days	Thu 8/12/10	Wed 8/25/10	
42	Prepare & Deliver System Users/Administration Guide	5 days	Thu 8/12/10	Wed 8/18/10	40 Natalius Huang_Lijk
43	Prepare & Deliver System Installation Guide	5 days	Thu 8/19/10	Wed 8/25/10	42 Natalius Huang_Lijk
44	(7) Production Deployment Phase	12 days	Thu 8/26/10	Fri 9/10/10	
45	Develop Release Package for Prod Environment	5 days	Thu 8/26/10	Wed 9/1/10	43 Natalius Huang_Lijk
46	Deploy Solution To Customer's Production Environment	7 days	Thu 9/2/10	Fri 9/10/10	45 Natalius Huang_Lijk



5 Price Proposal

5.1 Bid Sheet

The following table provides a bid sheet summarizing the proposed costs for each major project deliverable:

Tasks (includes all components as described in specifications)	Deliverable Due Dates	Vendor Quotation Cost for Tasks
DELIVERABLE #1: Delivery of a Node Product that meets the specifications of the National Environmental Exchange Network version 2.0.	Within the first 5 months of contract date	\$ 13,500
DELIVERABLE #2: Development of an exchange interface to use the software known as Lab to State for Laboratories and/or public water systems to transfer data over the internet into the existing Safe Drinking Water Information System/State version (SDWIS/State) which already exists within the WV DHHR environment.	Within the first 7 months of contract date	\$ 42,020
DELIVERABLE #3: Development of an exchange interface and software for public water systems to enter an electronic version of existing or DHHR Monthly Operational reports, either by upload or by manual, on-line entry through a web form, transfer this information through the Node into SDWIS/State and be CROMERR compliant.	Within the first 9 months of contract date	\$ 128,140
DELIVERABLE #4: (Deductive Alternate) Development of an exchange interface to allow water and wastewater operators plus water well drillers and pump installers, to view the information currently in SWOCS/SDWIS or associated databases through a vendor developed interface that establishes an individual user name and password for the operators, drillers and pump installers. Note: the deliverable will be a deductive alternative. In the event that the total cost of completed project exceeds the funds available, this deliverable may be deducted to complete the previous three deliverables.	Within the first 11 months of contract date	\$ 10,960
	Total cost of completed Project	\$ 194,620

The cost summary listed above on the Bid Sheet is further broken down in the following section based on deliverables to be provided to WV-DHHR.

5.2 Detailed Cost Estimates

This section provides a detailed listing of the tasks and deliverables to be provided to WV-DHHR, an associated cost for each, and an indication of the Summary Deliverable that the task is associated with.

Task Description	Deliverable 1	Deliverable 2	Deliverable 3	Deliverable 4	Service Fee for the Task	ODC Expenses for the Task	Total Estimated Cost for the Task
(1) Project Startup Phase							
Project Plan Document	\$ 440	\$ 440	\$ 440		\$ 1,320	\$ -	\$ 1,320
Conduct Periodic Project Monitoring Team Meetings (WebEx)	\$ 7,920	\$ 7,920	\$ 7,920		\$ 23,760	\$ -	\$ 23,760
Software License Fee (E2)							\$ 150,000
Software License Fee (Node)							\$ -
(2) Delivery of Node Product							
Prepare & Print Training Materials	\$ 2,160				\$ 2,160	\$ -	\$ 2,160
Onsite installation and Training Session(s)	\$ 2,980				\$ 2,160	\$ 820	\$ 2,980
(2) Requirements & Design Phase							
Develop & Deliver System Design Document		\$ 4,240	\$ 4,240		\$ 6,960	\$ 1,520	\$ 8,480
(3) Development Phase							
Establish new development environment (DB & code)		\$ 3,440	\$ 3,440		\$ 6,880	\$ -	\$ 6,880
Modify E2-Java to be CROMERR Compliant		\$ 2,400	\$ 2,400		\$ 4,800	\$ -	\$ 4,800
MOR Database Changes			\$ 5,120		\$ 5,120	\$ -	\$ 5,120
MOR XML Schema modifications			\$ 5,400		\$ 5,400	\$ -	\$ 5,400
Develop Online Entry form (2 small MOR)			\$ 9,600		\$ 9,600	\$ -	\$ 9,600
Develop Online Entry form (2 large MOR)			\$ 24,000		\$ 24,000	\$ -	\$ 24,000
Online validation (2 small MOR)			\$ 5,100		\$ 5,100	\$ -	\$ 5,100
Online validation (2 large MOR)			\$ 15,300		\$ 15,300	\$ -	\$ 15,300
Develop stylesheets for 4 MORs			\$ 9,300		\$ 9,300	\$ -	\$ 9,300
Develop batch upload validation			\$ 4,800		\$ 4,800	\$ -	\$ 4,800
Develop integration with EPA's Lab to State system		\$ 12,300			\$ 12,300	\$ -	\$ 12,300
MOR Integration with SDWIS/State			\$ 19,800		\$ 19,800	\$ -	\$ 19,800
Develop SWOCS Website				\$ 4,820	\$ 4,820	\$ -	\$ 4,820
Develop System Test Plan		\$ 980	\$ 980	\$ 980	\$ 2,940	\$ -	\$ 2,940
(4) Deployment / Acceptance Testing Phase							
Develop Release Package for Test Environment		\$ 540	\$ 540		\$ 1,080	\$ -	\$ 1,080
Deploy Solution To Customer's Test Environment		\$ 1,300	\$ 1,300		\$ 1,080	\$ 1,520	\$ 2,600
Execute System Test Plan in Client's Test Environment		\$ 3,300	\$ 3,300		\$ 6,600	\$ -	\$ 6,600
User Acceptance Testing (UAT) Support & Address UAT Feedback		\$ 3,000	\$ 3,000	\$ 3,000	\$ 9,000	\$ -	\$ 9,000
(5) System Knowledge Transfer & Documentation							
Prepare & Deliver System Users/Administration Guide		\$ 1,080	\$ 1,080	\$ 1,080	\$ 3,240	\$ -	\$ 3,240
Prepare & Deliver System Installation Guide		\$ 360	\$ 360	\$ 360	\$ 1,080	\$ -	\$ 1,080
(6) Production Deployment Phase							
Develop Release Package for Prod Environment		\$ 360	\$ 360	\$ 360	\$ 1,080	\$ -	\$ 1,080
Deploy Solution To Customer's Production Environment		\$ 360	\$ 360	\$ 360	\$ 1,080	\$ -	\$ 1,080

E2 Licensing Fee (waived)							\$-150,000
Final Total Costs:	\$13,500	\$42,020	\$128,140	\$10,960	\$190,760	\$3,860	\$194,620

License Fee Waiver: The E2 COTS software is typically priced at \$150,000 license fee for single enterprise-wide usage. This license fee is waived for WV-DHHR as shown in the table above. We are offering WV-DHHR both the eNode2008 software and E2 software to WV-DHHR for no license fee cost.

5.3 Payment Schedule

enfoTech proposes a deliverable-based payment schedule and will invoice West Virginia DHHR monthly for the amount incurred for the deliverables completed during the reporting period. enfoTech's standard payment terms are 30 days net from the invoice date.



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Quotation

EHS10018

PAGE 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:

ROBERTA WAGNER
 304-558-0067

VENDOR

EnfoTech
 11 Princess Road, Unit A
 Lawrenceville, NJ 08648

SHIP TO

HEALTH AND HUMAN RESOURCES
 BPH ENVIRO HLTH SERVICES
 CAPITOL AND WASHINGTON STREETS
 1 DAVIS SQUARE, SUITE 200
 CHARLESTON, WV
 25301-1798 304-558-2981

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
08/28/2009				

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	BID OPENING TIME	UNIT PRICE	AMOUNT
01	1	LB		220-34	01:30PM		
<p>TO DEVELOP & IMPLEMENT A CENTRALIZE DATA MODE EXCHAN</p> <p>REQUEST FOR QUOTATON</p> <p>TO DEVELOP AND IMPLEMENT A CENTRALIZED DATA NODE EXCHANGE PER THE ATTACHED SPECIFICATIONS.</p> <p>CONTRACT WILL BEGIN UPON AWARD AND EXTEND FOR A ONE YEAR PERIOD.</p> <p>EXHIBIT 3</p> <p>LIFE OF CONTRACT: THIS CONTRACT BECOMES EFFECTIVE ON AND EXTENDS FOR A PERIOD OF ONE (1) YEAR OR UNTIL SUCH "REASONABLE TIME" THEREAFTER AS IS NECESSARY TO OBTAIN A NEW CONTRACT OR RENEW THE ORIGINAL CONTRACT. THE "REASONABLE TIME" PERIOD SHALL NOT EXCEED TWELVE (12) MONTHS. DURING THIS "REASONABLE TIME" THE VENDOR MAY TERMINATE THIS CONTRACT FOR ANY REASON UPON GIVING THE DIRECTOR OF PURCHASING 30 DAYS WRITTEN NOTICE.</p> <p>UNLESS SPECIFIC PROVISIONS ARE STIPULATED ELSEWHERE IN THIS CONTRACT DOCUMENT, THE TERMS, CONDITIONS AND PRICING SET HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT.</p> <p>CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</p>							

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

IGF TURE

Executive Vice President *[Signature]* FEIN 22-3364641

TELEPHONE 609-896-9777 x.107 DATE 10/6/2009

ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Quotation

EHS10018

PAGE 2

ADDRESS CORRESPONDENCE TO ATTENTION OF:

ROBERTA WAGNER
 304-558-0067

RFQ COPY

VENDOR

enfoTech & Consulting, Inc.
 11 Princess Road, Unit A
 Lawrenceville, NJ 08648

SHIP TO

HEALTH AND HUMAN RESOURCES
 BPH ENVIRO HLTH SERVICES
 CAPITOL AND WASHINGTON STREETS
 1 DAVIS SQUARE, SUITE 200
 CHARLESTON, WV
 25301-1798 304-558-2981

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
08/28/2009				

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
------	----------	-----	---------	-------------	------------	--------

BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.

THE TERMS AND CONDITIONS CONTAINED IN THIS CONTRACT SHALL SUPERSEDE ANY AND ALL SUBSEQUENT TERMS AND CONDITIONS WHICH MAY APPEAR ON ANY ATTACHED PRINTED DOCUMENTS SUCH AS PRICE LISTS, ORDER FORMS, SALES AGREEMENTS OR MAINTENANCE AGREEMENTS, INCLUDING ANY ELECTRONIC MEDIUM SUCH AS CD-ROM.

REV. 05/26/2009

INQUIRIES:
 WRITTEN QUESTIONS SHALL BE ACCEPTED THROUGH CLOSE OF BUSINESS ON 9/8/2009. QUESTIONS MAY BE SENT VIA USPS, FAX, COURIER OR E-MAIL. IN ORDER TO ASSURE NO VENDOR RECEIVES AN UNFAIR ADVANTAGE, NO SUBSTANTIVE QUESTIONS WILL BE ANSWERED ORALLY. IF POSSIBLE, E-MAIL QUESTIONS ARE PREFERRED. ADDRESS INQUIRIES TO:

ROBERTA WAGNER
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON STREET, EAST
 CHARLESTON, WV 25311

FAX: 304-558-4115
 E-MAIL: ROBERTA.A.WAGNER@WV.GOV

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE 	TELEPHONE 609-896-9777 ext. 107	DATE 10/6/2009
E Executive Vice President	FEIN 22-3364641	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Quotation

EHS10018

3

ADDRESS CORRESPONDENCE TO ATTENTION OF:

ROBERTA WAGNER
 304 558 0067

RFQ COPY

enfoTech & Consulting, Inc.
 11 Princess Road, Unit A
 Lawrenceville, NJ 08648

HEALTH AND HUMAN RESOURCES
 BPH ENVIRO HLTH SERVICES
 CAPITOL AND WASHINGTON STREETS
 1 DAVIS SQUARE, SUITE 200
 CHARLESTON, WV
 25301-1798 304-558-2981

V
E
N
D
O
R

S
H
I
P
T
O

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
08/28/2009				

BID OPENING DATE:

09/24/2009

BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p>DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p> <p>PLEASE NOTE: A CONVENIENCE COPY WOULD BE APPRECIATED.</p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER: -----RW/FILE 22-----</p> <p>RFQ. NO.: -----EHS10018-----</p> <p>BID OPENING DATE: ---9/24/2009---</p> <p>BID OPENING TIME: ---1:30 PM---</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:</p> <p>FAX: 609-896-2555</p> <p>CONTACT PERSON (PLEASE PRINT CLEARLY):</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
<i>[Signature]</i>	609-896-9777, ext. 107	10/6/2009

Executive Vice President

FEIN 22-336-4641

ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Quotation

EHS10018

4

ADDRESS CORRESPONDENCE TO ATTENTION OF:

ROBERTA WAGNER
 304-558-0067

RFO COPY

enfoTech & Consulting, Inc.
 11 Princess Road, Unit A
 Lawrenceville, NJ 08648

HEALTH AND HUMAN RESOURCES
 BPH ENVIRO HLTH SERVICES
 CAPITOL AND WASHINGTON STREETS
 1 DAVIS SQUARE, SUITE 200
 CHARLESTON, WV
 25301-1798 304-558-2981

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
08/28/2009				

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
***** THIS IS THE END OF RFQ EHS10018 ***** TOTAL:						\$194,620.00

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

Signature: *[Signature]* TELEPHONE: 609-896-9777, ext. 107 DATE: 10/6/2009
 TITLE: Executive Vice President FEIN: 22-3364641
 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

NO. 0599 P. 1/57

RFP NUMBER
EHS10018

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
ROBERTA WAGNER
304-558-0067

RFQ NO. 09-001

ENRO TECH
 11 PRINCESS ROAD, UNIT 1
 LAWRENCEVILLE NJ 08648

S H P O

HEALTH AND HUMAN RESOURCES
 BPH ENVIRO HLTH SERVICES
 CAPITOL AND WASHINGTON STREETS
 1 DAVIS SQUARE, SUITE 200
 CHARLESTON, WV
 25301-1798 304-558-2981

DATE PRINTED 09/21/2009	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
-----------------------------------	---------------	----------	--------	---------------

BID OPENING DATE: **10/07/2009** BID OPENING TIME: **01:30PM**

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
ADDENDUM NO. 1						
1. QUESTIONS AND ANSWERS ARE ATTACHED. 2. TO MOVE BID OPENING DATE FROM 9/24/2009 TO 10/7/2009. 3. ADDENDUM ACKNOWLEDGEMENT IS ATTACHED. THIS DOCUMENT SHOULD BE SIGNED AND RETURNED WITH YOUR BID. FAILURE TO SIGN AND RETURN MAY RESULT IN DISQUALIFICATION OF YOUR BID.						
EXHIBIT 10						
REQUISITION NO.: EHS10018						
ADDENDUM ACKNOWLEDGEMENT						
I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.						
ADDENDUM NO. S:						
NO. 1 <input checked="" type="checkbox"/>						
NO. 2 <input type="checkbox"/>						
NO. 3 <input type="checkbox"/>						
NO. 4 <input type="checkbox"/>						
NO. 5 <input type="checkbox"/>						
I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.						

SIGNATURE: _____ TITLE: **Executive Vice President**

SEE REVERSE SIDE FOR TERMS AND CONDITIONS TELEPHONE: **609-896-9777, x 107** DATE: **10/6/2009**

ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

**Request for
 Quotation**

RFQ NUMBER
EHS10018

PAGE
2

ADDRESS CORRESPONDENCE TO ATTENTION OF
ROBERTA WAGNER
304-558-0067

RFQ COPY

VENDOR

enfoTech & Consulting, Inc.
 11 Princess Road, Unit A
 Lawrenceville, NJ 08648

VENDOR

HEALTH AND HUMAN RESOURCES
 BPH ENVIRO HLTH SERVICES
 CAPITOL AND WASHINGTON STREETS
 1 DAVIS SQUARE, SUITE 200
 CHARLESTON, WV
 25301-1798 304-558-2981

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS		
09/21/2009						
BID OPENING DATE: 10/07/2009		BID OPENING TIME 01-30PM				
LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.</p> <p style="text-align: center;"> SIGNATURE enfoTech & Consulting, Inc. COMPANY 10/6/2009 DATE </p> <p>REV. 11/96</p> <p style="text-align: center;">END OF ADDENDUM NO. 1</p>						

SIGNATURE	SEE REVERSE SIDE FOR TERMS AND CONDITIONS	
TITLE	TELEPHONE	DATE
Executive Vice President	609-896-9777 ext. 107	10/6/2009
PEIN	ADDRESS CHANGES TO BE NOTED ABOVE	
22-3364641		

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
EHS10018

PAGE
3

ADDRESS CORRESPONDENCE TO A MENTION OF
ROBERTA WAGNER
304-558-0067

RFQ COPY

enfoTech & Consulting, Inc.
 11 Princess Road, Unit A
 Lawrenceville, NJ 08648

S H P T O

HEALTH AND HUMAN RESOURCES
BPH ENVIRO HLTH SERVICES
CAPITOL AND WASHINGTON STREETS
1 DAVIS SQUARE, SUITE 200
CHARLESTON, WV
25301-1798 304-558-2981

DATE PRINTED: **09/21/2009** TERMS OF SALE: SHIP VIA: F.O.B.: FREIGHT TERMS:

BID OPENING DATE: **10/07/2009** BID OPENING TIME: **01:30PM**

LINE	QUANTITY	UOP	UNIT	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LB		220-34		
TO DEVELOP & IMPLEMENT A CENTRALIZE DATA MODE EXCHAN						
***** THIS IS THE END OF RFQ EHS10018 ***** TOTAL:						\$ 194,620.00

SIGNATURE: *[Signature]* TELEPHONE: **609-896-9777 ext. 107** DATE: **10/6/2009**
 TITLE: **Executive Vice President** FAX: **22-336-4641**
 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

**GENERAL TERMS & CONDITIONS
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)**

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
5. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
14. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
15. **WEST VIRGINIA ALCOHOL & DRUG-FREE WORKPLACE ACT:** If this Contract constitutes a public improvement construction contract as set forth in Article 1D, Chapter 21 of the West Virginia Code ("The West Virginia Alcohol and Drug-Free Workplace Act"), then the following language shall hereby become part of this Contract: "The contractor and its subcontractors shall implement and maintain a written drug-free workplace policy in compliance with the West Virginia Alcohol and Drug-Free Workplace Act, as set forth in Article 1D, Chapter 21 of the West Virginia Code. The contractor and its subcontractors shall provide a sworn statement in writing, under the penalties of perjury, that they maintain a valid drug-free work place policy in compliance with the West Virginia and Drug-Free Workplace Act. It is understood and agreed that this Contract shall be cancelled by the awarding authority if the Contractor: 1) Fails to implement its drug-free workplace policy; 2) Fails to provide information regarding implementation of the contractor's drug-free workplace policy at the request of the public authority; or 3) Provides to the public authority false information regarding the contractor's drug-free workplace policy."

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in case of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. Application is made for 2.5% resident vendor preference for the reason checked:

- N/A Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
 _____ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or** 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
 _____ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or**,

2. Application is made for 2.5% resident vendor preference for the reason checked:

- N/A Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,

3. Application is made for 2.5% resident vendor preference for the reason checked:

- N/A Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,

4. Application is made for 5% resident vendor preference for the reason checked:

- N/A Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or**,

5. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:

- N/A Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or**,

6. Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:

- N/A Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: enfoTech & Consulting, Inc.

Signed: 

Date: October 5, 2009

Title: Executive Vice President

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

STATE OF WEST VIRGINIA
Purchasing Division**PURCHASING AFFIDAVIT****VENDOR OWING A DEBT TO THE STATE:**

West Virginia Code §5A-3-10a provides that: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

PUBLIC IMPROVEMENT CONTRACTS & DRUG-FREE WORKPLACE ACT:

If this is a solicitation for a public improvement construction contract, the vendor, by its signature below, affirms that it has a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the **West Virginia Code**. The vendor **must** make said affirmation with its bid submission. Further, public improvement construction contract may not be awarded to a vendor who does not have a written plan for a drug-free workplace policy in compliance with Article 1D, Chapter 21 of the **West Virginia Code** and who has not submitted that plan to the appropriate contracting authority in timely fashion. For a vendor who is a subcontractor, compliance with Section 5, Article 1D, Chapter 21 of the **West Virginia Code** may take place before their work on the public improvement is begun.

ANTITRUST:

In submitting a bid to any agency for the state of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the state of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the state of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the state of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership or person or entity submitting a bid for the same materials, supplies, equipment or services and is in all respects fair and without collusion or fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

LICENSING:

Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf>.

Under penalty of law for false swearing (**West Virginia Code** §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

Vendor's Name: enfoTech & Consulting, Inc.

Authorized Signature:  Date: October 5, 2009