ELECTRONIC ENVIRONMENTAL DRINKING WATER REPORTING (E2-DWR) SYSTEM

USER'S GUIDE

Prepared for
New Jersey Department of Environmental Protection

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enfoTech

11 Princess Road, Unit A
Lawrenceville, New Jersey 08648

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

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1   Introduction

1.1   Electronic Environmental Reporting and the E2 System

The New Jersey Electronic Environmental reporting system (E2) is a web-based information system that allows the regulated community to electronically submit reports to the Department of Environmental Protection (NJDEP).

The E2 system provides an alternative to submitting hand-written or paper-based reports that is faster, more efficient, and requires less processing for water systems and the NJDEP. As a fully operational electronic reporting system, all of the necessary legal, security, and electronic signature functionalities have been included to serve as a completely paperless reporting system.

Currently, the E2 system allows laboratories to submit three major categories of reports:

- Electronic Drinking Water Reports (DWR)
- Electronic New Jersey Quantitation Limit (NJQL) reports
- Electronic Private Well Testing Act (PWTA) Reports

Currently, the E2 system allows water systems to perform the following major functions:

- View Electronic Drinking Water Reports (DWR) containing analytical results submitted by laboratories on behalf of water systems
- Submit the Annual Water Utilization report

The Bureau of Safe Drinking Water has not made all forms available for electronic submission[1]. Therefore, a water system may need to submit Drinking Water data electronically for some reports and use paper for other reports.

1.2   Reasons for and Benefits of Electronic Reporting with E2

Electronic reporting provides the following benefits:

- Gives the user greater control over the quality of data flow.
- Reduces reporting costs by offering a streamlined reporting method using readily available computer tools.
- Offers on-line availability of reports and their processing status.
- Improves reported data integrity and security.
- Saves the NJDEP costs by reducing, and better utilizing resources required for managing reports.
- Adds to the overall effectiveness of the NJDEP program areas with faster response for data analyses, compliance assessment, and decision-making.

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[1] A listing of the forms available for electronic submission can be found in the document entitled NJDEP E2RS XML Transmission Protocol.

- Allows the NJDEP (Office of Quality Assurance) to perform behind-the-scenes evaluations (informal data audits) of laboratory data submissions with respect to laboratories approved for certification, effective certification dates to analyze for specified parameters, using specified methods and techniques.

1.3 Contact Information

The E2 Coordinators can be reached at:

DWR
E2 Coordinator
Bureau of Safe Drinking Water
New Jersey DEP
DWRHelp@dep.state.nj.us
Phone: (609) 292 - 5550

1.4 E2 System Overview

As a web-enabled system, Laboratories and Water Systems can access the E2 system at minimal costs using existing Internet access. The E2 system provides Water Systems with the following capabilities with respect to Laboratories:

- **Ability to specify which laboratories can submit analytical reports.** E2 allows water systems to specify which laboratories can submit analytical reports on behalf of water systems.
- **Ability to view laboratory analytical reports.** E2 allows water systems to view laboratory analytical reports that have been submitted on behalf of water systems. In addition, the processing status of each sample / result can be viewed.

The E2 system provides Water Systems with the following capabilities with respect to Water System Reports[2]:

- **Ability to submit original or revised water system reports.** E2 allows water systems to either fill out the reports online, upload report submissions, or copy-and-paste reports from a water system's local spreadsheet program.
- **Ability to view validation messages online.** All submissions can be validated to verify that they meet minimum criteria as defined in the document entitled "NJDEP E2RS XML Transmission Protocol". Meaningful validation messages help pinpoint reporting errors so they can be corrected and resubmitted.
- **Ability to save partially completed reports.** If a user does not finish filling out a report in one session, he or she can save the report and resume filling it out at a later time. DEP will not review partially completed reports. The user must submit the report in order for the data to be processed by DEP.

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[2] Currently, the E2 System allows water systems to submit the Annual Water Utilization report electronically.

- **Ability to view and print previously submitted reports.** All submissions made through the E2 reporting system are saved for later retrieval.
- **Ability to monitor the status of all submissions.** Users can log in to see the current processing status of all submissions (Pending, Processed, Rejected). Users also receive an email notification of the submission status. In addition, program specific processing statuses can be tracked.

The E2 system provides Laboratories with the following capabilities:

- **Ability to submit original or revised laboratory reports.** E2 allows laboratories to either fill out the reports online, upload report submissions, or copy-and-paste reports from a laboratory's local spreadsheet program.
- **Ability to view validation messages online.** All submissions can be validated to verify that they meet minimum criteria as defined in the document entitled "NJDEP E2RS XML Transmission Protocol". Meaningful validation messages help pinpoint reporting errors so they can be corrected and resubmitted.
- **Ability to save partially completed reports.** If a user does not finish filling out a report in one session, he or she can save the report and resume filling it out at a later time. DEP will not review partially completed reports. The user must submit the report in order for the data to be processed by DEP.
- **Ability to view and print previously submitted reports.** All submissions made through the E2 reporting system are saved for later retrieval.
- **Ability to monitor the status of all submissions.** Users can log in to see the current processing status of all submissions (Pending, Processed, Rejected). Users also receive an email notification of the submission status. In addition, program specific processing statuses can be tracked

In essence, the E2 system serves as an electronic filing cabinet, allowing Water Systems to manage their own reporting to NJDEP and monitor the status of past report submissions.

In order to provide sufficient security for all submitted information, access to the E2 system is restricted in the following ways:

- Any person that wants to have access to the E2 system must have an authorized NJDEP Online account.
- Any person that wants to submit reports for a particular Water System must request and be granted an association with their Water System.
- Any person that wishes to certify water system reports must fill out an Electronic Signature Agreement to obtain a Personal Identification Number (PIN).
- Laboratories that wish to submit Drinking Water reports for analytical data will need prior approval from Water Systems before submissions can be accepted.

2   Minimum System Requirements

Laboratories and Water Systems must be able to access NJDEP's E2 website through the Internet. Typically, such access is available either through a dedicated connection (i.e.: local area network) or a modem connection to an Internet Service Provider.

To ensure that all of the features of the Department's E2 system are available, a Water System must use Microsoft Internet Explorer web browser (version 6.0 or higher) and Adobe Reader (version 5.0 or higher). The performance of the E2 system will vary based on the computer's internet connection speed, CPU, Operating System, and available memory. NJDEP recommends the following system configuration:

- Broadband Internet Connection or higher
- Pentium II processor or higher
- Microsoft Windows 2000 or higher
- 256 MB of RAM or higher
- Microsoft Internet Explorer 6.0 or higher

3   E2-DWR System Description

As with a regular paper and computer program cabinet, the E2-DWR electronic filing cabinet is surrounded by a number of procedures that guarantee that the available information is up-to-date and accurate. Information must be categorized and placed in the correct places. Keys to the locked drawers must be distributed to the appropriate people. Some files must pass across a number of desks to get signed off. A typical E2-DWR submission performed by a laboratory is provided below:

3.1   Abbreviated E2-DWR Submission Process:

Laboratory:

Step 1: Laboratory User logs into the E2 Reporting System via the Internet with user name and password.

Step 2: Using the Laboratory > Create a New Report screen, the user selects a laboratory under the "Safe Drinking Water Reports" section.

Step 3: The user previews and prepares e-DWR XML file in accordance with reporting requirements, as specified in the "NJDEP E2RS XML Transmission Protocol" using one of three methods.

- Step 3A: Downloading a XML template file and generating their own submission file
- Step 3B: Completing the online entry web form and generating a submission file. The file may be saved locally for later submission.
- Step 3C: Copying and pasting data into the online web form and generating a submission file. The file may be saved locally for later submission.
- Step 3D: Using the Microsoft Excel Template to generate an XML file for upload.

Step 4: Certify the data entered.

Step 5: The Server receives the file, and issues a receipt of confirmation to the user on the screen. A separate receipt confirmation email will be automatically sent to the user. The Server verifies that the e-DWR XML file conforms to very specific data validation rules and business requirements stored in the Server. If it does, the submission is noted as such on the Server for reference. If not, the submission will be noted as 'rejected' and the user will be notified via email. The user must cure the problems and submit revisions to the E2-DWR Server. In any case, an email is sent to the certifier stating the status of the submitted DWR.

Step 6: Valid DWR submissions can be viewed and printed at any time.

Water System:

Step 1: Water System User logs into the E2 Reporting System via the Internet with user ID and password.

Step 2: Using the Water System > Create New Reports screen, the user selects a water system to complete a Annual Water Utilization form.

Step 3: The user previews and prepares e-DWR XML file in accordance with reporting requirements, as specified in the "NJDEP E2RS XML Transmission Protocol" using one of three methods.

- Step 3A: Downloading a XML template file and generating their own submission file

- Step 3B: Completing the online entry web form and generating a submission file. The file may be saved locally for later submission.

- Step 3C: Using the Microsoft Excel Template to generate an XML file for upload.

Step 4: Certify the data entered.

Step 5: The Server receives the file, and issues a receipt of confirmation to the user on the screen. A separate receipt confirmation email will be automatically sent to the user. The Server verifies that the e-DWR XML file conforms to very specific data validation rules and business requirements stored in the Server. If it does, the submission is noted as such on the Server for reference. If not, the submission will be noted as 'rejected' and the user will be notified via email. The user must cure the problems and submit revisions to the E2-DWR Server. In any case, an email is sent to the certifier stating the status of the submitted DWR.

Step 6: Valid DWR submissions can be viewed and printed at any time.

4   Getting Started

4.1   Creating an NJDEP Online User Account

NJDEP Online is the NJDEP's application that provides user account management for a number of the NJDEP's on-line systems. Any person that wants to have any access to the E2 system must first have an authorized NJDEP Online account. Both current and new users must set-up a new account through the NJDEP Online application in order to access the E2 system to submit electronic data. Under the new NJDEP Online process, all access to NJDEP Online (www.njdeponline.com) will be managed by the myNewJersey portal (www.nj.gov). Think of myNewJersey as a central place to log in and get access to many services or systems across many state departments. This is a change from the previous version of NJDEP Online where users were granted access via the NJDEP Online application. Prior to anyone using NJDEP Online, users must have two things:

1. A valid account with myNewJersey
2. An authentication code for the NJDEP Online service.

A myNewJersey account is free and can be created at any time. Some users may have an existing myNewJersey account and some may not. Both scenarios will be addressed in this section. Once you create an account (or if you have one already) on myNewJersey you still will not be able to access the new NJDEP Online. In order to gain access to NJDEP Online (or any other protected service) you will need an authentication code. The authentication code can only be obtained via an email generated from the portal. The authentication code grants the user access to a specific service on the myNewJersey Portal (i.e. NJDEP Online).

Because we don't know who needs or wants access to NJDEP Online, new users will need to initiate a request for an authentication code. This will be done from a page which is linked right from 'www.njdeponline.com'. The requestor will enter their name, email, and organization and an email will be sent to them. This email has detailed instructions telling them what to do which involves entering the authentication code and creating a myNewJersey account if necessary.

Please follow the instructions below to set up your new NJDEP Online account. These same instructions can also be found on the NJDEP Online page at 'www.njdeponline.com'.

I. Creating An Account in NJDEP Online and MyNewJersey

STEP 1: Requesting Access (New Users - Users who do not have a NJDEP Online account)

1. Go to '**www.njdeponline.com**' and select the button labeled 'NEW USERS Request Access to NJDEP Online'. This will take you to the screen shown in Figure 1 below.
2. Fill in the following fields:
   'Contact Name', 'Organization Name', 'Email Address', and 'Confirm E-Mail'.
3. Click on the "Request" button.
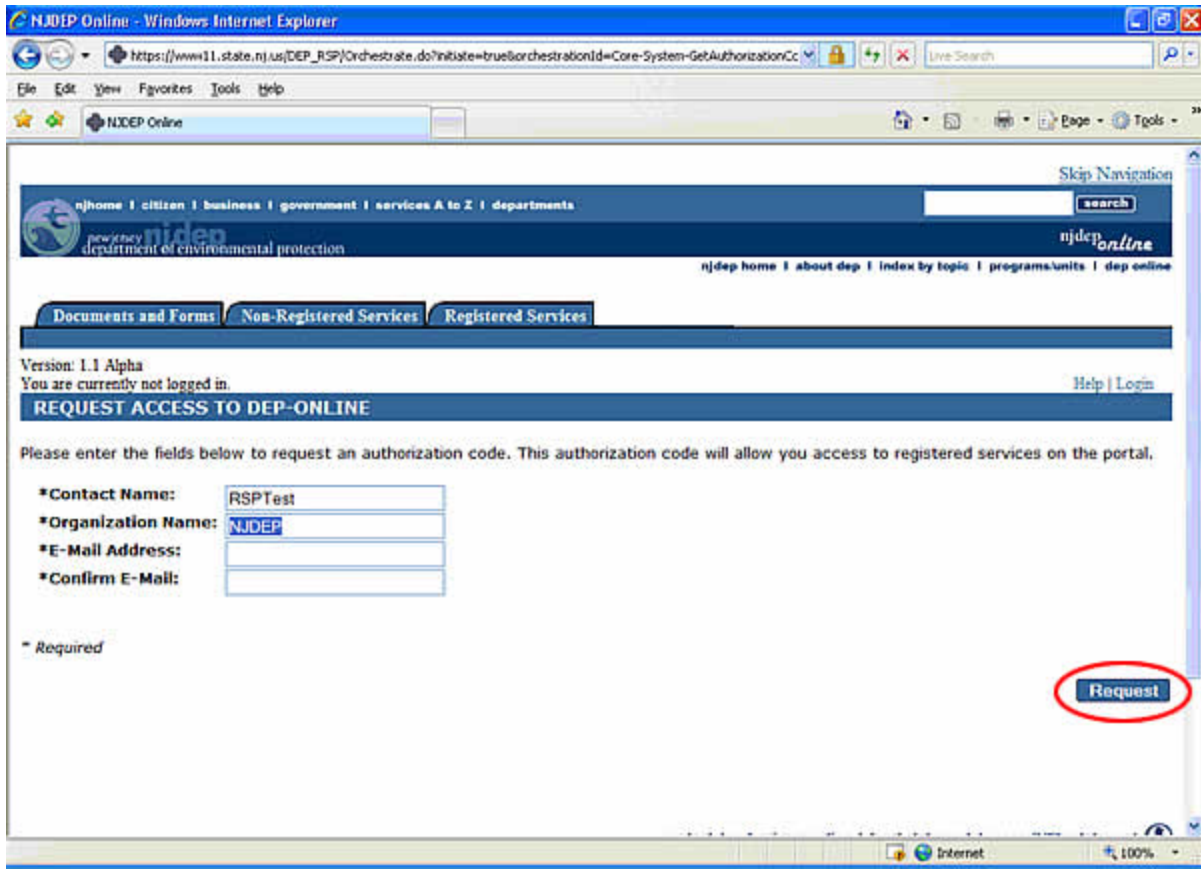
Figure 1: Requesting an Authorization Code.

STEP 2: Access Confirmation

1. You will receive on-screen confirmation that your request is being processed.
2. You will receive an email from 'PortalComments@dep.state.nj.us' that contains your Authorization Code and login instructions for NJDEP Online.
3. Click on the "Continue" button as shown in Figure 2.
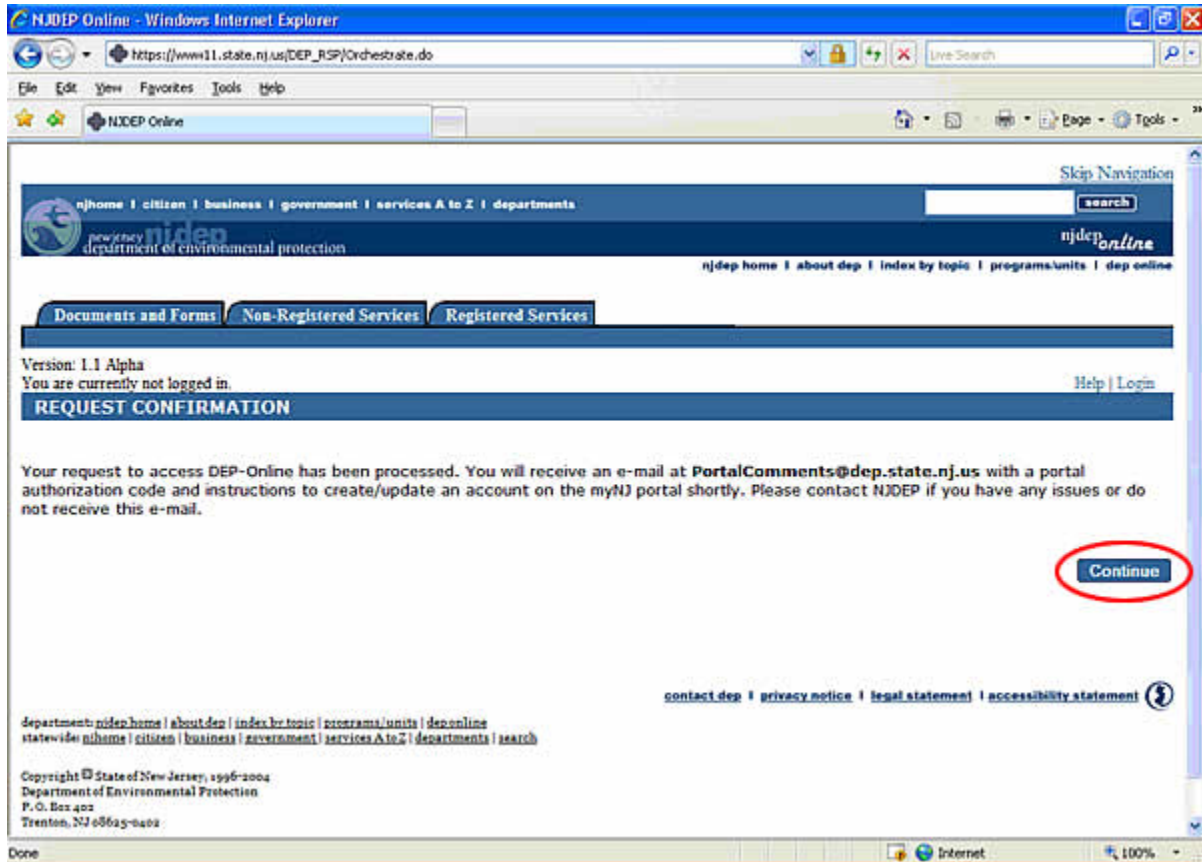
Figure 2: The Request Confirmation Screen.

You should receive an email containing a unique Authorization Code as well as instructions for accessing DEP Online through myNewJersey These same instructions are listed beginning on page 14 of this document with screen shots showing exactly what each screen looks like as you proceed through the registration process.

The email should read as follows:

Dear "User",

Important DEP Online Registration Information

Below is the Authorization Code for the DEP Online role.
This code is personalized for you and need only be used one time to provide access to the DEP Online channel via the myNewJersey portal. It cannot be used again.

*Authorization code is: *************

Please follow these instructions carefully.

If you have already registered on the myNewJersey portal, go to http://www.state.nj.us/ and follow the instructions starting at step 6.

1. Open an Internet browser and type http://www.state.nj.us/ in the address box and press <Enter>.
2. You will see the New Jersey home page. You need to register here so that you will see additional Channels (small, function-specific windows).
3. Click on the 'Register' button located in the upper left-hand corner of the screen.
4. On the 'Create Your myNewJersey Account' page, enter the requested information. Be sure to include a challenge question and valid email address in case you
forget your password.
5. Now that you've created your account, logout. The next step will verify the existence of your new account.
6. Log in to your account.
7. Once logged in, select 'enter authorization code'.
8. Follow the instructions carefully. In the textbox titled 'Authorization code' type (authorization code) and click the 'Finished' button.
9. The system will log you out.
10. Log in to your account. The channel or channels for your DEP Online role will be available on the 'myNewJersey' page.
11. Click on the DEPOnline Services link to gain access to the new NJDEP-Online site.

We hope you enjoy the new facility and welcome comments and suggestions regarding additional functions. Please address your comments and suggestions to me at PortalComments@dep.state.nj.us.

Disclaimer: Under no circumstances should you give your authorization code to another user. This code has been personalized for your particular need. If another user requires system access please have them contact the role manager.

Note: Authorization codes are account and e-mail address specific and may not be shared or used more than once.
Please see below to find your scenario:

1. Users who have NOT registered with myNewJersey. (**Begin at Page 14, Step 3**)
2. Users who have registered with myNewJersey. (**Begin at Page 16, Step 4**)

STEP 3: Registration (Users who have NOT registered with MyNewJersey)

1. Go to 'www.nj.gov' and click "Register" as shown in Figure 3.

Figure 3: The State of New Jersey home page.

2. Fill in the following fields as shown in Figure 4:
   'Log On ID', 'Password', 'Retype your password', 'First name', 'Last name', 'Question you want us to ask', 'Your answer', 'Email address', 'Retype your email address'.
3. Click on "Create myNewJersey Account".

Note: You are now registered with myNewJersey

Figure 4: Fill in all of the information in the Create a myNewJersey account.

STEP 4: Logging In & Using An Authorization Code (Users who have registered with myNewJersey)

1. Go to 'http://www.nj.gov' and click "Login" as shown in Figure 5.

Figure 5: The State of New Jersey home page.

2. Enter 'Log On ID' and 'Password' and click "Log On" as shown in Figure 6.
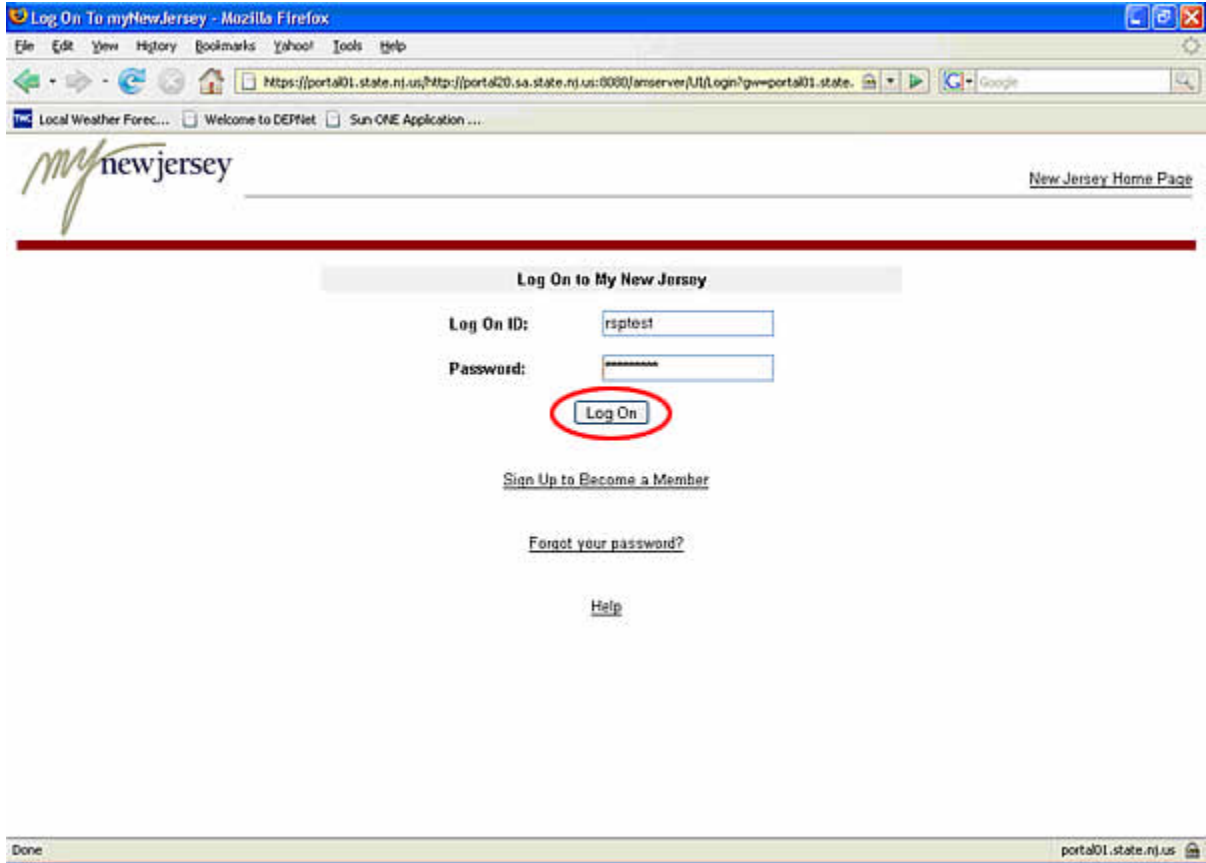
Figure 6: The myNewJersey login page.

3. Click on 'enter authorization code' as shown in Figure 7.
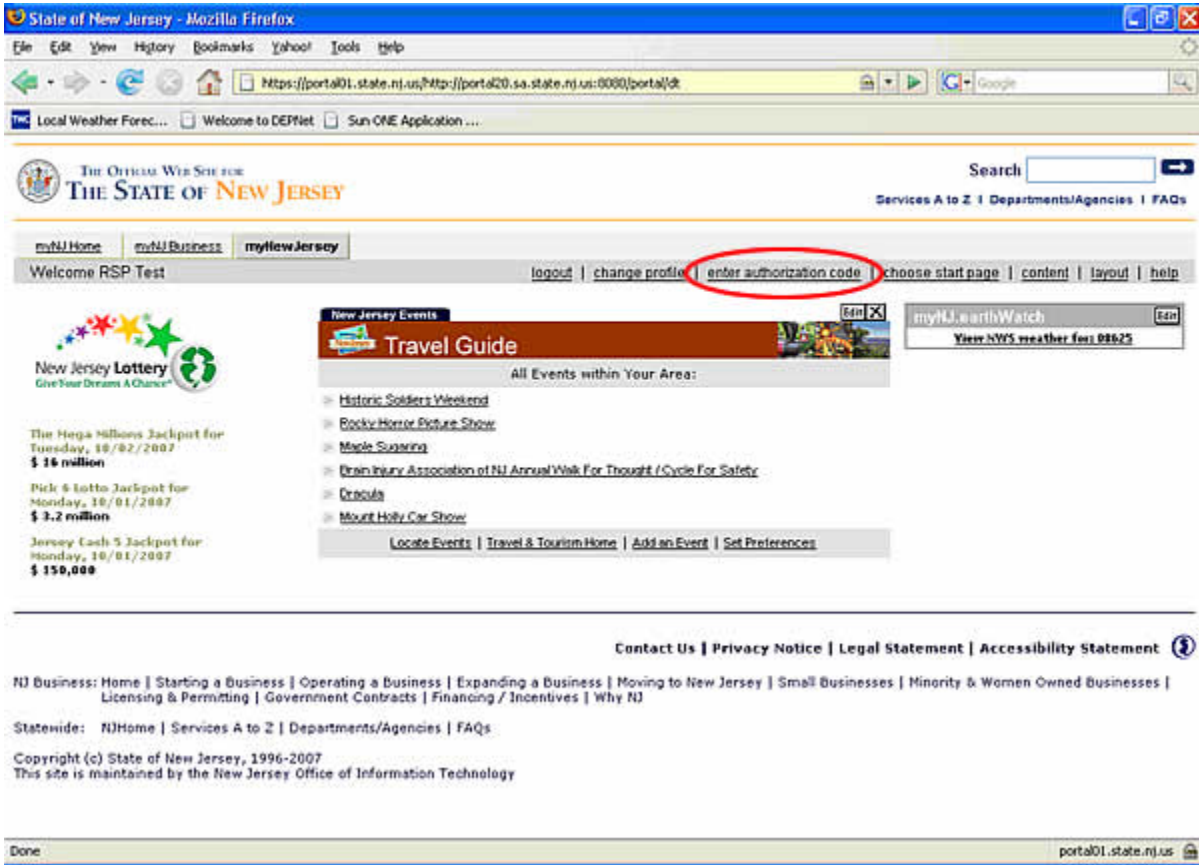
Figure 7: Click on the "Enter Authorization Code" link.

4. 'Enter your authorization code' and click "Finished" (you should receive your authorization code and instructions via email from 'PortalComments@dep.state.nj.us' as noted on Page 3).

Note: The system will automatically log you out after entering the authorization code and clicking "Finished" as shown in Figure 8.
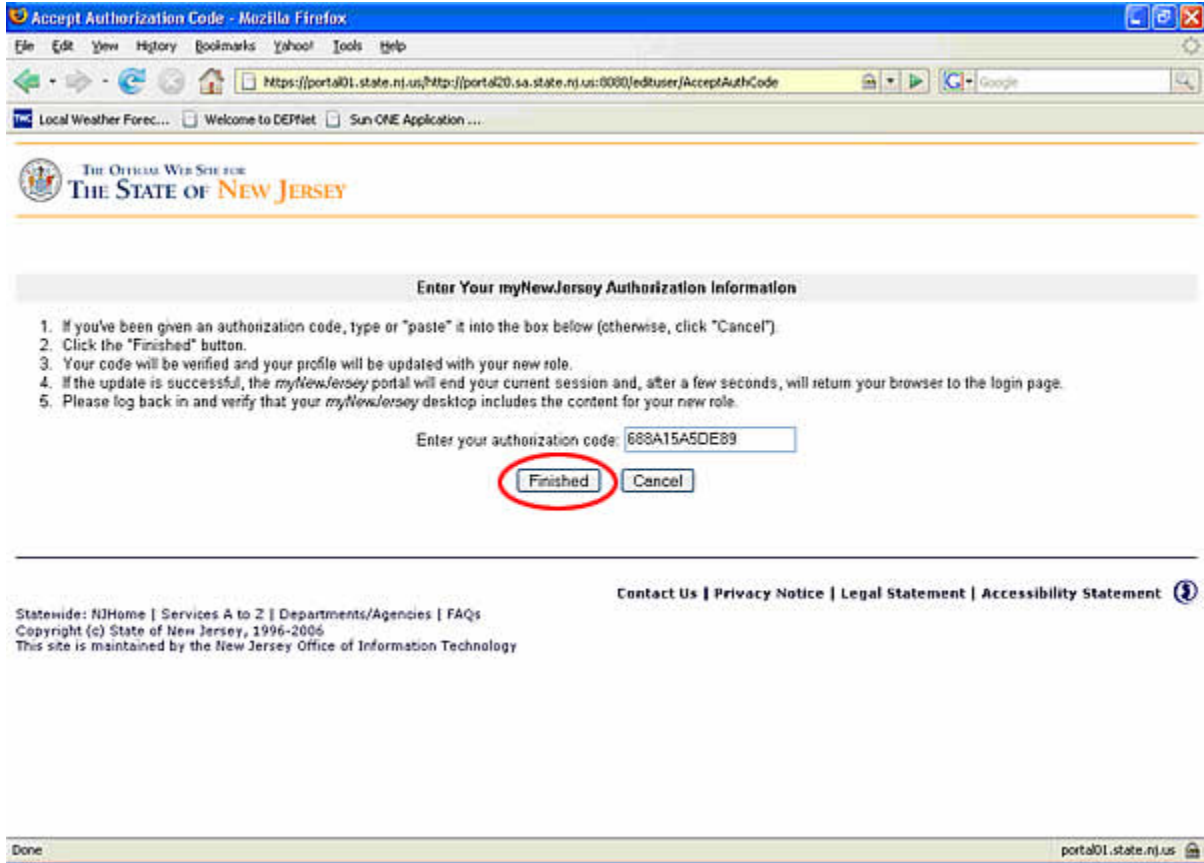
Figure 8: Enter authorization code.

STEP 5: Completing the Initial registration process

1. Log in to your account (the channel or channels for your NJDEP Online role will be available on the 'myNewJersey' page).
2. Make sure you are on the 'myNewJersey' screen.
3. Click on 'DEPOnline Services' as shown in Figure 9.
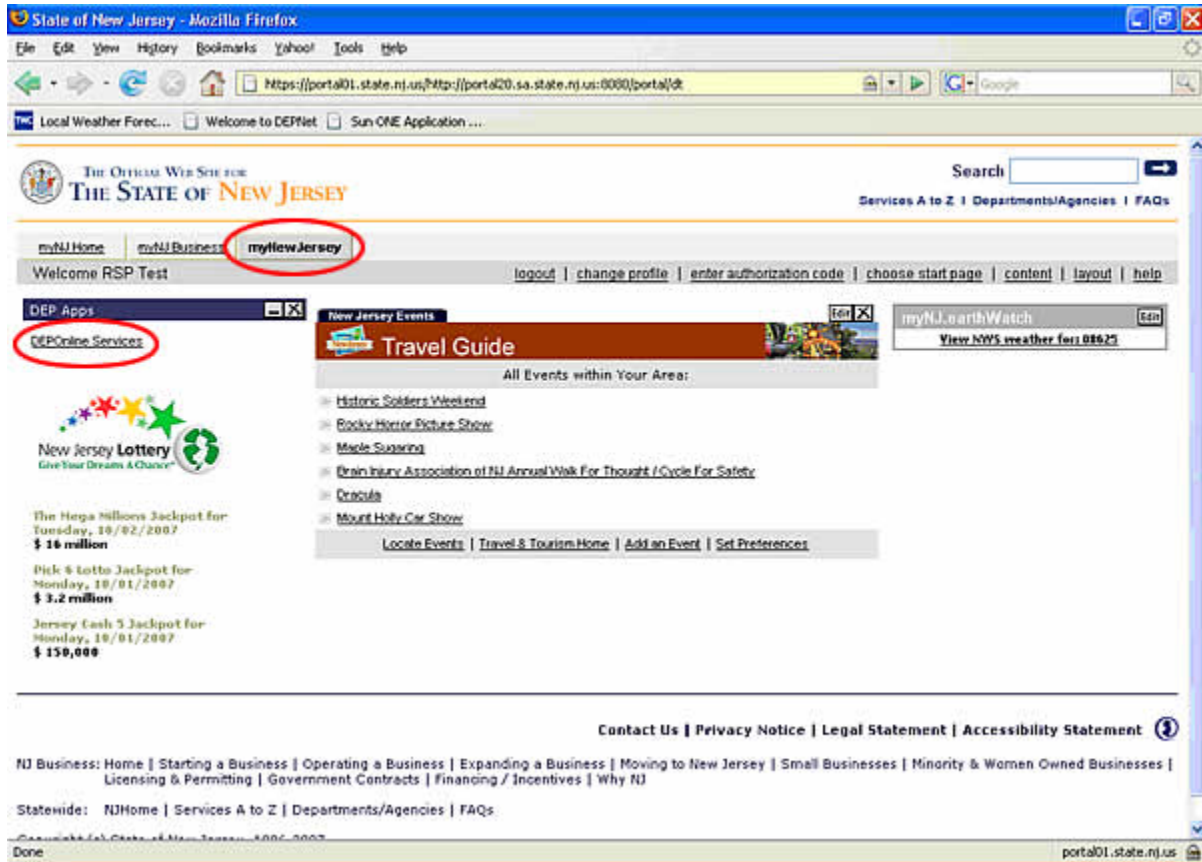
Figure 9: Click on the DEPOnline Services.

4. Enter your contact information and at least 1 contact number and click "Continue" as shown in Figure 10.
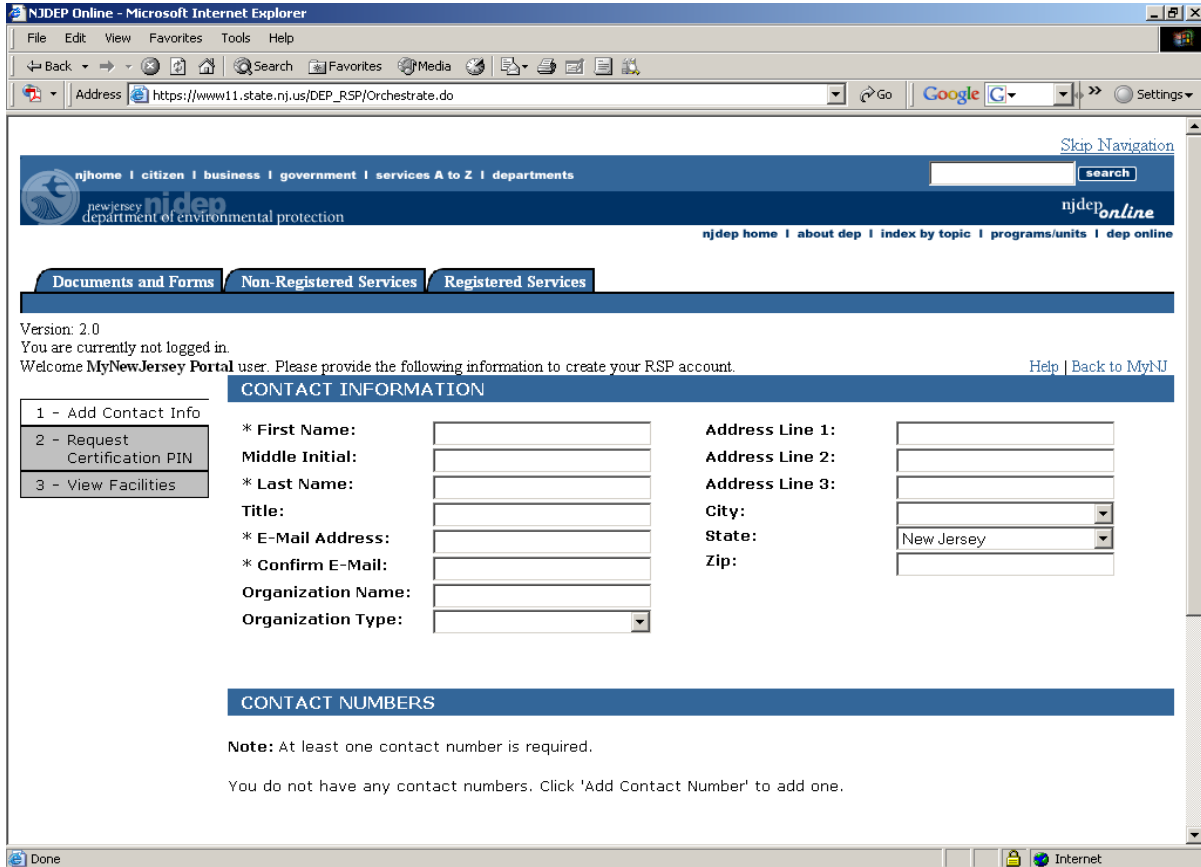
Figure 10: Enter the contact information.

5. The Request Certification PIN screen. Press the "Skip" button as shown in Figure 11.

Figure 11: Press the "Skip" button on the Request Certification screen.

6. Click on the "Complete Setup" button as shown in Figure 12.

Note: Not all services will require you to have associated facilities.
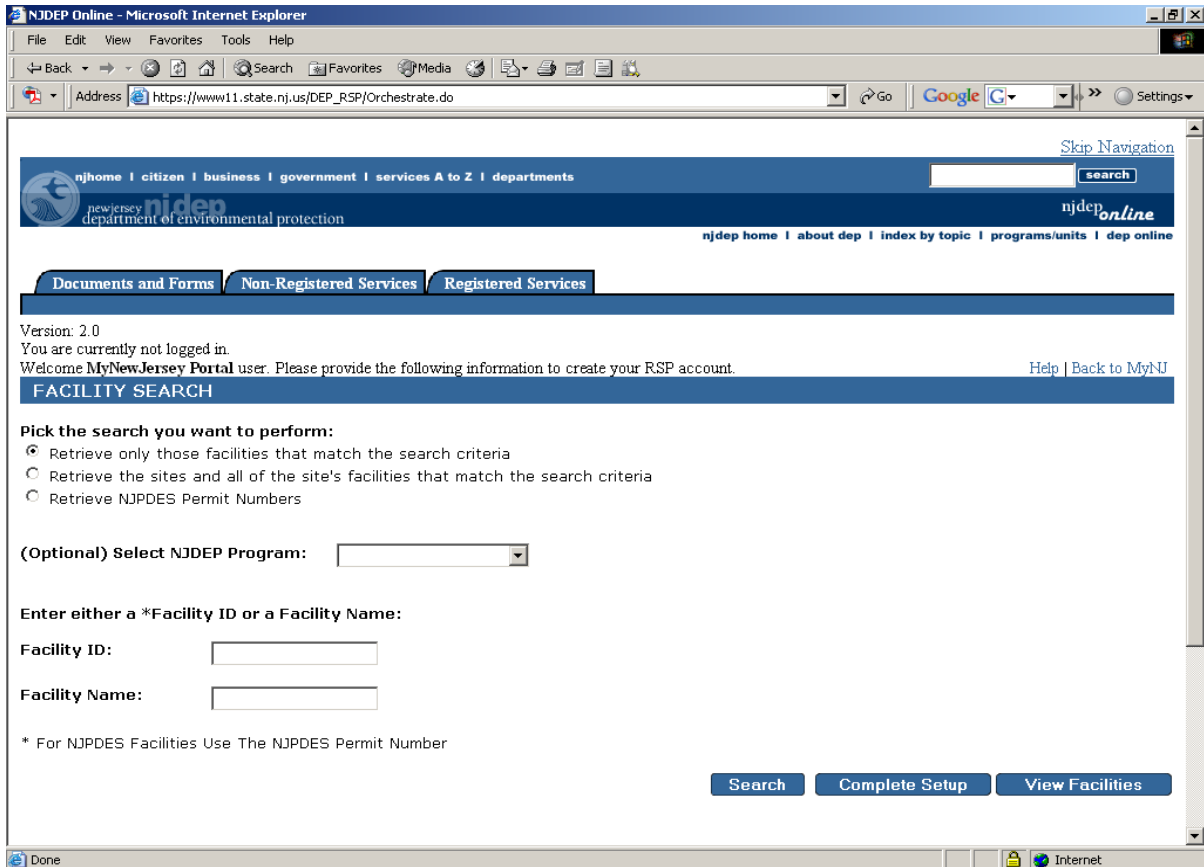
Figure 12: Click on the "Complete Setup" button.

7. Select your service(s) on the My Services screen and click "OK." For submitting drinking water analytical data, click on "Drinking Water (eDWR) under Water Supply as shown in Figure 13 under the Services NOT requiring Facilities section. **Setup is now complete!**
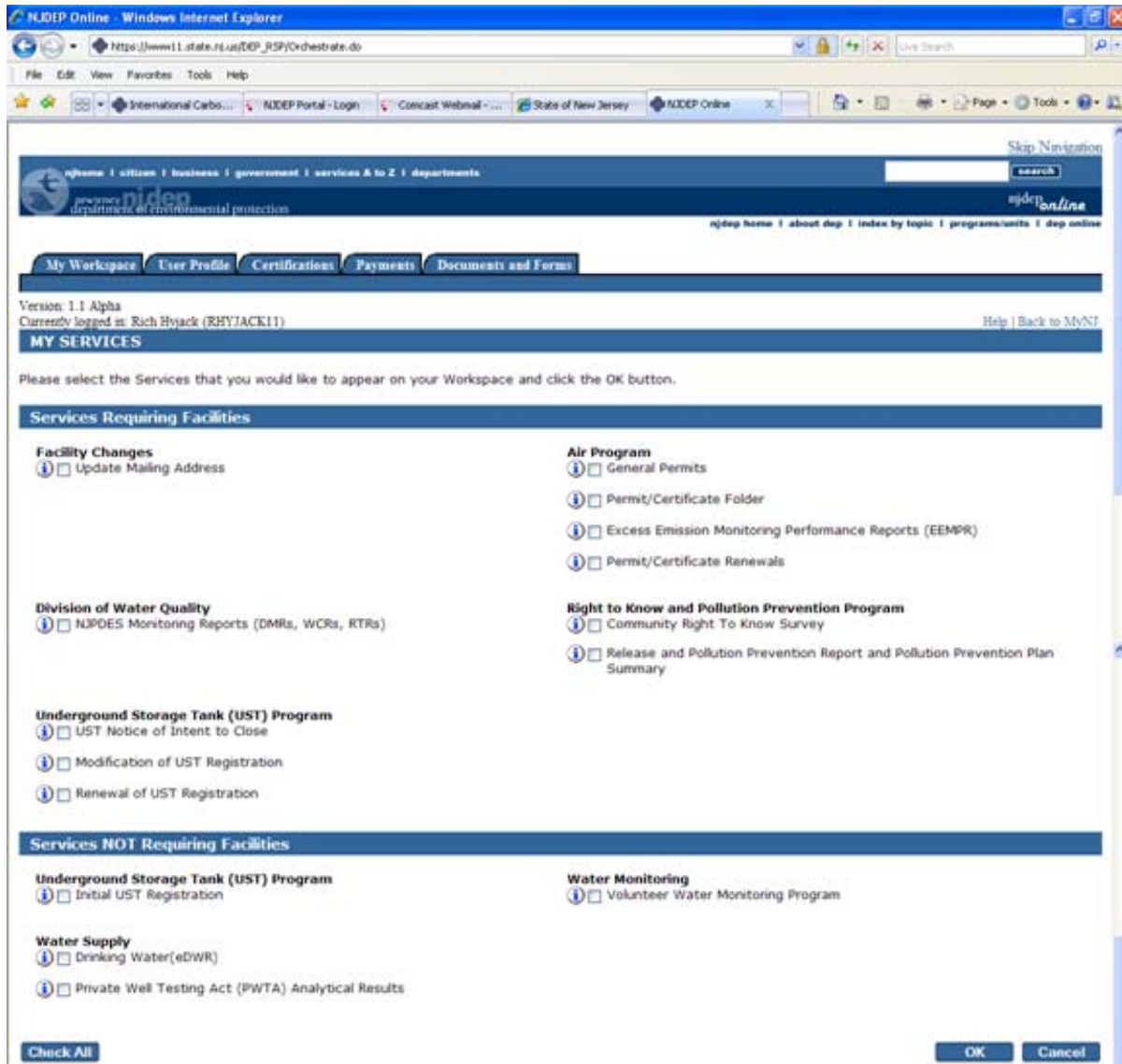
Figure 13: Select the service you want to submit data for through NJDEP Online.

Note: After completing these steps, you will be able to access NJDEP Online at any time by visiting 'www.njdeponline.com' and clicking "Continue" within the blue box at the top right of the screen.

8. After selecting their services, the user will be returned to the "My Workspace" screen and be able to see the services that have been assigned to them in the "Services Selection" section as shown in Figure 14.

The user should click on the links in the "Services Selection" section to log in to their desired service.
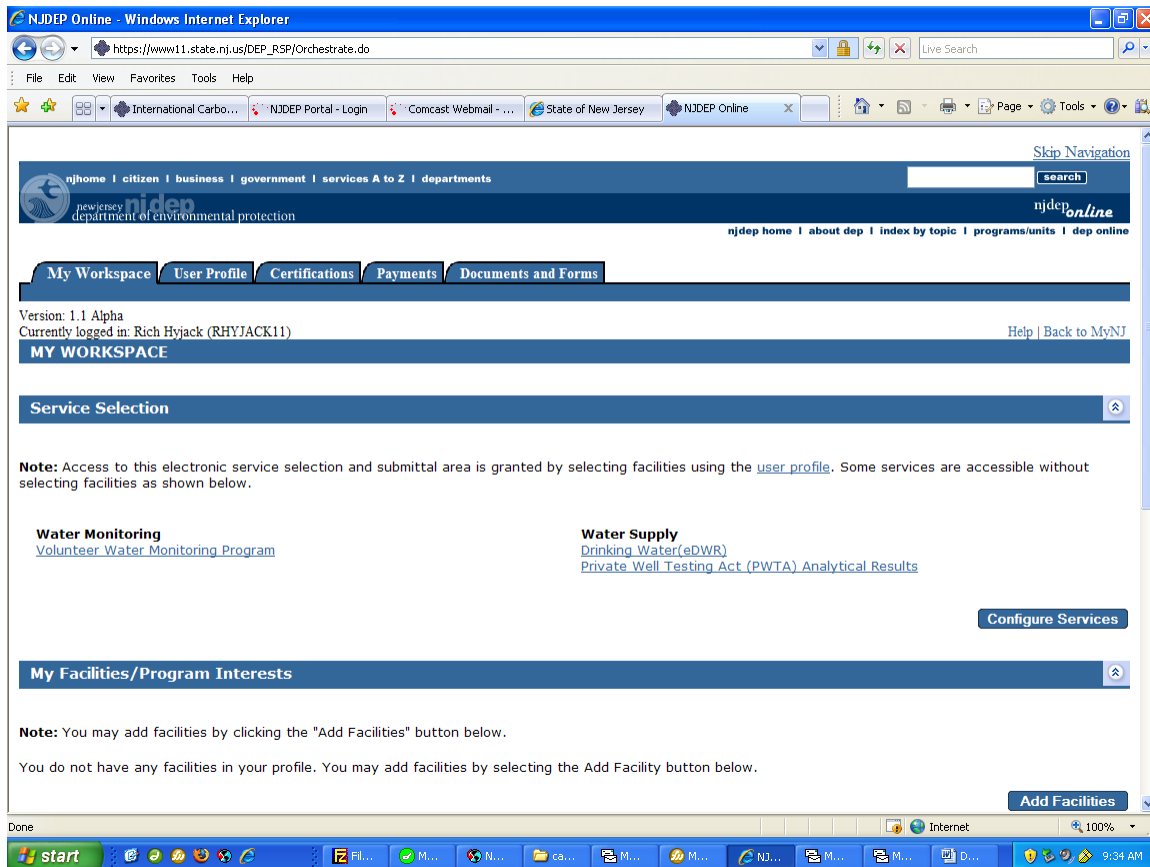
Figure 14: Select the service you wish to log into. For drinking water select the Drinking Water (eDWR) link.

Upon selecting a service, the user will receive a screen indicating that they are being forwarded to that service as shown in Figure 15.
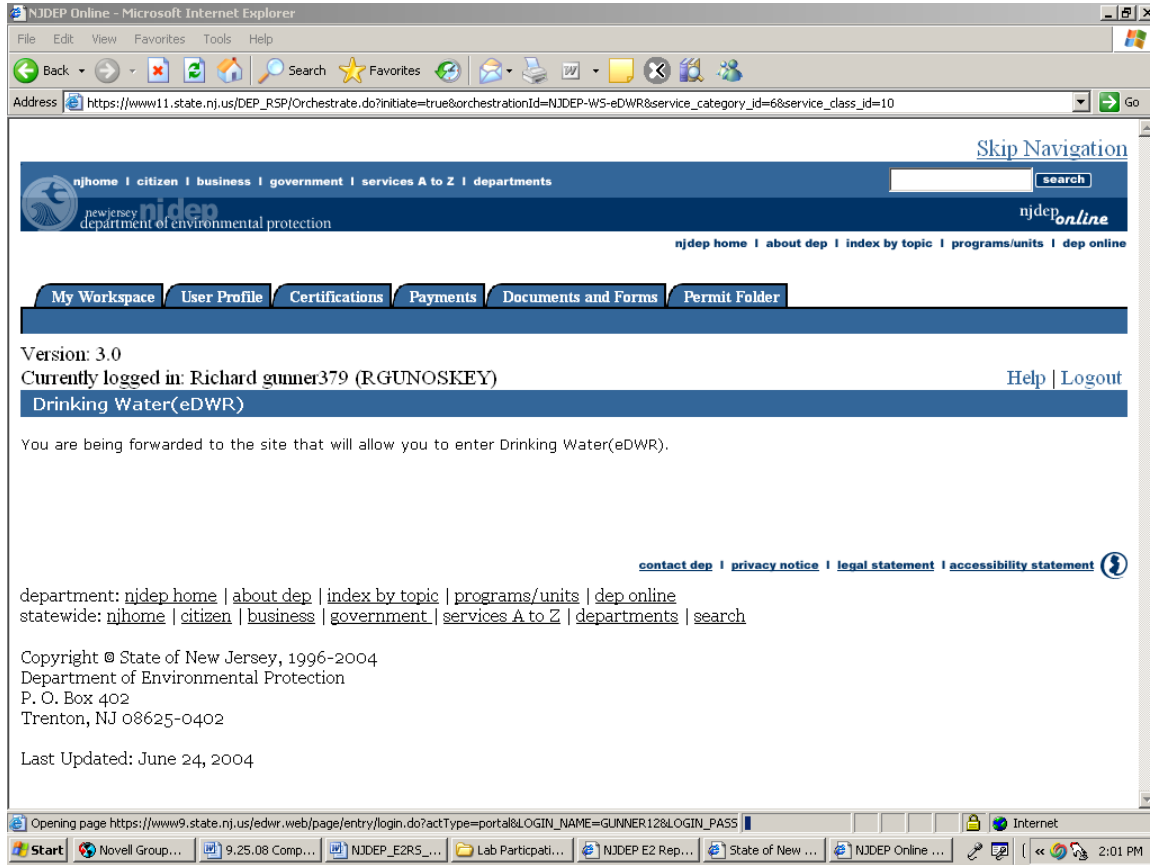
Figure 15: The user is being forwarded to the selected service.

4.2 New Jersey E2-eDWR Main Screen

After a user has correctly entered the user name and password, they are brought to the DWR module default page, which provides a brief description of the system, and highlights any announcements created by the administrator.
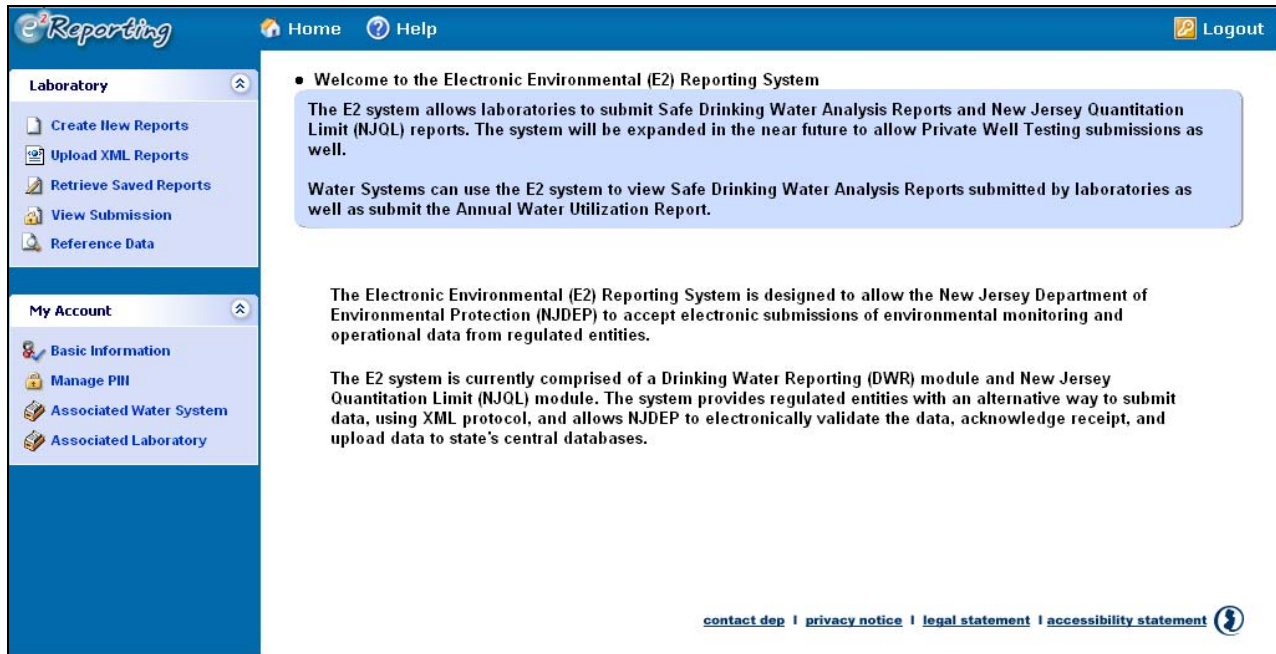
Before proceeding, we will be taking a closer look at the layout of the application as a whole, starting with the status bar.

The status bar is intended to provide quick access to the current module, user information, and general system functions.

- Towards the left part of the status bar, the Home icon allows the user to return to the DWR module default page.

- The user can access online help by clicking on this icon.

- Once finished using the E2 Reporting System, the user may log out using the logout icon.

To continue on with the layout of the application, the function bar is located in the frame to the left of the main area of the screen. Each functional area is highlighted below.

Under Laboratory are the following topics:

- **Create New Reports** The Create New Reports icon leads to the heart of the E2-DWR System. Up to date reports can be viewed, printed, and downloaded here. Also, web forms that look very similar to the paper DWR can be used to enter and submit data. Much of this document will focus on this functional area.

- **Upload XML Reports** By clicking on the Upload XML Reports icon, a user can select and upload a DWR file in XML format that has been generated in compliance with the e-DWR schema. Before submission, the files can be tested for completeness and compliance with the e-DWR schema.

- **Retrieve Saved Reports** By clicking on the Retrieve Saved Reports icon, a user can make changes to, or delete a saved report.

- **View Submission** DWR files that have been submitted can be viewed and downloaded by clicking on View Submission. Submissions can be viewed and searched by laboratory and submission date.

- **Reference Data** Laboratories can find information regarding water systems, including details of the facility and information pertaining to the Safe Drinking Water reports submitted by the facility by clicking on this icon. In addition, the method and parameter reference data is provided

Under My Account are the following topics:

- **Basic Information** The user's account information can be seen by clicking on Basic Information.

- **Manage PIN** The user can request a new PIN after clicking on this icon.

- **Associated Water System** Associated Water System functions include actions such as viewing the water system that the user is associated with, the user's role in reference to that system, and specific water system, information such as address and E2 Reporting System participation status.

- **Associated Laboratory** Associated Laboratory functions include actions such as viewing the laboratories that the user is associated with, the user's role in reference to that

laboratory, and specific laboratory information such as address and E2 Reporting System participation status.

4.3   My Account

The My Account section of the site provides three important links. The first is the ability for the user to see their user information. The second function is the ability to manage the user's PIN, which allows the user to submit reports. The third function is the ability to view all of the laboratories and water systems within the system, as well as, which laboratories and water systems the user is associated with.

4.3.1   Basic Information

To see user information, select the Basic Information icon, [Basic Information]. This will provide a link to the following page

User ID:	admin
First Name:	admin
Last Name:	enfoTech
Job Title:	Super Admin
e-mail Address:	maggie_hsueh@enfotech.com
Account Status:	Active

The information can be updated through the NJDEP Online User Profile.

4.3.2   Manage PIN

A user can request a new PIN by selecting the Manage PIN icon, [Manage PIN].

The user must enter their existing PIN and agree to the terms and conditions stipulated on the screen. The new PIN will be sent to the user's email address. If a user has lost their PIN they need to contact the system administrator.

4.3.3 Associated Water System

In order to view Laboratory Reports submitted for a water system or to prepare and/or submit the Annual Water Utilization Report a user must be associated with a water system. Information about a particular water system, and the ability to associate with a water system can be found clicking on the Associated Water System icon, . The same can be found for a laboratory by clicking the Associated Laboratory icon, .

For more information on how to view water systems, or to associate with a water system see Section 4.3.4: Associated Laboratory. The procedure is the same for Water Systems and Laboratories.

4.3.4   Associated Laboratory

In order to view Laboratory Reports submitted for a water system or to prepare and/or submit Laboratory Reports, a user must be associated with a laboratory. Information about a particular laboratory, and the ability to associate with a laboratory can be found clicking on the Associated Laboratory icon, **Associated Laboratory**.

This icon leads to a screen that provides basic information about a list of facilities that the user is associated with.

To obtain further information about a laboratory, click on the View report icon. This will lead to a screen called Laboratory Detail.

Program	EDWR
Laboratory Certification Number	12129
Name	ACCUTEST LABORATORIES
Status	Active
User Role	ADMINISTRATOR

Address Type	Location
Address 1	2235 RT 130
Address 2	BLDG B
City	Dayton
State	NJ
Postal code	08810

Address Type	Mailing
Address 1	2235 RT 130
Address 2	BLDG B
City	Dayton
State	NJ
Postal code	08810

To remove association with a particular laboratory, the user can select the Disassociate button, prompting the following window.
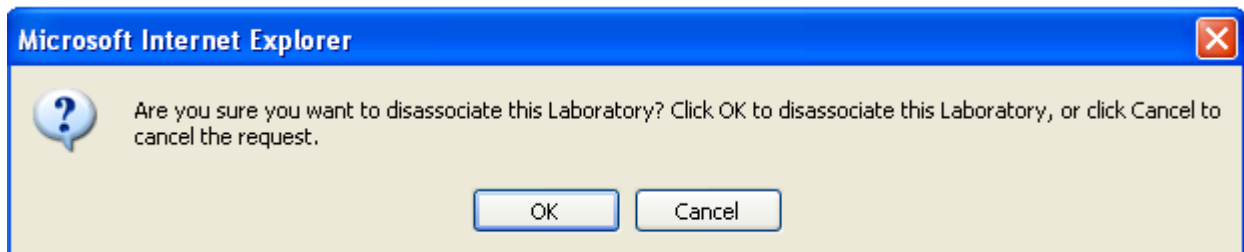
To add association to a particular laboratory select the Add Laboratory button from the first Associated Laboratory page.

This will bring the user to a laboratory search screen.

Enter the search criteria and press the Go button. Search results will be displayed below the search panel. To add a laboratory make the appropriate selection in the search results list by clicking on the empty box to the desired laboratory, and selecting the role in which the user will play within the selected laboratory (Administrator, Certifier, or Preparer) then click the "Add Laboratory" button. These roles are defined as follows:

- Administrator:
    o Allowed to download, prepare, upload, review, and certify the accuracy of electronic reports.
    o Allowed to submit electronic reports to the state agency.
    o If the user's account is associated with a laboratory the user will have the following additional privilege:
        ▪ Allowed to approve or deny requests from others requesting to be associated with the laboratory.
    o If the user's account is associated with a water system the user will have the following additional privileges:

- Allowed to approve or deny requests from others requesting to be associated with the water system.
- Allowed to view laboratory reports submitted on behalf of the water system.
- Allowed to manage which laboratories may submit electronic Drinking Water Reports on the behalf of the water system.

- Certifier:
  - Allowed to download, prepare, upload, review, and certify the accuracy of electronic reports.
  - Allowed to submit electronic reports to the state agency.
  - If the user's account is associated with a water system the user will be allowed to view laboratory reports submitted on behalf of the water system.
- Preparer:
  - Allowed to download and prepare electronic reports.
  - Allowed to view electronic reports and past submissions, but not certify or upload any submissions.
  - If the user's account is associated with a water system the user will be allowed to view laboratory reports submitted on behalf of the water system.

Before the association is made, it must be approved by an administrator.

5   Reporting

Once a user has been associated with a laboratory, the user has the option to view a blank form (template), download a template file (XML or Excel), or fill out an online form (Online webpage entry or Copy/Paste from Excel). These options are available for all report types: Safe Drinking Water, NJQL and PWTA reports.

To perform any reporting task, first click on the Create New Reports icon in the functional area to the left, this will lead to the following screen:

There are three possible programs that the user can be associated with for each laboratory. These programs are : Safe Drinking Water Reports, NJQL Reports, and PWTA. If a user is associated with all three programs this screen is partitioned into three sections. To obtain a particular report the user must first go the section of the page pertaining to the desired program (Safe Drinking Water, NJQL or PWTA) reports, and then select a laboratory using the drop-down associated with the appropriate report type. The balance of this section pertains to Safe Drinking Water reports.

5.1   Creating New Safe Drinking Water Reports

The E2 Reporting System offers laboratories two different forms for Safe Drinking Water Reports; the Generic Chemical Analysis Form and the Generic Coliform Analysis Form. The Generic Chemical Analysis Form can be used in place of the following Paper Report Forms:

- **WSE-014; DWR-BSDW-:** Asbestos
- **BSDW-28:** HAA5
- **DS-192 BSDW-05 :** Inorganic
- **DWR-085 DWR-BSDW-06:** Iron and Manganese
- **WTP-301 WSE-BSDW-12:** Lead
- **WTP-302 WSE-BSDW-12:** Copper
- **WSE 009 WSE-BSDW-14:** Nitrate
- **new:** Radiological
- **DWR-193 BSDW-05:** Secondary
- **DWR-191 DWR-BSDW-04:** Pesticides, Herbicides and Other Organics
- **BSDW-27:** Total Trihalomethanes (THM)
- **DWR-085 DWR-BSDW-02-A:** Volatile Organic Compound 524.2
- **DWR-085 DWR-BSDW-02-A:** Volatile Organic Compound 502.2
- **WTP-303:** Water Quality

The Generic Coliform Analysis Form can be used to submit individual coliform samples and results, in place of the following Paper Report Forms:

- **DWR-201 DWR-BSDW-08:** Coliform (monthly)
- **DWR-201 DWR-BSDW-09:** Coliform (repeat samples)
- **DWR-203 DWR-BSDW-10:** Coliform (quarterly)

(Note: The Bureau of Safe Drinking Water has not made all forms available for electronic submission.)

The E2 Reporting System offers a laboratory with four options for submitting Safe Drinking Water Reports electronically:

- **Manual Online Entry:** You can prepare and submit an electronic report by data entering sample / result information into an online entry form on the E2 Reporting System.
- **Copy & Paste Entry:** You can prepare data offline in a predefined spreadsheet format and copy the data and paste into an entry form on the E2 Reporting System.
- **XML File Upload:** You can prepare data offline in a predefined XML Schema format and upload the XML file to the E2 Reporting System.
- **Microsoft Excel XML File Generation:** You can use the Microsoft Excel Template file provided by the E2 Reporting System to prepare data offline. The Microsoft Excel Template file contains a macro which will generate an XML File for you, which can be uploaded to the E2 Reporting System.

5.1.1   Viewing a Blank Safe Drinking Water Report Template

Before a DWR file is generated, a user may wish to preview or print the report format for the DWR. To preview or print a DWR, click on the View icon [View] for the corresponding form type.

This will bring up the following pop-up browser that displays the Paper DWR.

*NOTE: Adobe Acrobat is required to view the form.

The window displays the DWR in a format that is very similar to the electronic form. The form at this point is considered a *template*, since the actual or measured values for sample and result data are not shown. To print this template, click the printer icon, [printer], in the top left section of the screen.

5.1.2   Downloading the Template XML

In the previous section, the template, or blank DWR form was viewed using the View Form window. To download this template file, return to the Create New Reports screen by clicking on the Create New Reports icon in the functional area to the left, [Create New Reports].

To download an XML template of the DWR file, click on the Download XML icon, [XML icon] for the corresponding report. This will begin a series of message boxes.
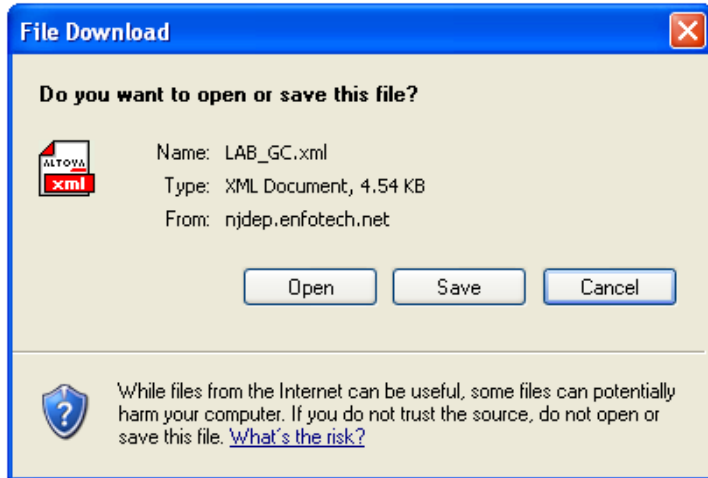
To open the file in a new window without saving, click Open. Alternately, click Cancel if you do not wish to save or open the file.

However, if you wish to download the template DWR XML file, click Save, at which point the user will be prompted to respond with the location they wish to save the file in.
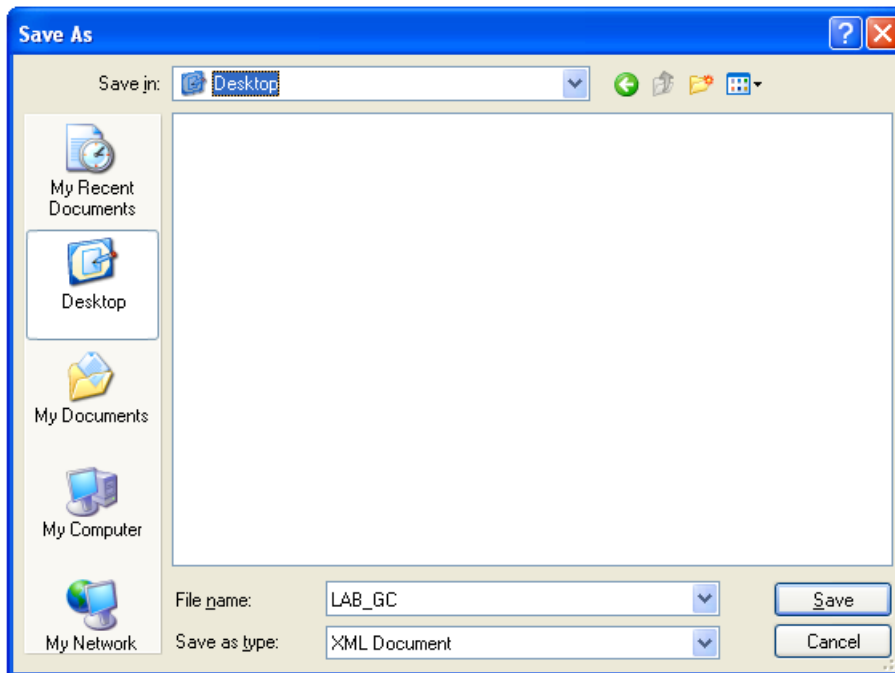
Navigate to the directory where you wish to save the file. Once you have selected a file location and name, click Save.

The next few sections explain how DWR module of the E2 Reporting System can generate the submission file for you.

In order to understand any type of message, common definitions and rules must be adopted and enforced, which is where the XML Schema specific to Drinking Water reporting, the e-DWR schema, comes into play. The e-DWR Schema is a definitive list of data elements created by a cross-section of stakeholders, including State Environmental Agencies, Laboratory Representatives, and USEPA. This schema serves as a national standard for Laboratory-to-State submission of analytical results. New Jersey has extended the e-DWR Schema v2.0 to allow for DWR, NJQL, and PWTA report formats.

Clicking on the XML icon, allows you to take a peek behind the scenes at the data being displayed. For a detailed discussion about XML please refer to the NJDEP E2RS XML Transmission Protocol document.

5.1.3   Downloading the Excel Template

If the user instead wishes to download the template file as an Excel file, return to the Create New Reports screen by clicking on the Create New Reports icon in the functional area to the left,

To download an Excel template of the DWR file, click on the Download Excel icon, for the corresponding report.
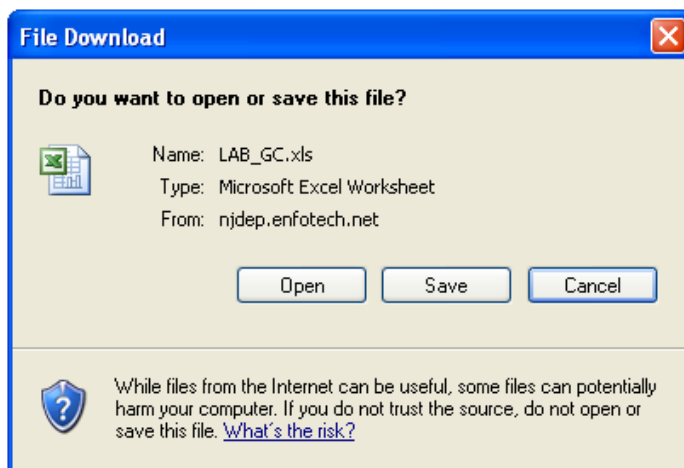
This will begin a series of message boxes.

To open the file in a new window without saving, click Open. Alternately, click Cancel if you do not wish to save or open the file.

However, if you wish to download the template DWR Excel file, click Save, at which point the user will be prompted to respond with the location they wish to save the file in.
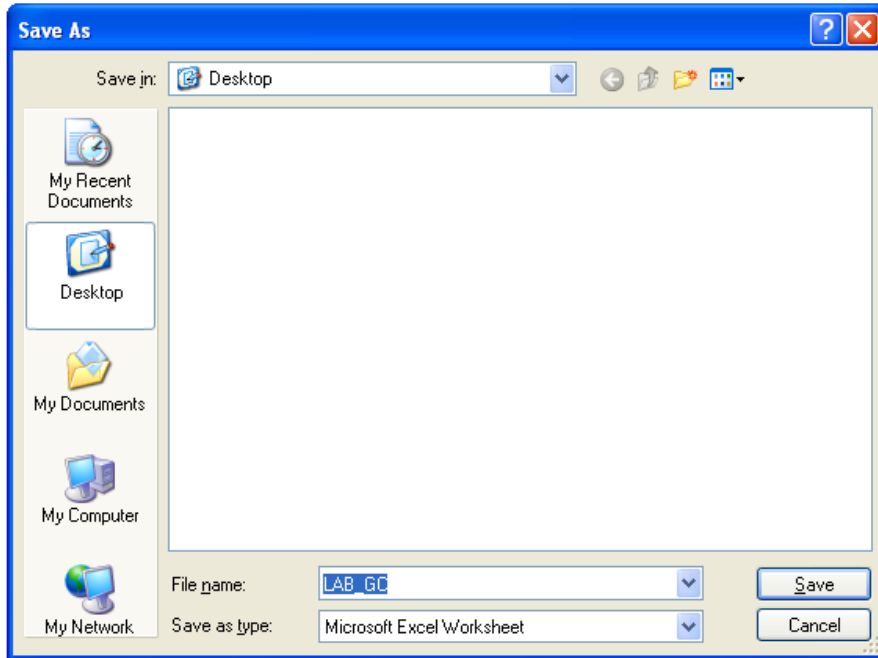
Navigate to the directory where you wish to save the file. Once you have selected a file location and name, click Save

5.1.3.1   MS Excel File Generation

After downloading the template Excel file the user can populate the file with data and use a built in macro to generate and XML file to be used for submission. When opening the Excel file you will be notified that the file contains macros. Click the "Enable Macros" button to continue.
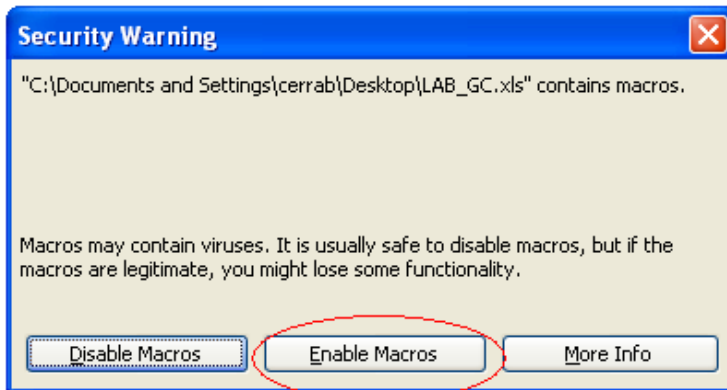
The file will now be opened and you can begin entering data. When you have completed the data entry, click the "Generate XML" button located near cell M3.

The excel file will first be checked to verify that all required fields were entered. If they are not a message window will be displayed notifying you of the fields that have not been filled out. Once all required fields have been entered, click the "Generate XML" button again. You will be asked if you are ready to proceed.
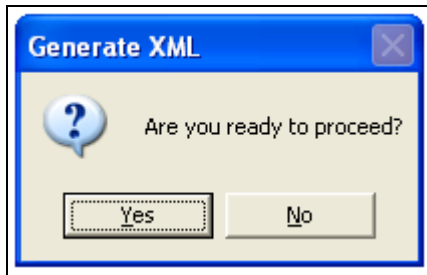
Click the "Yes" button. Next, you will be asked where you want to save the generated file.
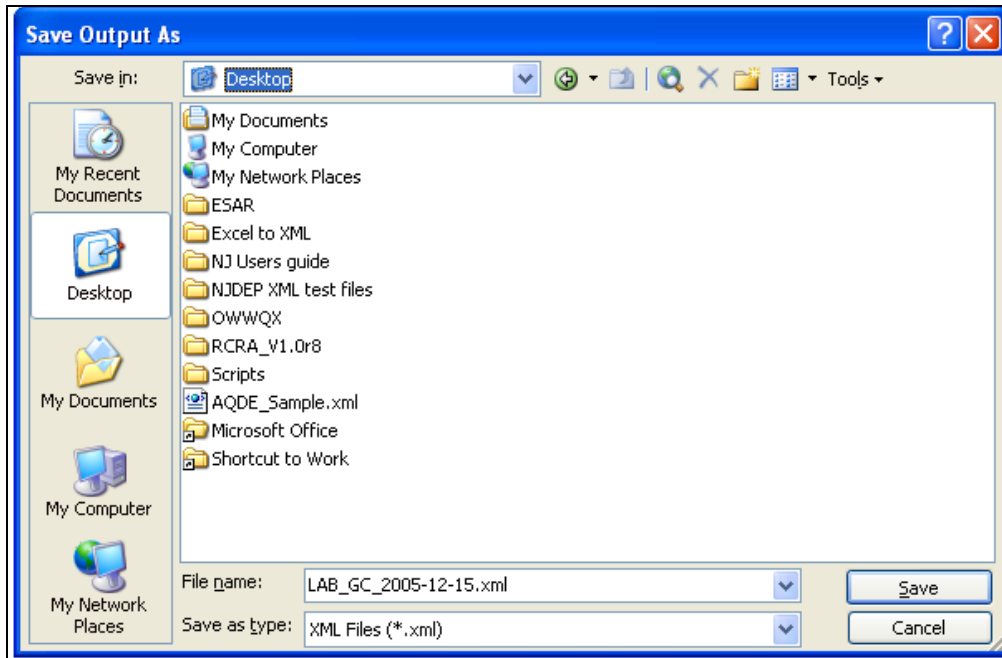
Navigate to the directory where you wish to save the file. Once you have selected a file location and name, click the "Save" button. After the file has been generated, a message window will be displayed to notify you that the process finished. Click the "OK" button. Now, this file can be uploaded by following the instructions in the XML File Upload section (Section 5.2).

5.1.4   Using the Web Form to Generate the DWR Submission File

Thus far we have focused on the template XML file. However, many facilities may wish to fill out a form very similar to the paper DWR. Using the E2-DWR System, the facility can fill out a web form online to meet this reporting need. Once the web form is filled out, it can be used to generate the submission DWR file populated with the reported data.

5.1.4.1 Manual Entry

To begin, return to the Create New Reports screen, by clicking on the Create New Reports icon in the functional area to the left. The user has two options for online entry, to fill out a form online or to copy and paste information into an online template form.

To fill out an online form manually click on the Entry icon, under the Online Entry header. This will bring up the following pop up window.

Microsoft Internet Explorer

❓ The system will automatically create and save a new report for this laboratory. Click OK to create a new report, or click Cancel to cancel the request.

[OK] [Cancel]
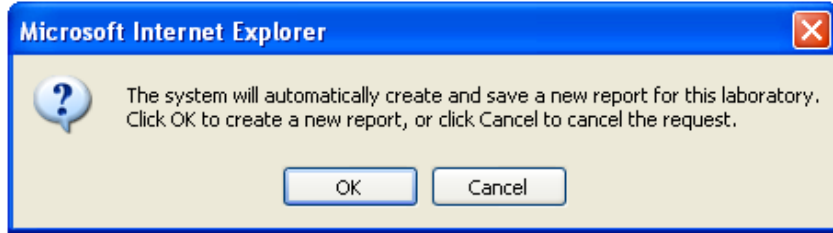
To proceed, click OK. This opens the report form for the user to begin adding information.

Generic Coliform Analysis Laboratory Report Form

Laboratory Name: **ACCUTEST LABORATORIES**
Laboratory Certification Number: 12129
Report Form ID: 37

[Exit] [Save] [Submit to DEP]

[Add Record] [Delete Selected Record(s)]

									Sample Information		
Delete Record	Edit Record	Record ID	Lab Sample Number	PWS ID Number	Replacement Indicator	Water Facility State Code	Sample Point ID	Compliance Sample?	Sample Collection Date	Sample Collection Time	Sample Ty

GENERAL REPORT COMMENTS AND EXPLANATION:

To add a record click the Add Record button, [**Add Record**]. This opens another page in which all of the record information can be filled in.

At any point during the data entry the user can click the Validate button to check that the information added to the form abides by the XML schema. Once the user has completed adding the data, they must click the Validate and Save button. This checks that the data is valid, and saves the record to the report.

Once the user has completed filling out the form, click the Submit to e-DWR button, **Submit to DEP**. It should be noted that at any time the user may save the values that have been entered for this DWR and return at a later time, by clicking the Save button, **Save**.

5.1.4.2 Copy and Paste

In many cases, a facility may store its daily DWR data electronically in a common spreadsheet software application, such as *Microsoft Excel*. To blend the simplicity of the web form with the commonly used spreadsheet format, there is a copy and paste feature available on the Safe Drinking Water and NJQL reports web forms. To use this feature, return to the Create New Reports screen by clicking on the Create New Reports icon **Create New Reports** in the functional area to the left. Then, click the Copy/Paste icon, **Copy/Paste**. This will open the following page

Copying and pasting data allows for standardization of data, reducing the degree of error that may occur by retyping the data. The parameters at the top of locally saved spreadsheet must be in the same order as those on the DWR web form. Once the data is copied into the window, the user must enter the authorized agent's title name and telephone number, as well as, any comments, if any.

At any point during the data entry the user can click the Validate button to check that the information added to the form abides by the XML schema. Once the user has completed filling out the form, click the Submit to e-DWR button, **Submit to DEP** .

5.2   Submitting e-DWR Files

In addition to submitting an e-DWR in the online entry section of the Create New Reports menu, the user can also upload an XML report. This is accomplished by clicking on the Upload XML Reports icon [Upload XML Reports].

To select a file, click on the Browse… button.

This will bring up the Choose File message box. Browse through the local file directory, and select the file to be uploaded.
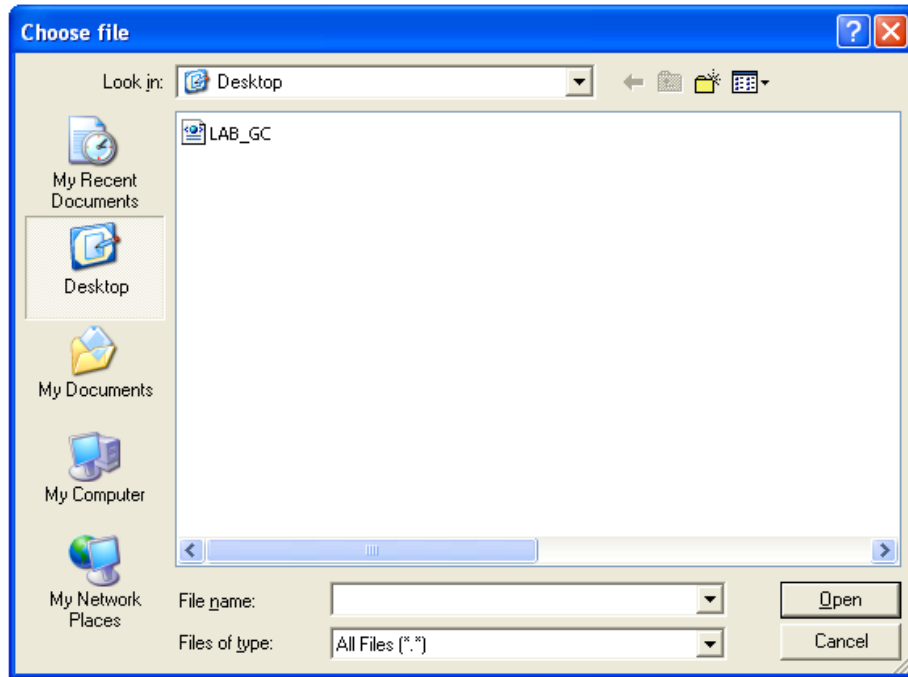
Note that the file selected must be a valid XML file. If the file does not have an .xml extension, an error will occur. Also, the file must generate as an e-DWR schema instance document, and must comply with the naming of the data elements, order of the data elements, and data element type definitions. If the e-DWR schema specifies a date value, it must be in a data element value. If a string is present, an error will occur.

Before submitting the e-DWR XML file, you may test if the file is well formed and validate it against the e-DWR schema. This can be accomplished by clicking the Test File button.

A message box will appear to confirm that the file will be tested at the E2 Server.
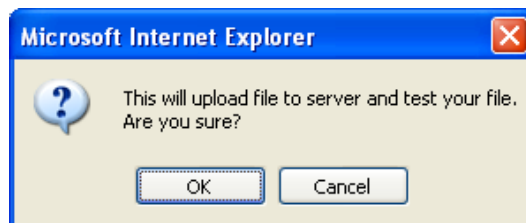
Click OK to continue.

If the file is invalid, the specific validation errors will appear above the Select File row. The most common errors are listed below.

(1) The file is not in XML format, for example, the submission file is in word format:

(2) The file did not pass validation:

Click the "here" button to view the error message

Once a valid XML file has been selected the user must enter their PIN and certify their submission. Then to submit the file, click the Submit button.

5.3   Editing or Deleting an Open Report

As stated above in the sections on creating new reports, the user has the option of saving their work at any time during the creation process. To continue work on an open report, click on the Retrieve Saved Reports icon, located in the functional area to the left.

5.3.1   Editing an Open Report

To edit a report select a laboratory from the drop down menu, then find the desired report. To edit the report click on the Edit icon [icon]. This will open the report. To make changes follow the steps for creating a report in section 5.1.

5.3.2   Deleting an Open Report

A report can be deleted by checking the delete check box next to the appropriate report, [checkbox].

Then click the Update button, [Update]. This will prompt the following message box
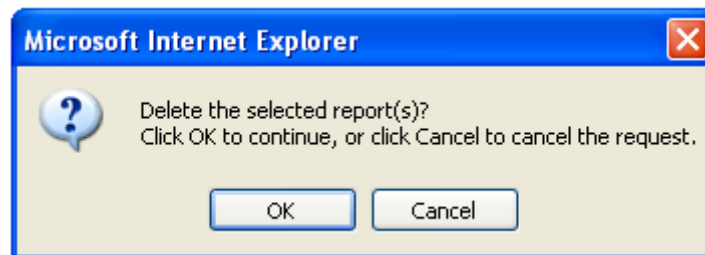
To delete the report, click OK.

5.4 Viewing Submissions

After a file has been submitted to the E2-DWR Server, it is accessible for viewing at any time. To view a DWR submission, click on the View Submission icon, [🔒 View Submission] in the left functional area. This will open the following screen.

To find a particular submission select the Lab from the drop down menu. The user can also search based on the submission status, program (EDWR, NJQL, or PWTA), and submission date. One of the search criteria is Submission Status, these statuses are described below:

- **Received**: A submission with "Received" status has been received by the E2 Reporting System, but has not yet been validated.
- **Rejected**: A submission with "Rejected" status has been received by the E2 Reporting System, and was validated. However, errors where detected when validating the submission.
- **Processed**: A submission with "Processed" status has been received by the E2 Reporting System, and was validated with no errors detected. Only sample / results contained within "Processed" submissions will be moved into SDWIS/State.
- **Resubmitted**: A submission with "Resubmitted" status was originally rejected by the E2 Reporting System, but a new submission was made to correct the errors.

5.4.1   Edit Rejected Submissions

From this page, any submissions that were given the Rejected status can be edited by clicking on the Edit icon.

5.4.2   Download XML file

This page also allows the user to download the XML submission file by clicking on the XML icon. This will bring up the following message box.
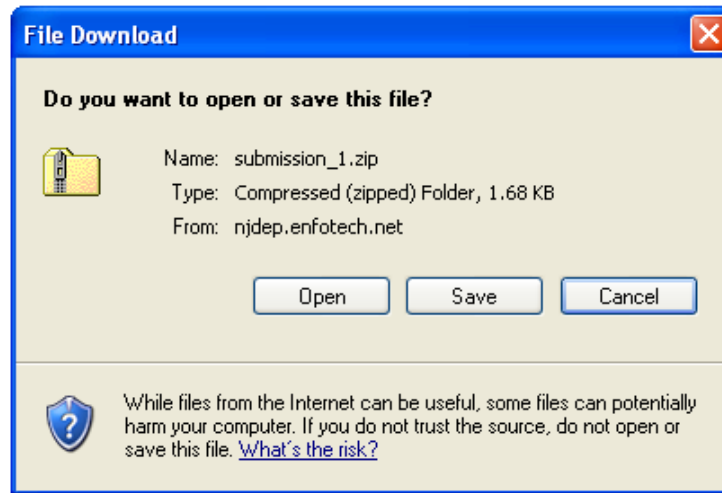
To open the file in a new window without saving, click Open. Alternately, click Cancel if you do not wish to save or open the file.

However, if you wish to download the XML submission file, click Save, at which point the user will be prompted to respond with the location they wish to save the file in.

5.4.3   Chain of Custody

The Chain of Custody can be obtained for the submission by clicking on the Chain of Custody icon.

5.4.4   Viewing Reports within a Submission

To view the reports within a submission, click the "View Lab Reports" tab at the top right of the page.

To find a particular report select the Lab from the drop down menu. The user can also search based on the submission status, report type¸ and submission date. To view the report, click the View icon .This prompts the user to download a zip file containing the report.
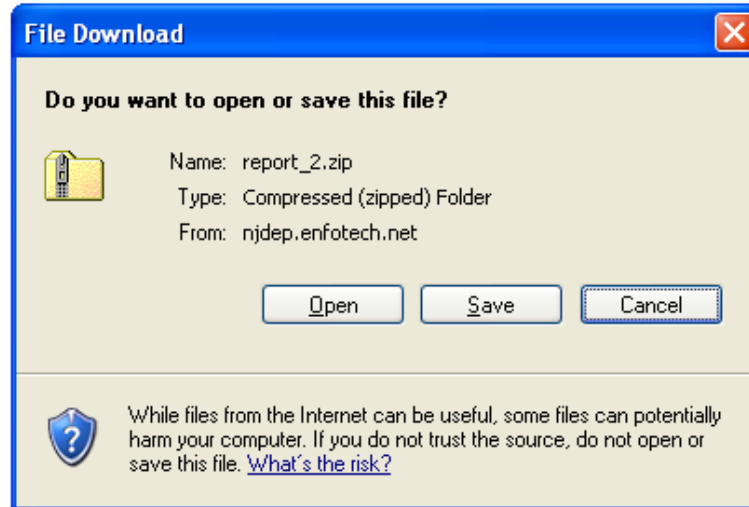
To open the file in a new window without saving, click Open. Alternately, click Cancel if you do not wish to save or open the file.

However, if you wish to download the Report file, click Save, at which point the user will be prompted to respond with the location they wish to save the file in.

5.4.5   Viewing Samples within a Report

To view the samples within a submission, click the "View Lab Samples" tab at the top right of the page.

To find a particular sample select the Lab from the drop down menu. The user can also search based on the SDWIS/State status, PWIS ID, Lab Sample ID, and submission date. To view the data, click the View icon .This will open a window containing a PDF displaying the sample data.

5.5 Reference Data

The user can obtain a listing of what water facilities are associated with a particular water system, as well as, the status of the facilities and system, by clicking the Reference Data icon, **Reference Data**, in the functional area to the left. From this screen the user can also obtain information regarding the SDWIS Method as well as related parameters, by clicking on the appropriate tabs located in the upper section of the screen

5.5.1 Water System Information

To find information regarding a water system first enter the appropriate search criteria.

To download the data for each system returned by the search click the Download Data button

. This will begin a series of message boxes.
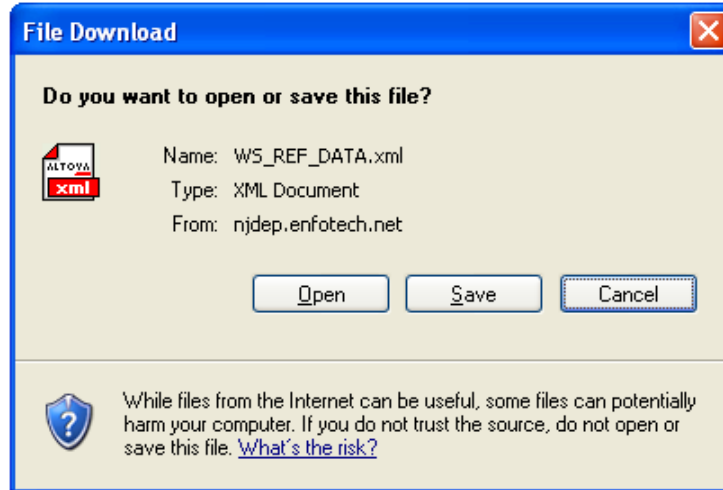
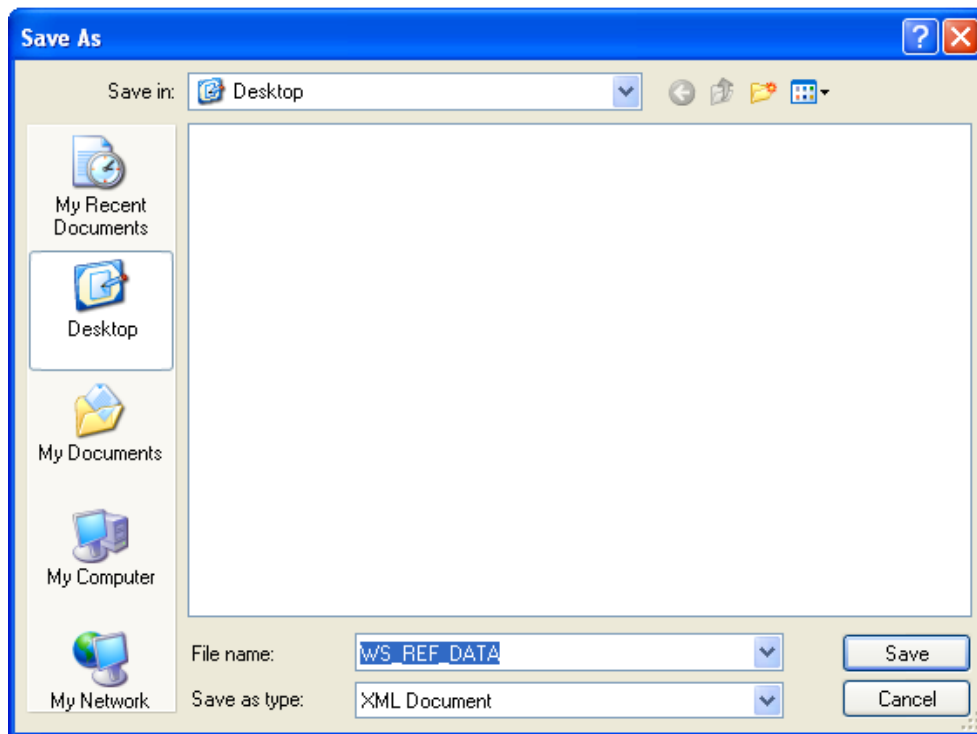To open the file in a new window without saving, click Open. Alternately, click Cancel if you do not wish to save or open the file.

However, if you wish to download the water systems' XML data file, click Save, at which point the user will be prompted to respond with the location they wish to save the file in.

Navigate to the directory where you wish to save the file. Once you have selected a file location and name, click Save.

To view the water facilities associated with a water system click the Details icon, [icon], for the water system of interest.

This screen displays a listing of the water facilities associated with the particular system, as well as, their status. To view information regarding a facility's sampling point click the Details icon, [icon], for the water facility of interest.

5.5.2 SDWIS Method

To find information regarding a SDWIS Method click on the SDWIS Method tab from the Reference Data screen, then enter the appropriate search criteria. (Note: details of a method can be found by searching a parameter from the Parameter tab (See section 5.5.3), and then selecting to view the methods related to the particular parameter, this action will bring the user to the SDWIS Method tab, as if they had performed a method search.)

To download the data for each method returned by the search click the Download Data button

. This will begin a series of message boxes.
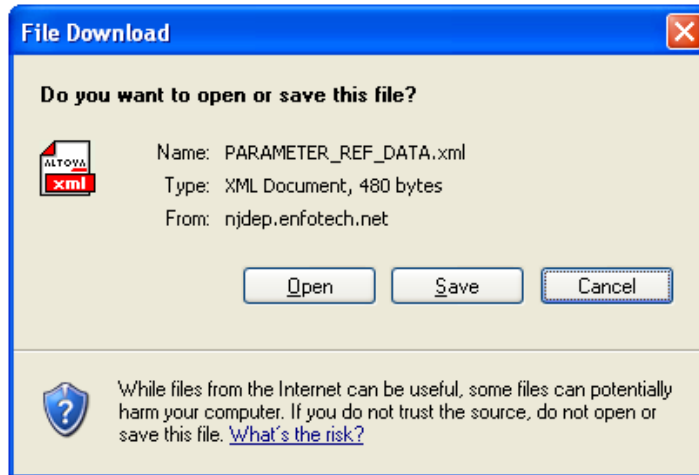
To open the file in a new window without saving, click Open. Alternately, click Cancel if you do not wish to save or open the file.

However, if you wish to download the SDWIS method XML data file, click Save, at which point the user will be prompted to respond with the location they wish to save the file in.

Navigate to the directory where you wish to save the file. Once you have selected a file location and name, click Save.

To view the parameters related to the method click the Details icon, [icon], for the method of interest. This will action will transfer you to the Parameter tab located at the top of the screen.
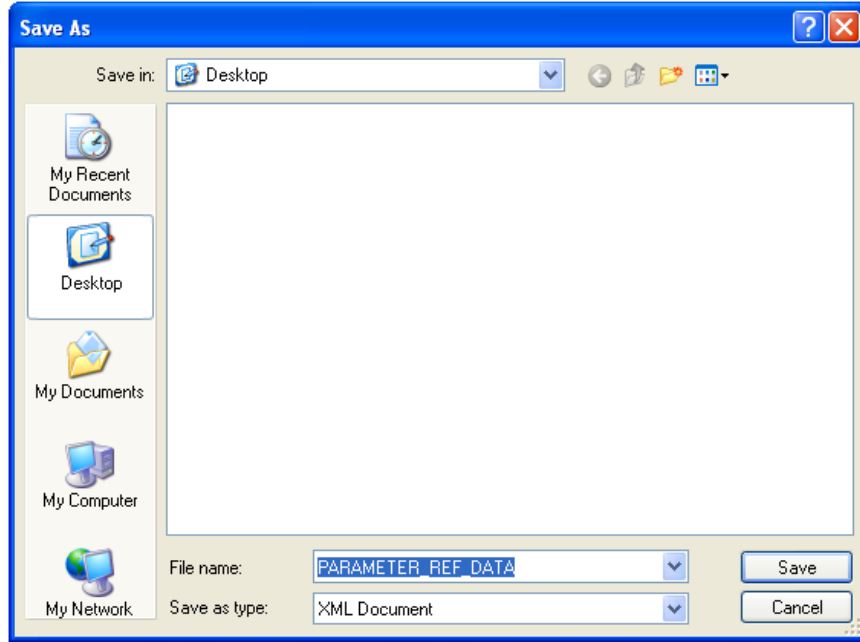

5.5.3   Parameter Search

To find information regarding a Parameter click on the Parameter tab from the Reference Data screen, then enter the appropriate search criteria. (Note: details for a parameter can be found by

searching a method from the SDWIS Method tab (See section 5.5.2), and then selecting to view the parameters related to the particular method, this action will bring the user to the Parameter tab, as if they had performed a parameter search.)

To download the data for each parameter returned by the search click the Download Data button

. This will begin a series of message boxes.
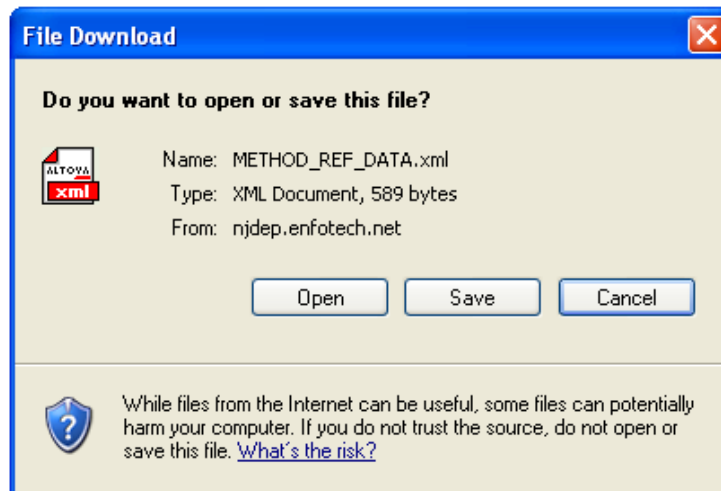
To open the file in a new window without saving, click Open. Alternately, click Cancel if you do not wish to save or open the file.

However, if you wish to download the parameter XML data file, click Save, at which point the user will be prompted to respond with the location they wish to save the file in.
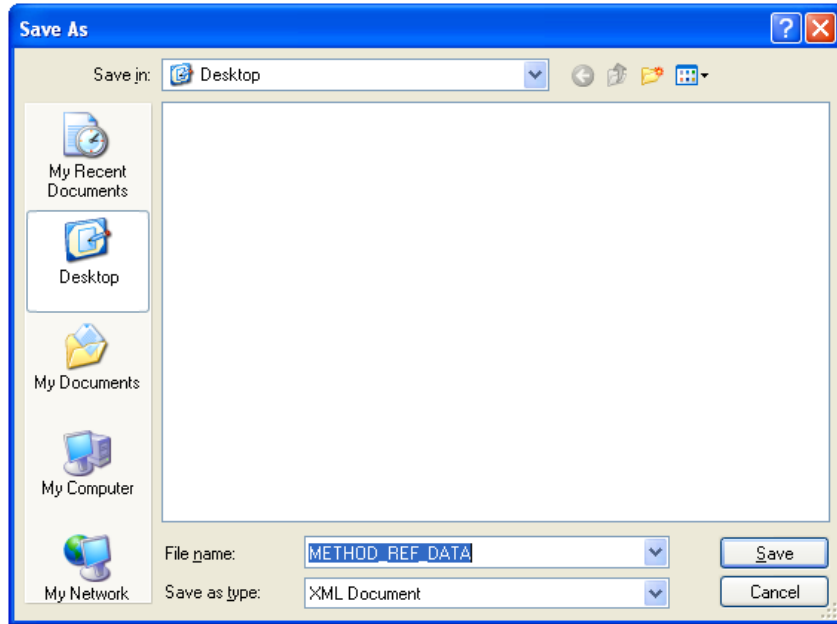
Navigate to the directory where you wish to save the file. Once you have selected a file location and name, click Save.

To view the methods related to a particular parameter click the Details icon, , for the parameter of interest. This will action will transfer you to the SDWIS Method tab located at the top of the screen.

6   Glossary

Term	Definition
Administrator	User Account Level which has the following privileges: • Allowed to download, prepare, upload, review, and certify the accuracy of electronic reports. • Allowed to submit electronic reports to the state agency. If the user's account is associated with a laboratory the user will have the following additional privilege: • Allowed to approve or deny requests from others requesting to be associated with the laboratory. If the user's account is associated with a water system the user will have the following additional privileges: • Allowed to approve or deny requests from others requesting to be associated with the water system. • Allowed to view laboratory reports submitted on behalf of the water system. • Allowed to manage which laboratories may submit electronic Drinking Water Reports on the behalf of the water system.
Certifier	User Account Level which has the following privileges: • Allowed to download, prepare, upload, review, and certify the accuracy of electronic reports. • Allowed to submit electronic reports to the state agency. If the user's account is associated with a water system the user will have the following additional privilege: • Allowed to view laboratory reports submitted on behalf of the water system.
COMPASS	NJDEP's database used to manage PWTA data
DWR	Drinking Water Reports
E2	New Jersey Department of Environmental Protection Electronic Environmental Reporting System. A web-based information system that allows laboratories and the regulated community to electronically submit reports to the New Jersey Department of Environmental Protection.
Electronic Signature Agreement	Serves as a formal agreement between each PIN holder (Certifier) and the Department regarding the responsibilities and use of their PIN

Term	Definition
NJDEP	New Jersey Department of Environmental Protection
NJDEP Online	New Jersey Department of Environmental Protection Online portal system located at http://njdeponline.com
NJEMS	New Jersey Environmental Management System: An integrated transactional Oracle database that contains the NJDEP's major program databases
NJQL	New Jersey Quantitation Limit
Personal Identification Number	A sequence of alpha-numeric characters assigned to a Certifier by NJDEP so as to uniquely identify Certifier
Preparer	User Account Level which has the following privileges: • Allowed to download and prepare electronic reports. • Allowed to view electronic reports and past submissions, but not certify or upload any submissions. If the user's account is associated with a water system the user will have the following additional privilege: • Allowed to view laboratory reports submitted on behalf of the water system.
PIN	Personal Identification Number
PWTA	Private Well Testing Act
Responsible Official	A Responsible Official as defined in N.J.A.C. 7:18-1.9 is as follows: • For a corporation: A principal executive officer of at least the level of vice president. • For a partnership: A general partner. • For a sole proprietorship: The proprietor • For a government agency: Either a principal executive officer or his or her designee
SDWIS/State	Safe Drinking Water Information System State version: NJDEP's database used to manage the Safe Drinking Water Act
Submission ID	A unique number generated by E2 and assigned to each submission.
USEPA	United States Environmental Protection Agency
XML	Extensible Markup Language (XML) is a recommended standard by World Wide Web Consortium (W3C) for generic data communication (http://www.w3.org/TR/2000/REC-xml-20001006).
XML Schema	Defines the data element names, definitions, order, required fields, and data types for all elements in an XML file.