

# ELECTRONIC ENVIRONMENTAL DRINKING WATER REPORTING (E2-DWR) SYSTEM

## LABORATORY USER GUIDE

### Texas Commission on Environmental Quality (TCEQ)



**Version: 2.4.1**

**January 2024**

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## **1 Introduction**

### **1.1 State of Texas Environmental Electronic Reporting System (STEERS)**

STEERS provides access to the public for on-line access to the E2 system plus several other regulatory programming areas of the TCEQ. An individual obtains a free STEERS account with which they have on-line access to add, update, renew and modify their accounts for a number of regulatory programs.

Individuals that have an issue with STEERS have access to telephone or e-mail assistance from the STEERS team. The STEERS team provides telephone support to the public for help with the STEERS program only. Any issues the individual has with a regulatory program are referred to the program area for assistance. STEERS staff also has access to the Internal Data Application (IDA) to re-set passwords for users locked out of their accounts.

Individuals that need assistance may contact STEERS by phone 512-239-6925 or by e-mail at [steers@tceq.texas.gov](mailto:steers@tceq.texas.gov).

### **1.2 Electronic Environmental Reporting and the E2 System**

The Electronic Environmental (E2) Reporting System is a web-based information system that allows the regulated community to electronically submit reports to the Texas Commission on Environmental Quality (TCEQ). The E2 system provides an alternative to submitting hand-written or paper-based reports that is faster, more efficient, and requires less processing for laboratories, water systems, and TCEQ. 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 the compliance data from the following report form: Microbial Reporting Form (MRF)- Form 10525 (TCEQ Form 10525). E2 allows the lab user to report the compliance data to TCEQ utilizing two options:

1. Online data entry option
2. Data upload option

### **1.3 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
- Eliminates transcription errors on the TCEQ side and will help labs address illegible submissions quicker with their customers to prevent future reoccurrence
- Decreases the number of extraneous violations using three steps of validation
- Reducing and better utilizing TCEQ resources required for managing reports
- Adds to the overall effectiveness of the TCEQ program areas with faster response for data analyses, compliance assessment, and decision-making

### **1.4 Contact Information**

The E2 Coordinators can be reached at:

<b>Public Drinking Water</b>
E2 Coordinator Public Drinking Water Section (MC-155) Water Supply Division Texas Commission on Environmental Quality (TCEQ) ESubdata@tceq.texas.gov Phone: (512) 239-4691

STEERS Contact:

<b>State of Texas Environmental Electronic Reporting System (STEERS)</b>
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Texas Commission on Environmental Quality  
(TCEQ)  
STEERS Help line  
STEERS (MC 226)  
E-mail: [STEERS@tceq.texas.gov](mailto:STEERS@tceq.texas.gov) Phone:  
(512) 239-6925

## 1.5 E2 System Overview

As a web-enabled system, 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 online Microbial Reporting Form, or upload the compliance data from their Microbial Monitoring database as a schema-defined CSV file.
- **Ability to view validation messages online.** All submissions can be validated to verify that they meet minimum criteria as defined for the Microbial Reporting Form.
- **Ability to save partially completed forms.** If a user does not finish filling out a form in one session, he or she can save the form and resume filling it out at a later time. TCEQ will not review partially completed forms. The user must submit the form in order for the data to be processed by TCEQ.
- **Ability to view and print previously submitted forms.** All submissions made through the E2 reporting system are saved and are available for later retrieval. E2 will generate Microbial Reporting Forms based on the data input into the system.
- **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 receive an email notification of each submission. There is not an automated e-mail if a file is rejected. Please follow up on each submission status in the View Lab Submissions application of E2.
- **STEERS.** Provides on-line access to the required E2 laboratory functions necessary for reporting to TCEQ. Reporting through STEERS and E2 does not ensure a submission will be on time per regulations, it only provides a lab the ability to report to TCEQ,

In essence, the E2 system serves as an electronic filing cabinet, allowing Laboratories to manage their own reporting to TCEQ and monitor the status of submitted reports.

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

- Any person who wants to have access to the E2 system must have an authorized STEERS User Account.

- Any person who wants to submit reports for a particular laboratory must be granted an association with the laboratory.
- In order to submit the reports online in E2, the STEERS user account must have the "PDW System Sign and Submit" role.
- Any person who wishes to certify laboratory reports must fill out an STEERS Participation Agreement (SPA).

## 2 Minimum System Requirements

Laboratories must be able to access TCEQ'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 the features of the E2 system are available, Laboratories must use Microsoft Internet Explorer web browser (version 7.0 or higher) or Firefox (version 10.0 or higher). The performance of the E2 system will vary based on the computer's internet connection speed, CPU, Operating System, and available memory. The minimum system configuration recommendation is as follows:

- Broadband Internet Connection or higher
- Pentium II processor or higher
- VGA or higher resolution monitor (at least 800 x 600 resolution)
- Microsoft Windows XP or higher • 256 MB of RAM or higher
- Web Browser:
  - Designed for Microsoft Internet Explorer 9.0 ○Also works on other browsers
  - Microsoft Internet Explorer 7.0 or higher
  - Google Chrome
  - Mozilla Firefox
- PDF reader for viewing of PDF file
- Printer for printing submission in report format and/or Copy of Record
- Email account

## 3 E2-DWR System Description

This section provides a brief overview of the report submission process in E2.

### 3.1 Abbreviated eDWR Submission Process for Laboratory:

**Step 1:** With STEERS, Laboratory User logs into the E2 Reporting System via the Internet with STEERS User ID, password, and an answer to a security question.

**Step 2A:** Using the Laboratory Reporting Module, user can either select “Create a New Report” to generate a data entry form or select “Upload File” to upload an already existing file

**Step 3:** The user prepares Microbial Monitoring report in accordance with reporting requirements, as specified using submission methods available as follows:

- Step 3A: Completing the Microbial Monitoring online entry web form and generating a XML submission file when it is submitted online.
- Step 3B: Using the defined schema (70-column CSV file format) to upload the Microbial Monitoring compliance data online.

**Step 4:** Enter the STEERS password and certify the data entered.

**Step 5:** E2 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. E2 verifies that the submitted file conforms to the specific data validation rules and business requirements defined for each of the submitted forms or uploaded records.

**Step 6:** Valid submissions can be viewed and printed at any time by the user that submitted the data.

**Step 7:** Follow up on status of submission in the View Lab Submissions application.

## 4 Getting Started

### 4.1 Creating a STEERS User Profile

In order to gain access to the E2 Reporting System, a State of Texas Environmental Electronic Reporting System (STEERS) user account must first be created

here: [www.tceq.texas.gov/goto/steers](http://www.tceq.texas.gov/goto/steers)

**THE STATE OF TEXAS ENVIRONMENTAL ELECTRONIC REPORTING SYSTEM**  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**Welcome to STEERS**, the State of Texas Environmental Electronic Reporting System.

**Here is what you can do online in STEERS:**

**e-Permits/Registration:**

- » Air New Source Review Registrations
- » CAFO General Permit
- » Municipal Solid Waste Notifications **NEW**
- » Pesticide General Permit
- » Petroleum Storage Tank (PST) Self-Certifications
- » Storm Water General Permits (Construction & Multi-Sector)

**e-Reporting:**

- » Annual Emissions Inventory Report (AEIR)
- » Air Emissions & Maintenance Events (AEME) Reporting
- » Discharge Monitoring Reports (eDMR)
- » Industrial & Hazardous Waste (IHW) NOR and Summaries
- » Municipal Solid Waste (MSW) Quarterly Report
- » Pollution Prevention Planning (P2PLAN) Reporting **NEW**
- » Training Roster Online Submittal (TROLS)

**Enter STEERS:**

ER Account Number:  (ER + 6 digits)

Password:

**I need:**

- my password
- to create a new account
- to authorize another user's account

**Find Out When STEERS Will Be Offline**

We do our best to ensure that STEERS is online upgrades, security measures, and other mainten

To create a new STEERS user account, follow the instructions and click on the “Create New Account” button listed on the right side to begin. This opens the Applicant Information screen.

**Help** **Contact Us** **STEERS Login**

**Welcome to the Online STEERS Participation Agreement (SPA)**

**To create a new STEERS account:**

1. You need the list of program areas and/or Ids to add to the account. For instructions, please click on the Help button at the top of the page.
2. Press the Create New Account button below.
3. A STEERS account verification email will be sent to the address you provide when the account is created. You must use the verification link contained in this email to set your account password.

**New STEERS Account Information:**

- New accounts are probationary and have limited access until STEERS receives a signed hard-copy SPA or the SPA is signed electronically using the account holder's Texas Drivers License. The signed SPA must be received to meet the EPA and legal requirements for electronic signatures.
  - If a signed SPA is not received by the STEERS team within:
    - **15 days** of the creation date, the account will be locked.
    - **30 days** of the creation date, the account will be archived.
- Only one account may be created in a 5-minute interval and only 20 accounts may be created in a 24-hour period.
- Each STEERS account must have a unique e-mail address.
- A STEERS account is owned by an individual and not a company.

**Note:** To update an existing STEERS account, you must press Exit Application and log into STEERS.

Enter the required user information as indicated by the red asterisk. After entering the user information, scroll to the bottom of the screen and click the “Next” button.



[Help](#) [Contact Us](#) [Logout](#)



## Applicant Information

51:58

Please enter the applicant's information below and press Next button to continue.  
*All fields marked with \* are required.*

**Applicant Name**

**First Name:\***

**Middle Initial:**

**Last Name:\***

**Suffix:**  (Name suffix if applicable.)

**Company Information**

**Company Name:\***  (Applicant's company.)

**Title:\***  (Applicant's title.)

**Contact Information**

**Email Address:\***  (Email must be unique.)

**Phone Number:\***    (555 123 4567 Format.)

**Extension:**  (Applicant's extension number.)

**Mailing Address**

**Address:\***  (Street address or PO Box.)

**Extra Line:**  (Mail code or other information.)

**City:\***

**State:** Texas(TX)  (Required for US Address)

**ZIP Code:**  -  (Required for US Address)

**Country:\*** USA

**Territory:**  (Required for non-US Address)

**Foreign Postal:**  (Required for non-US Address)

[Next](#) [Clear Form](#) [Exit Application](#)

A “Review Applicant Data” page will be displayed. Click on the “Next” to continue.



[Help](#) [Contact Us](#) [Logout](#)



## Review Applicant Data

54:51

Please review the applicant's information below. The data you entered has been validated and formatted to remove special characters. You may choose to change the data, continue account creation, or exit the application.

**!** Click Next button to create your account. This process may take a couple of minutes, so please do not click the button more than once on this page.

**Name:** Joe Smith  
**Company Name:** ENFOTECH  
**Title:** MR  
**Email Address:** user\_e3@yahoo.com  
**Phone Number:** 609-896-9777  
**Mailing Address:** 1368 HOW LANE  
 NORTH BRUNSWICK NJ 08902

[Previous](#) [Next](#) [Exit Application](#)

On the “STEERS Account Security Question Update” page, select 5 security questions and provide the desired answers accordingly. Click the “Save” button to continue.

### Set STEERS ER001474 Account Security Questions

In order to increase STEERS security, we are implementing a multi-factor verification system which requires 5 security questions. Please select and answer the following security questions. Answers must be between 3 and 20 characters. A \* indicates an answered question on your account. If you wish to keep the current answer, leave the answer box blank.

<b>Question 1:</b> - Select a Question -	<b>Answer 1:</b> <input type="text"/>
<b>Question 2:</b> - Select a Question -	<b>Answer 2:</b> <input type="text"/>
<b>Question 3:</b> - Select a Question -	<b>Answer 3:</b> <input type="text"/>
<b>Question 4:</b> - Select a Question -	<b>Answer 4:</b> <input type="text"/>
<b>Question 5:</b> - Select a Question -	<b>Answer 5:</b> <input type="text"/>

[Save](#)

Next, select the desired STEERS program for the selected user account as follows:

- Public Drinking Water - Laboratories (PDWLAB)

Help Contact Us Logout

Paper SPA E-sign SPA

**STEERS Account Summary**

User: ER001474

**Note:** You have not selected any STEERS program areas for your account. You cannot generate a STEERS Participation Agreement until you complete setting up your account by adding at least one program area below.

Your account security questions have been saved.

**STEERS Access**

Select STEERS Program to Add or Modify: -- Select program to add or modify -- Go

Select the applicable “Access Type” as follows:

- *PDW System Sign and Submit* - View, create, delete, modify, sign, and submit

You should select the “PDW System Sign and Submit” in order to have the most accessibility.

Account Summary Help Contact Us Logout

Account Summary Modify IDs

**Add New PDWSYS IDs**

To add IDs to the account: select a role, relationship, an authorization and either the IDs to add or an account to copy. Press Add IDs or Copy IDs to continue. Press Cancel when done.

**Program Status**

Access Type: \*\* Pick Role \*\*

**Authorization**

Select the appropriate relationship and authorization statement below.

**What is the best description of your employer's relationship to the facility or facilities?**

The Facility

Parent Company

Other

**Who is authorizing the access?(Select one of the following)**

I, Joe Smith, am applying for a read, edit, or preparer role and no specific company authorization is required.

**-OR-**

I, Joe Smith, am applying for a sign and submit role and have the authority to enter into this Agreement for the Company under the applicable standards referred to in the IAW Public Drinking Water Program area Regulatory Guidance documents.

Under the Authorization section, select the proper relationship to the facility. If you are a lab with \_\_\_\_, select “The Facility”. If you are a lab with \_\_\_\_, select “Parent Company”. If neither of these options is applicable, select “Other”.

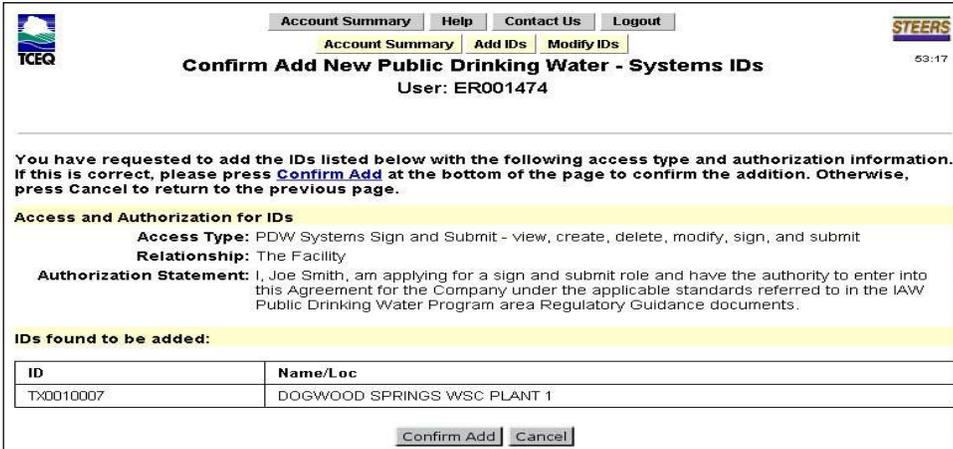
If you are applying for the “PDW System Sign and Submit” access type and have authorization to create an account, select the second radio button, “I am applying for a sign and

submit role and have the authority to enter into this Agreement for the Company under the applicable standards referred to in the IAW Public Drinking Water Program are Regulatory Guidance documents.” If you are signing up for the “PDW System Sign and Submit” Access Type and are granted authorization from a superior, check the third radio button, “I, Christina M Destefano, am applying for a sign and submit role and am authorized by the person below who does have the authority to enter into this Agreement for the Company under the applicable standards referred to in 30 TAC 290.46(f)(4)(C).” and fill in the required information.

Enter the PDW System ID(s) as follows:

- Public Drinking Water - Laboratories (PDWLAB) → Lab ID

Once “Access Type”, “Authorization Type”, and “PDW System ID” are selected/entered, click on the “Add IDs” button to continue. On the confirmation/review page, click on the “Confirm Add” button to save your selection.



The screenshot shows a web interface for the STEERS system. At the top, there are navigation links: Account Summary, Help, Contact Us, Logout, and a STEERS logo. The main heading is "Confirm Add New Public Drinking Water - Systems IDs" with the user ID "ER001474". Below this, a message states: "You have requested to add the IDs listed below with the following access type and authorization information. If this is correct, please press Confirm Add at the bottom of the page to confirm the addition. Otherwise, press Cancel to return to the previous page." The "Access and Authorization for IDs" section includes: Access Type: PDW Systems Sign and Submit - view, create, delete, modify, sign, and submit; Relationship: The Facility; Authorization Statement: I, Joe Smith, am applying for a sign and submit role and have the authority to enter into this Agreement for the Company under the applicable standards referred to in the IAW Public Drinking Water Program area Regulatory Guidance documents. A table titled "IDs found to be added:" contains one entry: ID TX0010007, Name/Loc DOGWOOD SPRINGS WSC PLANT 1. At the bottom, there are "Confirm Add" and "Cancel" buttons.

ID	Name/Loc
TX0010007	DOGWOOD SPRINGS WSC PLANT 1

Please note that a new STEERS user accounts will have a “probation” status until the signed STEERS Participation Agreement (SPA) is received by the TCEQ (either by mail or electronically).

Account Summary Help Contact Us Logout

Account Summary Add IDs Modify IDs Who Else Has Access?

**Public Drinking Water - Systems ID List**

User: ER001474

**Your PDWSYS access has been updated.**  
You have 1 IDs for PDWSYS

1.1 of 1 Records

ID	Name/Location	Role	Authorization	Status	Modified
TX0010007	DOGWOOD SPRINGS WSC PLANT 1	PDW Systems Sign and Submit	Self	probation	08/05/2012

Add IDs Modify IDs Cancel

To access the STEERS Participation Agreement (SPA), click on the “Account Summary” button on the top of the page. Once the STEERS Account Summary page is opened, the options for SPA are made available as follows:

- *Paper Submission:* For mailing of SPA, click on the “Paper SPA” button to access STEERS Participation Agreement (SPA).

Help Contact Us Logout

Paper SPA E-sign SPA

**STEERS Account Summary**

User: ER001474

Click on the “Generate Your SPA” to create the SPA printout for the mailing to TCEQ.

Account Summary Help Contact Us Logout

Account Summary E-sign SPA

**STEERS Select SPA Type**

User: ER001474

**STEERS Participation Agreement (SPA)**  
Please select whether you want to generate the entire SPA or a partial SPA for a specific authorization. Or select E-sign above to sign your account electronically using Texas Drivers License.

**Generate Your SPA**  
To generate the entire SPA, press the "Generate Your SPA" button below.

Generate Your SPA Cancel

-- OR --

**Generate SPA for a Single Authorization**  
All fields are required. You must enter the information the same as you did in the authorization form.

First Name:  Authorization first name.

Last Name:  Authorization last name.

Company Name:  Enter one keyword.

Title:  Enter one keyword.

- *Electronic Submission:* To electronically sign the SPA, click on the “E-Sign SPA” (via Texas Driver License) button to access STEERS Participation Agreement - E-sign page. With the electronic signature of the SPA, users will be granted immediate access to their STEERS account

Account Information	
<b>Account:</b>	ER001474
<b>Name:</b>	Joe Smith
<b>Company:</b>	ENFOTECH
<b>Title:</b>	MR

For an online electronically signed SPA, use your Texas Driver License information.

**Sign Electronically with Your Texas Drivers License (TDL)**  
 All fields are required. TCEQ will not save confidential data such as TDL, audit number, birthday, and partial social security number.

**First Name:**  Your first name as it appears on your TDL.

**Last Name:**  Your last name as it appears on your TDL.

**Company Name:**

**Title:**

**TDL Number:**  8 to 10-digit number

**TDL Audit Number:**  The 11-, 16- or 20- digit number on your license.

**SSN:**  Last 4 digits only

**Date of Birth:**  mm/dd/yyyy

I, Sony Su, have the authority to enter into this Agreement for ENFOTECH under the applicable standards listed below.

I, Sony Su, certify that I am signing this document with my personal Texas Driver's License information.

**Signature verification can take several minutes.  
 Please do not press the E-sign button more than once.**

## 4.2 STEERS passes validation to the E2 Reporting System

The laboratory participant must log into the E2 Report System via STEERS using E2 Production information. After logging into STEERS ([www.tceq.texas.gov/goto/steers](http://www.tceq.texas.gov/goto/steers)) with a valid STEERS user account, password, answer the security question, select the applicable “Reporting Program Area” and click the “Go” button to access the E2 website as follows:

After a user has selected “Public Drinking Water – Laboratories (PDWLAB)”, clicking on the “Go” button will re-direct the user to the E2 Reporting System. By default, the user will be greeted by the E2 home page as shown below

:

On the Home page for Laboratory Users, system announcements created by the administrator are displayed.

## 5 E2-eDWR Online Data Entry Form

NOTE: E2 will accept incomplete data, however, TCEQ requires the data outlined in the guide and summarized in Appendix A. Samples may be rejected by TCEQ if data is incomplete.

The online data entry forms currently available in TCEQ’s E2 Reporting System are described in the sections below:

### 5.1 Online Data Entry for Microbial Monitoring Form

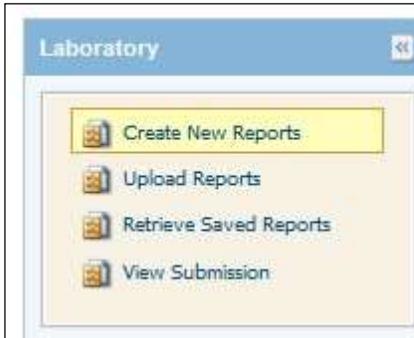
The data entry process for the “Microbial Monitoring” online data entry form is as follows:

**Step 1A:** Login to STEERS with a valid STEERS user account number and password

**Step 1B:** Once logged into STEERS, select the “Public Drinking Water – Laboratories (PDWLAB)” option and click on the “Go” button to access the E2 Reporting System.

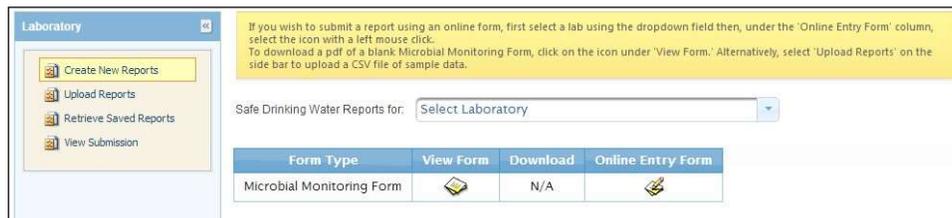
**Step 2:** After E2 validates the user account via STEERS web services, the lab user is presented with the E2 Home Page. Click the “Laboratory” tab.

**Step 3:** For a lab user, the Laboratory Reporting Module menu options are available as follows:



**Step 4:** From the Laboratory Reporting Module, click on “Create New Reports” menu option.

**Step 5:** Select an “associated” laboratory from the list and click on the “Online Data Entry” link to begin the online data entry form for Microbial Reporting Form. This menu should display only lab ID(s) associated with your account.



Please note that on the “Create New Report” page for the Laboratory Reporting Module, the following option is also available:

- *View Form:* Presents a “blank” set of fields from the Microbial Reporting Form.

**Step 6:** Once the “Online Data Entry” icon is clicked, a pop up window will be displayed as shown below. To proceed, click on the “OK” button.



This will open the Microbial Monitoring Report Form for the user. The user will need to select the “Add New Record” button to begin online data entry.

**Step 7:** When the user selects the “Add New Record” button, the online Microbial Monitoring Data Entry Form opens. In the Online Data Entry form for Microbial Monitoring Report Form (MMRF), the lab user will be allowed to enter data from the Microbial Reporting Form.

The Online Data Entry form for the MMRF is divided into the following two sections:

- General Information
- Sample Information

In the “General Information Section”, the following data fields are available as follows:

- TCEQ Lab ID \* (Locked from entry. This is the same selected lab id from previous page)
  - PWS ID \* (text box)
  - Sampler Name \* (text box)

- Sampler Contact Phone # (text box)
- Sampler Contact Phone Extension # (text box)
- Sampler Type (drop-down combo box with values of Owner, Operator, Other)
- System Type (drop-down combo box with values of Public, Private, Bottled/Vended, Other)
- Water Source (drop-down combo box with values of Groundwater, Surface Water, GW with Surface Water Influence, Both Surface Water and Groundwater)
- Sample Iced? \* (drop-down combo box with values of Yes, No)
- Sample Temperature at receipt in °C \* (text box)
- Sample Received By: First & Last (text box)
- Date Received (date text box with calendar for date)
- Time Received \* (time text box with selection for time)
- Sample Tested By: First & Last (text box)
- Date Tested \* (date text box with calendar for date)
- Time Tested \* (time text box with selection for time)
- Sample Reported By: First & Last (text box)
- Date Reported \* (date text box with calendar for date)
- Time Reported \* (time text box with selection for time)
- General Report Comments and Explanation (text box)
- 

**The red (\*) represent required data fields for online submission.**

General Information	
TCEQ Lab ID: *	<input type="text" value="1111"/>
Certificate/Accreditation ID:	<input type="text"/>
PWS Id: *	<input type="text"/>
Sampler Name:	<input type="text"/>
Sampler Contact Phone #:	<input type="text"/>
Sampler Contact Phone Extension #:	<input type="text"/>
Sampler Type:	<input type="text"/>
System Type:	<input type="text"/>
Water Source:	<input type="text"/>
Sample Iced?:	<input type="text"/>
Sample Temperature at receipt in °C:	<input type="text"/>
Sample Received By: First & Last:	<input type="text"/>
Date Received:	<input type="text"/>
Time Received:	<input type="text"/>
Sample Tested By: First & Last:	<input type="text"/>
Date Tested:	<input type="text"/>
Time Tested:	<input type="text"/>
Sample Reported By: First & Last:	<input type="text"/>
Date Reported:	<input type="text"/>
Time Reported:	<input type="text"/>
General Report Comment and Explanation:	<input type="text"/>

In the “Sample Information Section”, the following data fields are available as follows. Please note that it is not necessary to submit results from construction or special samples to TCEQ since those are not used in compliance with the Revised Total Coliform Rule.

- Laboratory Sample ID Number \* (text box)
- Sample Identification/Location \* (text box)
- Sample Collected Date \* (date box with calendar for date)
- Sample Collected Time \* (time box with hour, minute, and second)
- Replacement Indicator \* (drop down combo box)
- Sample Type \* (drop-down combo box)
- Original Lab Sample ID \* \* (text box)
- Original Lab ID \* \* (text box)
- Original Collected Date \* \* (date box with calendar for date)
- Chlorine Residual Type (Free or Total) \* (text box)

- Chlorine Residual Value (Measure) \* (text box)
- Unsuitable Sample - Please Resubmit (This will be used by the Lab to indicate a sample was rejected/deemed unsuitable for analysis/Lab Invalidated) (text box)
- Analyte Under Test \* (drop down combo box)
- Lab Results for Analyte \* (drop down combo box with Present and Absent value)
- Lab Results for Fecal Indicator Analyte Code (drop down box, auto populated by system)
- Lab Results for Fecal Indicator (drop down combo box with Present and Absent value)
- Lab Results for E. Coli Indicator Analyte Code (drop down box, auto populated by system)
- Lab Results for E. Coli Indicator (drop down combo box with Present and Absent value)

**The red (\*) represent required data fields for online submission.**

**The red (\*\*) represent conditional required data fields.**

**Sample Information**

Laboratory Sample ID Number: *	🔍	<input type="text"/>
Sample Identification/Location:	🔍	<input type="text"/>
Sample Collected Date: *	🔍	<input type="text"/>
Sample Collected Time:	🔍	<input type="text"/>
Replacement Indicator: *	🔍	<input type="text" value="No"/>
Sample Type: *	🔍	<input type="text"/>
Original Lab Sample ID: **	🔍	<input type="text"/>
Original TCEQ Lab ID: **	🔍	<input type="text"/>
Original Collected Date: **	🔍	<input type="text"/>
Chlorine Residual: *	🔍	<input type="text"/>
Chlorine Residual Value: *	🔍	<input type="text"/>
Unsuitable Sample - Please Resubmit:	🔍	<input type="text"/>
Analyte Under Test: *	🔍	<input type="text"/>
Lab Results for Analyte: *	🔍	<input type="text"/>
Lab Results for Fecal Indicator Analyte Code:	🔍	<input type="text"/>
Lab Results for Fecal Indicator:	🔍	<input type="text"/>
Lab Results for E. Coli Indicator Analyte Code:	🔍	<input type="text"/>
Lab Results for E. Coli Indicator:	🔍	<input type="text"/>

**Instructions:**  
Delete Selected Records - Deletes the records below that the user has checked.  
Validate and Save - Validates the form above and adds it to the list below. To add multiple samples, click Add New Record.  
Edit - Repopulates the sample information above from the selected record.  
Add New Record - Validate/Saves the online data entry form and adds the currently entered sample to the sample summary list below. Also, clears the 'Sample Information' data fields for the next sample.  
Done With Form - Navigates back to the Microbial Monitoring Form Summary page. Any sample not saved to the sample summary list will be lost.

	Edit Record	PWS ID	Sample Identification/Location	Laboratory Sample ID Number	Sample Collected Date / Time	
☐						
No records found.						

Once data entry for a sample has been completed, click the “Validate and Save”

button to check the information entered against the QC data validations defined for MRF. After the data has been validated, it has been saved until the lab user is ready to submit. Once the user has completed adding the data and saved the selected sample result, click the “Add New Record”

button to enter the second sample result. The data entered in the first section, the “General Information Section”, will remain the same as the previous sample. Continue the process until all the sample results and requisite data from the MRF 10525 has been entered into the online data entry form.

Data that has been entered, but not yet submitted can be viewed on the “Retrieve Saved Samples” page in the Laboratory Reporting Module menu. Select your laboratory from the dropdown menu. To delete exiting report forms mark the checkbox and click “Delete” above. To edit existing samples click  and the Online Data Entry form will appear.

After the user has completed entering all the MRF 10525 sample data, the user will click on the  button to go back to the previous page displaying all samples entered. A listing of Microbial Monitoring Form by PWS is shown.

For submission of multiple MMSSF 10525 forms please click on “Add New Record” button to continue.

**Add New Record** - Navigate to a new page to add a new Microbial Monitoring Form and sample data.  
**Delete** - Delete the selected Microbial Monitoring Form.  
**Preview** - It is recommended to Preview all Microbial Monitoring Form before submission to TCEQ.  
**Submit** - Submit all Microbial Monitoring Form to TCEQ.  
**Exit** - Exit to the E2 lab home page. All entered Microbial Monitoring Form are saved. To submit or edit at a lat

**Microbial Monitoring Report Form**

---

Laboratory Name: **1111 - TEST LAB A**  
TCEQ Lab ID: **1111**  
Report Form ID: **1469**

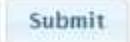
View/Edit	PWS ID	PWS Name	Sampler N
No records found.			

(1 of 1) 

Add New Record

Exit
Submit
Preview

**Step 9:** When the lab user is ready to submit all data entered on the Microbial Monitoring Report

 button. Once clicked, a pop up window will be displayed as shown below. To proceed, click on the  button. This will open the submit page. Form, click on the

Add New Record - Navigate to a new page to add a new Microbial Monitoring Form and sample data.  
 Delete - Delete the selected Microbial Monitoring Form.  
 Preview - It is recommended to Preview all Microbial Monitoring Form before submission to TCEQ.  
 Submit - Submit all Microbial Monitoring Form to TCEQ.  
 Exit - Exit to the E2 lab home page. All entered Microbial Monitoring Form are saved. To submit or edit at a later date, click on 'Retrieve Sa

**Microbial Monitoring Report Form**

Laboratory Name: 48001 - TEXAS DSHS MICROBIOLOGICAL SCIENCES DIV  
 TCEQ Lab ID: 48001  
 Report Form ID: 1468

**Submit Report**

The data will be submitted to the server. Click OK to continue, or click Cancel to cancel the request.

OK Cancel

View/Edit	PWS ID	
	TX3000001	IMA COMMUNITY GW SYSTEM - MEDIUM

(1 of 1) 20

Add New Record

Exit **Submit** Preview

**Step 10:** On the E2 submission page, enter the password, read the certification statement, and place a check mark in the “I Certify checkbox” to associate your electronic signature with the submitted samples and press the “Submit” button to submit the Microbial Monitoring Form report online.

1 Enter Password:

2 Certify Your Submission

Certifier: ER001454  
 Phone Number:

I certify that I am authorized under 30 Texas Administrative Code Subchapter 305.44 to sign this document and can provide documentation in proof of such authorization upon request.  
 I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- I am the owner of the STEERS account ER001454.
- I have the authority to sign this data on behalf of the applicant named above.
- I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
- I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.

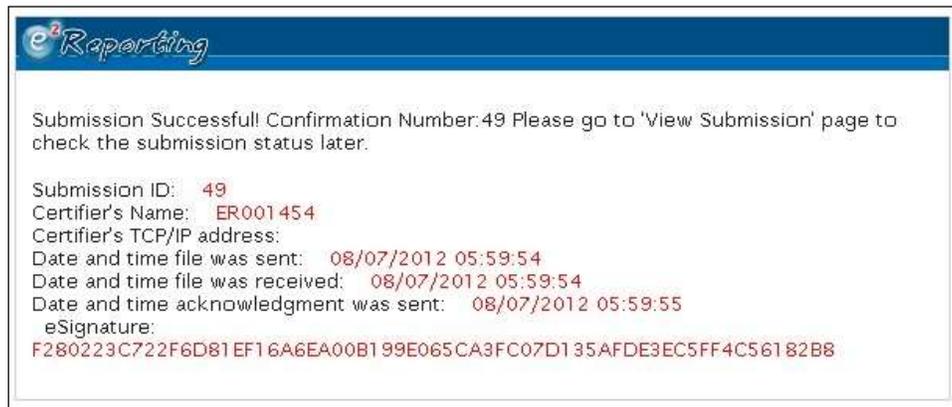
I CERTIFY: \*

3 Submit File **Submit**

Once the “Submit” button is clicked, E2 will call STEERS’ web service to validate the following:

- Lab user has entered the correct password
- Lab user has the correct role to “Sign and Submit” the report online

**Step 11:** Upon successful submission, the receipt page is displayed online as shown below. A submission confirmation email will be sent to the submitter’s email address associated with the account. Note: Successful submission does not mean data has passed validation steps. Please return to the “View Lab Submission” application to track the progress of your submission through validation.



**Step 12:** After the Microbial Monitoring Report Form is submitted in E2, it is available for review at any time under the Laboratory Reporting Module. Select “View Submission” menu option to open.



## 6 E2-eDWR Online File Upload

NOTE: E2 will accept incomplete data, however, TCEQ requires the data outlined in the guide and summarized in Appendix A. Samples may be rejected by TCEQ if data is incomplete.

The online file upload options available in TCEQ's E2 Reporting System are described in the sections below.

### 6.1 CSV File Structure for the Online Upload Option of E2

Labs must structure CSV files in adherence to the provided Electronic Data Dictionary (EDD). The EDD is based on the 70-column schema previously developed by TCEQ. The EDD requires all fields to be included in the CSV file, even if there is no data is required for a specific field or multiple fields. Appendix A in Section 7 provides the detail necessary for creating properly structured CSV files including the sequence in which data elements are ordered, the type of data (i.e. alpha-numeric or numeric), optionality of a given data element (i.e. optional, mandatory, or conditionally mandatory), and the associated business rules. As CSV files separate data elements by using commas null or blank data elements will be displayed as a series of commas, as seen in the example below:

```
A12345,,TX1234567,,,,TCEQ,DS01,
```

where A12345 is the Lab Sample Number, TX1234567 is the PWS ID number, TCEQ is the Lab Certifying Agency, and DS01 is the State Assigned ID. Because the State Sample Number, PWS Name, Alternative Customer Name, System Type, and Replacement Indicator are optional, data does not need to be included. The repeated commas act as placeholders for the data elements that do not require information, as listed above, and are required in order for E2 to successfully process and validate the submitted file. In addition, commas **MUST NOT** be included in any of the data elements (ex: "Joe, Andy, and Mike" entered as collector's name) as they may result in submission and validation errors and making it necessary to re-submit a given file. Data can be viewed in this raw format using programs such as Notepad or WordPad.

**NOTE:** Please make sure that the CSV file created is using the "ANSI" encoding. Also, if you have multiple labs with multiple sample results, please create a CSV file for each lab.



### 6.2 Online CSV File Upload of Microbial Monitoring Data

The example screen flow for the Online File Upload of the Microbial Monitoring Data, which has been formatted into a defined CSV file-structure, is as follows:

**Step 1A:** Login to STEERS with a valid STEERS user account number and password

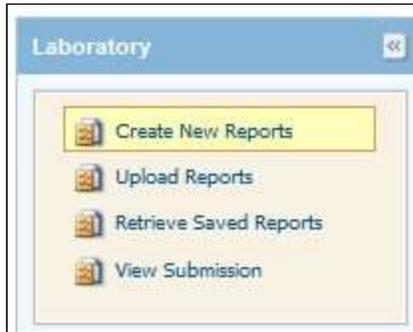
**Step 1B:** Once logged into STEERS, select the Public Drinking Water- Laboratories (PDWLAB) Program module menu option to access E2 Reporting System

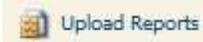
**Step 2:** After E2 validates the user account via STEERS web services, the Lab User is presented with the E2 Home page with any messages.

**Step 3:** For the Lab User, the Laboratory Reporting Module menu options are available as follows:

- *Create New Reports:* Creates a manual entry form for lab users to submit samples

- *Upload Reports:* Users upload an existing .csv file containing samples to be submitted
- *Retrieve Saved Reports:* Manual entries not yet submitted are saved here for future use
- *View Submissions:* Users can view, check status, and receive feedback on previous submissions



**Step 4:** The lab user will select the  button once they are ready to upload their CSV file extract. The lab's generated CSV File must be based on the defined schema (70-column CSV file format).

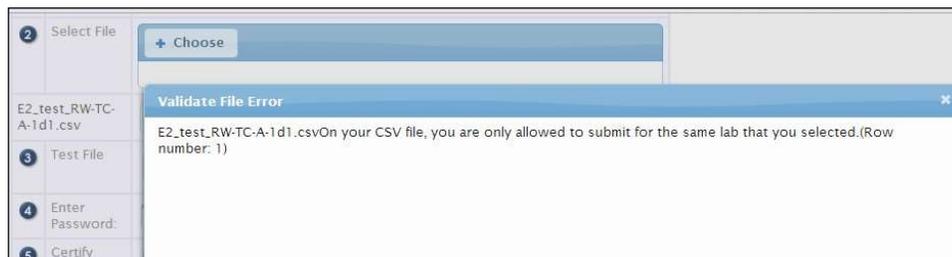
**Step 5:** Once a CSV file with Microbial Monitoring data is prepared, click on the "Upload Reports" menu option in Laboratory Reporting Module. An "Upload Report" page will be opened as shown below.

A screenshot of the "Upload Report" page in the Laboratory Reporting Module. The page has a navigation bar with "Home", "Laboratory", and "My Account". The left sidebar shows the "Laboratory" menu with "Upload Reports" highlighted in a red box. The main content area is a form with five numbered steps: 1. Select Laboratory (dropdown menu showing "1111 - TEST LAB A"), 2. Select File (button "+ Choose"), 3. Test File (button "Test"), 4. Enter Password (text input field), and 5. Certify Your Submission (text area with a certification statement). The certification statement reads: "I certify that I am authorized under 30 Texas Administrative Code Subchapter 305.44 to sign this document and can provide documentation in proof of such authorization upon request. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my".

**Step 6:** On the "Upload Report" page, please select the applicable laboratory from the list of associated lab list. Please make sure that the Lab ID selected matches the lab Lab ID used in the CSV file.

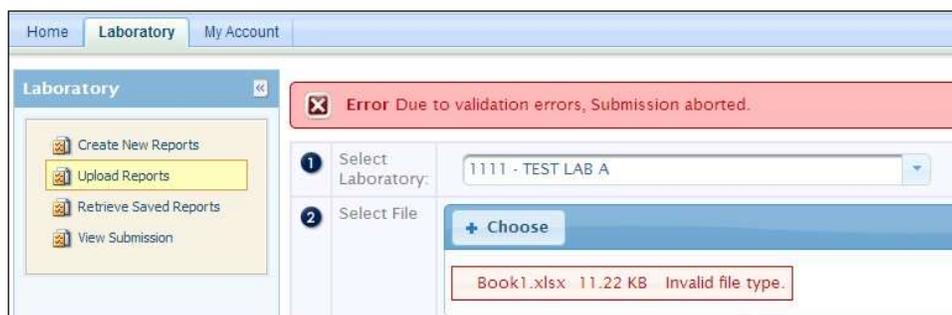


If the selected lab in E2 does not match the lab on the CSV file, the system will display an error message as shown below.



**Step 7:** On the “Upload Report” page, browse and locate the CSV file saved locally on user’s computer, enter password, and click on the “Submit” button to upload the selected file into E2.

When the “Choose” button is clicked, it will bring up the “Choose File” pop-up window. The user will browse through his or her local file directory and select the desired file to be uploaded. The selected file must have a .csv file extension. Otherwise a system error will be displayed.



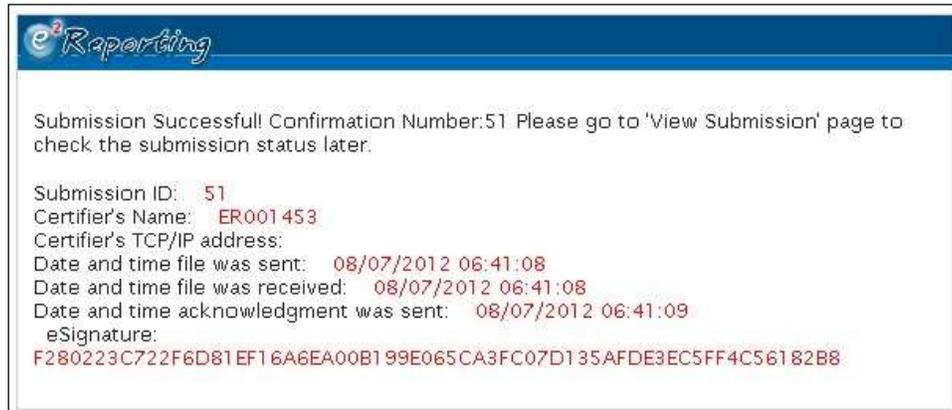
**Step 7A:** Use the “Test” button to quickly validate the file is in .csv format, all 70 fields are accounted for, and that all 70 fields are in the proper format.

**Step 8:** Once the “Submit” button is clicked, E2 will call STEERS’ web service to validate the following:

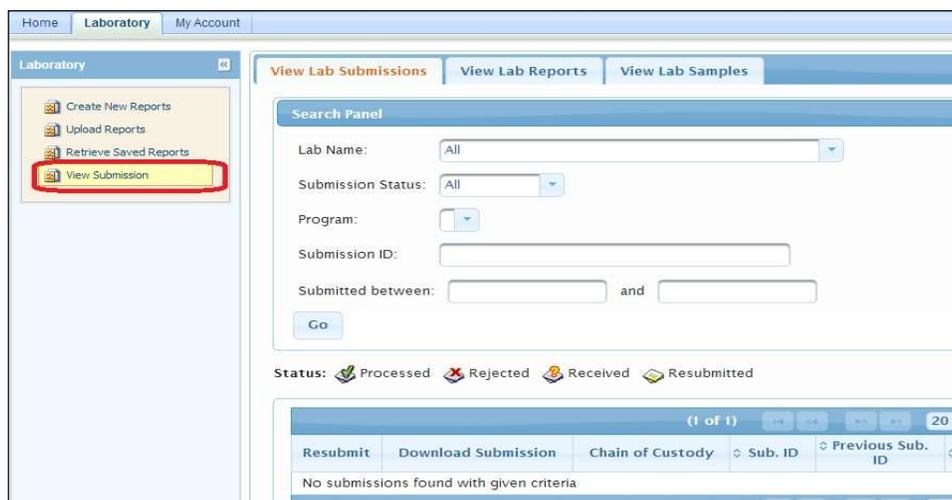
- PWS user has provided the correct password
- PWS user has the correct role to “Sign and Submit” the report online

**Step 9:** If validation error is found, an error icon with error message will be displayed on the top of “Upload Reports” page.

**Step 10:** If no validation error is found, a successful submission message is displayed on the receipt page online as shown below.



Also, a submission received confirmation email will be sent to the submitter’s email address. Note: Successful submission does not mean data has passed validation steps. Please return to the “View Lab Submission” application to track the progress of your submission through validation. **Step 11:** After the Microbial Monitoring Form is submitted in E2, it is available for review at any time under the “View Submission” menu option. Change the “Submitted between:” date range and click “Go” to see status of submissions.



**Step 12:** Review submissions to make sure last file upload was processed (denoted by the green checkmark). If file was rejected, click the red X icon to receive feedback.

## 7 E2-eDWR Online Submission Viewer

Using the ‘View Submission’ tab in E2 Laboratory Reporting Module, users are able to view previous submissions, check the status of their submissions, retrieve E2 generated Microbial Monitoring Forms for samples.

### 7.1 Confirming Successful Data Validation/Viewing Previous File Submissions

To check file submissions to ensure all files have been successfully processed, click “View Submissions” in the Laboratory Reporting Module. Select the tab “View Submissions” as shown below.



Enter a range of dates in the “Submitted Between: “fields and click “Go”. E2 will load all submissions from that user during the range of dates. Although the “Submitted Between: “fields are mandatory, users can also search for submissions based on other criteria:

- Submission status
- Program
- Submission ID

The table will display the following columns:

An example “View Submissions” page is shown below.

Resubmit	Download Submission	Download COR	Chain of Custody	Sub. ID	Previous Sub. ID	Received Date	Status	Status Date	Submit User
N/A	N/A			617		2013-02-04 10:27:16.0		2013-02-04 10:27:18.0	admin enfoTech
				616		2013-02-04 10:24:13.0		2013-02-04 10:24:14.0	admin enfoTech
N/A	N/A			615		2013-02-04 09:37:29.0		2013-02-04 09:37:31.0	admin enfoTech

For Submission Status, these statuses are available as follows:

- **Received** : A submission with “Received” status has been received by the

E2 Reporting System, but has not yet been validated.

- **Rejected**  **Rejected** : A submission with “Rejected” status has been received by the E2 Reporting System, and was validated. However, errors were detected when validating the submission. This icon can be clicked to view feedback on why the submission was rejected.
- **Processed**  **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 migrated into SDWIS/State.
- **Resubmitted**  **Resubmitted** : A submission with “Resubmitted” status was originally rejected by the E2 Reporting System, but a new submission was made to correct the errors.

## 7.2 Retrieving E2 Generated Microbial Monitoring Forms

Users can retrieve E2 generated Microbial Monitoring Forms using the ‘View Submission’ page. These generated MMFs serve as records for those using the Manual Entry method. Once on the ‘View Submissions’ page, click the “View Lab Reports” tab.



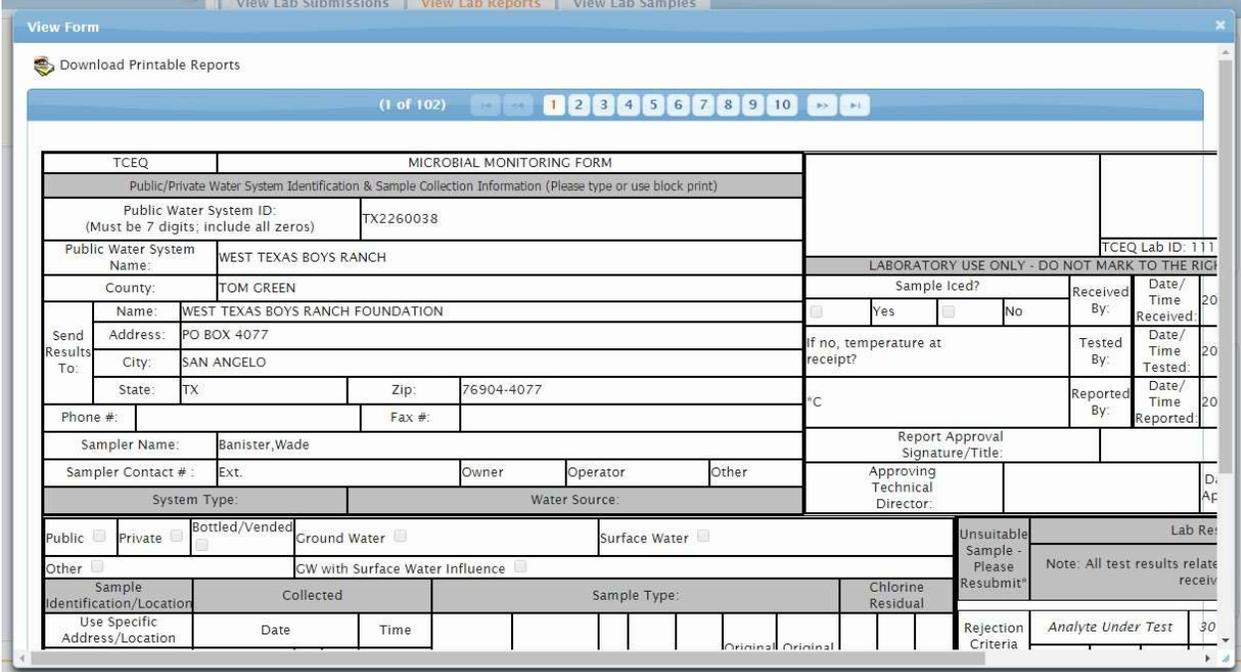
Enter search criteria of submissions and a table will appear as shown below:

View	Sub. ID	Report ID	Laboratory	Received Date	Status	Status Date	Report Type	Submit User
	4368		1111 - TEST LAB A	2016-05-19 16:55:31.0		2016-05-19 16:55:33.0		Christina M Destefano
	4367	3542	1111 - TEST LAB A	2016-05-17 09:48:20.0		2016-05-17 09:48:21.0		Christina M Destefano
	4366	3541	1111 - TEST LAB A	2016-05-17 09:46:08.0		2016-05-17 09:46:09.0		Christina M Destefano
	4365	3540	1111 - TEST LAB A	2016-05-17 09:41:51.0		2016-05-17 09:41:52.0		Christina M Destefano

The table lists the following information:

- View
- Sub ID
- Report ID
- Laboratory
- Received Date
- Status
- Status Date
- Report Type
- Submit User

Users can click the  icon under the “View” column to show the generated MMF, as shown below:



TCEQ		MICROBIAL MONITORING FORM							
Public/Private Water System Identification & Sample Collection Information (Please type or use block print)									
Public Water System ID: (Must be 7 digits; include all zeros)		TX2260038							
Public Water System Name:		WEST TEXAS BOYS RANCH				TCEQ Lab ID: 111			
County:		TOM GREEN				LABORATORY USE ONLY - DO NOT MARK TO THE RIGHT			
Send Results To:	Name:	WEST TEXAS BOYS RANCH FOUNDATION				Sample Iced?	Received By:	Date/Time Received:	20
	Address:	PO BOX 4077				<input type="checkbox"/> Yes <input type="checkbox"/> No			
	City:	SAN ANGELO				if no, temperature at receipt?		Tested By:	Date/Time Tested:
	State:	TX	Zip:	76904-4077		°C		Reported By:	Date/Time Reported:
Phone #:				Fax #:					
Sampler Name:		Banister, Wade				Report Approval Signature/Title:			
Sampler Contact #:		Ext.	Owner	Operator	Other	Approving Technical Director:			
System Type:		Water Source:							
Public <input type="checkbox"/>	Private <input type="checkbox"/>	Bottled/Vended <input type="checkbox"/>	Ground Water <input type="checkbox"/>		Surface Water <input type="checkbox"/>		Unsuitable Sample - Please Resubmit*		Lab Re
Other <input type="checkbox"/>		CW with Surface Water Influence <input type="checkbox"/>						Note: All test results relate	
Sample Identification/Location		Collected		Sample Type:		Chlorine Residual			
Use Specific Address/Location		Date	Time					Rejection Criteria	Analyte Under Test

MMFs can be printed or saved for user records from this menu using the “Download Printable Reports” option in the top left corner.

## 8 STEERS Test

E2 TEST is a platform designed to simulate E2 Production without officially submitting samples. This program can be used to get acquainted with the functionality of E2 and is recommended to users beginning with E2. E2 Test adheres to the same validation rules as E2 Production and can present feedback regarding data entered. Note E2 Test does require separate account information to be used. The website for E2 Test is <https://www3tst.tceq.texas.gov/steers/index.cfm>. The homepage will appear as below:

The screenshot shows the STEERS Test login page. At the top left is the TCEQ logo and the text "TEXAS COMMISSION ON ENVIRONMENTAL QUALITY". At the top right are links for "Questions or Comments >>" and a "TCEQ Home" button. The main heading is "Welcome to STEERS Test, the State of Texas Environmental Electronic Reporting System." Below this, it says "Here is what you can do online in STEERS:" followed by two sections: "e-Permits\Registration:" and "e-Reporting:". The "e-Permits\Registration:" section lists several options like "Aggregate Production Operations Registration" and "Air New Source Review Registrations". The "e-Reporting:" section lists options like "Annual Emissions Inventory Report (AEIR)" and "Air Emissions & Maintenance Events (AEME) Reporting". To the right of the text is a login form titled "Enter STEERS:" with fields for "ER Account Number:" (with a note "(ER + 6 digits)") and "Password:", and a "Login" button. Below the login form is a section titled "I need:" with a bulleted list: "my password", "to create a new account", and "to authorize another user's account". At the bottom of the page, it says "See details of what you can do." and "This is STEERS version 6.0."

Once you have logged into STEERS Test, users will see a message in red stating they are in STEERS Test as shown in the image below:

The screenshot shows the STEERS Test environment message. At the top left is the TCEQ logo and the text "TEXAS COMMISSION ON ENVIRONMENTAL QUALITY". At the top right are links for "Help >>", "Contact Us >>", and "Logout >>". Below these are navigation buttons: "My Account", "Submissions", "Activity", and "STEERS Home". The main heading is "STEERS Home" and the time is "14:55". The STEERS logo is on the right. The main message is in red: "This is the STEERS TEST environment. If you want to submit OFFICIAL data to TCEQ, you must go to <https://www3.tceq.texas.gov/steers/>." Below this is a section titled "Welcome to STEERS Internet Version 6.0!" followed by a "Notice:" stating "STEERS automatically logs out after 20 minutes of inactivity. Activity is defined by moving from one page to another, not by entering information on a page." and a link to the "Help" section. At the bottom, there is a "Select Reporting Program Area:" dropdown menu with "Public Drinking Water - Laboratories (PDWLAB)" selected and a "Go" button. Below this is a "STEERS News:" section.

Users can check the URL as well to see if they are operating E2 Test or E2 Production mode. URL will include “www3tst.tceq.....” as oppose to “www3.tceq.....”

## 9 Appendices

### 9.1 Appendix A –CSV elements to SDWIS/XML Sampling user guide

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
1	B_LAB_SAMPLE_NUMBER	Laboratory – issued unique sample number	Alpha-Numeric	20	Mandatory	Lab unique identifier
2	B_STATE_SAMPLE_NUMBER	State issued unique sample number	Alpha-Numeric	20	N/A	Open field
3	B_PWS_NUMBER	State assigned Public Water System Identification on Number	Alpha-Numeric	9	Mandatory	PWS ID all begin “TX#####”
4	S_PWS_NAME	Public Water System name	Alpha-Numeric	40	Optional	PWS Name

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
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5	L_ALTERNATIVE_CUSTOMER_NAME	An alternative name for the Public Water System	Alpha-Numeric	40	N/A	Open field
6	S_SYSTEM_TYPE	The type of water system	Alpha-Numeric	2	Mandatory	“PU”- indicates the water system is a public water system. Note: Do not upload files for non-public samples to E2.
7	B_REPLACEMENT_INDICATOR	Indicates if the sample is a replacement for a previous sample	Alpha-Numeric	1	Mandatory	N: Assumed value Y: Replacement Sample <u>(If Y, fields 25, 26, 38 and 39 become mandatory; the original sample number and original date of collection must be reported)</u> i.e. (a broken bottle, excessive chlorine etc.) not a replacement if a sample is positive. (that would be a “RP”)
8	B_LABORATORY_CERTIFYING_AGENCY	Agency which certifies laboratories – will always be ‘STATE’	Alpha-Numeric	10	Mandatory	“STATE”

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
------------	-----------------------------	------------	--------	-----------------	-------------	----------------

9	B_LABORATORY_CERTIFICATION_ID	State assigned Laboratory accreditation on identification on number	Alpha-Numeric	10	Mandatory	State-assigned lab accreditation ID. Must be current in SDWIS system or will fail second validation.
10	B_WSF_STATE_ASGN_ID	State assigned Public Water System facility identification on	Alpha-Numeric	12	Mandatory	Use "DS01" for the following codes: RT, RP, CN, SP  Use the Source ID for RW (raw) e.g. G#####(A)
11	B_SAMPLING_POINT	Type of sampling point. See Business Rules for descriptions	Alpha-Numeric	12	Mandatory	"DSTCRRT": Routine "DSTCRRP": Repeat "ASM": Raw Assessment Source Monitoring OR "TSM": Raw Triggered Source Monitoring "DSTCRSP": Special and Construction
12	B_SAMPLING_LOCATION	Location of sampling point	Alpha-Numeric	40	Optional	RT: "ROUTINE TCR SAMPLE", RP:" REPEAT TCR SAMPLE, SP:" SPECIAL TCR SAMPLE", CN: "SPECIAL TCR SAMPLE" and RW:"WELL TAP"

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
------------	-----------------------------	------------	--------	-----------------	-------------	----------------

13	B_SAMPLE_CATEGORY	State sample category – will always be ‘TC’ (Total Coliform)	Alpha-Numeric	2	Mandatory	“TC”
14	B_COMPLIANCE_INDICATOR	Indicates if a sample is taken for compliance purposes	Alpha-Numeric	1	Mandatory	“Y”: RT, RP, or RW “N”: SP or CN.
15	B_DOC	The date in which the sample was collected	Date	10	Mandatory	Value must be before or on the current date. Date of Collection in MM/DD/YYYY format
16	B_TOC	The time the sample was collected	Time	11	Mandatory	HHMM in 24-hour format
17	B_SAMPLE_TYPE	The type of sample collected – see Business Rules	Alpha-Numeric	2	Mandatory	RT: Routine TCR Sample RP: Repeat TCR Sample RW: Either Raw ASM or Raw TSM sample SP: Special TCR Sample CN: Construction TCR Sample

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
18	B_REPEAT_LOCATION	The location where a repeat sample was collected – see Business Rules	Alpha-Numeric	2	Optional	Must be either one of the following: <ul style="list-style-type: none"> <li>• UP (upstream)</li> <li>• DN (downstream)</li> <li>• OR (original)</li> </ul> If sequence #17 is “RP”
19	B_LAB_REC_DATE	The date in which the laboratory received the sample	Alpha-Numeric	10	Mandatory	Date of Receipt in MM/DD/YYYY format
20	B_COLLECTOR_NAME	The name of the sample collector	Alpha-Numeric	40	Mandatory	“First Name Last Name” No punctuation allowed
21	B_SAMPLE_VOLUME	The volume of the sample taken	Numeric	9	Optional	“100”
22	B_LEAD_COPPER_SAMPLE_TYPE	This field is not applicable	Alpha-Numeric	3	N/A	Open field

23	B_SAMPLE_REJECTION_REASON	The reason for a sample	Alpha-Numeric	2	Conditionally Mandatory	This field must be populated if the sample is rejected. Rejection code must be one of the following:
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Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
(23)		being rejected				BP: Invalid sampling point BR: Broken CL: Chlorine present EH: Exceeds holding time EV: Excessive Volume FZ: Frozen sample HB: Heavy Bacterial Growth IN: Insufficient information IP: Invalid sampling protocol LA: Lab accident LR: Lab Rejected LT: Leaked in transit NC: No chlorine residual ST: Heavy Silt or Turbidity Present VO: Insufficient volume

24	B_COLLECTION_METHOD_CODE	Code representing the method used for sample collection – see Business Rules	Alpha-Numeric	12	N/A	Open field
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Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
25	B_ORIGINAL_LAB_SAMPLE_NUMBER	Laboratory –issued unique sample number for originating sample	Alpha-Numeric	20	Conditionally Mandatory	Format must match reporting of initial rejected sample or positive sample. Must be populated for: <ul style="list-style-type: none"> <li>• Replacement Samples</li> <li>• Repeat Samples</li> <li>• Raw Triggered Source Monitoring Samples</li> </ul>
26	B_OG_DOC	Date of collection for originating sample	Alpha-Numeric	10	Conditionally Mandatory	MM/DD/YYYY format. Must be populated for: <ul style="list-style-type: none"> <li>• Replacement Samples</li> <li>• Repeat Samples</li> <li>• Raw Triggered Source Monitoring Samples</li> </ul> Date must be prior to B_TOC.

27	B_LAB_COMPOSITE_NUMBER	This field is not applicable	Alpha-Numeric	20	N/A	Open field
28	B_COMP_DATE	This field is not applicable	Alpha-Numeric	10	N/A	Open field
29	B_FREE_CHLORINE_RESIDUAL	The measure of free chlorine residual in the distribution system	Numeric	3-5	Conditionally Mandatory	Either free or total chlorine residual must be populated for all compliance samples. <u>Lab must reject sample if no value was collected.</u> Must include leading zeroes for values < 1. If a PWS did not report a value on MRF do not enter a value of zero. Please send the MRF to TCRDATA for the sample that was rejected. Sequence #23 will be “NC”

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
30	B_TOTAL_CHLORINE_RESIDUAL	The measure of total chlorine residual in the distribution system	Numeric	3-5	Conditionally Mandatory	Either free or total chlorine residual must be populated for all compliance samples. Lab must reject sample if no value was collected. Must include leading zeroes for values < 1. If a PWS did not report a value on MRF do not enter a value of zero. Please send the MRF to TCRDATA for the sample that was rejected. Sequence #23 will be “NC”.

31	B_SAMPLE_WATER_TEMPERATURE	The FIELD temperature of the water when the sample was not delivered on ice by the PWS.	Numeric	1-3	N/A	Open field.
32	B_TEMPERATURE_UNIT_MEASURE	Unit of measure for FIELD temperature	Alpha-Numeric	1	N/A	Open field.
33	B_TURBIDITY_MEASURE	The FIELD measure of turbidity of the collected sample	Numeric	2-5	N/A	Open field

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
34	B_PH_MEASURE	The FIELD pH measure of the collected sample	Numeric	1-4	N/A	Open field

35	B_FLOW_RATE	The FIELD measured flow rate at the time and location of the collected sample	Numeric	4-7	N/A	Open field
36	B_SAMPLE_PURPOSE	The reason for the sample collection	Alpha-Numeric	2	Optional	This field may be populated for RW and CN samples.
37	B_STATE_CLASSIFICATION_CODE	The classification code, provided by TCEQ	Alpha-Numeric	6	N/A	Open field

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
38	B_ORIGINAL_LABORATORY_CERTIFYING_AGENCY	Agency responsible for certifying the lab which analyzed the originating sample	Alpha-Numeric	10	Conditionally Mandatory	<p>This field must be populated for:</p> <ul style="list-style-type: none"> <li>• Replacement Samples</li> <li>• Repeat Samples</li> <li>• Raw Triggered Source Monitoring Samples</li> </ul> <p>Should be "STATE".</p>

39	B_ORIGINAL_LABORATORY_CERTIFICATION_ID	Laboratory certification identification number for lab which analyzed the originating sample	Alpha-Numeric	10	Conditionally Mandatory	This field must be populated for: <ul style="list-style-type: none"> <li>• Replacement Samples</li> <li>• Repeat Samples</li> <li>• Raw Triggered Source Monitoring Samples</li> </ul>
40	B_SAMPLE_COMMENTS	Used for entering the Sample Location	Alpha-Numeric	1000	Mandatory	This is the location (Address) of sample collection. Do not include punctuation. For raw samples, report the Source ID without extraneous details (ex: G1234567A).
41	B_ANALYTE_CODE	EPA-defined analyte code	Alpha-Numeric	4	Mandatory	"3100" - This should be the default for all samples with a result. Analyte codes will differ for Enterococci (3002) and Coliphage (3028) samples.

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
42	B_ANALYSIS_SDATE	Date on which analysis of the sample started	Alpha-Numeric	10	Mandatory	Sample will be rejected if Analysis Start Date supplied is prior to Sample Collection Date. Must be in MM/DD/YYYY format.

43	B_ANALYSIS_STIME	Time in which analysis of the sample started	Alpha-Numeric	11	Mandatory	HHMM 24-hour format
44	B_ANALYSIS_COM_DATE	Date on which analysis of the sample completed	Alpha-Numeric	10	Optional	Sample will be rejected if Analysis Completion Date is prior to Sample Collection Date and/or Analysis Start Date. Must be in MM/DD/YYYY format.
45	B_ANALYSIS_COM_TIME	Time in which analysis of the sample completed	Alpha-Numeric	11	Optional	HHMM 24-hour format
46	B_STATE_NDATE	Date on which TCEQ was notified of the sample analysis result	Alpha-Numeric	10	Mandatory	Must be in MM/DD/YYYY format.

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
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47	B_PWS_NDATE	Date on which the Public Water System was notified of the sample analysis result	Alpha-Numeric	10	Mandatory	Must be in MM/DD/YYYY format.
48	B_DATA_QUALITY	Data quality determination of the sample collected	Alpha-Numeric	1	Mandatory	A: Accepted R: Rejected
49	B_DATA_QUALITY_REASON	The reason for which a sample may have data quality value of "Rejected"	Alpha-Numeric	2	N/A	Open field
50	B_ANALYSIS_METHOD_CODE	EPA defined code for a given laboratory analysis method	Alpha-Numeric	30	Mandatory	9221B, 9221D, 9221F-PA, 9222B, 9222C, 9222G, 9223B, COLILERT-18, COLISURE-PA

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
51	B_VOLUME_ASSAYED	The volume used in analyzing the collected sample	Numeric	9	Optional	“100”
52	B_LAB_REJECTION_REASON	The reason for which a laboratory may reject a collected sample	Alpha-Numeric	4	N/A	Open field
53	B_MICROBE_PRESENCE_INDICATOR	Indicates microbial absence or presence in collected sample	Alpha-Numeric	1	Conditionally Mandatory	Must be populated if Data Quality reason is “A” for accepted. Must be populated with a “P” if either S_FECAL_INDICATOR or S_ECOLI_INDICATOR value is “P”.
54	B_COUNT	Count of microbes which may be present in collected sample	Numeric	5-15	N/A	Open field

Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
55	B_COUNT_UNITS	Unit of Measure for the B_COUNT field	Alpha-Numeric	9	N/A	Open field
56	B_COUNT_TYPE	Count of microbe type	Alpha-Numeric	10	N/A	Open field
57	B_LESS_THAN_INDICATOR	This field is not applicable	Alpha-Numeric	1	N/A	Open field
58	B_LESS_THAN_CODE	This field is not applicable	Alpha-Numeric	3	N/A	Open field
59	B_DETECTION_LEVEL	This field is not applicable	Numeric	9-15	N/A	Open field
60	B_DETECTION_LEVEL_UNIT_CODE	This field is not applicable	Alpha-Numeric	9	N/A	Open field
61	B_CONCENTRATION	This field is not applicable	Numeric	9-15	N/A	Open field

62	B_CONCENTRATION_UNIT_CODE	This field is not applicable	Alpha-Numeric	9	N/A	Open field
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Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
63	B_REPORTED_MEASURE	This field is not applicable	Alpha-Numeric	10	N/A	Open field
64	B_REPORTED_MEASURE_COUNT_ERROR	This field is not applicable	Numeric	3-8	N/A	Open field
65	B_RESULT_COMMENTS	Comments regarding sample analysis results	Alpha-Numeric	1000	Optional	Provides a place to record free text information about the result or inability to get a result.
66	S_FECAL_INDICATOR	Indication of fecal absence or presence in the collected sample	Alpha-Numeric	1	Conditionally Mandatory	This field should not be populated if the analyte code is "3100". Populate for Enterococci or Coliphage samples.  A: Absent P: Present

67	S_ECOLI_INDICATOR	Indication of e coli absence or presence in the collected sample	Alpha-Numeric	1	Conditionally Mandatory	This field must be populated if B_DATA_QUALITY is "A" and B_MICROBE_PRESENCE_INDICATOR is "A" and your lab is accredited to test for E Coli by TCR methods.  A: Absent P: Present
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Sequence #	Staging Table Column Header	Definition	Domain	Size(precision)	Optionality	Business Rules
68	L_RECEIVED_BY	Name of Lab associate who received the sample/sample result information	Alpha-Numeric	40	Optional	Lab informational only.
69	L_ENTERED_BY	Name of Lab associate who entered the sample/sample result information	Alpha-Numeric	40	Optional	Lab informational only.

70	B_DE	Date on which the sample/sample result information was entered	Alpha-Numeric	10	Optional	Must be in MM/DD/YYYY format.
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