LINKING NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM VIOLATIONS TO ENFORCEMENT

XML Generator & Batch Upload (v1.30)

June 22, 2023

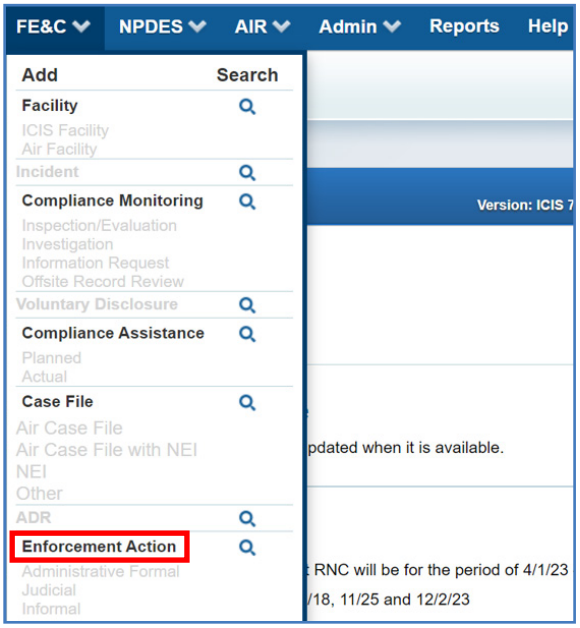
The purpose of this document is to provide Integrated Compliance Information System (ICIS) users a demonstrative reference on how to link National Pollutant Discharge Elimination System (NPDES) violations to enforcement actions:

- **Online Entry (Manual Linking in ICIS)**
  This section provides instructions to identify violations and link them to enforcement actions directly in ICIS.
- **Batch Upload (via Exchange Network)**
  This section provides instructions to how to identify and link violations to enforcement actions using the batch upload method. This process involves using the XML Generator spreadsheet, formatting data files, and uploading data to ICIS-NPDES via Exchange Network (EN) services.

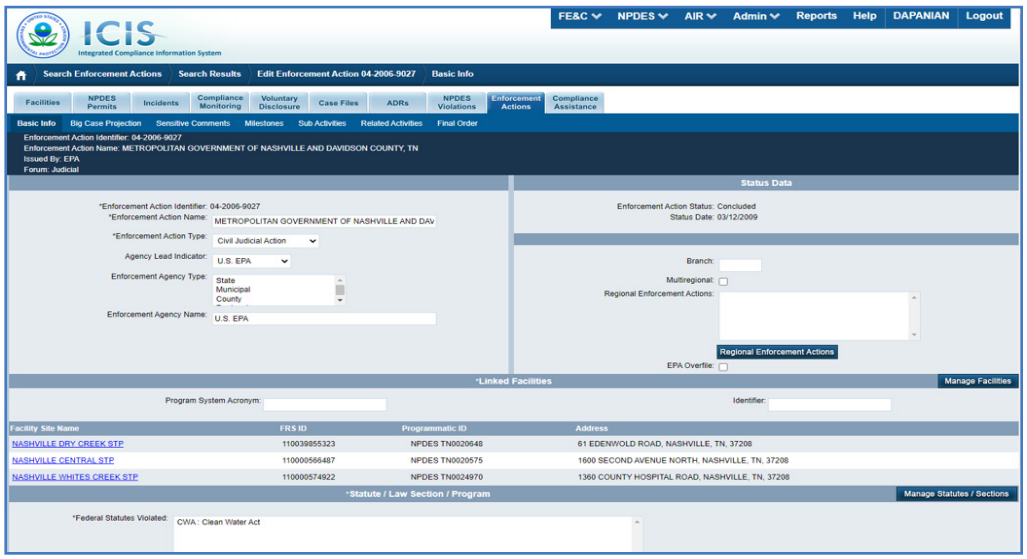
Online Entry (Manual Linking in ICIS)

The steps below demonstrate how to identify violations and link them to enforcement actions directly in ICIS.

1. Navigate and log into ICIS: https://icis.epa.gov/
   a. From ICIS, select the "Enforcement Actions" tab and search for an enforcement action.

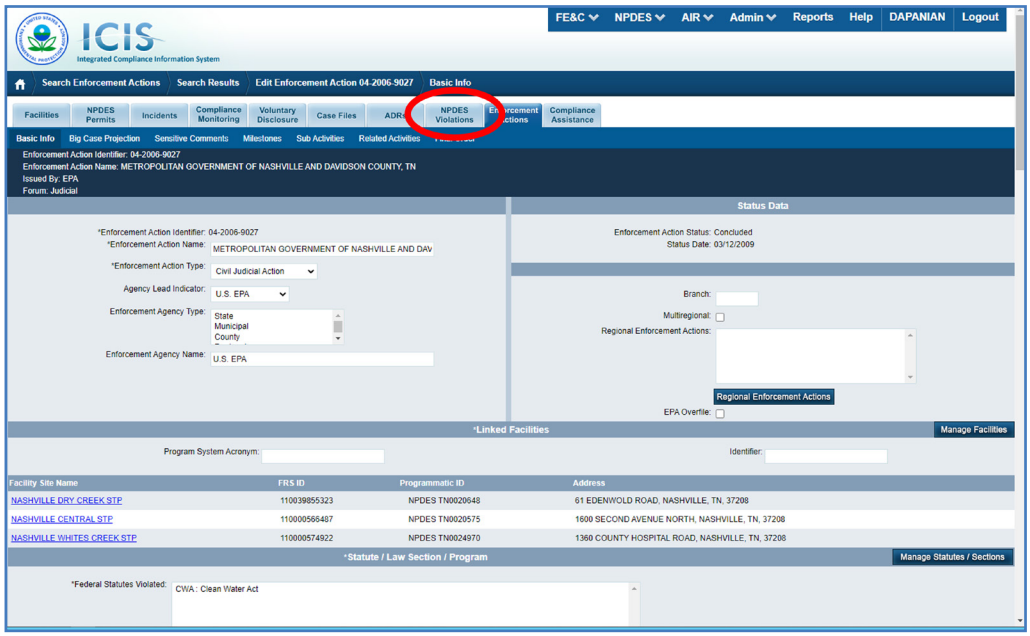


   b. Select the enforcement action and navigate to the specific enforcement action page.

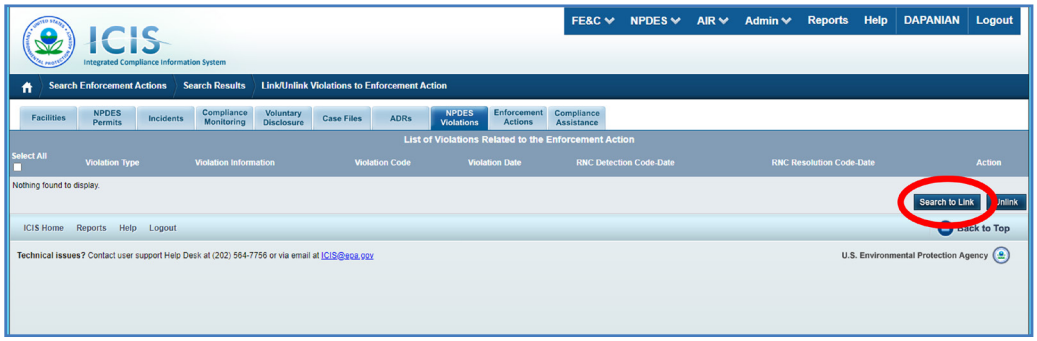


2. Link Violations to an enforcement action

a. Click on NPDES Violations to see all the violations currently linked to the enforcement action.

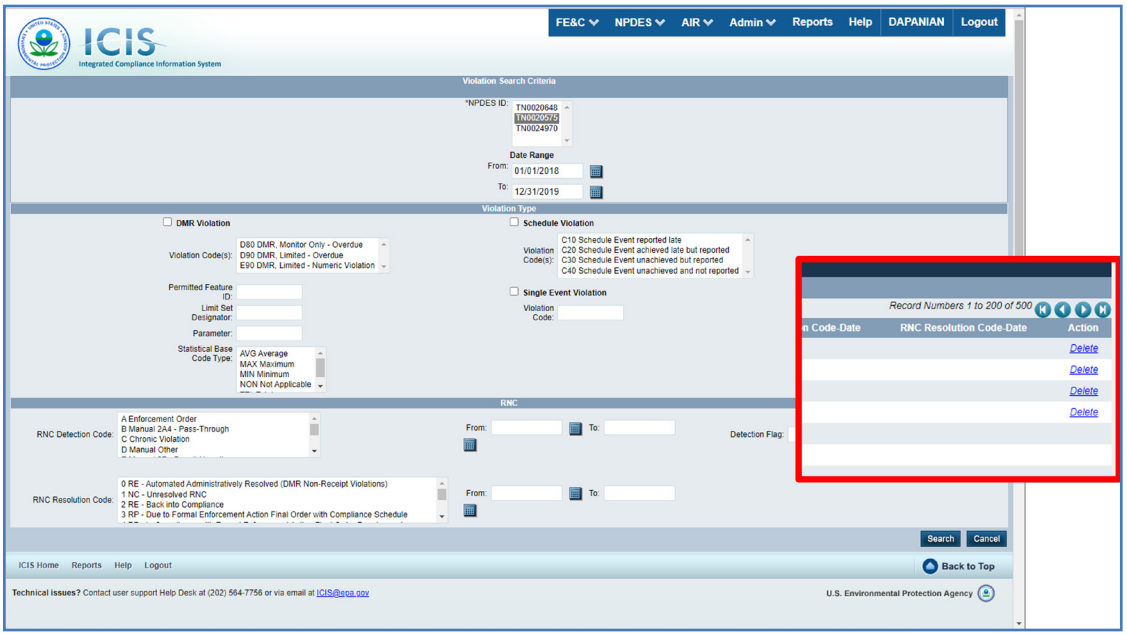


b. To link more violations to an enforcement action, click on the "Search to link" button.

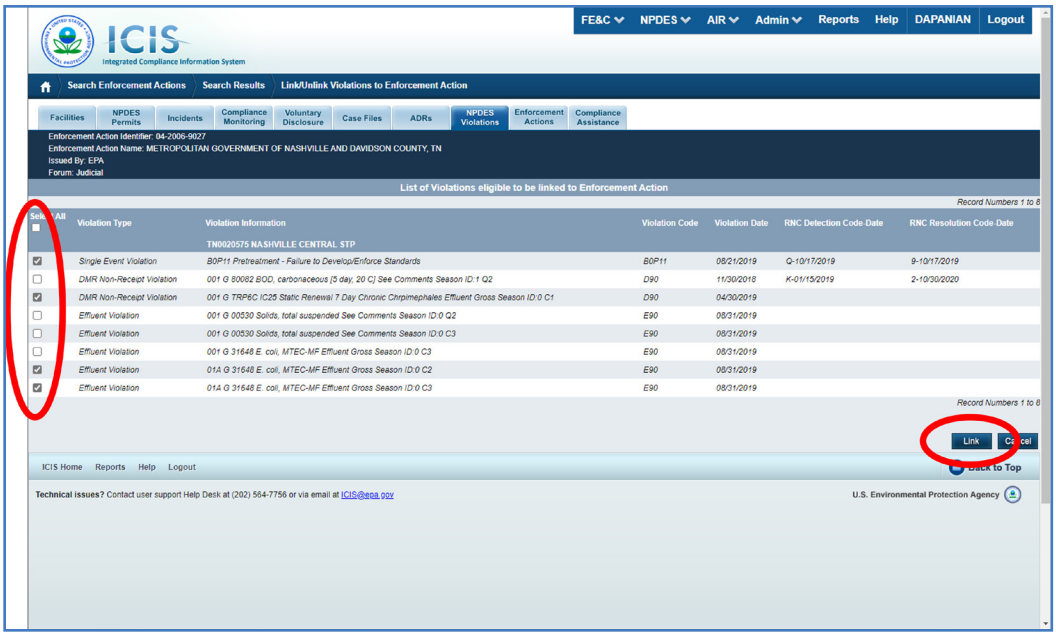


c. Utilize the options on-screen to filter for the targeted violations. Note, ICIS will only display the first 500 violations that meet your search criteria.

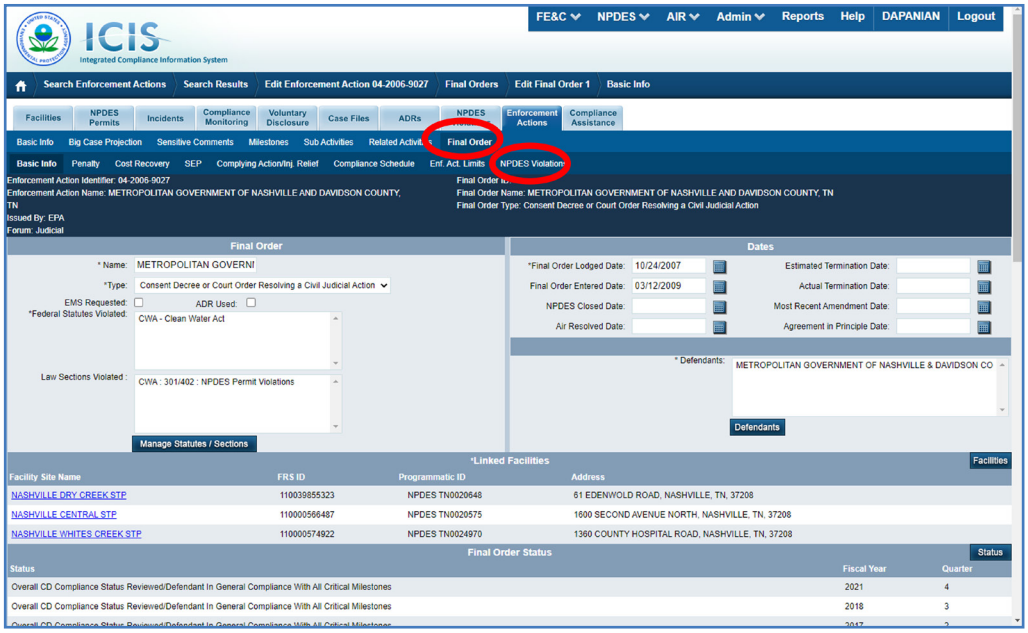
i. Hit "search" to bring up violations that meet your search criteria.



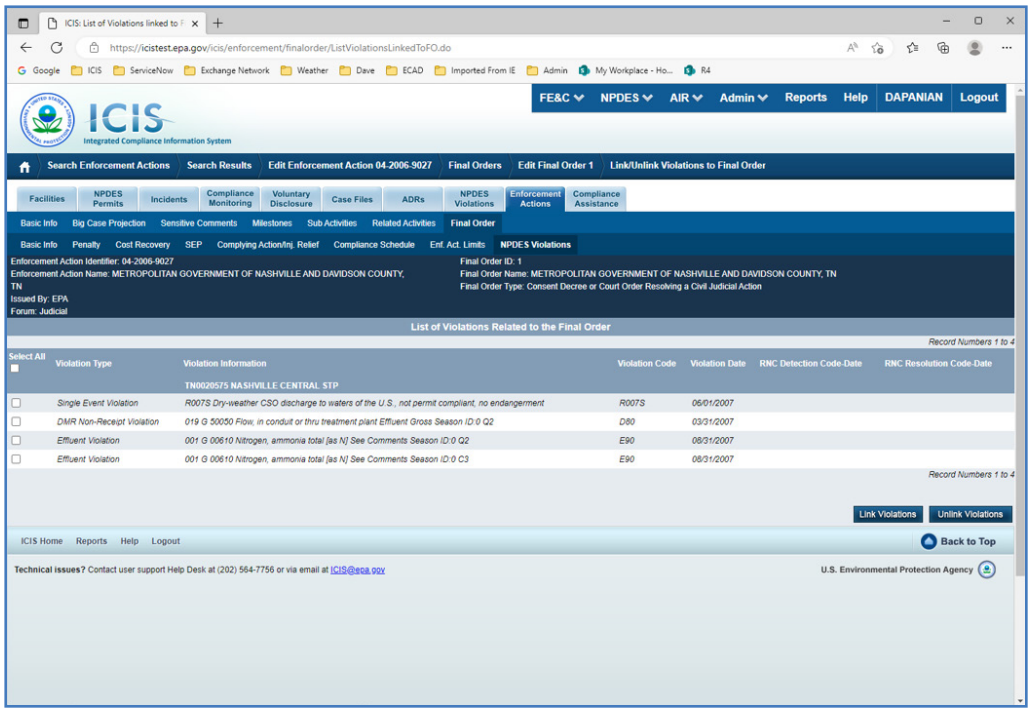
d. Select the violations that you want to link to the enforcement action and select “Link.”



i. To review the violations that were just linked to the enforcement action, go to the “Final Order” tab and then navigate to the “NPDES Violations” subtab. Note, if the enforcement action has more than one Final Order, the newly linked violations will not be linked to any of the Final Orders, it will only be linked to the identified Enforcement Action. Instead, users must first select and open the relevant Final Order and link the violations to that order.



ii. The following screen will then present the violations that were just linked to the enforcement action.



iii. From this screen, users can link other violations to the Final Order, or unlink violations that should not be connected to the Final Order.

Batch Upload (via Exchange Network)

EPA Regions and authorized states can also share linkage data by using the ICIS Data Submission service, which is hosted on the Exchange Network (EN). This service allows EPA Regions and authorized states to electronically send NPDES program data to EPA in batch submissions using eXtensible Markup Language (XML) technology. EPA takes these XML data files and routes them to ICIS–NPDES and other related systems. In order to use the ICIS Data Submission service, authorized states must compose their transactions into well-formed XML files, package them into zip files, and then electronically submit them using their "Node" on the Exchange Network or by manually uploading them using a form on the Exchange Network Service Center website.

The steps below demonstrate how to identify and link violations to enforcement actions using the batch upload method. This method involves uploading data to ICIS-NPDES via Exchange Network (EN) services using the XML Generator spreadsheet.

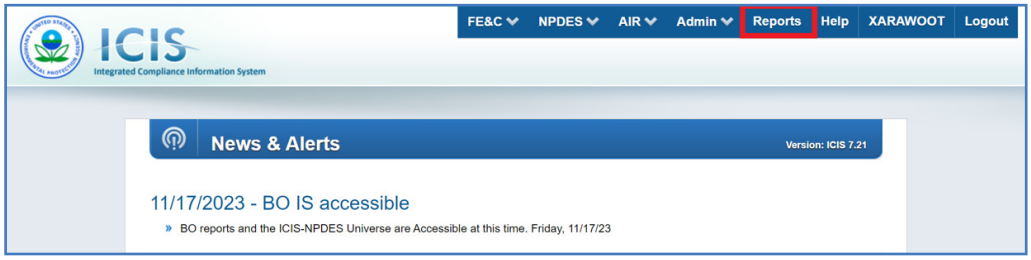
The process can generally be broken down into the following steps:

a. Generate an ICIS Violation Report
b. Populate the XML Generator Spreadsheet
c. XML Cleanup
d. ZIP and Upload to the Exchange Network Services

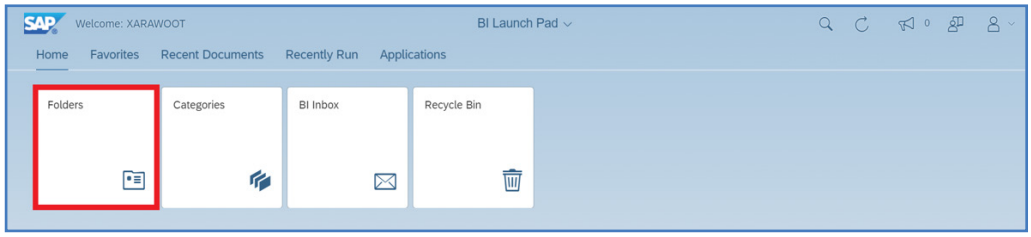
Generate an ICIS Violation Report

The first step in the process is to generate a list of violations that you would like to link to enforcement actions. To do this, we will utilize an ICIS BI Report.

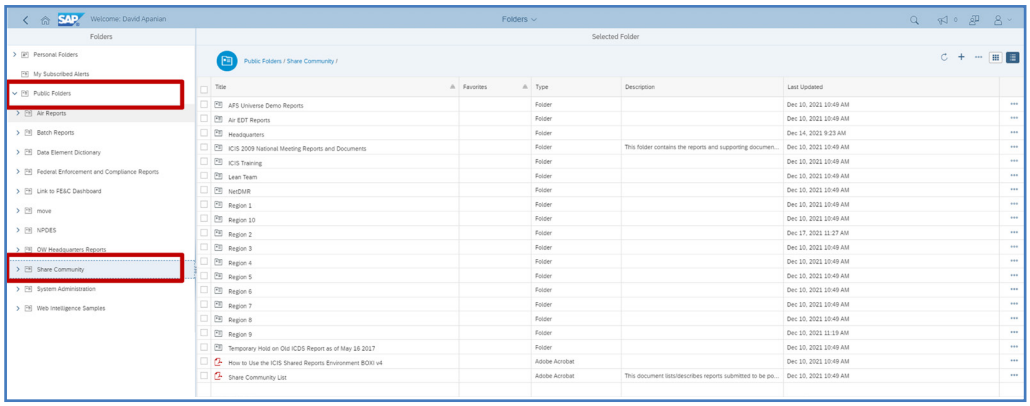
To access reports in ICIS, log into ICIS and select "Reports" from the blue ribbon at the top.



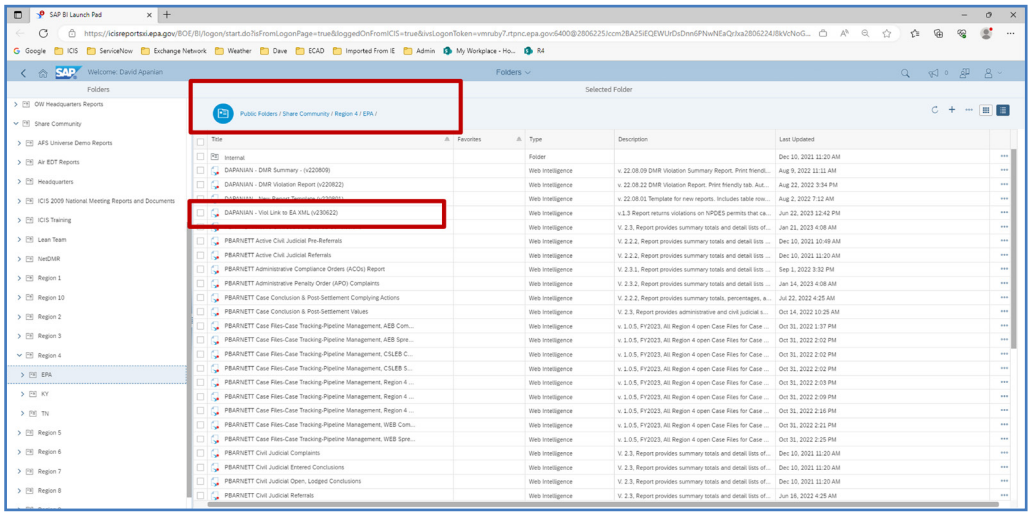
To access the file to generate violations, click on "Folders"



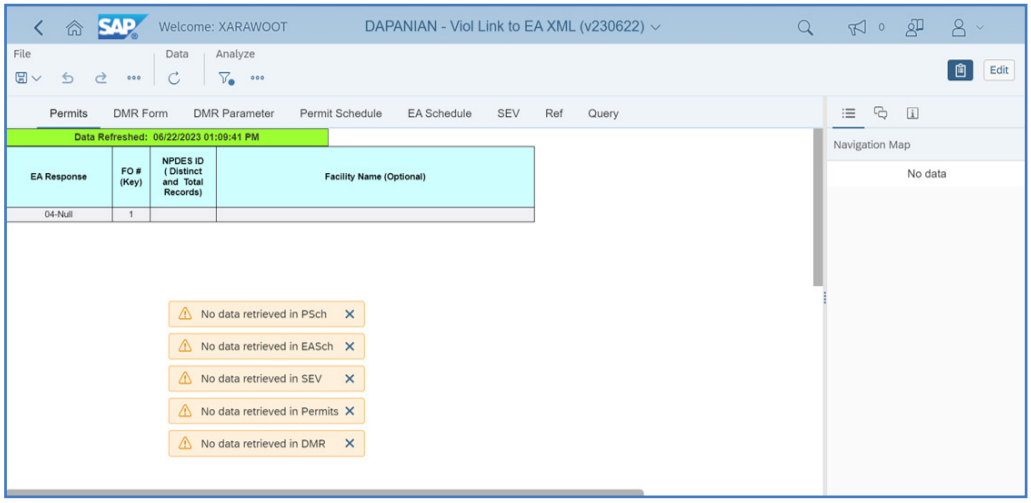
Navigate to "Public Folders" -> "Share Community" -> "Region 4" -> "EPA"



Select the report named “DAPANIAN-Viol Link to EA XML (v230622).” Save the report to your personal workspace before running the report. Note, the version number of the report may be more current than shown in this guide.

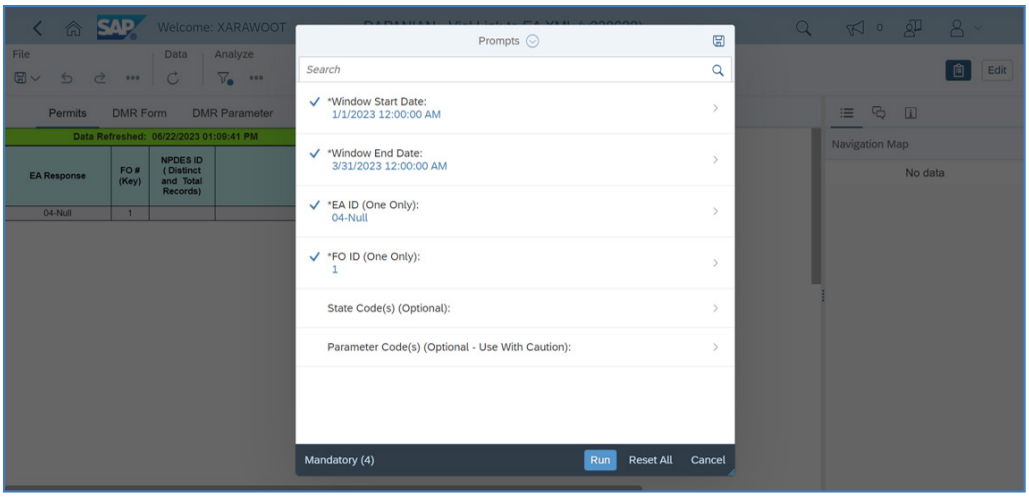


To generate an excel table of violations to be linked, open and run the ICIS/BI Report.

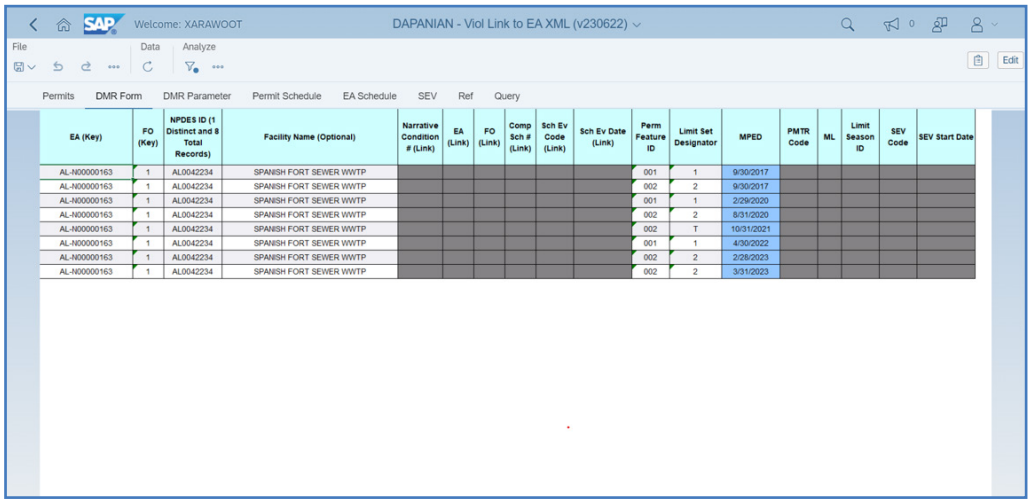


The ICIS BI Report will prompt users for the following required information: start date, end date, Enforcement Action (EA) ID, and Final Order (FO) ID.

Click “Run” after providing the required query information.

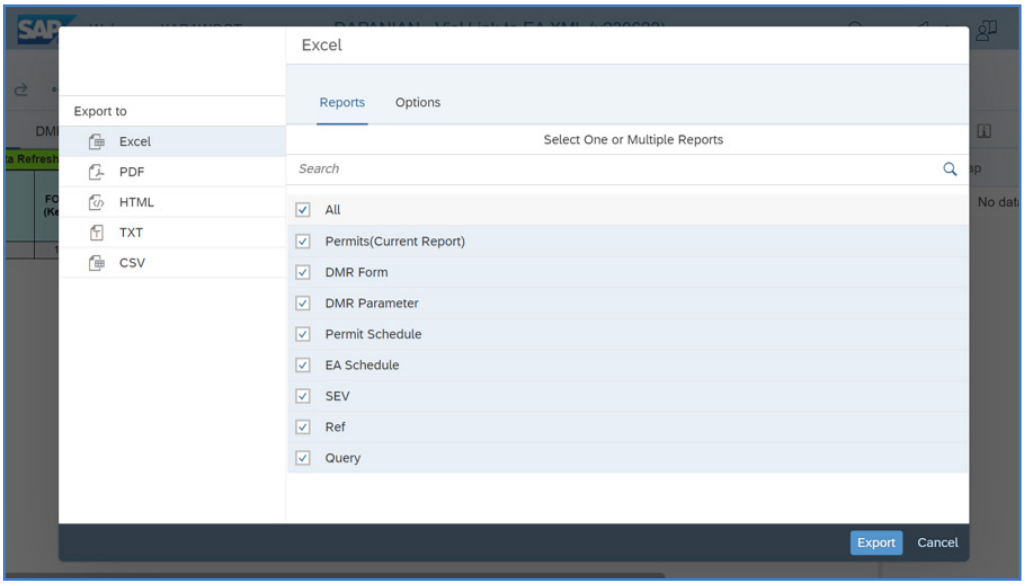


The report will compile all violations associated with the identified query parameters.



EA (Key)	FO (Key)	NPDES ID (1 Distinct and 8 Total Records)	Facility Name (Optional)	Narrative Condition # (Link)	EA (Link)	FO (Link)	Comp Sch # (Link)	Sch Ev Code (Link)	Sch Ev Date (Link)	Perm Feature ID	Limit Set Designator	MPED	PMTR Code	ML	Limit Season ID	SEV Code	SEV Start Date
AL-N00000163	1	AL0042234	SPANISH FORT SEWER WWTP							001	1	9/30/2017					
AL-N00000163	1	AL0042234	SPANISH FORT SEWER WWTP							002	2	9/30/2017					
AL-N00000163	1	AL0042234	SPANISH FORT SEWER WWTP							001	1	2/29/2020					
AL-N00000163	1	AL0042234	SPANISH FORT SEWER WWTP							002	2	8/31/2020					
AL-N00000163	1	AL0042234	SPANISH FORT SEWER WWTP							002	T	10/31/2021					
AL-N00000163	1	AL0042234	SPANISH FORT SEWER WWTP							001	1	4/30/2022					
AL-N00000163	1	AL0042234	SPANISH FORT SEWER WWTP							002	2	2/28/2023					
AL-N00000163	1	AL0042234	SPANISH FORT SEWER WWTP							002	2	3/31/2023					

Export the data to excel format and download the file.



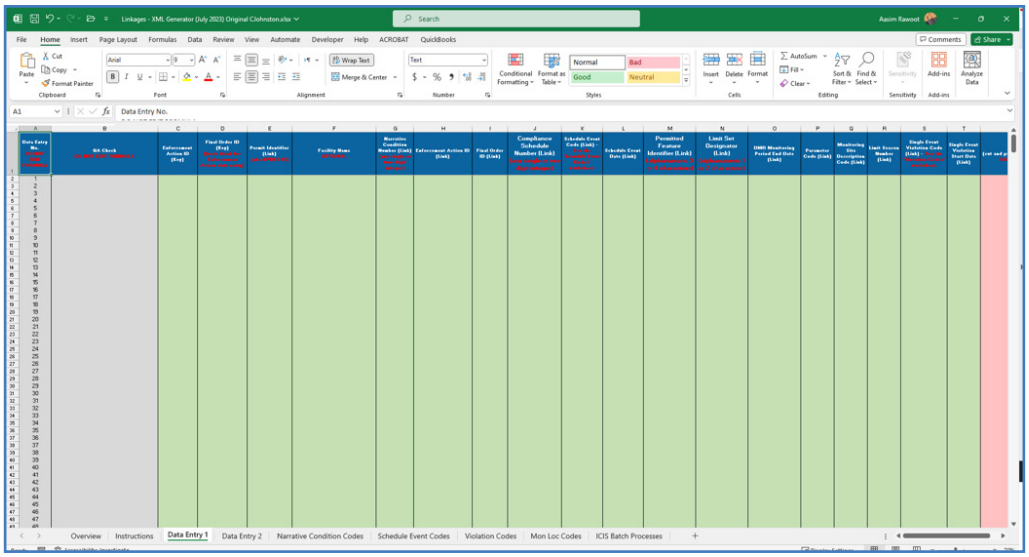
Review Excel spreadsheet to filter out violations that should not be linked to the enforcement action.

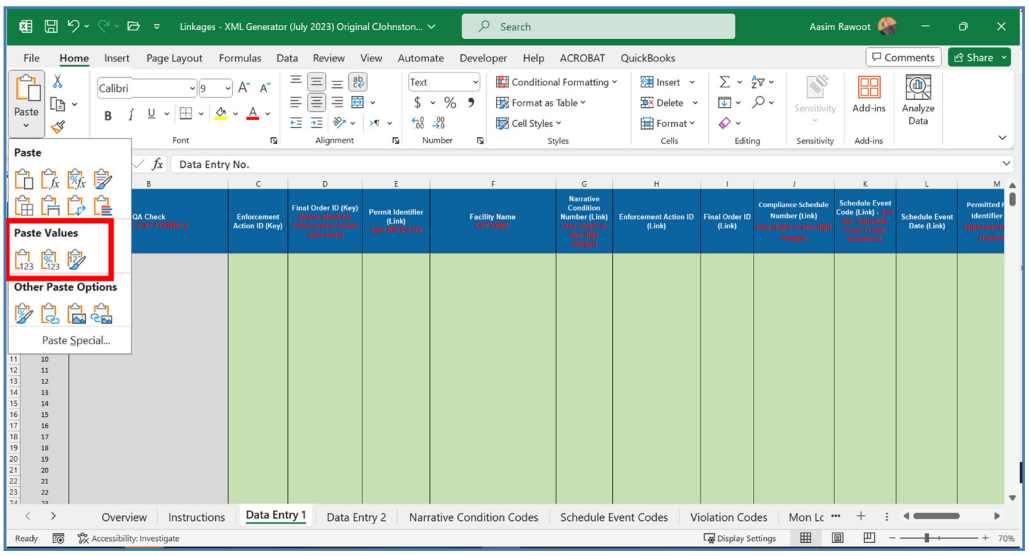
Populate the XML Generator Spreadsheet

In this step, the list of violations generated from ICIS will be used to populate the XML Generator file. Download and prepare the XML Generator file:

1. Download a copy of the XML Generator File from online : https://usepa.servicenowservices.com/oeca_icis?id=kb_article&sys_id=8929cd731b3021980a81202de54bcbe8
2. (For the 6/22/2023 version of the file) Fill in the following information in the “Instructions” tab:
   a. **Cell D4:** Enter your ICIS User ID (e.g. – jdoe)
   b. **Cell D5:** Enter you Email address (e.g. - doe.jane@example.gov)
   c. **Cell D6:** Verify transaction type (Replace [**R**] or Delete [**X**])
3. **Save** file

Copy violations data from the ICIS BI Violations Report, paste the data into the “Data Entry 1” tab of the Excel XML Generator file (cell C2, the first green cell in the spreadsheet). To avoid errors, right click and paste the data as values.



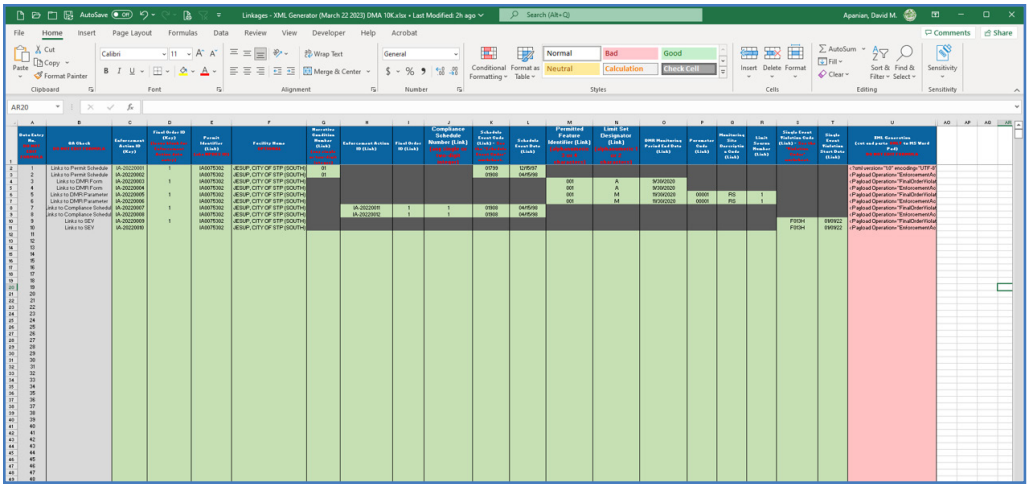


After pasting data into the XML Generator file, review the QA Check (Column B) to see whether the information links to the correct violation type and level. Note, irrelevant cells are automatically greyed out.

	A	B	C	D	E	F	G	H	I
1	Data Entry No. (DO NOT EDIT FORMULA)	QA Check (DO NOT EDIT FORMULA)	Enforcement Action ID (Key)	Final Order ID (Key) (leave blank for Enforcement Action data entry)	Permit Identifier (Link) (aka NPDES ID)	Facility Name (OPTIONAL)	Narrative Condition Number (Link) (any single or two-digit integer)	Enforcement Action ID (Link)	Final Order ID (Link)
2	1	Links to Permit Schedule	IA-20220001	1	IA0075302	JESUP, CITY OF STP (SOUTH)	01		
3	2	Links to Permit Schedule	IA-20220002		IA0075302	JESUP, CITY OF STP (SOUTH)	01		

Continue to copy and paste desired data into the XML Generator file. The XML Generator file accepts many violation types that are output from the ICIS BI Violations Report (e.g., DMR forms, permit schedules, compliance schedules, SEVs, etc.).

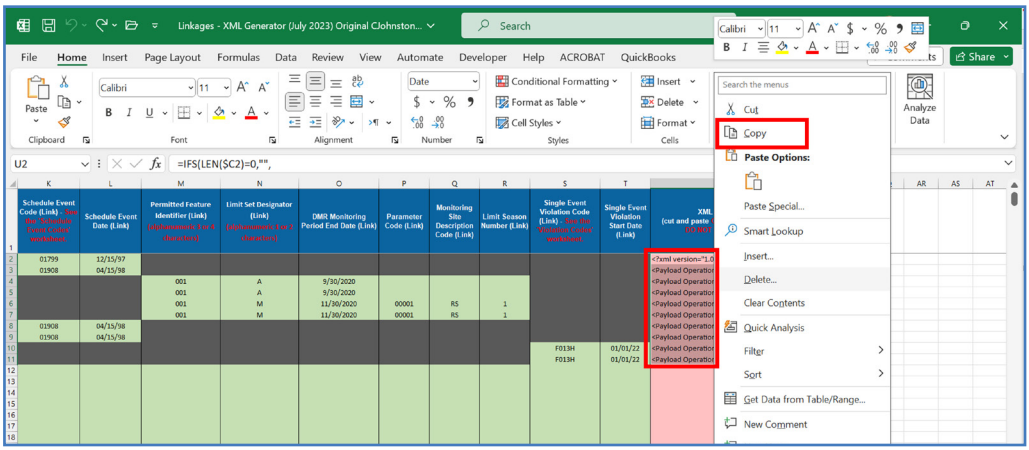
	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Data Entry No. (DO NOT EDIT FORMULA)	QA Check (DO NOT EDIT FORMULA)	Enforcement Action ID (Key)	Final Order ID (Key) (leave blank for Enforcement Action data entry)	Permit Identifier (Link) (aka NPDES ID)	Facility Name (OPTIONAL)	Narrative Condition Number (Link) (any single or two-digit integer)	Enforcement Action ID (Link)	Final Order ID (Link)	Compliance Schedule Number (Link) (any single or two-digit integer)	Schedule Event Code (Link) - see the 'Schedule Event Codes' worksheet	Schedule Event Date (Link)	Permitted Feature Identifier (alphanumeric character)
2	1	Links to Permit Schedule	IA-20220001	1	IA0075302	JESUP, CITY OF STP (SOUTH)	01				01799	12/15/97	
3	2	Links to Permit Schedule	IA-20220002		IA0075302	JESUP, CITY OF STP (SOUTH)	01				01908	04/15/98	
4	3	Links to DMR Form	IA-20220003	1	IA0075302	JESUP, CITY OF STP (SOUTH)							001
5	4	Links to DMR Form	IA-20220004		IA0075302	JESUP, CITY OF STP (SOUTH)							001
6	5	Links to DMR Parameter	IA-20220005	1	IA0075302	JESUP, CITY OF STP (SOUTH)							001
7	6	Links to DMR Parameter	IA-20220006		IA0075302	JESUP, CITY OF STP (SOUTH)							001
8	7	Links to Compliance Schedule	IA-20220007	1	IA0075302	JESUP, CITY OF STP (SOUTH)		IA-20220011	1	1	01908	04/15/98	
9	8	Links to Compliance Schedule	IA-20220008		IA0075302	JESUP, CITY OF STP (SOUTH)		IA-20220012	1	1	01908	04/15/98	
10	9	Links to SEV	IA-20220009	1	IA0075302	JESUP, CITY OF STP (SOUTH)							



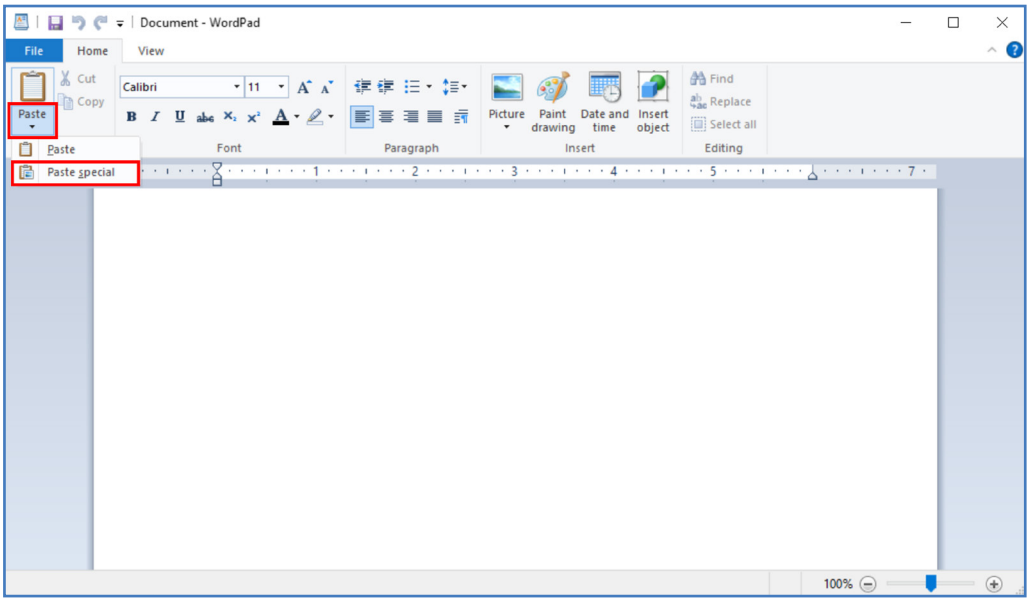
Cleanup and Save as XML File

Once the XML Generator has been populated, we can transfer the data into a plain text editor to clean up and edit into a format that is acceptable for batch upload.

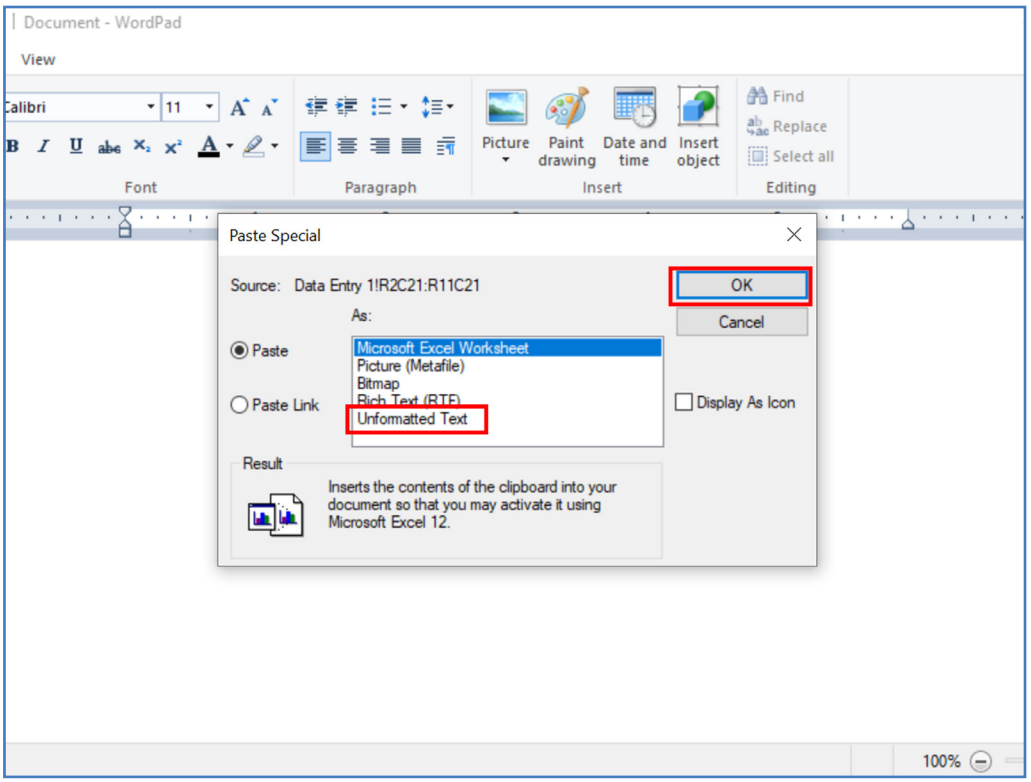
Copy the contents of Column U from the XML Generator file.



Paste the copied data as unformatted text into a WordPad file. Use the dropdown arrow to select "**Paste special**" option:

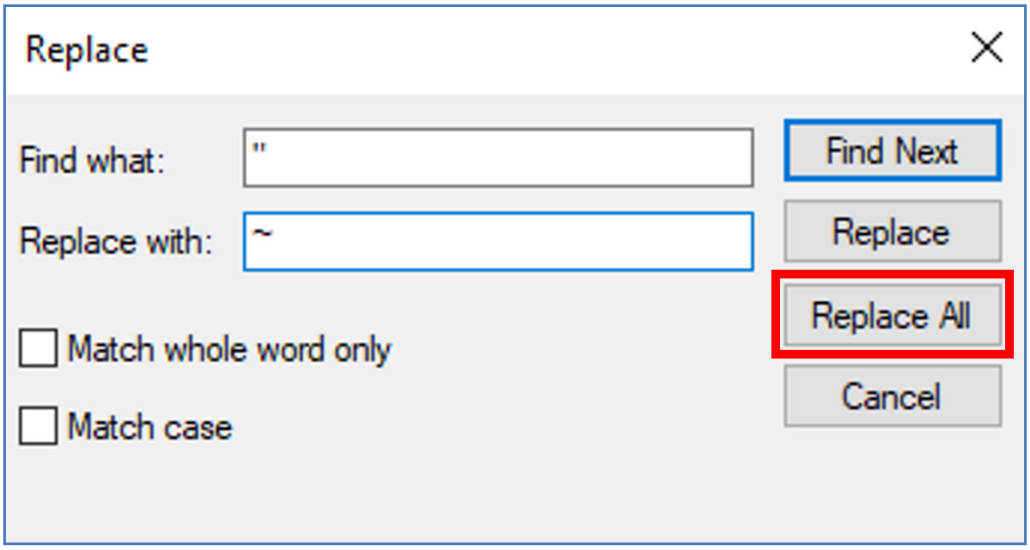


From the window, select the “**Unformatted Text**” option and click “**OK**”:

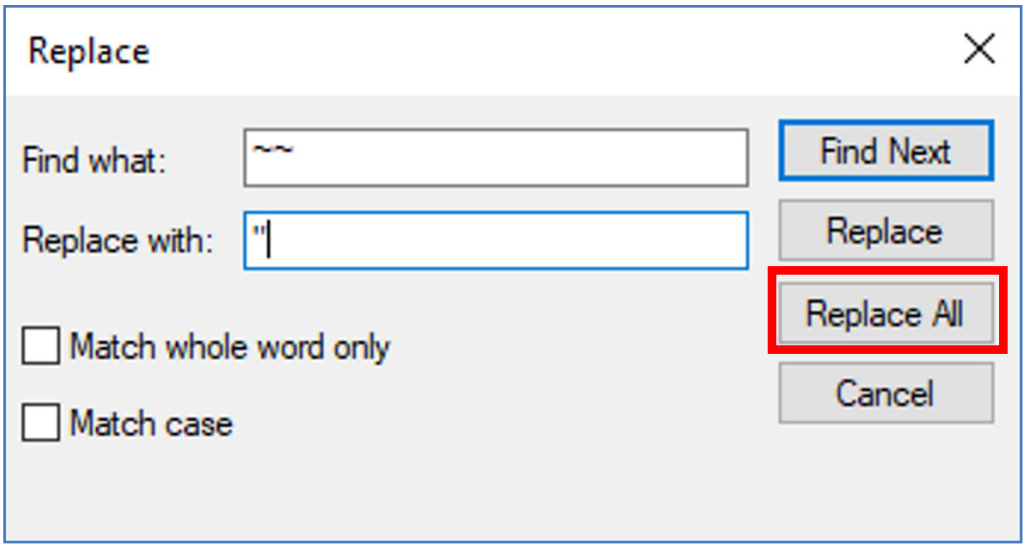


Clean up the XML code using the “Replace All” feature.

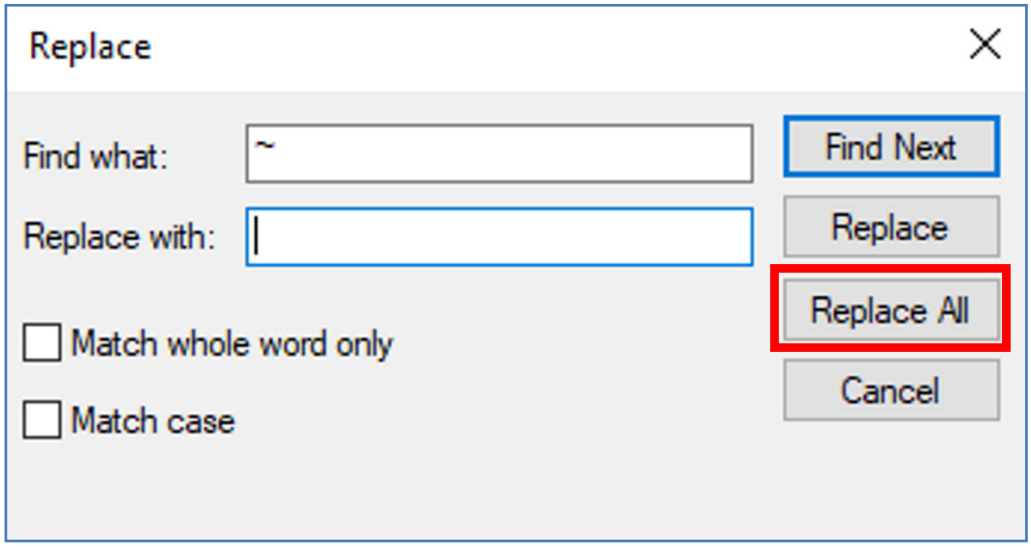
1. Search for all double quotes (“) and replace each instance with a single tilde (~).



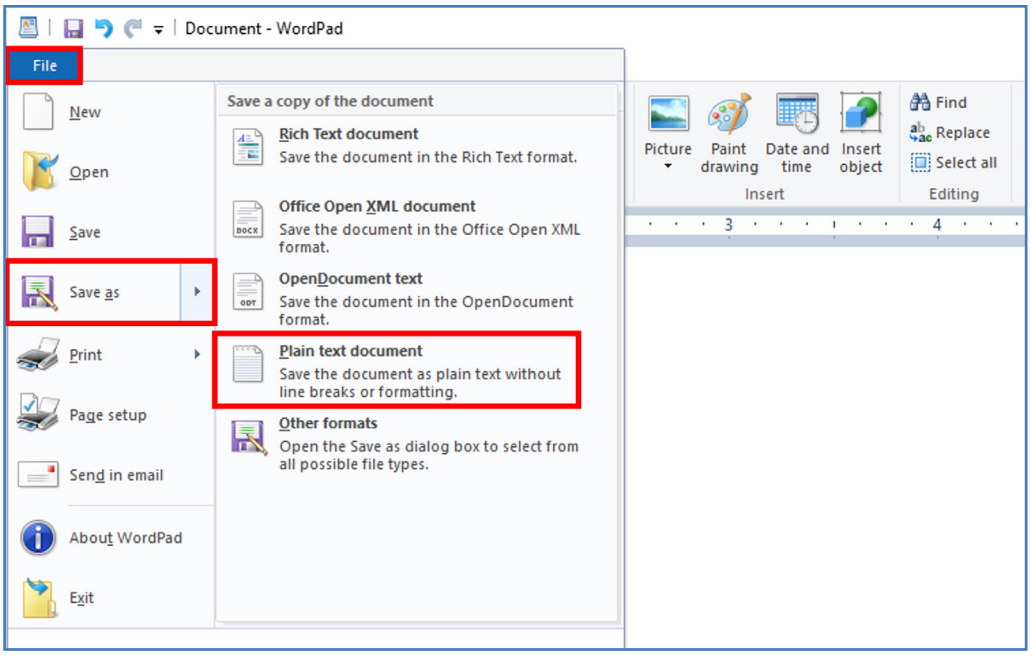
2. Search for all double tildes (~~) and replace each instance with a double quote (“).



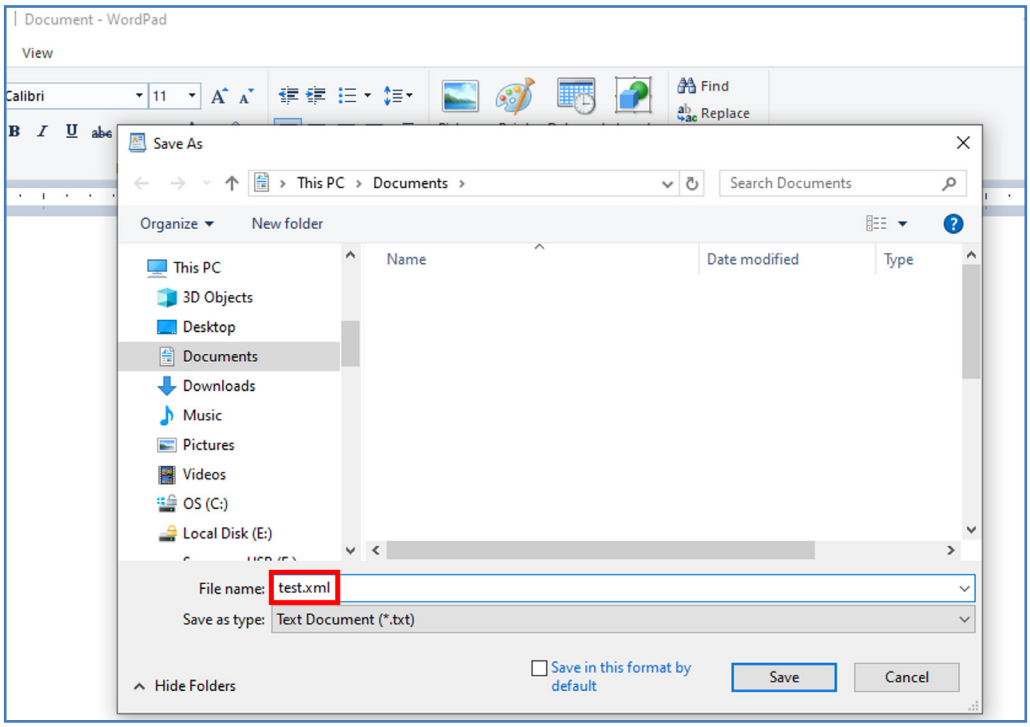
3. Search for and delete all remaining single tildes (~).



4. Save the WordPad file as a plain text document.



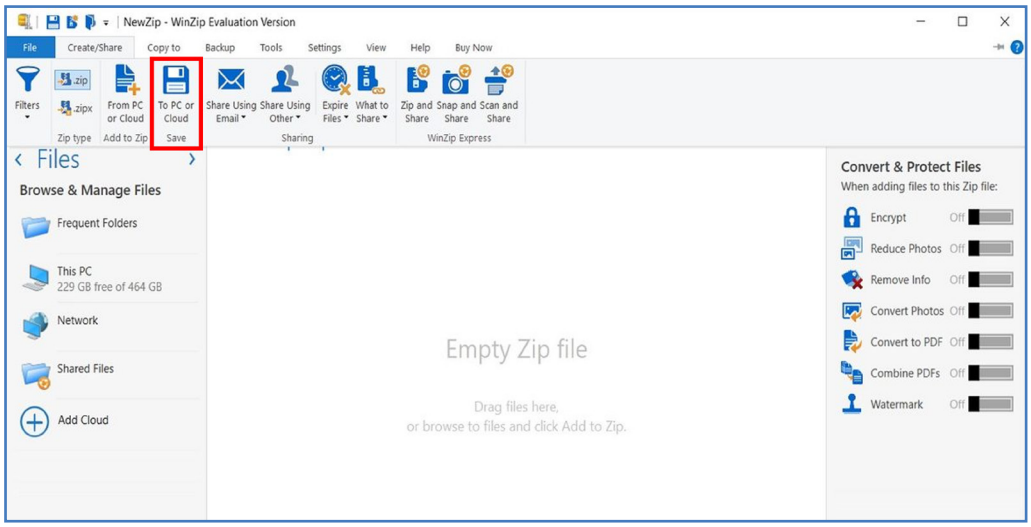
Before saving, change the extension to ".xml". For example - "**test.xml.**"



ZIP and Upload to the EN Services Center

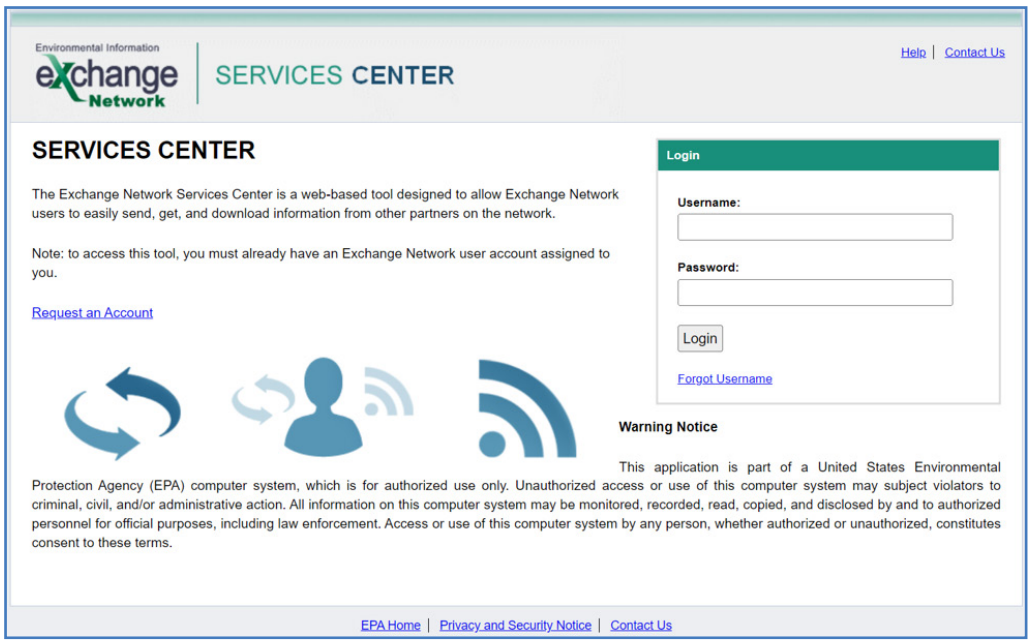
After preparing the XML file, the last steps are to ZIP the file and upload it to the Exchange Network Services Center.

Open the WinZip application – locate, drag, and drop the XML file into the WinZip window. Click on “Save”, then identify the name and location of where to save the zipped XML file.

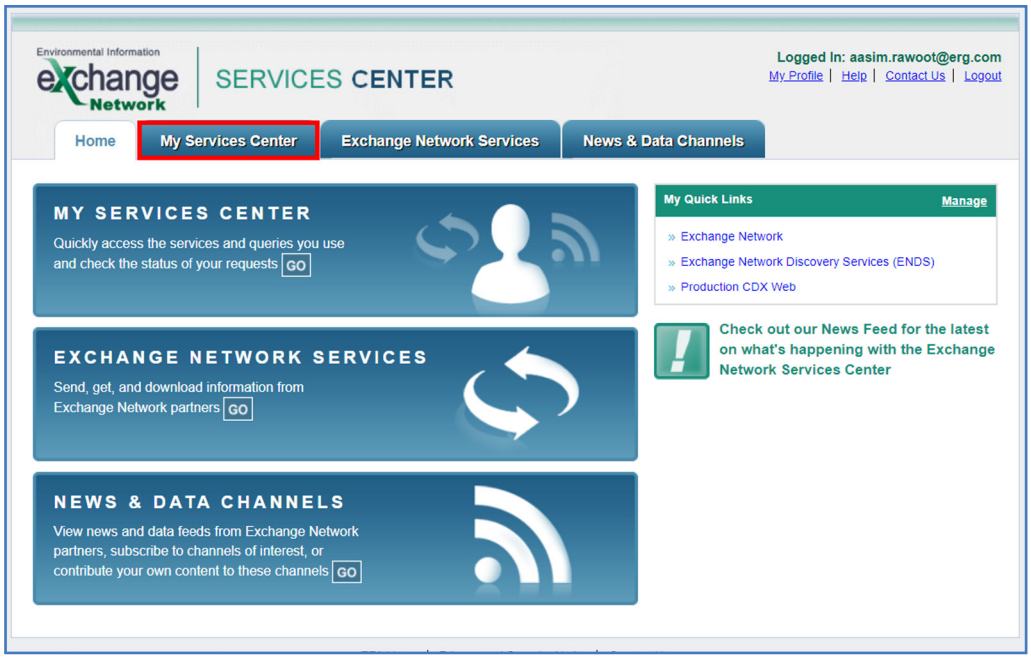


Navigate and log into the the EN Services Center:

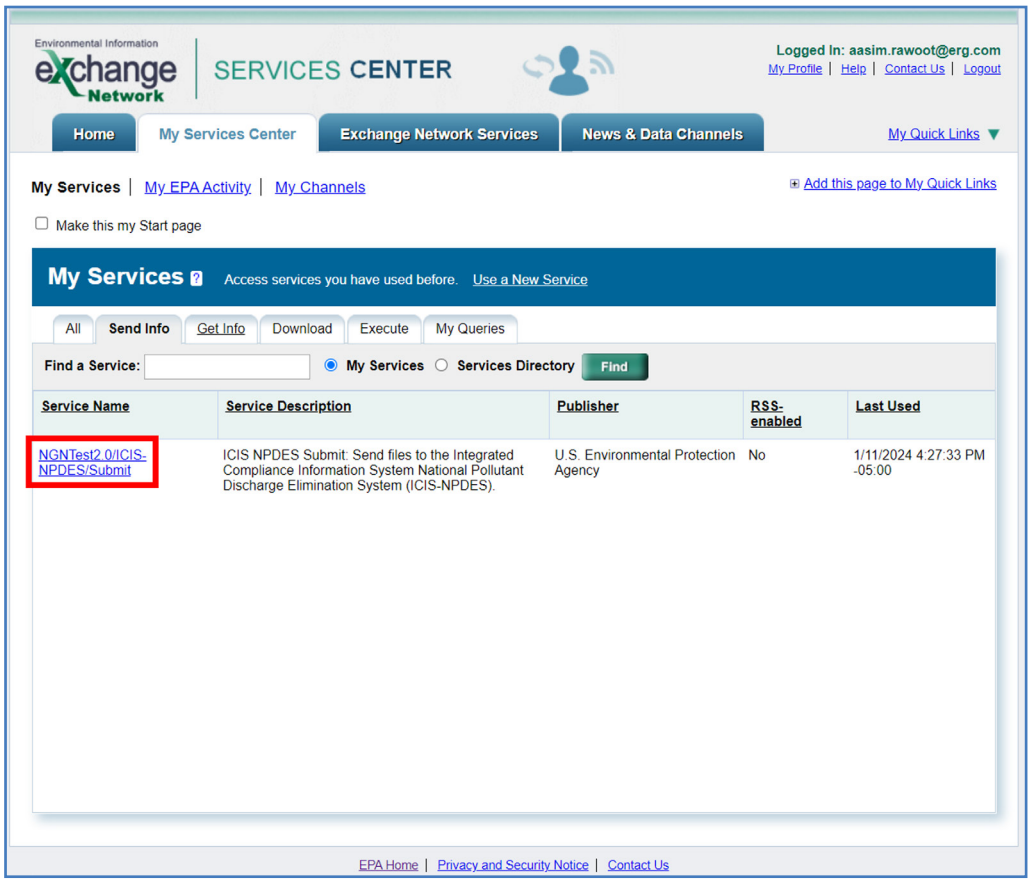
- https://enservices.epa.gov/login.aspx
- Test Environment: https://enservicestest.epacdxnode.net



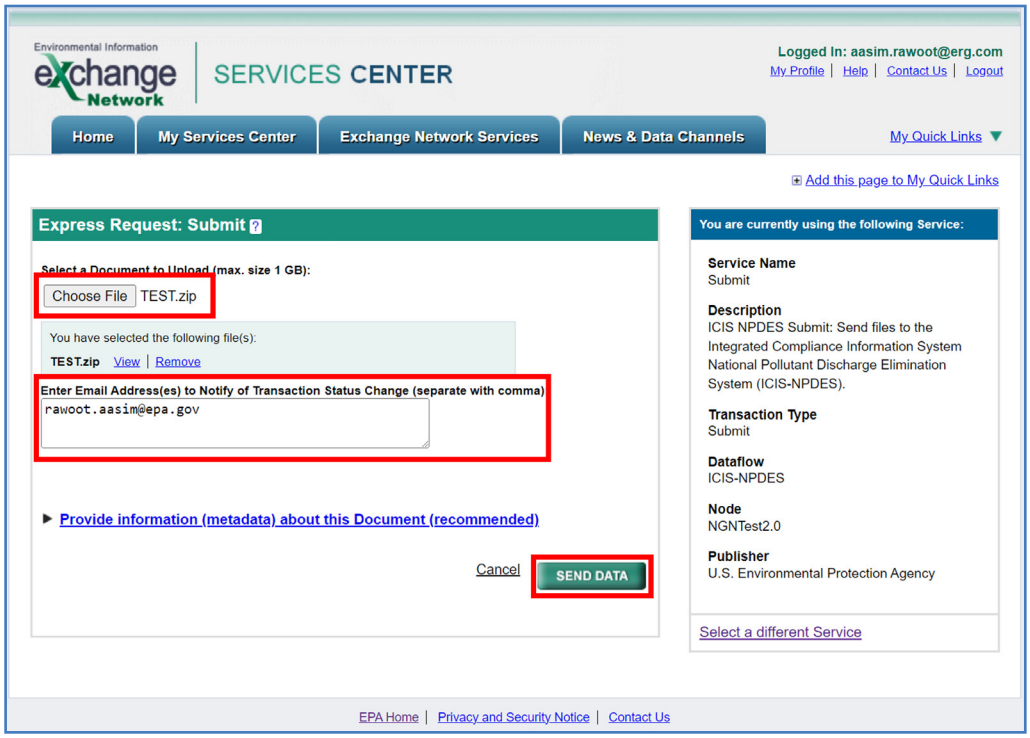
Go to “My Services”



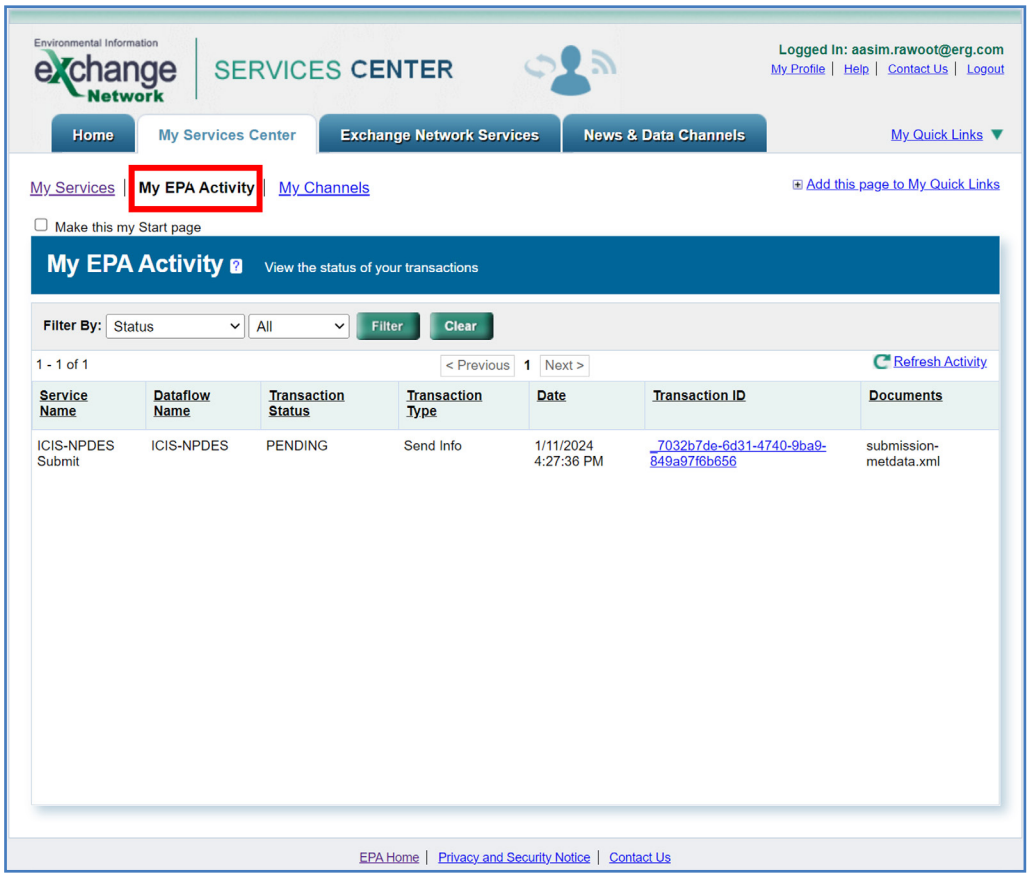
Select the applicable Service Name



Click on “Choose file” to select the ZIP file, enter your email address, and upload it to the EN Services Center by clicking “Send Data.”



You can review and monitor the status of submissions on the “My EPA Activity” page.



Links and Resources

Review HQ Help Desk for Exchange Network guidance and batch upload training at:
https://usepa.servicenowservices.com/oeca_icis?id=kb_article_view&sysparm_article=KB0014347

Help Resources:

1. EPA's XML Generator Tool: https://usepa.servicenowservices.com/oeca_icis?sys_kb_id=8929cd731b3021980a81202de54bcbe8&id=kb_article_view&sysparm_rank=1&sysparm_tsqueryId=2f46a79b1b1cb598fd044262f54bcb7f
2. Linking Violations ICIS Web Online: https://usepa.servicenowservices.com/oeca_icis?id=kb_article_view&sysparm_article=KB0014347
3. Linking Violations Batch: https://usepa.servicenowservices.com/oeca_icis?id=kb_article_view&sysparm_article=KB0014367