Welcome to the UIC Data Application Comprehensive Training Webinar. In this webinar, we will discuss and demonstrate how state and regional staff can use the new application to submit and review UIC inventory and Form 7520 data.

This training webinar is one of four training webinars being held in October and November. Links to this presentation, as well as various other supporting materials are available on the landing page of the application and will also be posted at the www.epa.gov/uic site soon.
The purpose of this webinar is to help UIC programs understand the features and functions of the UIC Data Application and how programs can use it to submit and review UIC inventory and Form 7520 data.

We will start with a quick refresher on the UIC Data Application and the timeline for completion. We will then demonstrate how users can access the application and discuss the workflow that each record goes through. From there, we will show how there are two methods that users will be able to enter data: manual data entry and batch upload. We will demonstrate each of these methods so that users understand how they can perform these functions for both Inventory and Form 7520 data. Note that batch upload was the subject of a previous training webinar, and that other materials are available for further detail on how to use the batch upload templates. Next, we will show the reporting services that are available in the application. After all of the features of the application have been explained and demonstrated, we will provide more information about the user testing process. And finally, we will recap what we have learned, and provide a way for you to ask any questions you may have.
Recently, programs have reported data to EPA in three ways:

- The Form 7520-1 through 7520-4 as hardcopy
- Inventory data submitted electronically via the Inventory and Measures Reporting Service (IMRS), or
- Both inventory and Form 7520 data submitted electronically to the National UIC Database

The new application that is being developed will replace those three mechanisms and serve as a one-stop-shop for 7520 forms 1-4 and well inventory data submission. The new application will also house various reporting and analysis tools that UIC programs may find useful.
This slide shows several key dates in the development of the new UIC Data Application. In February of 2018, the National UIC Database was discontinued. During spring and summer 2018, EPA contracted a developer to create the new application. Development is now complete, and EPA is currently holding user testing from October to November 2018. For end-of-year reporting for federal fiscal year 2018, programs should submit hardcopy Form 7520’s. Inventory should be submitted through IMR. Today’s webinar is one of four webinars that EPA is holding in October and November of 2018. EPA will also hold additional training webinars in Spring 2019 as the application becomes the sole means of reporting data from the Form 7520-1 through 7520-4 and inventory reporting for mid-year reporting in April/May of 2019.
We will now discuss and demonstrate how programs can access and navigate the new UIC Data Application.

This section of the slides corresponds to the comprehensive training video at time 3:54 (three minutes and 54 seconds).
How to Access the Application

- User testing participants have received an email with log-in information.
  - If you have not, please send an email to UICDatacollection@epa.gov
  - Note that a separate log-in will be required when the application goes live. More information to come.

The application is web-based and can therefore be accessed via web browser. During user-testing, the application can be found at the URL displayed on this slide. Each person who has expressed interest in user testing should have already received an email with their individual username and password. If you have not received an email with this information, please send an email to UICDatacollection@epa.gov.

Once the application goes live, the link on this slide will become inactive and a new URL will be distributed. More information will then be provided on how to obtain log-in credentials.
This slide is a screenshot of what is being covered in the live demonstration.

After logging in, users will be directed to the Home screen. Return to the Home screen at any time by clicking the “EPA Underground Injection Control (UIC)” banner at the top of the page.

The Home screen for state and regional users contains drop-down menus for Well Inventory, 7520’s, and Reports modules. Drop-down menus for Grant Allocation Model and Administration modules are only available to headquarters users with admin permissions.

Below the images of UIC wells are links to various user support materials. The user testing feedback form should be downloaded by each user tester and used to record user testing feedback. The training materials, including the batch upload training webinar recording and notes, as well as the comprehensive user manual, can be downloaded for more information on how to use the application. And finally, the four batch upload templates are also available for download from the Home screen.

In the upper right corner are your name and the log-out button.
Data Entry & Batch Upload

- Data may be submitted in two ways:
  - Manual entry (forms)
  - Batch upload
- Process may be used for
  - Summary well inventory
  - Well-specific inventory
  - 7520 Forms 1-3
  - 7520 Form 4
- Submission starts the workflow process

As will be discussed, data can be submitted in two ways for all UIC data, manual entry via web forms, and batch upload. Either way, the submission of data starts the workflow, in which data is submitted and reviewed in a specific order.
When new inventory or 7520 data is entered, it becomes part of a record. Each record goes through a specific workflow, where it is reviewed and approved by the EPA Region and EPA Headquarters. So, before continuing, we will discuss the workflow. There are four statuses that a record can take, represented by the text in boxes on this slide. Those statuses are Draft, Under EPA Region Review, Submitted to Headquarters, and Final. When a primacy agency first creates a new inventory or 7520 record, it has “draft status”. In draft status, a primacy agency can enter numbers, as well as save a partially complete record and edit it later. When a primacy agency is ready, they can press the button “Submit to EPA Region” and the status will change to “Under EPA Region Review”. With this status, the record can no longer be edited by the primacy agency. The EPA region will then review the record, and can make changes if necessary. The EPA region can use the button “Return to Primacy Agency” to return the record to draft status, or they can use the button “Submit to Headquarters” to move the record into “Submitted to Headquarters” status. Here, EPA Headquarters can review the record and either finalize it or kick it back to “Under EPA Region Review” status or “Draft” status. When a record is in Final status, it can no longer be edited unless headquarters unlocks the record. Note that whenever a record changes statuses, an email notification is automatically sent to the relevant parties.
The previous slide showed the workflow for primacy agencies. This slide shows the workflow for DI program submissions. The Difference is that there is no regional review. Records start in draft status at the regional level, and are then submitted directly to EPA Headquarters.
We will now discuss and demonstrate how programs can manually enter UIC inventory data in the new application. Manual data entry is accomplished via web forms. The other method of data entry, batch upload, will be discussed later in this training webinar.

This slide corresponds to the comprehensive training video at time 10:10 (ten minutes and ten seconds).
To begin the process of manually entering inventory data, a user should click the drop down menu in the Well Inventory module, and select “Inventory”. This will take the user to the inventory list view, described on the next slide.
This slide shows a screenshot of the inventory list view. The list view contains a table, where each row represents a well inventory record for a particular year. For instance, the first row represents the 2018 inventory record for US EPA Region 4 DI, in Florida. The second row represents the 2018 inventory record for the Alaska Oil and Gas Conservation Commission.

Associated with each record is either an “edit” button (click) or a “record locked” button (click). If a record has an “edit” button, then the user will be able to open the record and make changes, as long as the record is still in draft status and not under EPA Region or EPA Headquarters review.

The status column shows the status of the record. The different status’s that a record can take will be discussed on the next slide.

Next, there are columns showing the Fiscal Year, Primacy Agency Code, Primacy Agency, and State or Tribe that the record is associated with. These fields are what we refer to as “header data”. Each primacy program is assigned a four-digit primacy agency code. In addition, each record is associated with either a state or tribe, but not both.
To the right of the header data fields are the inventory data fields, exactly as they were in IMRS.

At the top are two different filter options (click). The user can use the drop down lists in this section to filter by primacy agency or by fiscal year.

To create a new inventory record, the user can select “New Well Inventory” at the top right of the screen (click).
In order to create a new record, header information is required to be entered. All inventory records require a fiscal year (click). 7520 records, as we will see, also require a fiscal quarter. Then, all records need a primacy agency (click). You can use the drop down list to select the applicable primacy agency. Next, users will need to select the radio button for either State or Tribe in the Program Type section (click). All primacy agencies would select state except for Navajo Nation and Fort Peck, which would select Tribe because they are primacy tribes. DI programs would select state or tribe, depending on whether they are reporting state or DI tribal data. Finally, depending on the Program Type selection, either a state or Tribe drop-down list will be displayed (click). Select the applicable state or tribe and then press the “Next” button in the top right to continue creating the record (click).
Users will then be taken to this screen. Notice the header information that is displayed at the top (click). Population and Area are also displayed, as these data are used in the UIC grant allocation formula. Reporting programs need not be concerned with updating these numbers. To the right of the area, the application displays the status of the record (click). In this case, the record is in draft status.

Below the header data are five different tabs, titled “Well Summary”, “Well Specific”, “Prior Years Comparison”, “History”, and “Record Details”. The “Well Summary” tab is shown by default, but the other tabs can be clicked on to be shown. In the “Well Summary” tab, users are able to manually enter well inventory for each well class. Only well classes associated with a particular primacy agency and state are shown. After entering well inventory, users should click the blue “Save” button at the top right of the screen. When ready, users can also use the “Submit to EPA Region” button.
EPA accepts both summary-level and well-specific inventory data. A program is able to choose which type of data they submit. Summary inventory is simply the total number of wells in each well class. Well-specific inventory, which can be reported using the second tab, allows the user to report all applicable unique wells. If a user reports well-specific inventory, then the application automatically calculates the summary well inventory and populates the “Well Summary” tab.
This slide is a screenshot of what is being covered in the live demonstration.

The first screenshot is of the “Well-Specific” tab. To add a new well, users should click the “Add Well-Specific Inventory” button. The second screenshot shows the pop-up form that appears when this button is clicked. For each well, it is required that users input either Well Type or Summary Well Class and a unique Well ID. Additionally, if the user is inputting a Class III well, then another field will appear in the form for Well Site. Well Site is required for Class III wells. The other fields are optional but may be useful to provide due to the reporting services that programs can take advantage of elsewhere in the application.
This slide is a screenshot of what is being covered in the live demonstration.

The third tab is titled “Prior Years Comparison”. Using this tab, users can easily compare the current year data with data from previous years. This comparison can aid in the QA/QC process, as anomalies can easily be spotted.
Use History tab to view submission history and to enter comments about a submission

This slide is a screenshot of what is being covered in the live demonstration.

The fourth tab is titled “History”. This tab contains a log of the submission history for the record. In addition, users can click the “Add Comment” button and add any additional information that may be relevant to the submission.
This slide is a screenshot of what is being covered in the live demonstration.

Finally, the fifth tab, “Record Details” displays meta-data related to the record, as shown in the screenshot.
This slide is a screenshot of what is being covered in the live demonstration.

When ready, click the “Submit To EPA Region” button. Or, if a region is submitting DI data, the button will be titled “Submit to EPA HQ”. A pop-up form appears. Any comments entered will be saved in the “History” tab. Upon submittal, a notification will be sent to the list of email recipients. The list of recipients is automatically populated for each record and the default recipients can only be changed by EPA HQ. If you would like to make a change, please send an email to UICdatacollection@epa.gov. Users can also list additional email recipients in the box on the form.
We will now discuss and demonstrate how programs can manually enter UIC 7520 Form 1-3 data in the new application. Manual data entry is accomplished via web forms. The other method of data entry, batch upload, will be discussed later in this training webinar.

This slide corresponds to the comprehensive training video at time 24:54 (twenty-four minutes and fifty-four seconds).
To begin the process of manually entering 7520 data, a user should click the drop down menu in the 7520 module, and select the 7520 form that they are interested in. This will take the user to the list view for that form, described on the next slide.
This slide is a screenshot of what is being covered in the live demonstration.

This slide shows a screenshot of the 7520-1 list view. The view is similar for the other 7520 forms. The list view contains a table, where each row represents a 7520-1 record for a particular fiscal year and quarter. For instance, the first row represents the Fiscal Year 2018, Fiscal Quarter 4, 7520-1 record for US EPA Region 5 DI, in Michigan. 4Q is used for end-of-year reporting, and 2Q is used for mid-year reporting. The second row represents the 4Q2018 7520-1 record for the Maryland Department of the Environment.

Associated with each record, in the “edit” column, is either an “edit” button (click) or a “record locked” button (click). If a record has an “edit” button, then the user will be able to open the record and make changes, as long as the record is still in draft status and not under EPA Region or EPA Headquarters review.

The second column displays a button in the form of a printer icon (click). Clicking this button brings up a filled-in PDF copy of the 7520 form associated with the record.

The status column shows the status of the record. The different status’s that a record
can take, as well as the workflow, were discussed earlier in the “Accessing and Navigating the Application” section.

Next, there are columns showing the Fiscal Year, Fiscal Quarter, Primacy Agency Code, Primacy Agency, and State or Tribe that the record is associated with. As with the inventory module, these fields are what we refer to as “header data”. Each primacy program is assigned a four-digit primacy agency code. In addition, each record is associated with either a state or tribe, but not both.

To the right of the header data fields are information on when, and by whom, the record was most recently modified.

At the top are two different filter options (click). The user can use the drop down lists in this section to filter by primacy agency or by fiscal year.

To create a new 7520-1 record, the user can select “New 7520-1” at the top right of the screen (click). This is an example for the 7520-1. However, the layout is the same for the other 7520 forms.
As shown on the previous slide, one of the icons associated with each record is the “Print” icon, pictured again on this screen. Clicking on the “Print” icon will bring up a window containing a PDF version of the 7520. The PDF can be printed or saved from this window.
Again, in order to create a new record, header information is required to be entered. All 7520 records require a fiscal year and quarter (click). For quarter, 2Q is used for mid-year reporting, while 4Q is used for end-of-year reporting. 1Q and 3Q are also available options for 7520-4 reporting. Next, all records need a primacy agency (click). Users can use the drop down list to select the applicable primacy agency. After that, users will need to select the radio button for either State or Tribe in the Program Type section (click). All primacy agencies would select state except for Navajo Nation and Fort Peck, which would select Tribe because they are primacy tribes. DI programs would select state or tribe, depending on whether they are reporting state or DI tribal data. Finally, depending on the Program Type selection, either a state or Tribe drop-down list will be displayed (click). Select the applicable state or tribe and then press the “Next” button in the top right (click) to continue creating the record.
Users will then be taken to this screen. Notice the header information that is displayed at the top (click). The application also displays the status of the record with the header data. In this case, the record is in draft status.

Below the header data are four different tabs (click), titled “7520-1 Detail”, “Attachments”, “History”, and “Record Details”. The “7520-1 Detail” tab is shown by default, but the other tabs can be clicked on to be shown. In the “7520-1 Detail” tab, users are able to manually enter 7520-1 data for each applicable well class (click). Only well classes associated with a particular primacy agency and state are shown. Note the icon containing a circle with a question mark inside (click). Clicking this icon will bring up the reporting guidance for the associated data element from the back of the respective hardcopy Form 7520. After entering data, users should click the blue “Save” button (click). When ready, users can also use the “Submit to EPA Region” button (click).
Manual Data Entry - 7520 1-3

Attach relevant documents to your 7520 submission

This slide is a screenshot of what is being covered in the live demonstration.

The second tab is titled “Attachments”. Using this tab, users can upload files that they would like to attach to their 7520 forms.
This slide is a screenshot of what is being covered in the live demonstration.

The third tab is titled “History”. As was the case with inventory, this tab contains a log of the submission history for the record. In addition, users can click the “Add Comment” button and add any additional information that may be relevant to the submission.
This slide is a screenshot of what is being covered in the live demonstration.

When ready, click the “Submit To EPA Region” button. Or, if a region is submitting DI data, the button will be titled “Submit to EPA HQ”. A pop-up form appears. Any comments entered will be saved in the “History” tab. Upon submittal, a notification will be sent to the list of email recipients. The list of recipients is automatically populated for each record and the default recipients can only be changed by EPA HQ. If you would like to make a change, please send an email to UICdatacollection@epa.gov. Users can also list additional email recipients in the box on the form.

A PDF version of the 7520 form will be displayed. Users can save or print the 7520 form.

Below the PDF window is the certification statement found on the 7520 form. After reading it, users should check the box and select the “Submit” button to submit the record.
We will now discuss manual data entry for the 7520-4. A user should begin by clicking the drop-down menu in the 7520 module, and selecting 7520-4. This will take the user to the list view for 7520 Form 4, pictured to the right. Click the blue button in the upper right to create a new 7520-4.
Users should enter header data in the same way they would for 7520 Forms 1-3. The only difference is that for 7520 Form 4, users are able to enter 1Q and 3Q for quarter, in addition to 2Q and 4Q.
Users will then be taken to this screen. As with the manual data entry screens for 7520 Forms 1-3, the header information and status are displayed at the top (click), and there are four different tabs (click), titled “7520-4 Detail”, “Attachments”, “History”, and “Record Details”. The “7520-4 Detail” tab is shown by default, but the other tabs can be clicked on to be shown. In the “7520-4 Detail” tab, users can click the “Add 7520-4 Well” button (click) to add a well that has applicable SNC violations. If there are no applicable SNC violations to report, users should click the button “No Wells to Report” (click). When ready, users can also use the “Submit to EPA Region” button (click).
This slide is a screenshot of what is being covered in the live demonstration.

After clicking the “Add 7520-4 Well” button, a pop-up form appears as shown in the screenshot on this slide. Users should enter all applicable well information. Then, users can enter multiple violations and enforcement actions (click). Users must enter at least one violation for each well. (click) However, enforcement actions or date compliance achieved are not required fields.
We will now discuss and demonstrate how programs can use the batch upload feature to automatically enter UIC inventory and 7520 data in the application. In order to use the batch upload feature, users will need the four batch upload templates. For convenience, these templates are available for download from the homepage of the application.

Note that a separate training webinar was held on 9/25/2018. That training goes into extensive detail on how to use the batch upload feature and batch upload training. Links to the video recording of that training, as well as a PDF copy of the training slides, are available from the application homepage. Today’s training will briefly cover batch upload, but it is recommended that users reference the training materials from 9/25/2018.

This slides corresponds to the comprehensive training video at time 40:10 (forty minutes and ten seconds).
Before getting into too much detail, it is helpful to spend some time understanding the purpose of the batch upload templates.

There are two ways that you will be able to enter data into the new application. The first is via webforms, which have already been covered extensively in this training.

The second way that users will be able to enter data into the new application, and the focus of this section, is via batch upload. To use the batch upload process, users will need to format data in accordance with the batch upload templates that EPA has distributed, in either a .xlsx or .csv file. Users will then log into the new application via their web browsers and use a wizard to select and upload the file containing the data.
This slide shows a screenshot of a batch upload template file, opened in Microsoft Excel. To use the batch upload function and upload large quantities of data to the application, users can format data as an Excel spreadsheet (.xlsx) or comma-separated value (.csv) file as described in the template files. If using an Excel spreadsheet for uploading data, all cells must be formatted as text.

This image is a screenshot of the batch upload template for Form 7520 1-3. We will go into more detail on this template later on in this training webinar.
This slide shows the process for the use of the batch upload functionality. Data that is initially held in a program’s database is queried and exported into a .xlsx or .csv file. The file must be formatted according to the templates provided by EPA. The file is then uploaded to the application, and the data submission is then complete.

If uploading a .xlsx file, all fields must be formatted as text.
There are four available batch upload templates.

Two templates are available for the 7520 data because 7520 Forms 1-3 and 7520 Form 4 are different in structure and therefore cannot both be included in the same batch upload template.

For inventory data submissions, programs have the option of submitting either summary inventory information or well-specific inventory information. Therefore, a program would only use one of the two inventory batch upload templates.

We will now go through a live demonstration where we will show how the 7520-1 through 7520-3 batch upload template can be used to upload data into the application. We will not go through live demonstrations for the other three batch upload templates, but we will speak to the key differences between those batch upload templates and the 7520-1 through 7520-3 batch upload template.
Template: Form 7520 1 through 3 (Live Demo)

- The template file (UIC 7520-1_to_3 Import template (read only).xlsx) contains the template, field key, example, primacy agency codes, and tribe codes.
- Tips
  - First row needs to be field names
  - .xlsx documents must contain only one sheet
  - For best results, format all cells (even numbers and dates) as text in .xlsx documents or use .csv

In the batch upload template training video posted to www.epa.gov/uic, a live demonstration of upload data from the 7520-1 through 7520-3 template into the application will begin.

In these slides, we will demonstrate how to use the templates using screenshots of the application in the next several slides.
This slide is a screenshot of what is being covered in the live demonstration.

The fields in the batch upload templates are color coded based on whether they contain data from the header section or from the data section of Form 7520 or inventory. The header data is the data found at the top of the Form 7520 including primacy agency, federal fiscal year, state or tribe, and well class.

Each of the header data fields will be discussed shortly. It is important to note that in this example, columns A-D, as well as column G, are all required. Either State or Tribe (columns E and F, respectively) must be entered, but not both.

Starting with column H, each field corresponds to a data element on Form 7520-1 through 3. Fields form 7520-1 are represented first, then 7520-2A, 7520-2B, and 7520-3.
This slide is a screenshot of what is being covered in the live demonstration.

The field key tab includes descriptions of each field in the template, as well as the form and form section that each field corresponds to. Each program can look up their four-character primacy agency code using the Primacy Agency Codes worksheet. Fiscal Year Quarter is either 2Q for mid-year reporting or 4Q for end-of-year reporting. A program should fill in either State or Tribe, but not both. If a program is a state, they should enter the full name of their state, rather than the two-character postal abbreviation. If a program is a tribe, or an EPA region is reporting data for a DI tribe, the Bureau of Indian Affairs (BIA) Code should be given in the Tribe field. BIA codes for every tribe can be found in the Tribe Codes worksheet.

Data elements for 7520 data can all be matched up with the correct box on a 7520 form by using the columns called “Source of Field” and “Form Section”.

The field key worksheet includes descriptions of each field.
This slide is a screenshot of what is being covered in the live demonstration.

The “Primacy Agency Codes” worksheet lists the four-character codes associated with each primacy agency. These codes are used in the PRI_AGENCY_CODE field on each of the templates.
This slide is a screenshot of what is being covered in the live demonstration.

If a record is applicable to a tribe, then the ‘Tribe’ field on the batch upload templates should contain the BIA code of that tribe. The ‘Tribe Codes’ worksheet lists the BIA codes of each tribe currently in the database.
This slide is a screenshot of what is being covered in the live demonstration.

The example worksheet shows a template populated with data. Comment bubbles are used in this worksheet to point out key features.
Finding the Import Menu

Template: Form 7520 1 through 3 (Live Demo)

This slide is a screenshot of what is being covered in the live demonstration. Note that the screenshots in this section are based on a version of the application that is still in development.

We will now demonstrate how to use the application to upload a batch upload template file that contains data. First, the user will navigate through the drop-down menu for the 7520 module, and select import and then 7520 (1,2A,2B,3).
This slide is a screenshot of what is being covered in the live demonstration. Note that the screenshots in this section are based on a version of the application that is still in development.

A data load wizard appears that assists the user in uploading data into the application. The user clicks the “Choose File” button and navigates to either a .xlsx or .csv file that contains the data that they would like to batch upload. Once the file is chosen, the user clicks the Next button.

If the user is uploading an Excel spreadsheet (.xlsx), all fields must be in text format for successful import.
This slide is a screenshot of what is being covered in the live demonstration. Note that the screenshots in this section are based on a version of the application that is still in development.

The Data Preview screen shows the user how the application interpreted the file that they uploaded. The user should perform a manual check to make sure that everything appears as desired. When the user is happy with the data preview, clicking the “Next” button will begin the Data Validation stage of the upload.
Data Validation

If any errors exist in the uploaded data, they will need to be addressed in the original file and the file re-uploaded.

This slide is a screenshot of what is being covered in the live demonstration. Note that the screenshots in this section are based on a version of the application that is still in development.

The Data Validation screen shows any errors that the application has detected in the batch upload file. The number of errors will be displayed at the top, and error descriptions associated with individual rows will be displayed in the Errors column. An example of an error would be if the Primacy Agency Code is not one of the recognized codes.

If errors exist, the user will need to correct them in their batch upload file and start the process over. The ‘Load Data’ button will only appear if there are zero errors. Press the Load Data button to complete the batch upload process.

Note that after loading data, the user will still need to open each record from the listview and submit it to move the record through the workflow. EPA has heard from users that this process can be burdensome, and is working with the developer to implement a streamlined way of submitting and approving records.
Batch Upload Scenarios:  
How Does the Application Interpret Data?

Example 1: Program uploads a template to the UIC application that contains blanks in the data fields.

We will now use several examples to show how the application interprets different batch upload files.

In this example, we can see that blank cells are imported as zeros for the data columns (PermitApps, IndPermitNew, and IndPermitExist). Blank cells in the header data columns (PRI_AGENCY_CODE through WellClass) are not imported as zeros.
Batch Upload Scenarios: How Does the Application Interpret Data?

In this example, the user inputs data for class I, but does not input any data for class II-VI. In this example EPA Region 3 (Primacy Agency 03DI) is reporting DI data for Virginia. The application recognizes that EPA Region 3 implements the UIC program for all well classes in Virginia, and automatically creates records with all zeros for the unreported well classes (i.e. class II-VI).
In this example, the user has left required fields in the header section blank. The upload will not be successful, and the application will provide a message identifying the error.
We have now competed a demonstration of how to use the 7520 1-3 batch upload template. Over the next set of slides, the remaining three templates will be discussed. A live demonstration will not be done because the remaining templates are constructed very similarly to the 7520 1-3 template, and the process very similar.
In the 7520-4 template, each row corresponds to a different violation or to a different enforcement action. There should be no row with more than one violation or more than one enforcement action. Violations and enforcement actions should be marked by a capital “X”. If more than one enforcement action is associated with a particular violation, then create two rows for the same violation - one for each enforcement action.
This is the field key for the 7520-4 template. Note that Class I wells are required to be identified as hazardous, municipal, or industrial, per the instructions on the back of the 7520-4. This is different than with the 7520-1 through -3 template, where Class I wells were not broken out into subtypes.
We will now discuss the remaining two batch upload templates, both of which are used for inventory data.
EPA accepts both summary level and well-specific inventory data. A program is able to choose which type of data they submit.

### Which Inventory?

EPA accepts either summary-level inventory or well-specific, and we have templates for both.

<table>
<thead>
<tr>
<th>Summary Level</th>
<th>Or</th>
<th>Well-Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Total number of wells broken down by</td>
<td>• Listing of all applicable unique wells</td>
<td>• Application is then able to produce summary-level inventory automatically</td>
</tr>
<tr>
<td>• Primacy agency</td>
<td>• Programs may find it easier to submit well-specific inventory</td>
<td></td>
</tr>
<tr>
<td>• Fiscal year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• State/Tribe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Well Class</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EPA accepts either summary-level inventory or well-specific, and we have templates for both.
The summary-level inventory template is constructed similarly to the 7520 templates in that it contains both header data and program data. Each row corresponds to a program-state submission for a given year.
The field key describes the column headings in the summary well inventory template. The well classes used for summary inventory are slightly different than well classes in the Form 7520.
Finally, we will discuss the well-specific inventory upload template.
Template: Well-Specific Inventory

The template file (UIC Well Specific Inventory Template.xlsx) containing template, field key, example, primacy agency codes, and tribe codes.

In the well-specific inventory template, each row represents a unique well. Some of the data fields are optional and some are required. The requirements are outlined in the ‘field keys’ tab of the template.
User may provide either WellType or WellSummary Class data. The “Well Types & Classes worksheet” in the template lists the acceptable WellType codes.

As seen in the other batch upload templates, the Field Key worksheet contains descriptions of each field in the template. Unlike previous templates that have been discussed, some fields are required while others are optional. The only required fields are those necessary to calculate the summary well inventory.

Note that the user has the option of providing WellType or WellSummaryClass. This batch upload template contains a worksheet titled “Well Types & Classes” which provides the list of acceptable choices for these two fields.

It’s also important to note that Well Site is a required field for Class III wells only, because the application needs to be able to calculate the number of Class III sites for the summary inventory.
As mentioned previously, the user has the option of providing WellType or WellSummaryClass. This batch upload template contains a worksheet titled “Well Types & Classes” which provides the list of acceptable choices for these two fields. This slide shows a screenshot of that worksheet. The first column shows the acceptable WellType codes, while the last column shows the acceptable WellSummaryClass codes. The other columns show helpful descriptions and information that may help programs design queries.

If a user submits data with WellType fields entered, the application will convert the data to the well classes found in Summary Inventory Well Class when the application calculates the summary well inventory. If the user submits data in only the WellSummaryClass field, then application will not need to convert the data prior to calculating the summary inventory.
We have now completed our introduction to each of the four batch upload templates that have been distributed.
We will now discuss and demonstrate how programs can use the reporting module to download and analyze data.

This slide corresponds to comprehensive training video time 54:54 (fifty-four minutes and fifty-four seconds).
To begin, a user should click the drop down menu in the Reports module. Two options appear, “Data Downloads” and “Qlik Reports”. Each option will be discussed separately. If the user selects “Data Downloads”, they are given a menu of four different reports, as shown on the right side of the screen.
Each of the four data download reports can be selected to view and download all data from that particular module. In the example on this slide, “Well Inventory Summary” is selected from the list of data downloads. The right side of this slide shows a screenshot of the corresponding data download.
At the top are filters for Fiscal Year and Primacy Agency (click). The search bar (click) can be used to quickly filter the records. For instance, typing “GANR in the search bar will return all records for GANR. Similarly, typing “2016” in the search bar will return all records for 2016.

To the right of the search bar is the Actions Menu (click). The Actions Menu will be discussed in detail on a coming next slide.

Below that is the Data Listing (click), which is a table of all applicable data based on the Data Download report selected and the sorting and filtering options used. The example in this screenshot is for summary well inventory, and so each row shows the well inventory for each year-primacy agency-state/tribe combination.

Clicking the “Download” button (click) downloads everything currently displayed in the Data Listing into a .csv file.

NOTE: Historic data is currently being checked for accuracy.
In the data listing, each column heading can be clicked. Once clicked, a menu appears with options to sort ascending, sort descending, hide column, create a control break, and filter.
The Actions Menu is a very useful tool for data filtering, sorting, and analysis. When the Actions Menu is clicked (click), a list of options appears. Options include advanced filtering, creating bar, line, and pie charts, creating pivot tables, data download, add or remove columns, sort/aggregate/compute using expressions, advanced sorting, and Save Report. Save Report is useful because it allows users to save different types of filtering/sorting/charting/etc so that the user does not need to recreate certain views every time they go into the reports module.

For more detail on how to use the various functions in the Actions Menu, users can reference the User Guide, linked from the application home page.
The second option in the Reports module is Qlik Reports. Qlik is the name of the software platform that is being used to produce the reports. The Qlik reports are not ready at this time, but they should be in time for open user testing in November. Users will be able to access Qlik using their web browsers, and view ready-made charts and graphs of all UIC inventory and 7520 Form 1-4 data. Qlik makes filtering, analyzing, and exporting data exceedingly easy.
We will now discuss what to expect during user testing.

This slide corresponds to comprehensive training video at time 59:22 (fifty-nine minutes and twenty-two seconds).
• User Group & Regional User Testing: 10/24/2018 - 11/2/2018

User group and regional user testing will run October 24 to November 2, 2018. Changes will then be made to the application based on feedback received, and a second round of user testing will run from November 13 to 30, 2018. The second round of user testing will be open to all potential users of the application.
User testers can use the feedback form to record findings. The “Commenter” column should contain the user’s name. The “Module” column should contain the module that the comment pertains to. For instance, the comment could pertain to the Inventory module. Finally, the “Comment” column should contain the feedback that the user would like to share with EPA. Users should provide enough information for EPA and the developer to be able to understand and address the finding.
User Testing

- What should users test?
  - Inventory, 7520, and Reports Modules

- How should users test?
  - Try entering data through both manual entry and batch upload
    - Tip: Practice entering 2018 data!
  - Test well-specific inventory if desired
  - Submit data for states, primacy tribes, and DI tribes
    - Test the submit buttons at the end. We can unlock records if needed.
  - For EPA Regions: Review state submissions (All 2017 records have been set to Draft or Under EPA Region Review status)
  - Run reports and download
  - Click through and verify everything!

During user testing, users should test all functions in the Inventory, 7520, and Reports modules. Users should perform tasks such as entering data both manually and using the batch upload function. It may be useful to go through the exercise of entering 2018 data. If users are intending on entering well-specific inventory, they can test that function as well.

In addition to testing data entry, users should test the submission and review of records. All 2017 records have been set to either Draft or Under EPA Region Review status. States can go into their old 2017 records and practice submitting them to the region. Regions can view 2017 state submissions and either send them back to the state, or submit them to EPA Headquarters.

Finally, users can run reports and test the various reporting services that are available.

Click through everything. Don’t assume anything is correct!
User Testing

• What should users look for?
  – Errors/bugs (e.g. do numbers in 7520 form match what they should
    be based on the batch upload form?)
  – Anything that does not make sense (i.e. not intuitive process,
    instructions unclear)
  – Anything that could be done better/differently
• Nothing is too small

During user testing, users should look for errors and bugs, anything that does not
make sense (or is not intuitive), and anything that could be done better/differently.
Nothing is too small. Our goal is to make the application as robust and useful as
possible, and we welcome all comments.
This slide shows an example of something a user might write in the Feedback Form. Here, the commenter’s name is John Smith, and John is commenting about the Well-Specific portion of the inventory module. John is having trouble with deleting individual well records.

Note that John is not sure if there is a bug in the application that is now allowing him to delete these wells, or if he is simply not understanding the correct way to do so. Either way, it is good that John is reporting this in the Feedback Form. If it is a bug in the application, the developer will be able to fix it. If John is having trouble figuring out how to use the delete function, then the user interface is not intuitive enough and improvements need to be made in that regard.

Again, nothing is too small.
Q & A

For any further questions or concerns, please don’t hesitate to contact EPA at uicdatacollection@epa.gov.

A video recording of this webinar, as well as the presentation slides, will be posted at http://www.epa.gov/uic. They will also be available on the application home page.