

Welcome to the UIC Data Application Batch Upload Template Training Webinar. In this webinar, we will discuss the batch upload functionality that will be available to UIC programs in the new UIC Data Application, and show how the batch upload templates can be used in the batch upload process. The templates were distributed to state primacy programs through the EPA Regions, and we also plan to post the templates and other supporting materials at the www.epa.gov/uic site soon.



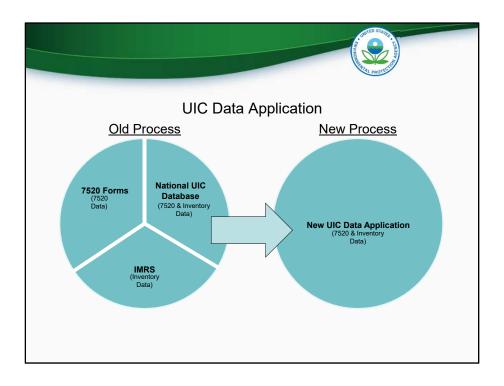
Agenda

Purpose: Programs understand "batch upload" function and how to use it

- What is the UIC Data Application? (Quick refresher, development timeline)
- · Data entry webforms vs batch upload templates
- · Process for using batch upload templates
- 4 templates available (7520-1 through -3, 7520-4, summary inventory, well-specific inventory)
- · Live demonstration of using the 7520-1 through -3 template
- · Batch upload scenarios
- · Discussion of how the other three templates are used
- Recap
- Q&A

The purpose of this webinar is to help UIC programs understand what the "batch upload" function is and how programs can use the batch upload templates to successfully import data into the new UIC Data Application.

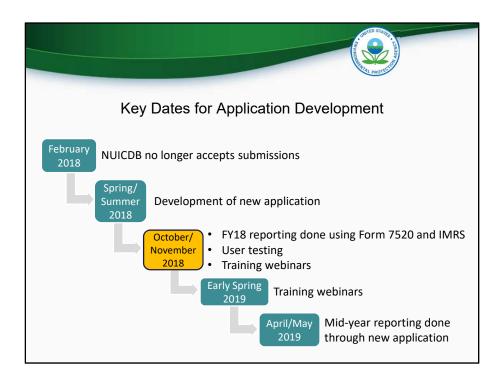
We will start with a quick refresher on the UIC Data Application and the development timeline for completion. We will then define and describe the batch upload process and how batch upload can be used to enter large amounts of data into the application as opposed to manual data entry into webforms. We will explain why there are four batch upload templates. Next, we will show a live demonstration of how the batch upload template for Form 7520-1 through 7520-3 can be used to load data into the application. In the "batch upload scenarios" section of the training webinar, we will explain how the application will interpret different types of upload scenarios. We will not be doing live demonstrations with all four batch upload templates, but we will explain the key differences between the 7520 1-3 batch upload template and the other three templates. Finally, we will recap what we have learned, and provide a way for you to ask any questions you may have.



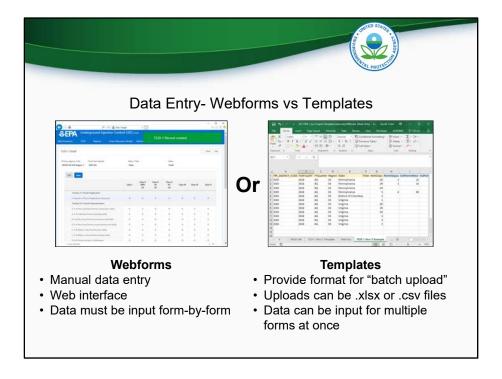
Recently, programs reported data to EPA in three ways:

- the Form 7520-1 through 7520-4 as hardcopy
- Inventory data submitted electronically via the Inventory and Measures Reporting Service (IMRS), and
- 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 1-4 and well inventory data submission. The new application will also house various reporting and analysis tools that UIC programs may find useful.



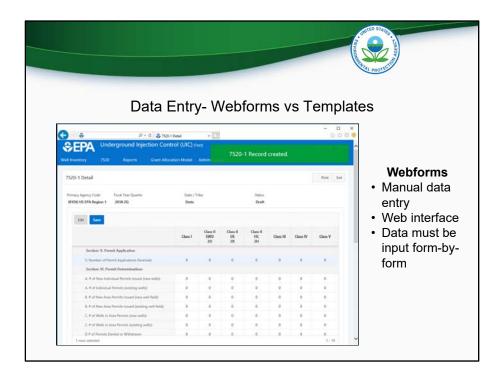
This slide shows several key dates in the development of the new UIC Data Application. In February of 2018, the National UIC Database was discontinued. During spring and summer 2018, EPA contracted a developer to create the new application. Development is nearing completion, and EPA is planning on having user testing begin in October-November 2018. For end-of-year reporting for federal fiscal year 2018, programs should submit hardcopy Form 7520 and inventory should be submitted through IMRS. EPA will hold several training webinars in October and November of 2018, and will 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.



Before getting into too much detail, it is helpful to spend some time understanding the purpose of the batch upload templates.

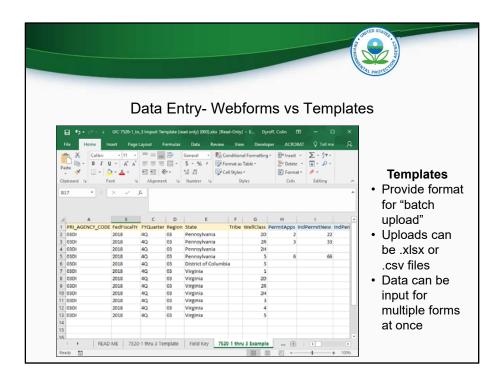
There are two ways that you will be able to enter data into the new application. The first is via webforms, which will not be the focus of today's training webinar. To use webforms, users would log in to the application via their web browsers, navigate through the appropriate menus to create a new record, and manually type data into boxes.

The second way that users will be able to enter data into the new application, and the focus of this training webinar, 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.



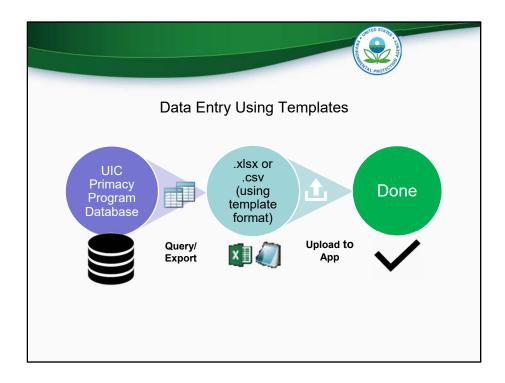
This slide shows a screenshot of a webform. To use a webform, users can log into the application via their web browsers. The application provides users with an electronic version of each 7520 form, where they can enter data manually into each box. Users can manually enter inventory data into a webform as well.

Webforms are not the topic of this training, but will be covered later in a more comprehensive training webinar.



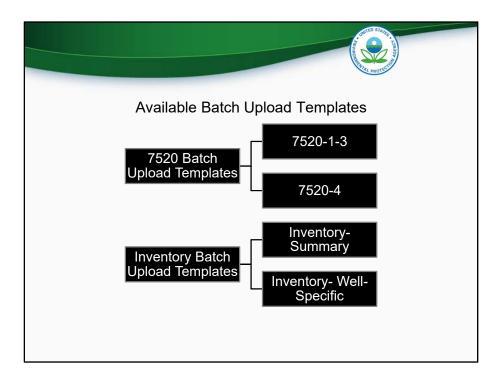
This slide shows a screenshot of a batch upload template file, opened in Microsoft Excel. To use the batch upload function and upload large quantities of data to the application, users can format data as an Excel spreadsheet (.xlsx) or comma-separated value (.csv) file as described in the template files. 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.

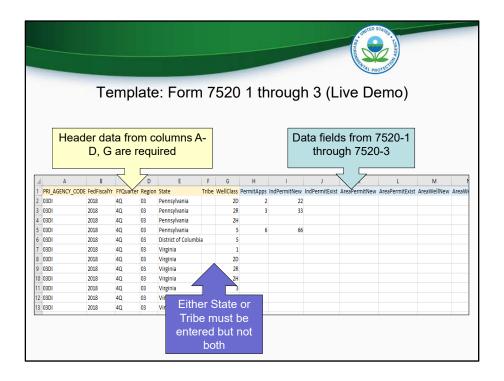


Template: Form 7520 1 through 3 (Live Demo)

- 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.

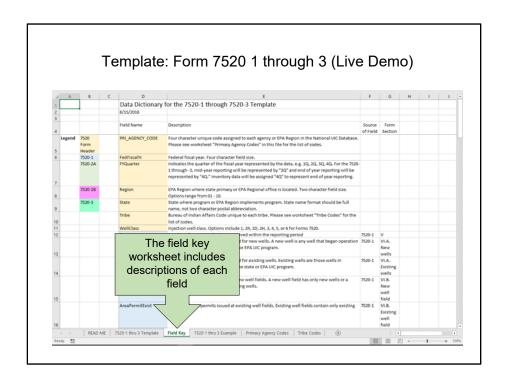
In these slides, we will demonstrate how to use the templates using screenshots of the application in the next several slides.



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.

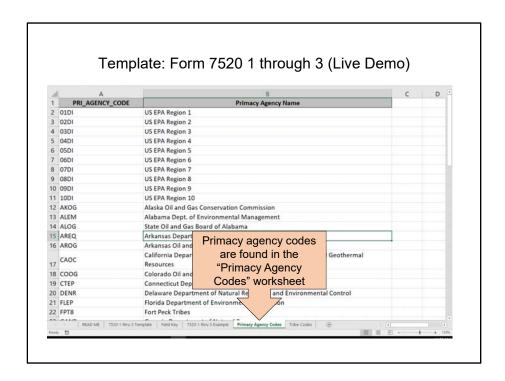
Each of the header data fields will be discussed shortly. It is important to note that in this example, columns A-D, as well as column G, are all required. Either State or Tribe (columns E and F, respectively) must be entered, but not both.

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.

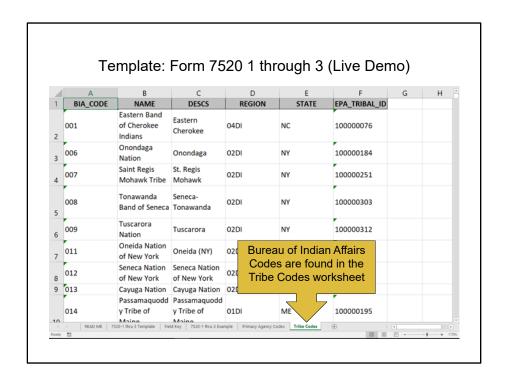


The field key tab includes descriptions of each field in the template, as well as the form and form section that each field corresponds to. Each program can look up their four-character primacy agency code using the Primacy Agency Codes worksheet. Fiscal Year Quarter is either 2Q for mid-year reporting 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.

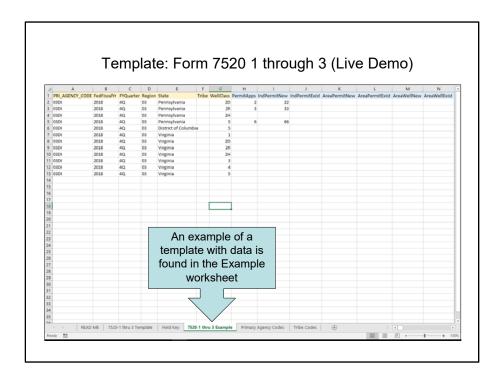
Data elements for 7520 data can all be matched up with the correct box on a 7520 form by using the columns called "Source of Field" and "Form Section".



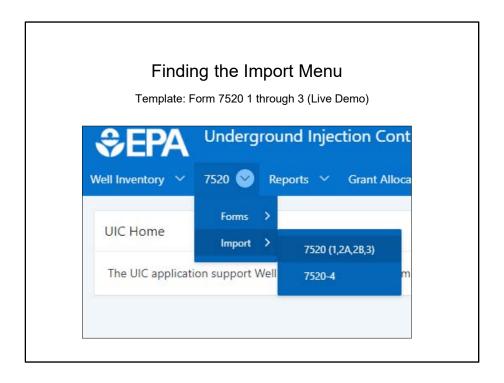
The "Primacy Agency Codes" worksheet lists the four-character codes associated with each primacy agency. These codes are used in the PRI_AGENCY_CODE field on each of the templates.



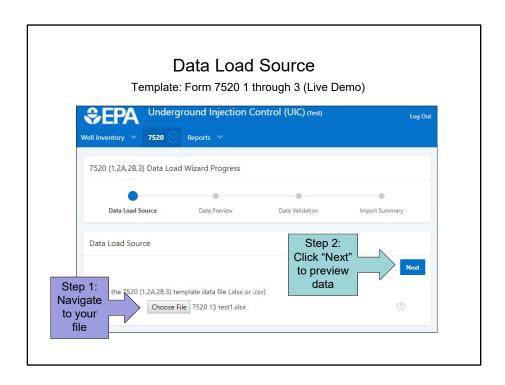
If a record is applicable to a tribe, then the 'Tribe' field on the batch upload templates should contain the BIA code of that tribe. The 'Tribe Codes' worksheet lists the BIA codes of each tribe currently in the database.



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

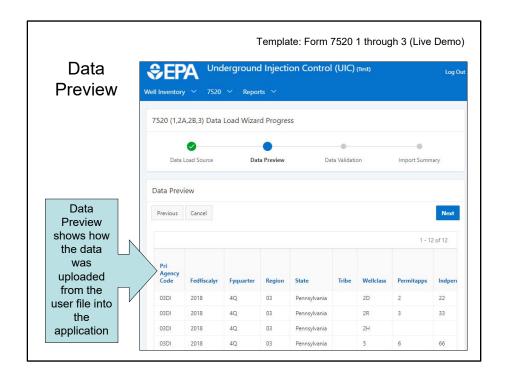


We will now demonstrate how to use the application to upload a batch upload template file that contains data. First, the user will navigate through the drop-down menu for the 7520 module, and select import and then 7520 (1,2A,2B,3).

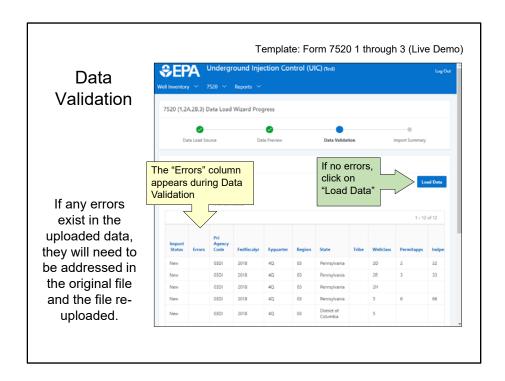


A data load wizard appears that assists the user in uploading data into the application. The user clicks the "Choose File" button and navigates to either a .xlsx or .csv file that contains the data that they would like to batch upload. Once the file is chosen, the user clicks the Next button.

If the user is uploading an Excel spreadsheet (.xlsx), all fields must be in text format for successful import.

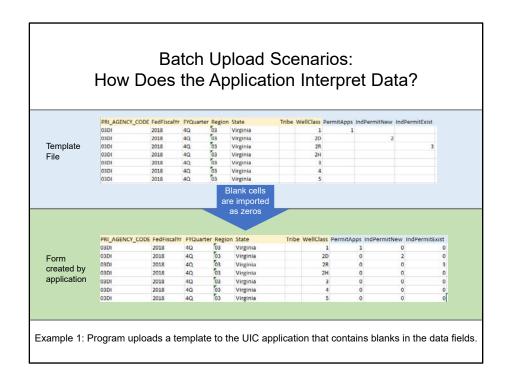


The Data Preview screen shows the user how the application interpreted the file that they uploaded. The user should perform a manual check to make sure that everything appears as desired. When the user is happy with the data preview, clicking the "Next" button will begin the Data Validation stage of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



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.

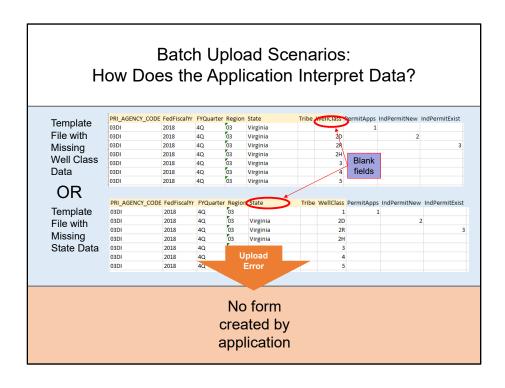


We will now use several examples to show how the application interprets different batch upload files.

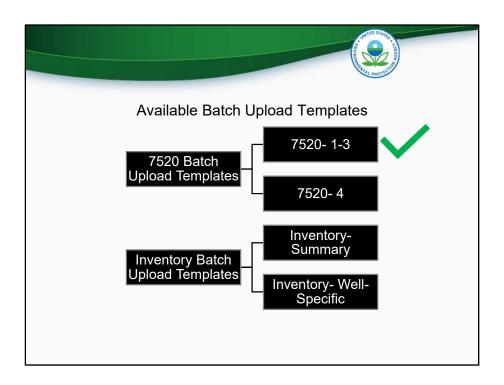
In this example, we can see that blank cells are imported as zeros for the data columns (PermitApps, IndPermitNew, and IndPermitExist). Blank cells in the header data columns (PRI_AGENCY_CODE through WellClass) are not imported as zeros.

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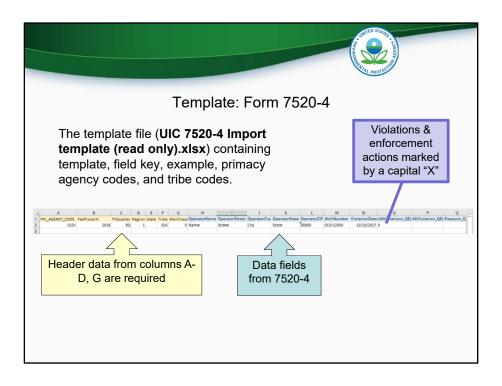
In this example, the user inputs data for class I, but does not input any data for class II-VI. In this example EPA Region 3 (Primacy Agency 03DI) is reporting DI data for Virginia. The application recognizes that EPA Region 3 implements the UIC program for all well classes in Virginia, and automatically creates records will all zeros for the unreported well classes (i.e. class II-VI).



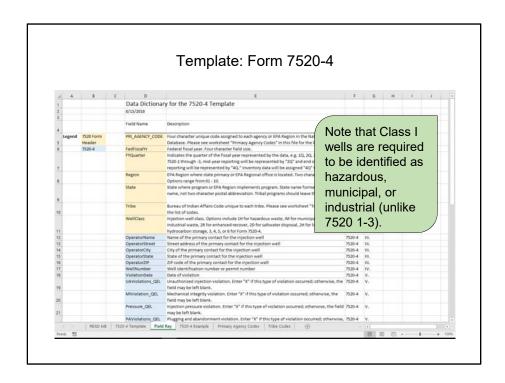
In this example, the user has left required fields in the header section blank. The upload will not be successful, and the application will provide a message identifying the error.



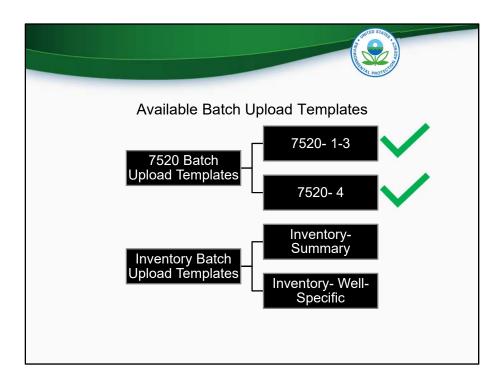
We have now competed a demonstration of how to use the 7520 1-3 batch upload template. Over the next set of slides, the remaining three templates will be discussed. A live demonstration will not be done because the remaining templates are constructed very similarly to the 7520 1-3 template, and the process 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.



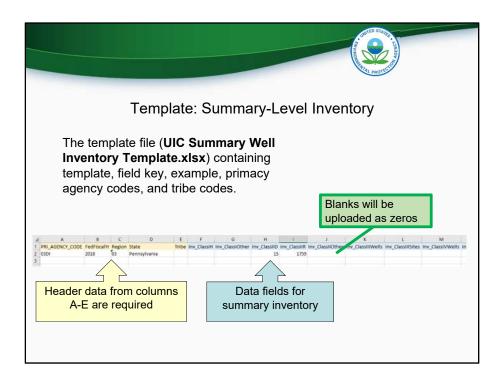
We will now discuss the remaining two batch upload templates, both of which are used for inventory data.



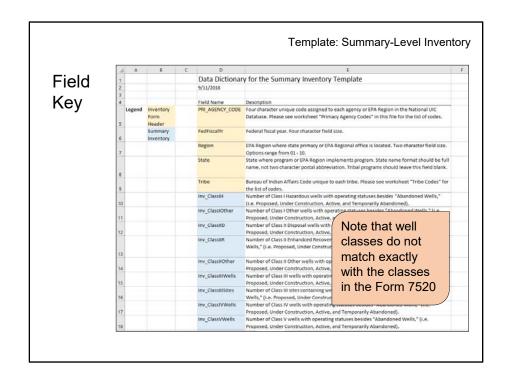
- <u>Total number of wells</u> broken down by
 - Primacy agency
 - Fiscal year
 - State/Tribe
 - Well Class

- <u>Listing of all applicable</u> <u>unique wells</u>
- Application is then able to produce summary-level inventory automatically
- Programs may find it easier to submit wellspecific inventory

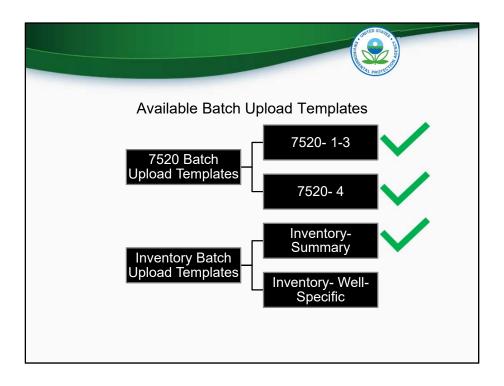
EPA accepts both summary level and well-specific inventory data. A program is able to choose which type of data they submit.



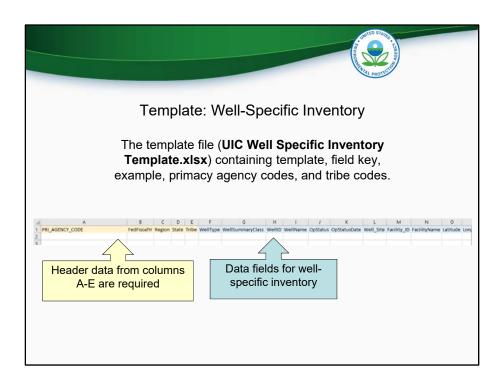
The summary-level inventory template is constructed similarly to the 7520 templates in that it contains both header data and program data. Each row corresponds to a program-state submission for a given year.



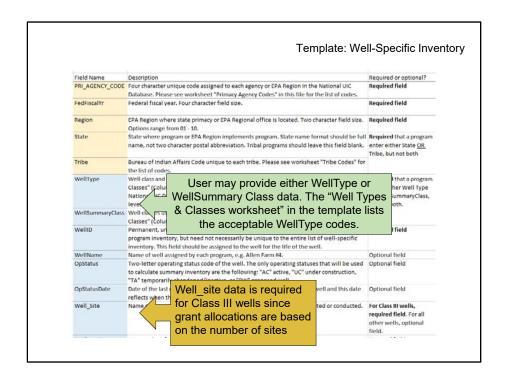
The field key describes the column headings in the summary well inventory template. The well classes used for summary inventory are slightly different than well classes in the Form 7520.



Finally, we will discuss the well-specific inventory upload template.



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.



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.

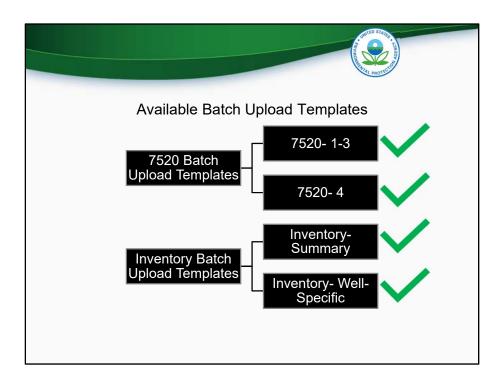
Note that the user has the option of providing WellType or WellSummaryClass. This batch upload template contains a worksheet titled "Well Types & Classes" which provides the list of acceptable choices for these two fields.

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.

	Template: Well-Specific Inventor								
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Types asses well Type code (sheet	Category of Well	Description of Category	Corresponding Injection Well Type in 1987 Report to Congress	Summary Inventory Well Class					
ic ic	CO2 Sequestration	The large majority of CO2 Sequestration wells will be Class VI, but if the state or DI region has assigned another class, it should be reported as such.		CLASS1_OTHER					
1H	Hazardous Industrial			CLASS1_HW					
11	Non-Hazardous Industrial	1		CLASS1_OTHER					
1M	Municipal			CLASS1_OTHER					
1R	Radioactive Waste Disposal			CLASS1_OTHER					
ıw	Drinking Water Treatment Residual	Depending on the well class assigned by the state or DI Region, Drinking Water Treatment Residuals could be Class 1W or 5A23.		CLASS1_HW					
1X	Other			CLASS1_OTHER					
2A	Annular Disposal			CLASS2 OTHER					
2C	CO2 Sequestration	The large majority of CO2 Sequestration wells will be Class VI, but if the state or DI region has assigned another class, it should be reported as such.		CLASS2_OTHER					
20	Produced Fluid Disposal			CLASS2D WELL					
25	Hydraulic Fracturing with Diesel Fuel			CLASS2_OTHER					
2H	Hydrocarbon Storage			CLASS2_OTHER					
2М	Coal Bed Methane Hydro- fracturing wells			CLASS2_OTHER					
2R	Enhanced Recovery			CLASS2R_WELL					
2W	Drinking Water Treatment Residual	Depending on the well class assigned by the state or DI Region, Drinking Water Treatment		CLASS2_OTHER					

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.



Recap

- Data may be entered using webforms or batch upload templates with the new UIC Data Application.
- To use the batch upload functionality, data must be formatted a certain way in either an Excel spreadsheet (.xlsx) or comma-separated value (.csv) file prior to upload to the application.
- Four templates are available (7520 1-3, 7520-4, summary inventory, well-specific inventory).
- The template files contain helpful information for generating templates, including field keys, primacy agency codes, tribe codes, and examples.
- The 'batch upload scenarios' slides illustrate how the application interprets various things when they are uploaded.
- Programs should submit either summary inventory or well-specific inventory, but not both.



Q & A

For any further questions or concerns, please 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