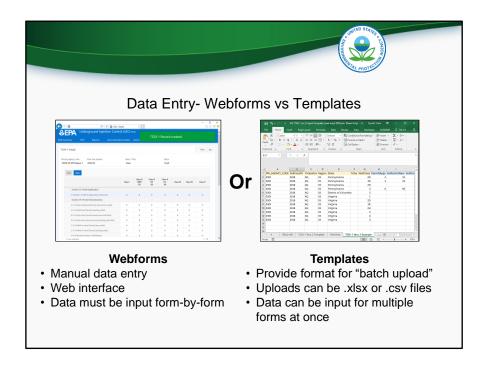


We will now discuss and demonstrate how programs can use the batch upload feature to automatically enter UIC inventory and 7520 data in the application. In order to use the batch upload feature, users will need the four batch upload templates. For convenience, these templates are available for download 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.

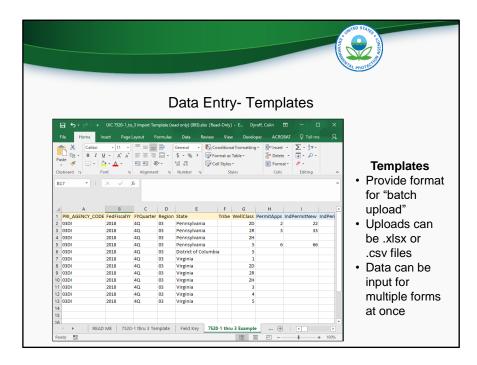
This slides corresponds to the comprehensive training video at time 40:10 (forty minutes and ten seconds).



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

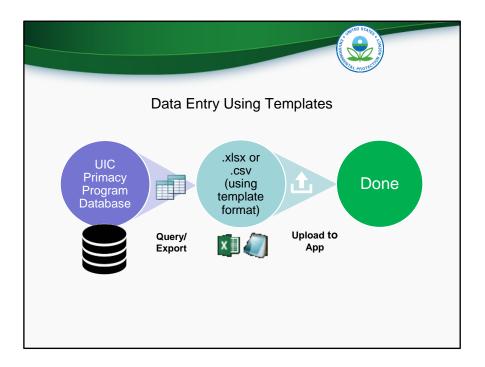
There are two ways that you will be able to enter data into the new application. The first is via webforms, which have already been covered extensively in this training.

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.



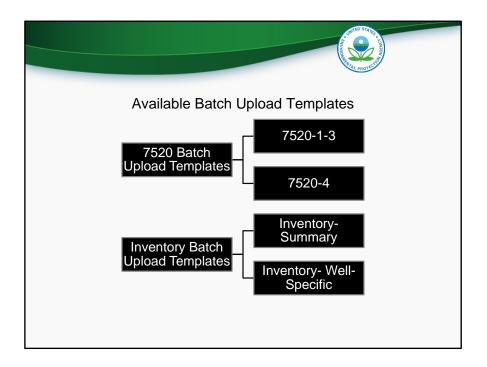
This slide shows a screenshot of a batch upload template file, opened in Microsoft Excel. To use the batch upload function and upload large quantities of data to the application, users can format data as an Excel spreadsheet (.xlsx) or commaseparated value (.csv) file as described in the template files.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

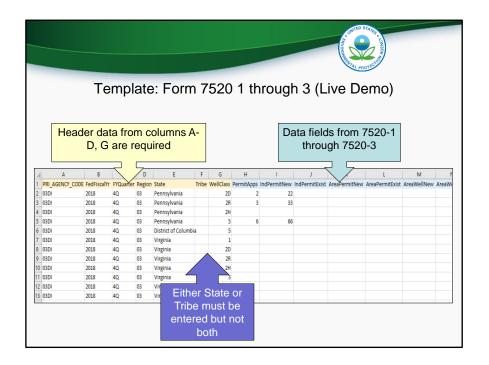


Template: Form 7520 1 through 3 (Live Demo)

- 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.

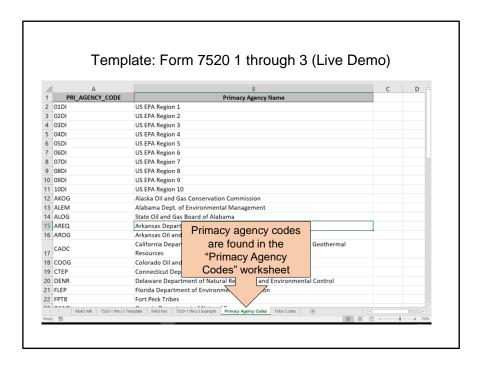
Each of the header data fields will be discussed shortly. It is important to note that in this example, columns A-D, as well as column G, are all required. Either State or Tribe (columns E and F, respectively) must be entered, but not both.

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.

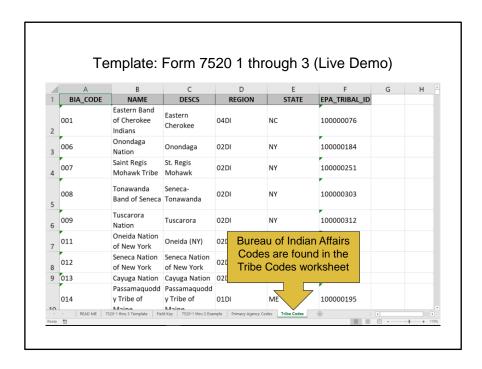
al A	8	c D		· E ·	F	G	н	17	J
1	-1	Data Dictionary	for the 7520-1 through 75	520-3 Template					
2	-	8/15/2018							
3									
4		Field Name	Description		Source of Field	Form Section			
Leger 5	7520 Form Header	PRI_AGENCY_CODE		ned to each agency or EPA Region in the National UIC Database. gency Codes" in this file for the list of codes.					
6	7520-1	FedFiscalYr	Federal fiscal year. Four character						
	7520-2A	FYQuarter	1 through -3, mid-year reporting v	year represented by the data, e.g. 1Q, 2Q, 3Q, 4Q. For the 7520- will be represented by "2Q" and end of year reporting will be ata will be assigned "4Q" to represent end of year reporting.					
7	7520-28	Region	EDA Region where state orimany	or EPA Regional office is located. Two character field size.					
8	1323 23	megicin	Options range from 01 - 10.	a critical annual and annual a					
9	7520-3	State	State where program or EPA Regi- name, not two character postal at						
10		Tribe	Bureau of Indian Affairs Code uni list of codes.	que to each tribe. Please see worksheet "Tribe Codes" for the					
11		WellClass	Injection well class. Options inclu	de 1, 2R, 2D, 2H, 3, 4, 5, or 6 for Forms 7520.					
12				ved within the reporting period	7520-1	V			
13			e field key	I for new wells. A new well is any well that began operation or EPA UIC program.	7520-1	VI.A. New wells			
14			neet includes tions of each	I for existing wells. Existing wells are those wells in le state or EPA UIC program.	7520-1	VI.A. Existing wells			
			field	w well fields. A new well field has only new wells or a ng wells.	7520-1	VI.B. New well			
15		AreaPermitExist	permits issued at	existing well fields. Existing well fields contain only existing	7520-1	field VI.B. Existing well			

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.

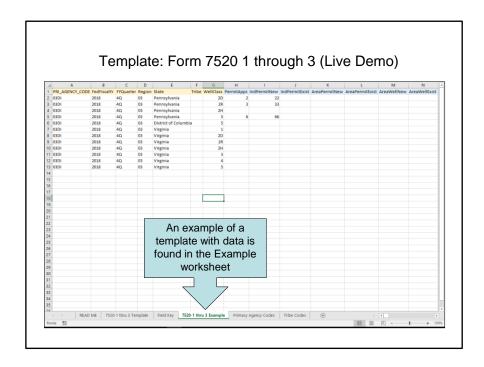
Data elements for 7520 data can all be matched up with the correct box on a 7520 form by using the columns called "Source of Field" and "Form Section".



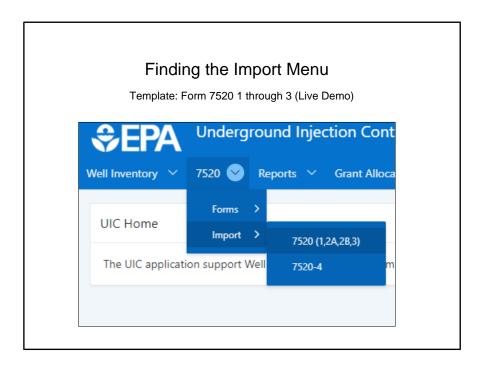
The "Primacy Agency Codes" worksheet lists the four-character codes associated with each primacy agency. These codes are used in the PRI_AGENCY_CODE field on each of the templates.



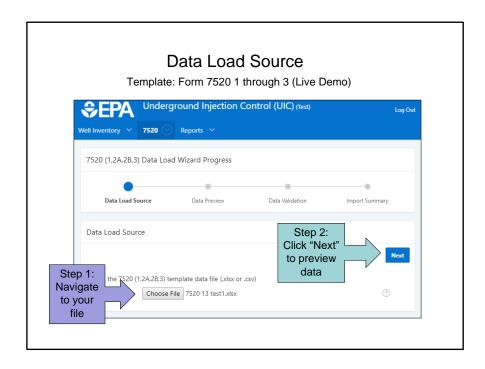
If a record is applicable to a tribe, then the 'Tribe' field on the batch upload templates should contain the BIA code of that tribe. The 'Tribe Codes' worksheet lists the BIA codes of each tribe currently in the database.



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

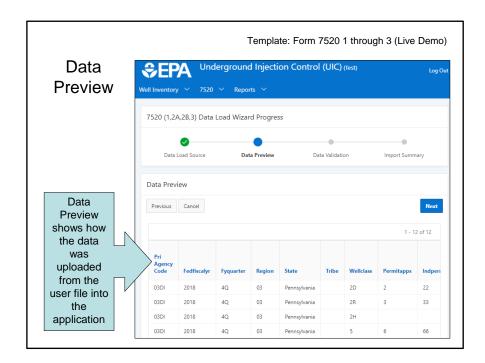


We will now demonstrate how to use the application to upload a batch upload template file that contains data. First, the user will navigate through the drop-down menu for the 7520 module, and select import and then 7520 (1,2A,2B,3).

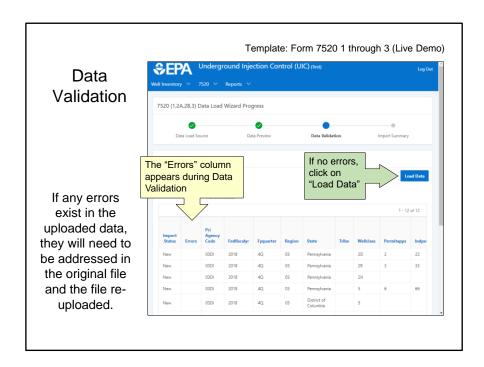


A data load wizard appears that assists the user in uploading data into the application. The user clicks the "Choose File" button and navigates to either a .xlsx or .csv file that contains the data that they would like to batch upload. Once the file is chosen, the user clicks the Next button.

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.

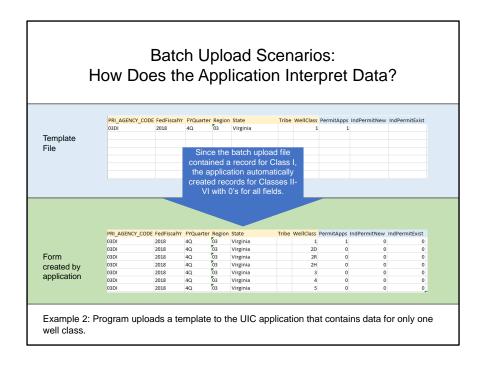
If errors exist, the user will need to correct them in their batch upload file and start the process over. The 'Load Data' button will only appear if there are zero errors. Press the Load Data button to complete the batch upload process.

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.

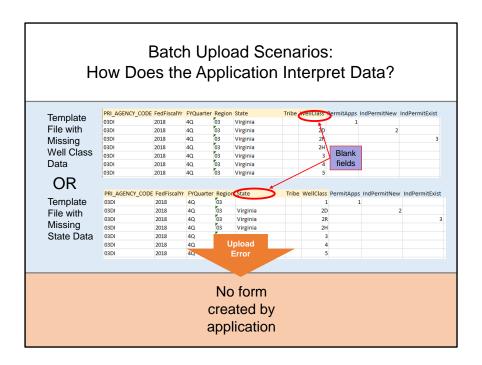
How							t Data	?
DDI ACENCY	CODE EndEisselve	EVOund	r Bogion	State	Tribo WallClass	DormitAnns Inc	DormitNow IndDo	.emitEvict
							permitivew indre	rmitexist
				-		-	2	
03DI	2018	4Q	03		2R		-	3
03DI	2018	4Q	03	Virginia	2H			
03DI	2018	4Q	03	Virginia	3			
03DI	2018	4Q	03	Virginia	4			
03DI	2018	4Q	03	Virginia	5			
				as zeros				
PRI AGENCY	CODE FedFiscalY	r FYQuar	ter Regio	n State	Tribe WellCla	ss PermitApps	IndPermitNew In	ndPermitExist
03DI	2018	4Q	03	Virginia		1 1	. 0	0
03DI	2018	4Q	03	Virginia		2D 0	2	0
	2018	4Q	03	Virginia		2R 0	0	3
03DI	2018		03	Virginia		2H 0	0	0
03DI 03DI	2018	4Q	03					
		4Q 4Q	03	Virginia		3 0	0	0
03DI	2018			Virginia Virginia		3 0	-	0
	PRI_AGENCY_ 03DI 03DI 03DI 03DI 03DI 03DI 03DI 03DI	PRI_AGENCY_CODE FEdFiscalYY G3D1 2018 C3D1 2018 2018 2018 2018 2018 2018 2018 2018 2018	PRI_AGENCY_CODE FedFiscalYr PYQuarte O3DI 2018 4Q O3DI 2018 AQ O3DI O3DI 2018 AQ O3DI 2018 AQ O3DI 2018 AQ O3DI O3DI 2018 AQ O3DI 2018 AQ O3DI 2018 AQ O3DI O3DI 2018 AQ O3DI 2018 AQ O3DI 2018 AQ O3DI O	PRI_AGENCY_CODE_FedFiscallyr_FYQuarter_Region 2018	How Does the Applicate Region State PRI_ASENCY_CODE_FedFiscalYY_FYQuarter_Region_State 03D1	PRI_AGENCY_CODE FedFiscalYr PrQuarter Region State Tribe WellClass GaDi 2018 4Q 63 Virginia 1 03Di 2018 4Q 63 Virginia 2D 03Di 2018 4Q 63 Virginia 2P 03Di 2018 4Q 63 Virginia 2P 03Di 2018 4Q 63 Virginia 2P 03Di 2018 4Q 63 Virginia 3 3 03Di 2018 4Q 63 Virginia 3 4 03Di 2018 4Q 63 Virginia 4 03Di 2018 4Q 63 Virginia 5 03Di 2Di 2D	PRI_AGENCY_CODE FedFiscalYr FYQuarter Region State	PRI_AGENCY_CODE FedFiscallYF PrQuarter Region State Tribe WellClass PermittApps IndPermittNew In

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

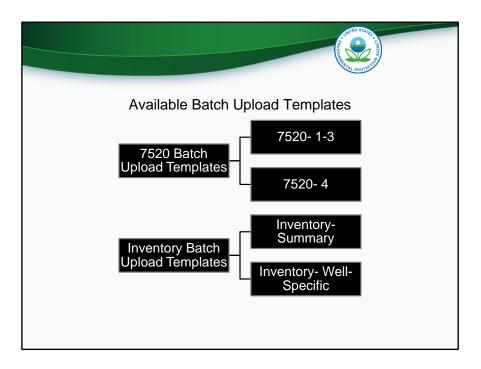
In this example, we can see that blank cells are imported as zeros for the data columns (PermitApps, IndPermitNew, and IndPermitExist). Blank cells in the header data columns (PRI_AGENCY_CODE through WellClass) are not imported as zeros.



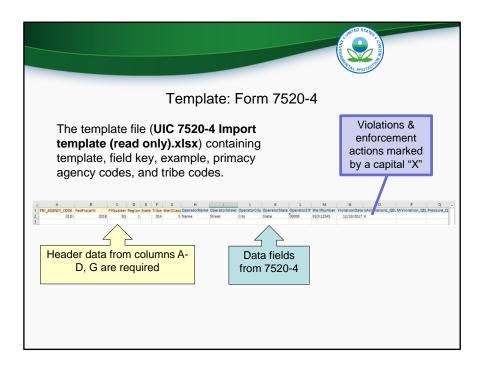
In this example, the user inputs data for class I, but does not input any data for class II-VI. In this example EPA Region 3 (Primacy Agency 03DI) is reporting DI data for Virginia. The application recognizes that EPA Region 3 implements the UIC program for all well classes in Virginia, and automatically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



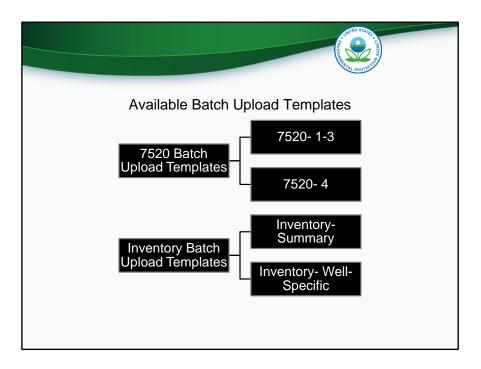
We have now competed a demonstration of how to use the 7520 1-3 batch upload template. Over the next set of slides, the remaining three templates will be discussed. A live demonstration will not be done because the remaining templates are constructed very similarly to the 7520 1-3 template, and the process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

				Template: Form 7520-4						
				1 emplate. 1 om 1 320-4						
A	A	8	C D	E	F	G	н	- 1:	1	
1			Data Dictiona	ry for the 7520-4 Template						
2			8/15/2018	i						
2										
			Field Name	Description	Source	Form				
4				1 29 9	of Field	Section				
	egend	7520 Form	PRI_AGENCY_CODE							
5		Header		Database. Please see worksheet "Primacy Agency Codes" in this file for the list of codes.						
6		7520-4	FedFiscalYr	Federal fiscal year. Four character field size.						
			FYQuarter	Indicates the quarter of the fiscal year represented by the data, e.g. 1Q, 2Q, 3Q, 4Q. For the						
				7520-1 through -3, mid-year reporting will be represented by "2Q" and end of year						
7				reporting will be represented by "4Q." Inventory data will be assigned "4Q" to represent						
			Region	EPA Region where state primacy or EPA Regional office is located. Two character field size.						
8			State	Options range from 01 - 10. State where program or EPA Region implements program. State name format should be full						
			State	name, not two character postal abbreviation. Tribal programs should leave this field blank.						
9				name, not two character postal appreviation. Tribal programs should leave this field blank.						
2			Tribe	Bureau of Indian Affairs Code unique to each tribe, Please see worksheet "Tribe Codes" for						
10			IIIDE	the list of codes.						
-			WellClass		7520-4	0.				
				industrial waste, 2R for enhanced recover, 2D for saltwater disposal, 2H for liquid						
11				hydrocarbon storage, 3, 4, 5, or 6 for Form 7520-4.						
12			OperatorName	Name of the primary contact for the injection well	7520-4	III.				
13			OperatorStreet	Street address of the primary contact for the injection well	7520-4	III.				
14			OperatorCity	City of the primary contact for the injection well	7520-4	III.				
15			OperatorState	State of the primary contact for the injection well	7520-4	HI.				
16			OperatorZIP	ZIP code of the primary contact for the injection well	7520-4	III.				
17			WellNumber	Well identification number or permit number	7520-4	IV.				
18			ViolationDate	Date of violation	7520-4	V.				
			UAViolations_QEL	Unauthorized injection violation. Enter "X" if this type of violation occurred; otherwise, the	7520-4	V.				
19				field may be left blank.						
20			MIViolation_QEL	Mechanical integrity violation. Enter "X" if this type of violation occurred; otherwise, the field may be left blank.	7520-4	V.				
			Pressure QEL	Injection pressure violation. Enter "X" if this type of violation occurred; otherwise, the field	7520-4	V.				
21				may be left blank.		0.55				
			PAViolations QEL	Plugging and abandonment violation. Enter "X" if this type of violation occurred; otherwise,	7520-4	V.				
		READ ME		Key 7520-4 Example Primacy Agency Codes Tribe Codes (+)		[4]			-	
		THE PARTY	Tres	and the codes (i)		THE IN	[III]			

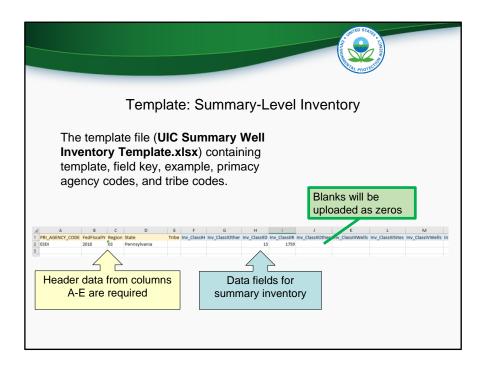
This is the field key for the 7520-4 template. Note that Class I wells are required to be identified as hazardous, municipal, or industrial, per the instructions on the back of the 7520-4. This is different than with the 7520-1 through -3 template, where Class I wells were not broken out into subtypes.



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



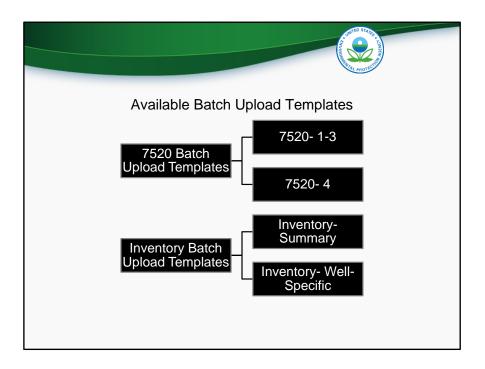
EPA accepts both summary level and well-specific inventory data. A program is able to choose which type of data they submit.



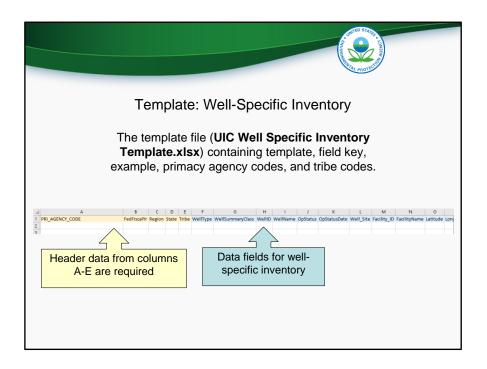
The summary-level inventory template is constructed similarly to the 7520 templates in that it contains both header data and program data. Each row corresponds to a program-state submission for a given year.

	2	A	В	С	D		E				
-: ala	-				ata Dictionar	y for the Summary Inventory	Template				
Field	2				1/2018	, to the summary memory	· on part				
	3										
Sey	4				ld Name	Description					
toy	5	Legend	Inventory Form Header	PRI	_AGENCY_CODE		to each agency or EPA Region in the National UIC macy Agency Codes" in this file for the list of codes.				
	6		Summary Inventory	Fed	dFiscalYr	Federal fiscal year. Four character field :	d size.				
	7		,	Reg	gion	EPA Region where state primacy or EPA Options range from 01 - 10.	A Regional office is located. Two character field size.				
	8			Sta	te	State where program or EPA Region imp	elements program. State name format should be full stion. Tribal programs should leave this field blank.				
	9			Trib	be	Bureau of Indian Affairs Code unique to the list of codes.	each tribe. Please see worksheet "Tribe Codes" for				
	10			Inv	_ClassIH	Number of Class I Hazardous wells with (i.e. Proposed, Under Construction, Acti	operating statuses besides "Abandoned Wells," ve, and Temporarily Abandoned).				
	11			Inv	_ClassIOther	Number of Class I Other wells with oper Proposed, Under Construction, Active, a	ating statuses besides "Abandoned Wells." (i.e.				
	12			Inv	_ClassIID	Number of Class II Disposal wells with Proposed, Under Construction, Active,	Note that well				
	13			Inv	_ClassIIR	Number of Class II Enhandced Recover Wells," (i.e. Proposed, Under Construc	classes do not				
	14			Inv	_ClassIIOther	Number of Class II Other wells with op- Proposed, Under Construction, Active,	match exactly				
	15			Inv	_ClassIIIWells	Number of Class III wells with operatin Proposed, Under Construction, Active,	with the classes				
	16			Inv	_ClassIIISites	Number of Class III sites containing we Wells," (i.e. Proposed, Under Construc	in the Form 7520				
	17			Inv	_ClassIVWells	Number of Class IV wells with operating Proposed, Under Construction, Active, a	and Temporarily Abandoned).				
				Inv	ClassVWells	Number of Class V wells with operating	statuses besides "Abandoned Wells," (i.e.				

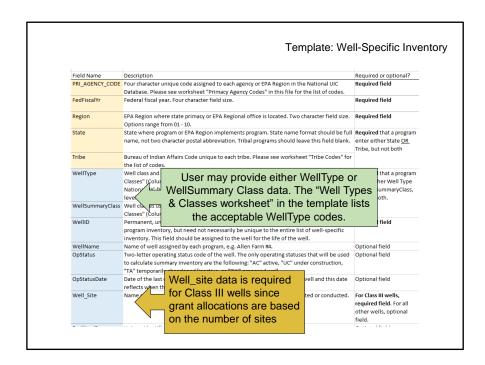
The field key describes the column headings in the summary well inventory template. The well classes used for summary inventory are slightly different than well classes in the Form 7520.



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.

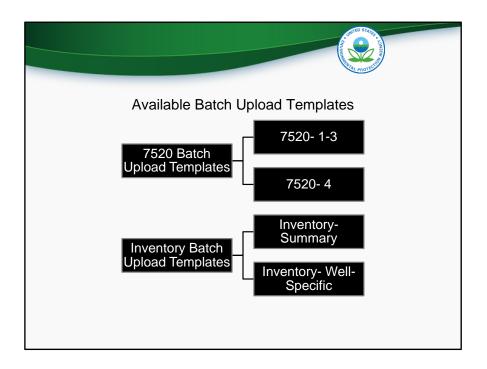
Note that the user has the option of providing WellType or WellSummaryClass. This batch upload template contains a worksheet titled "Well Types & Classes" which provides the list of acceptable choices for these two fields.

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 Invento					
	ь		U				
Des well Type Code eet	Category of Well	Description of Category	Corresponding Injection Well Type in 1987 Report to Congress	Summary Inventory Well Class			
1C	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			CLASS1_OTHER			
1M	Municipal			CLASS1_OTHER			
1R	Radioactive Waste Disposal			CLASS1_OTHER			
1W	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			
2D	Produced Fluid Disposal			CLASS2D_WELL			
2F	Hydraulic Fracturing with Diesel Fuel			CLASS2_OTHER			
2H	Hydrocarbon Storage			CLASS2_OTHER			
2M	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.