GC-859 Nuclear Fuel Data Survey Web-Application User Manual

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GC-859 Nuclear Fuel Data Survey

Apr 12, 2023

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This user manual documents the step-by-step instructions for using the web-application of the Nuclear Fuel Data Survey Form GC-859 to enter the data requested in Schedules A-F of the survey form. These instructions are written for a survey respondent (also referred to as a "user" of the web application) and it is assumed that respondents have registered for access to the web application and are able to access the data entry screens for their facility or facilities.

After logging into the portal and selecting the appropriate facility, the user will be prompted to enter data sequentially for each section. A user can exit the sequential process by clicking on the green "My GC-859" button at the upper left-hand part of the screen, circled below in red (1) in Fig. 1 and the user can click on any section of any schedule to enter data for that schedule. If the user wishes to return to the sequential data entry they can click on the green "Return to last GC859 data entry point", circled in the lower left-hand corner in Fig. 1 below (2).

User can revert all changes by clicking "Reset to Base Data" circled below in red (3). This option can be used when entering data for practice or if user wants to correct a mistake. For details on reset steps see section *Reset to Base Data*.

On the input form some of the entries are required and some maybe optional. The required fields are discussed in *Required Entries*.

In cases with no new data to report for example for plants that were shutdown for an extended period of time a fast track submission is available as discussed in section *Fast Track Submission*.

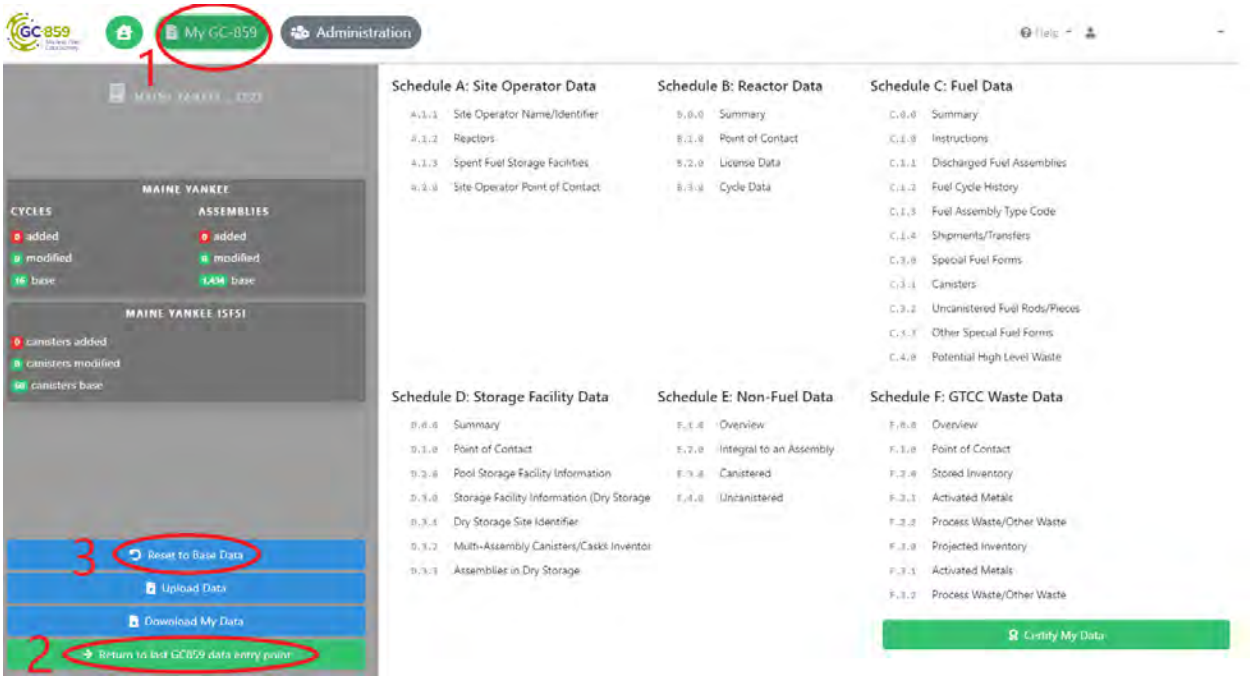


Fig. 1: "My GC-859" Screen

The sequential data entry process will be discussed within the following subsections of this manual:

CHAPTER

ONE

SCHEDULE A: SITE OPERATOR DATA

After the user clicks on the "get started" button from the welcome page, they will be taken to the Schedule A page to enter information for Schedule A for site operating data as shown in Fig. 1.1.

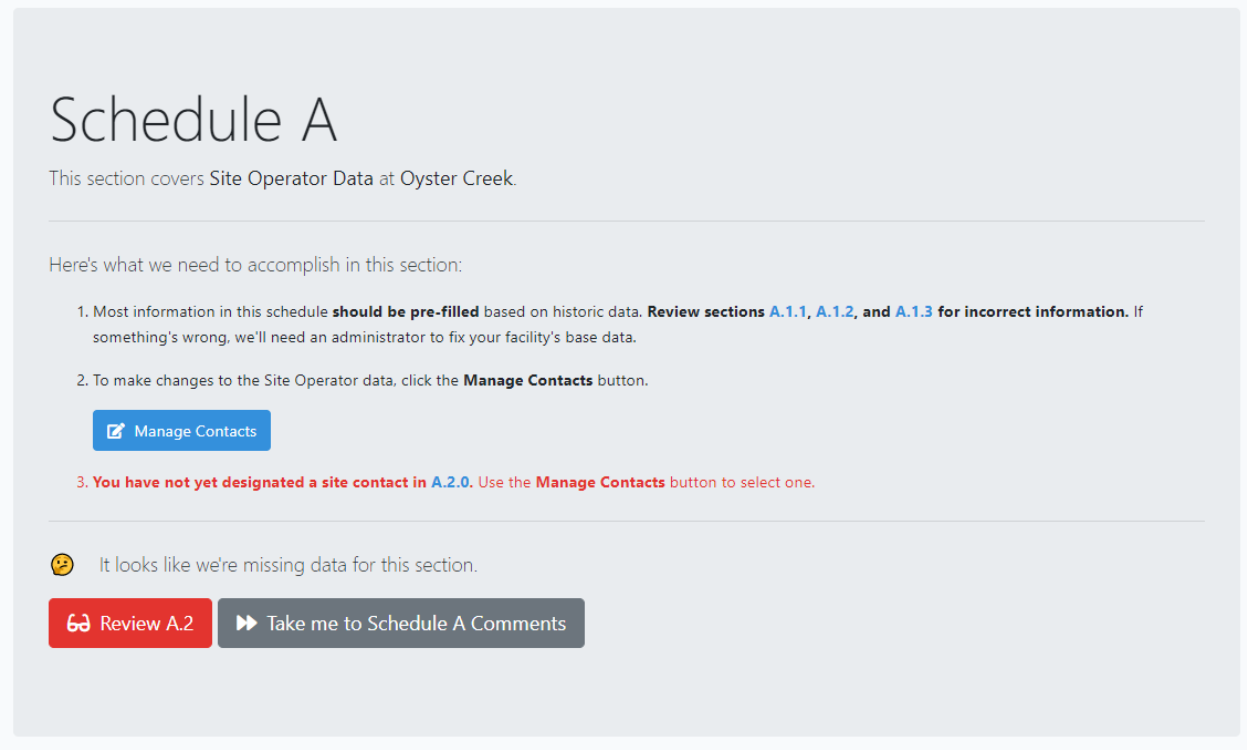


Fig. 1.1: Schedule A Site Operator Data

If the user has access to multiple facilities, they can click on the upper left-hand text circled below in Fig. 1.2 which also shows the drop-down menu. In this example case, it shows that the user has access to "Diablo Canyon" and "Humboldt Bay" facilities.

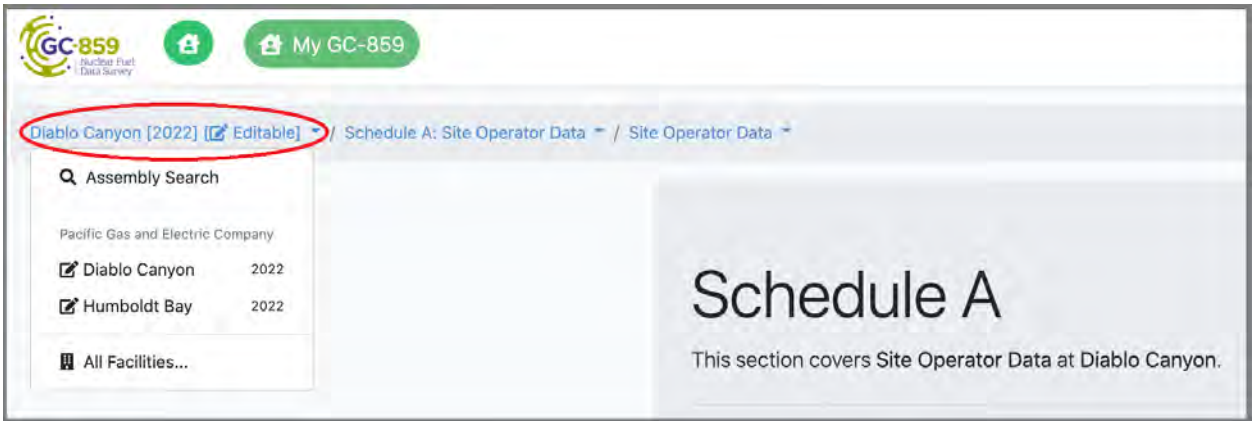


Fig. 1.2: Example Access Menu for Other Facilities

While editing a table within the schedule, the user can click on the "GC-859 Form" link near the top of the page to return to the last page or the beginning of a new schedule as shown in Fig. 1.3.

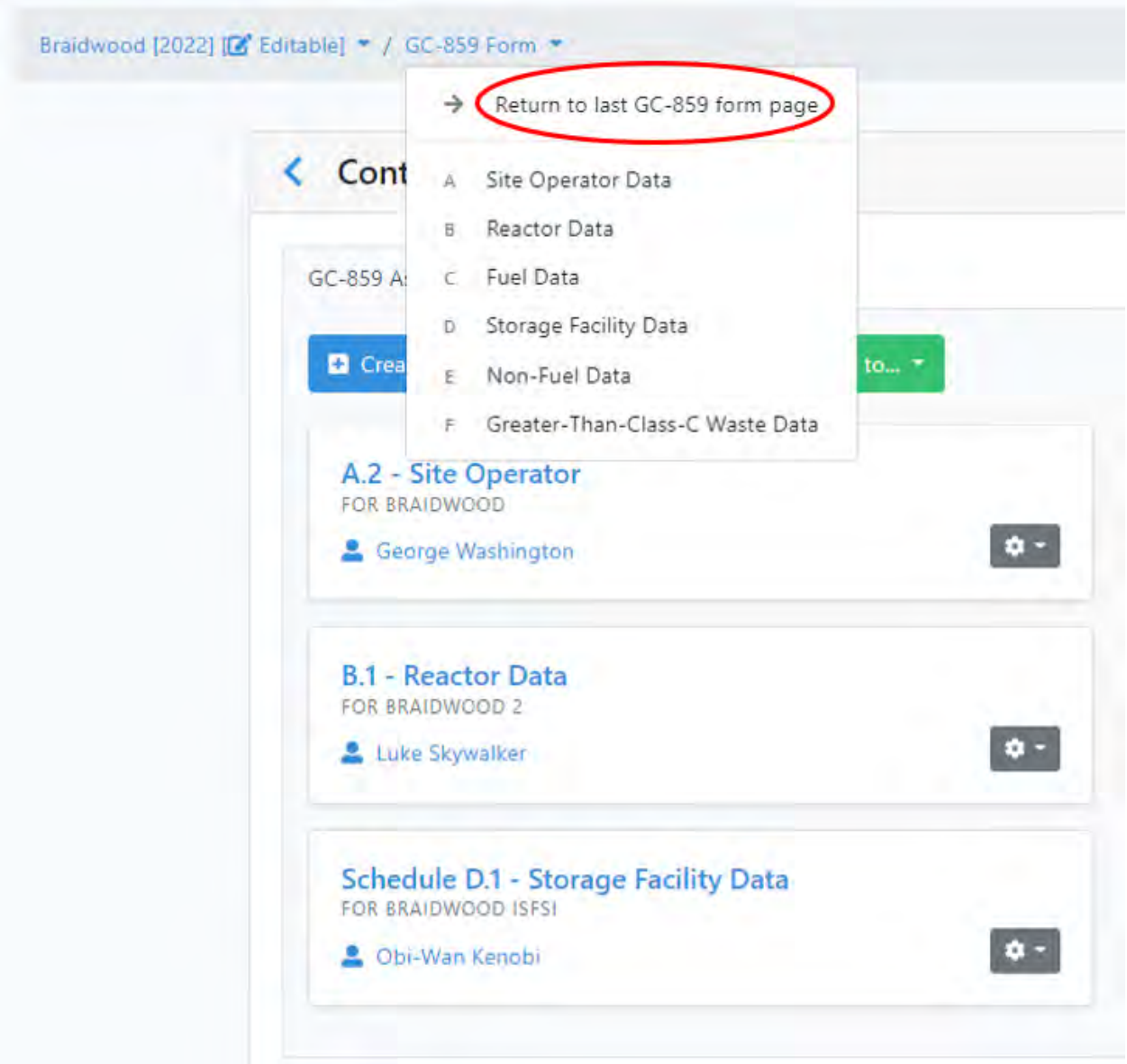


Fig. 1.3: GC-859 Link to Return to Last Page or Beginning of New Section

To enter contact information, the user needs to click the blue "Manage Contacts" button shown in Fig. 1.1 and Fig. 1.2. Once they click this button the "Contact Management" screen in Fig. 1.4 will show. To create a contact the user clicks on the blue "Create Contact" button in the upper left. This will bring them to a menu where they enter contact information as shown in Fig. 1.5.

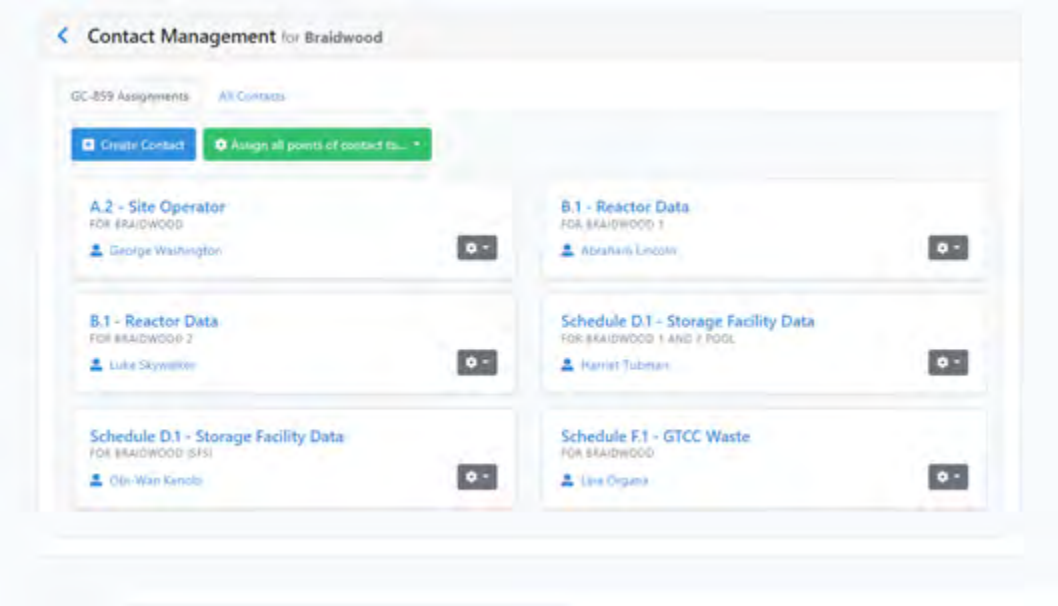


Fig. 1.4: Schedule A Contact Management

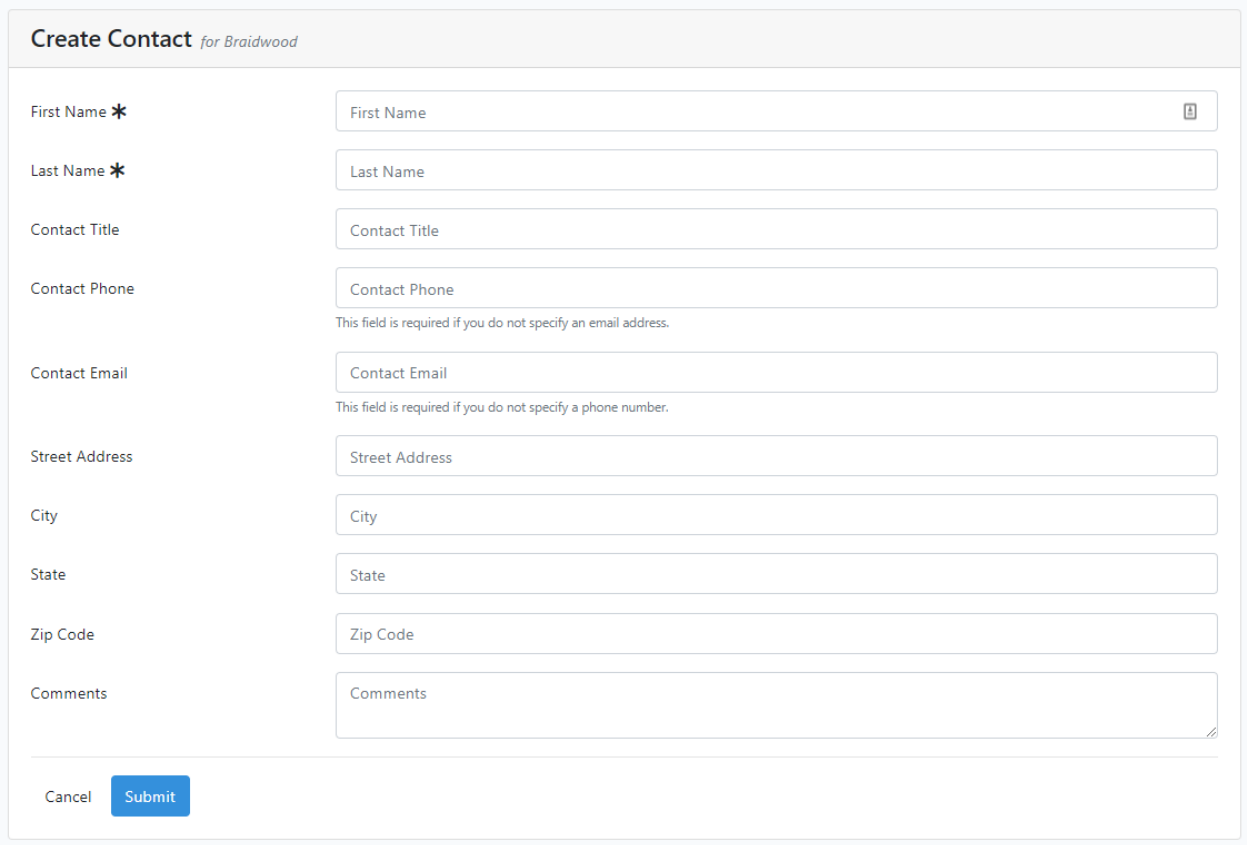


Fig. 1.5: Schedule A Create Contact Form

Once contact information is entered, the user can assign a separate contact for each GC-859 schedule by clicking the

gray gear button which will show a drop-down menu with a list of available contacts to assign this schedule to as shown in Fig. 1.6.

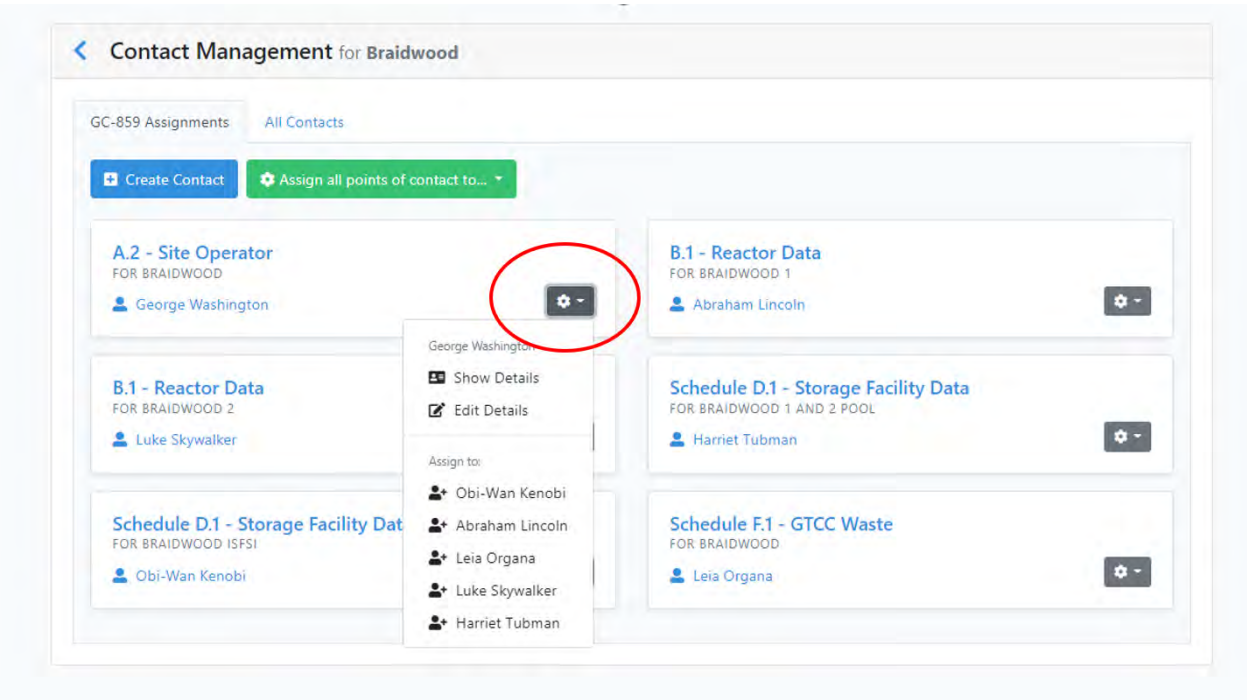


Fig. 1.6: Schedule A Assign Contact for Each GC-859 Schedule

Alternatively, the same contact can be assigned to all schedules by clicking on the green “Assign all points of contact to..” button as shown in Fig. 1.7.

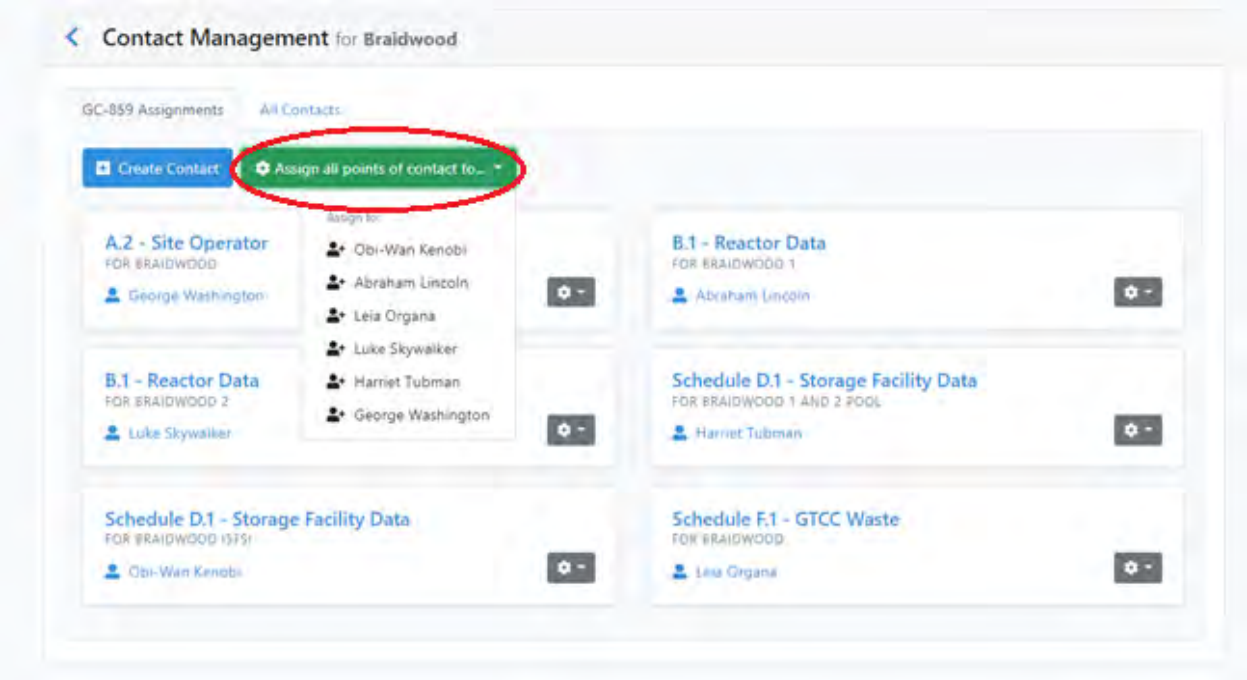


Fig. 1.7: Schedule A Assign All Points of Contact

After all contacts have been assigned. The user can click on the blue back button next to "Contact Management" to exit this section as shown in Fig. 1.8.

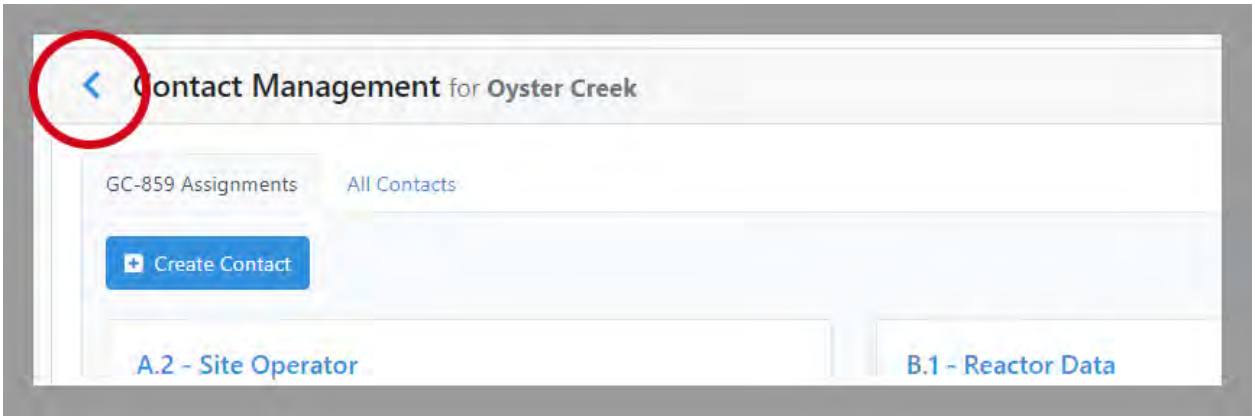


Fig. 1.8: Contact Information Completion

1.1 Schedule A Comments

Next, user can proceed to the comment section using the grey button "Take me to Schedule A Comments" shown above in Fig. 1.1. Provide any comments you have concerning Site Operator Data (Section A.1, A.2, A.3) and label your comments by the Schedule and Item Number to which they refer. To enter and edit comments click the "Edit Comments" button in Fig. 1.9. After completing comments proceed to Schedule B.

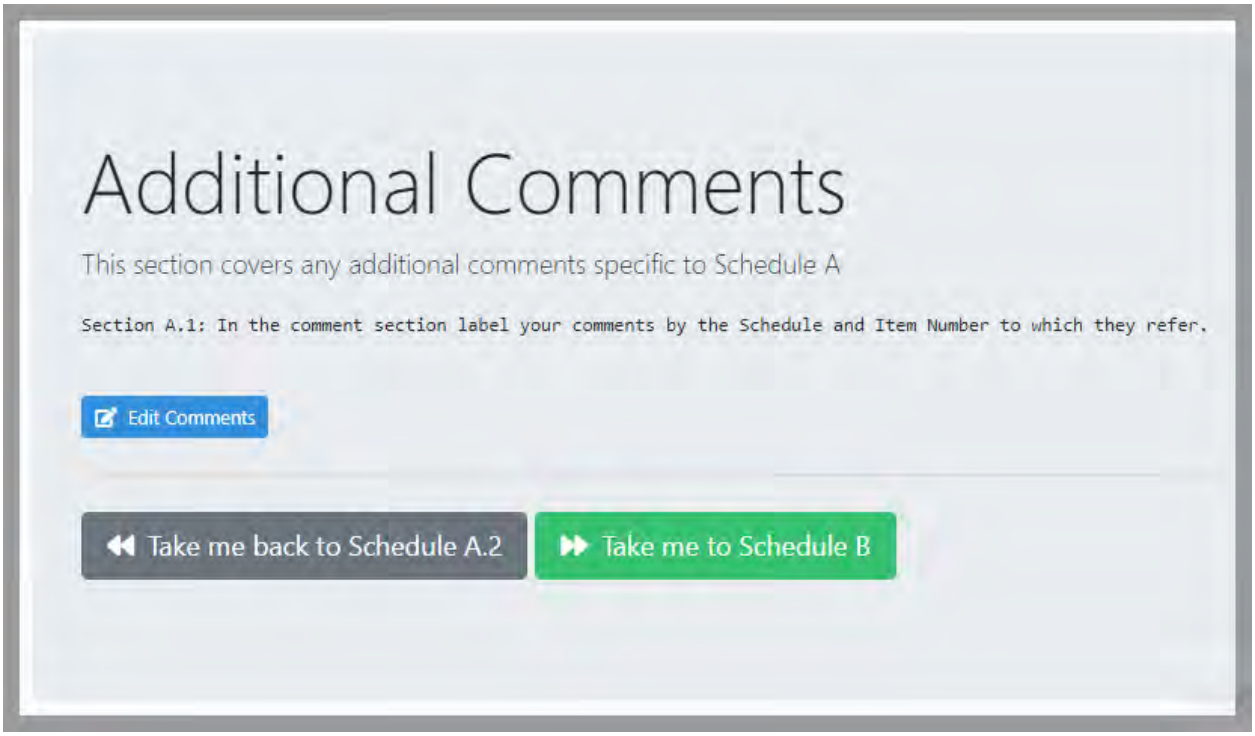


Fig. 1.9: Schedule A Comment Section

CHAPTER

TWO

SCHEDULE B: REACTOR DATA

After completing comments and exiting the "Contact Management" section, the user can click on the green "Take me to Schedule B" to begin Schedule B. This will bring them to the screen shown in Fig. 2.1. The counters show a high-level summary of what's included in the base data, and how much information you've provided. After reviewing the summary users can proceed to Schedule B.1.

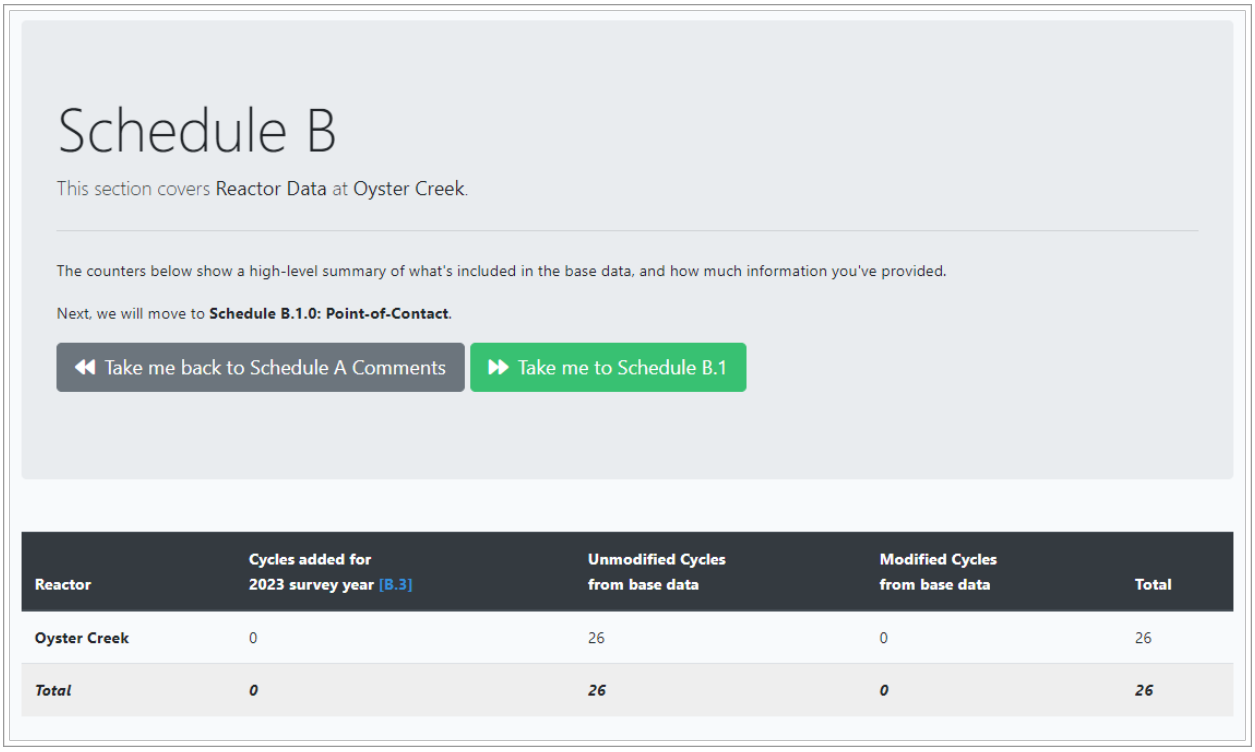


Fig. 2.1: Reactor Data Front Screen

In Schedule B.1 users can review and update the Point of Contact for each reactor on site Fig. 2.2.

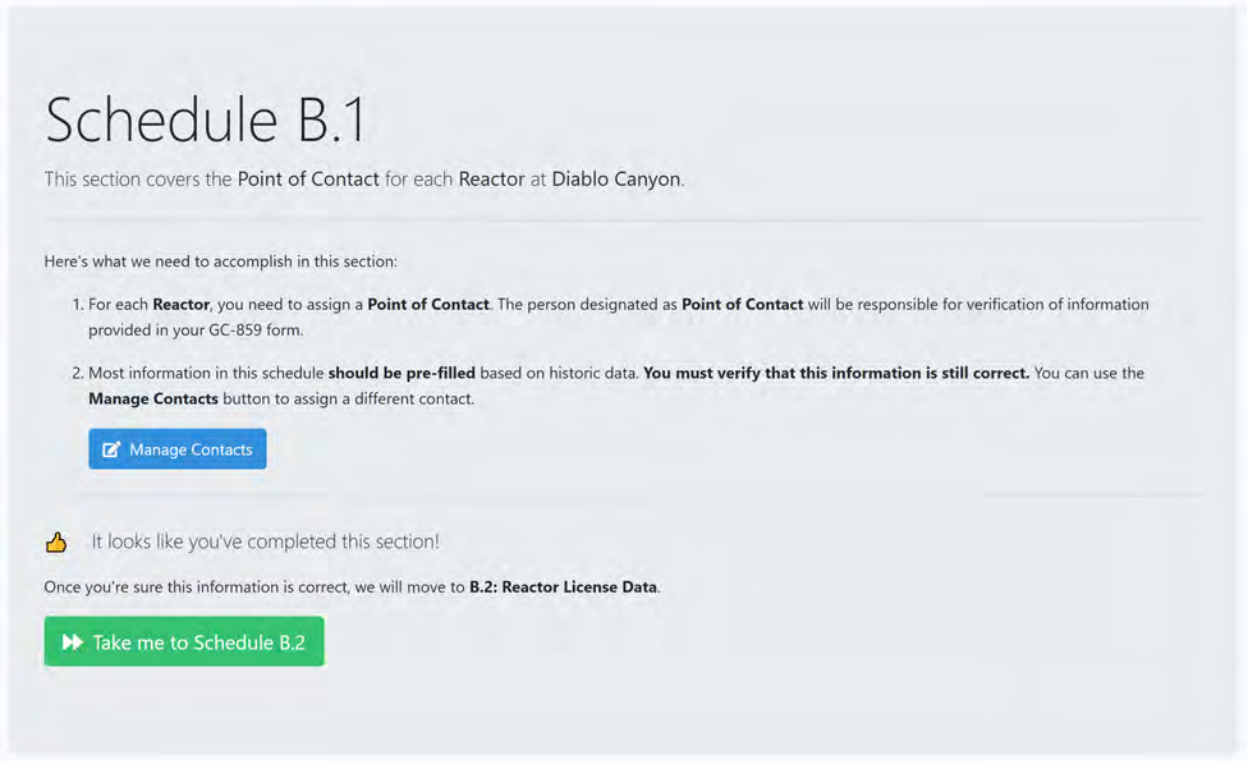


Fig. 2.2: Point of Contact Front Screen

Once the user has completed entering or verifying the reactor contact information they can enter Schedule B.2 by clicking on the green "Take me to Schedule B.2" button shown in Fig. 2.2 which will take them to the screen shown in Fig. 2.3.

By scrolling down the screen in Fig. 2.3 the user will be able to see the reactor license data that has already been entered for the facility shown. Item B.2.2, "NRC License Expiration Date" and Item B.2.3 "NRC License Type" can both be changed by clicking on the blue hyperlink for each of these items circled in Fig. 2.3 in the case where there was a license extension or the facility was decommissioned and the license changes from an "operating" license to a "possession only" license. On this page, users can also provide a shutdown date for a shutdown site. For operating sites, please provide a projected shutdown date if that information is available at this time.

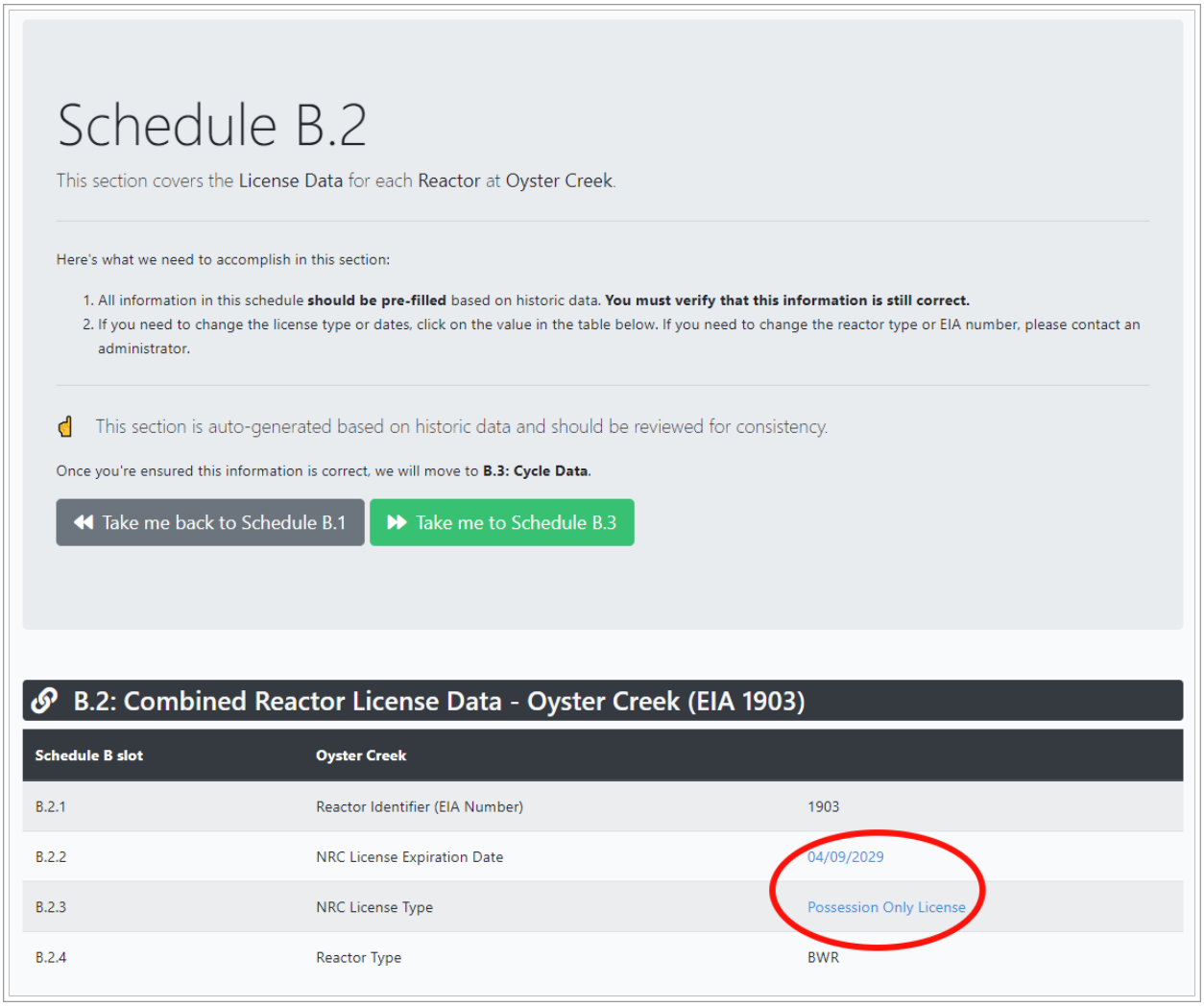


Fig. 2.3: Schedule B License Data Front Screen

Once the License Data has been verified in Schedule B.2, the user can click on the green "Take me to Schedule B.3" button as shown in Fig. 2.3 . This will take the user to the cycle data screen shown in Fig. 2.4. Information for previous reactor cycles is provided for review and is shown in Fig. 2.4. Clicking on the hyperlinks at the bottom left of Fig. 2.4 allows the user to edit the information for previous cycles. It is possible to add data for single cycles via a web interface or download a form that can be filled out and uploaded for one or more cycles. In Fig. 2.4 the blue button on the left, "Add Cycle via Web Interface" opens up a menu for adding individual cycles and the "Upload Data" button allows for uploading a comma-separated value (CSV) file with one or more cycles in it.

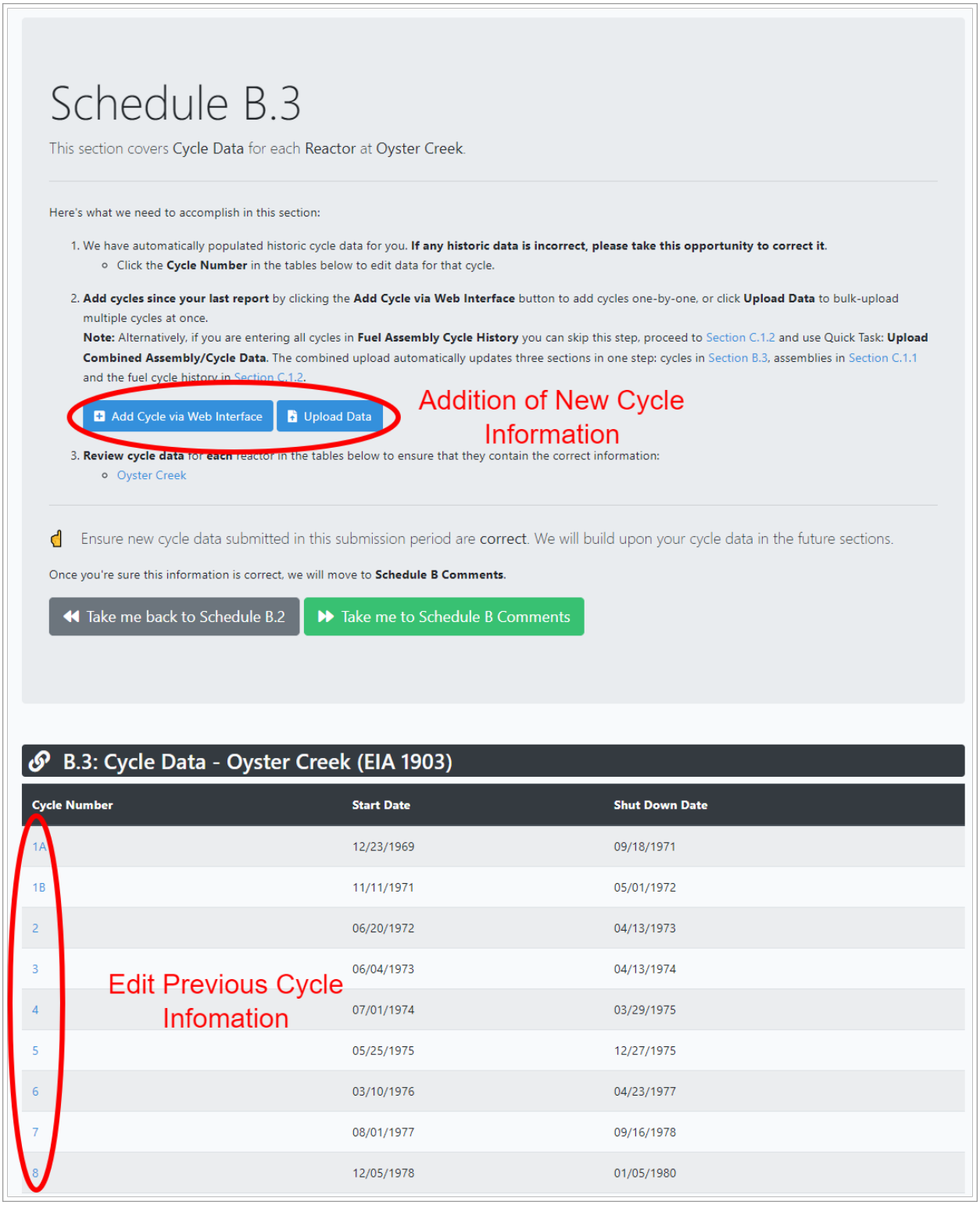


Fig. 2.4: Schedule B.3 Cycle Data Front Screen

Clicking the "Add Cycle via Web Interface" button on the screen opens the form shown in Fig. 2.5, which allows for manual entry of cycle data. Many of the forms provided in the web application provide consistency checking for the

data entered by the user. An example of the error checking provided by the interface is shown in Fig. 2.6. In this example the user enters the same cycle number that has already been used and the system returns an error message.

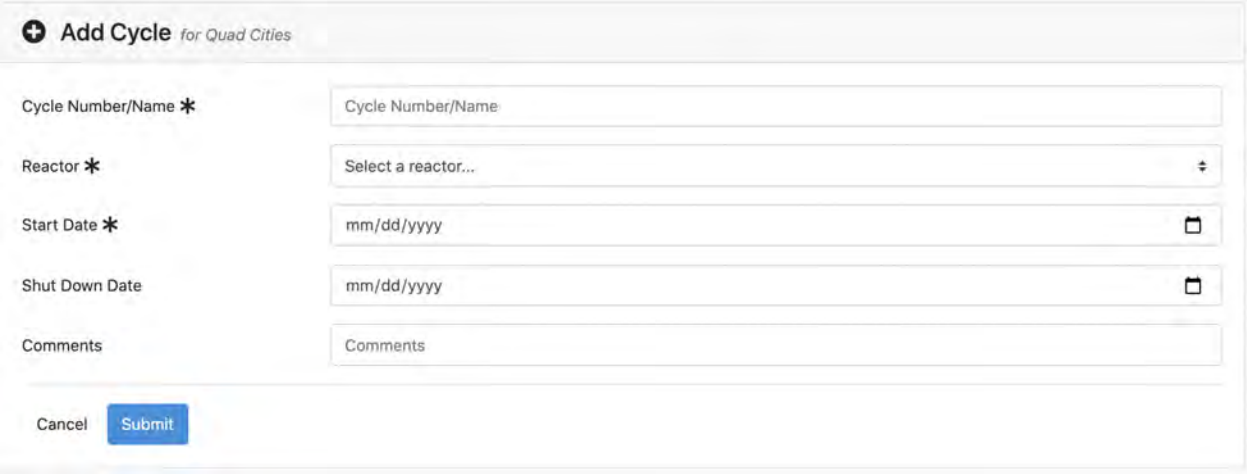


Fig. 2.5: Schedule B.3 Add Cycle via Web Interface

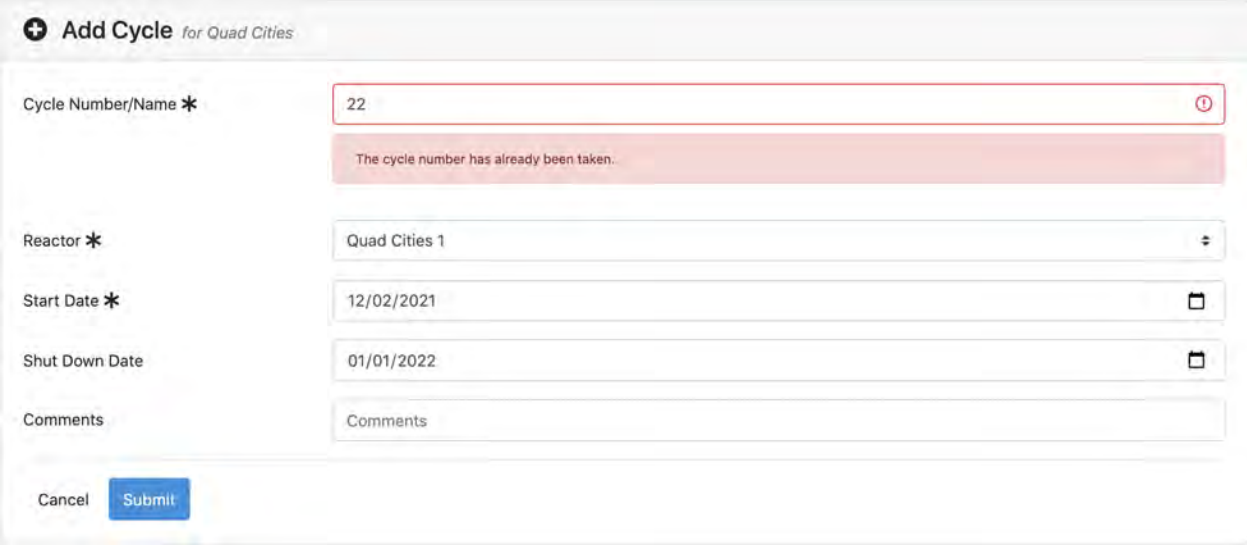


Fig. 2.6: Schedule B.3 Error Message

Clicking the "Upload Data" button brings the user to the form pictured in Fig. 2.7. The web application provides the ability to upload files with either only cycle data or files which contain both cycle data and assembly data. Fig. 2.7 shows two main options for uploading a data file, (1) built-in cycle file, and (2) built-in assembly-cycle data file. The built-in assembly-cycle data file combines schedules B.3, C.1.1, and C.1.2. Below these two boxes there is a statement "Displaying supported file formats for Schedule B.3 along with a hyperlink Click here to see all available formats." Clicking on this link shows all upload file formats for all schedules. Only schedules supporting B.3 will be discussed in this section of the user guide.

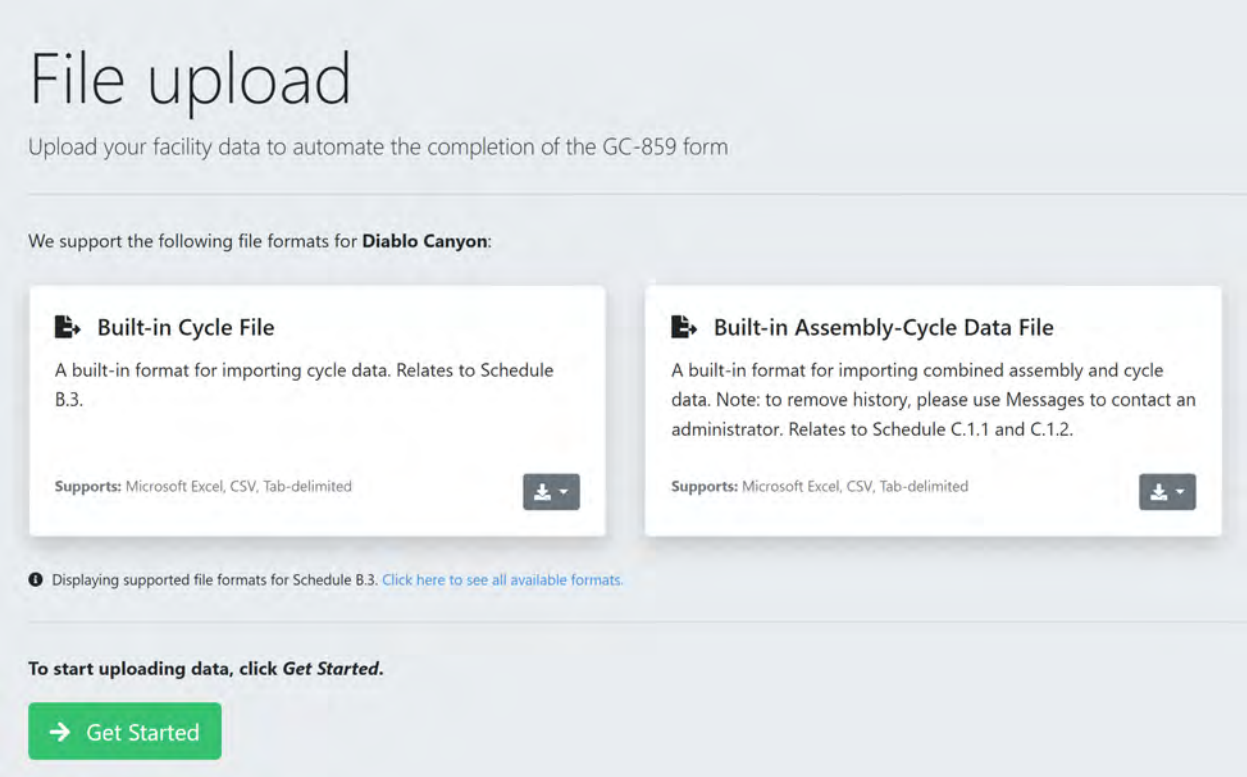


Fig. 2.7: Schedule B.3 Cycle Data File Upload

Both options for uploading a file contain a drop-down menu if the user clicks on the gray button with a down arrow shown in Fig. 2.8 which brings up two options: (1) Download Sample and (2) Download Data for Editing.

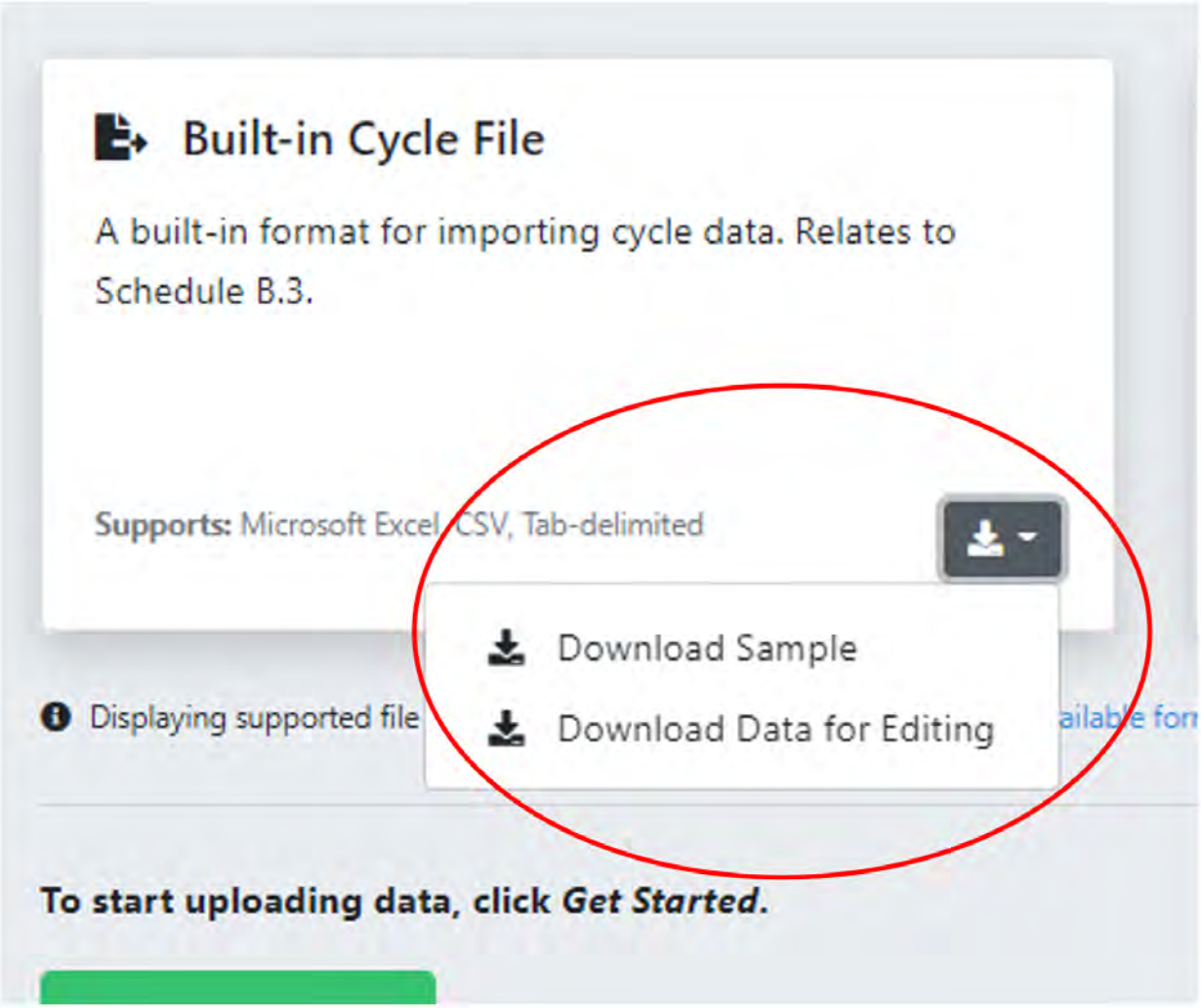


Fig. 2.8: Schedule B.3 Links to Sample Datasheets for Importing Data Using a File

If a user clicks on “Download Sample.” This will download a xlsx file with a file name in the format “[facility name] Example - [year].xlsx” that can be opened using Microsoft Excel. An example file name for Callaway would be: “Callaway Cycle Example - 2022.xlsx.” An example of the file is shown in Fig. 2.9. This file will have an example of the format of the data that will be accepted but will not contain actual previously entered data therefore, if this method is used, the user will need to delete rows not used and replace this data with correct data.

A	B	C	D	E
cycle_number	cycle_reactor_name	start_date	shut_down_date	
24	Quad Cities 1	4/11/13	10/11/14	
25	Quad Cities 1	11/11/14	5/11/16	
26	Quad Cities 1	6/11/16	12/11/17	
27	Quad Cities 1	1/11/18	7/11/19	
23	Quad Cities 2	4/19/12	10/19/13	
24	Quad Cities 2	11/19/13	5/19/15	
25	Quad Cities 2	6/19/15	12/19/16	
26	Quad Cities 2	1/19/17	7/19/18	

Fig. 2.9: Example Cycle Data using “Download Sample”

Once the file is ready, the user can proceed by clicking the green button “Get Started” in Fig. 2.7. On the file upload page, users have two options: “Drag and Drop” files onto the page to upload or use the “Choose Files” button and browse for a file on the local computer. Note that in addition to xlsx format, csv and tab separated file formats are supported for upload as well.

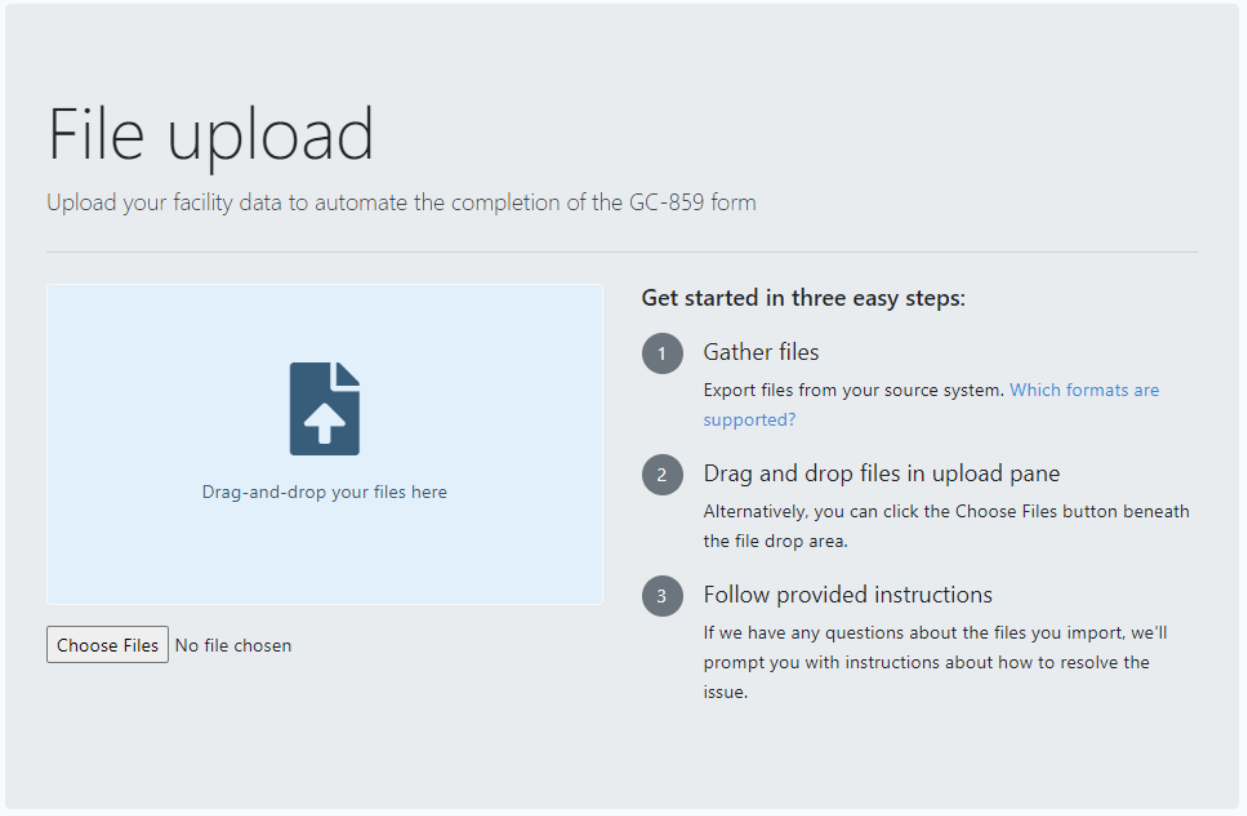


Fig. 2.10: File Upload Page

Each uploaded data file is validated and errors are reported back to the user. As an example of an error in this manual a csv file with rows including only commas is used. When the file is imported, the rows with only commas will be flagged by the web application as an error. To assure that the errors are from these extra commas and not from the errors in the entered data, the user should open the file in a text editor to see if there are any extra rows full of commas. An example of an error message is shown in Fig. 2.11 below.

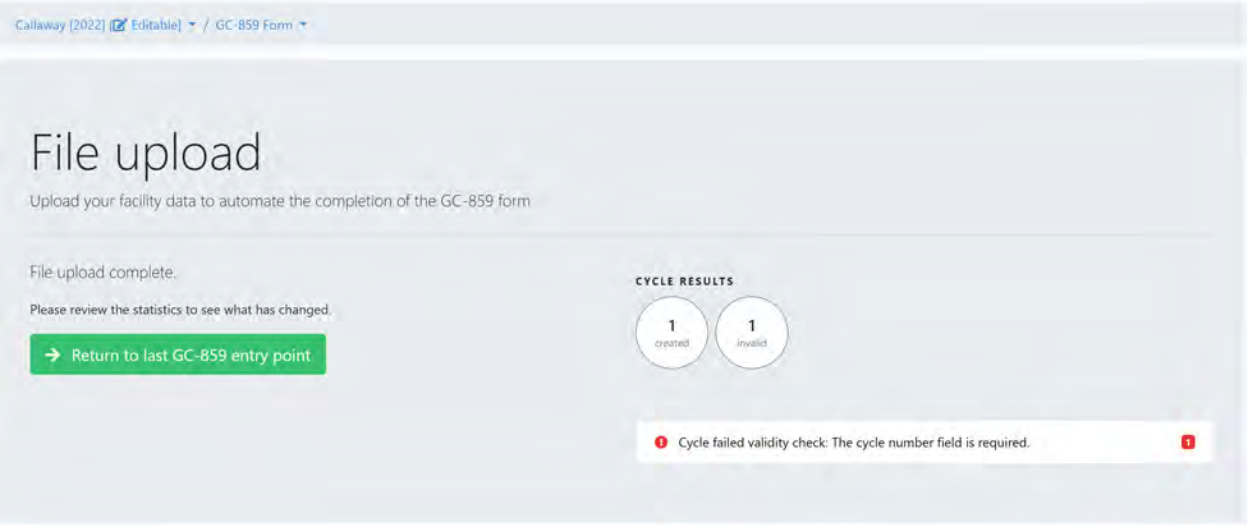


Fig. 2.11: Schedule B.3 Example Error Message for Cycle Data File Upload

If the user would like to download previous cycle data to update, they would click the "Download Data for Editing" button shown in Fig. 2.8. This will download a Microsoft Excel (xlsx) file with a file name in the format "[facility name] Data - [year].xlsx" that can be opened using Microsoft Excel. An example file name for Callaway would be: "Callaway Cycle Data - 2022.xlsx." An example is shown in Fig. 2.12. This file will have the actual previously entered data and new records can be appended to the end of this data. Entries can be modified and will replace existing values and can be used to correct errors in previous data.

A	B	C	D
cycle_number	cycle_reactor_name	start_date	shut_down_date
24	Quad Cities 1	4/11/15	3/27/17
25	Quad Cities 1	4/27/17	3/18/19
26	Quad Cities 1	4/18/19	3/15/21
27	Quad Cities 1	4/15/21	3/15/23

Fig. 2.12: Schedule B.3 Example of Actual Cycle Data using "Download Data for Editing"

As an alternative to entering the cycle data on its own the user can enter assembly and cycle data simultaneously. In order to enter assembly and cycle data simultaneously, the user should click on the "Built-in Assembly-Cycle Data File" shown in Fig. 2.7. The user would click on the drop-down menu from the gray button inside that box that looks similar to the one identified in Fig. 2.8. This will display two options, "Download Sample" and "Download Data for Editing" and will provide sample data and previous data respectively. These files will allow the user to enter cycle and

assembly data in one csv file which will also satisfy the data request for Section C.1.1 that will be discussed in the next section.

If the user would like to review any of the information that they have entered they can click the green "My GC-859" at the top of the screen circled in red on Fig. 1. Clicking here will bring them to a to screen similar to that in Fig. 2.13. The area on the left circled in red can be used to check if the cycle (or assembly information if using C.1.1 import form) has been added as it shows a summary of the number of added and modified records.

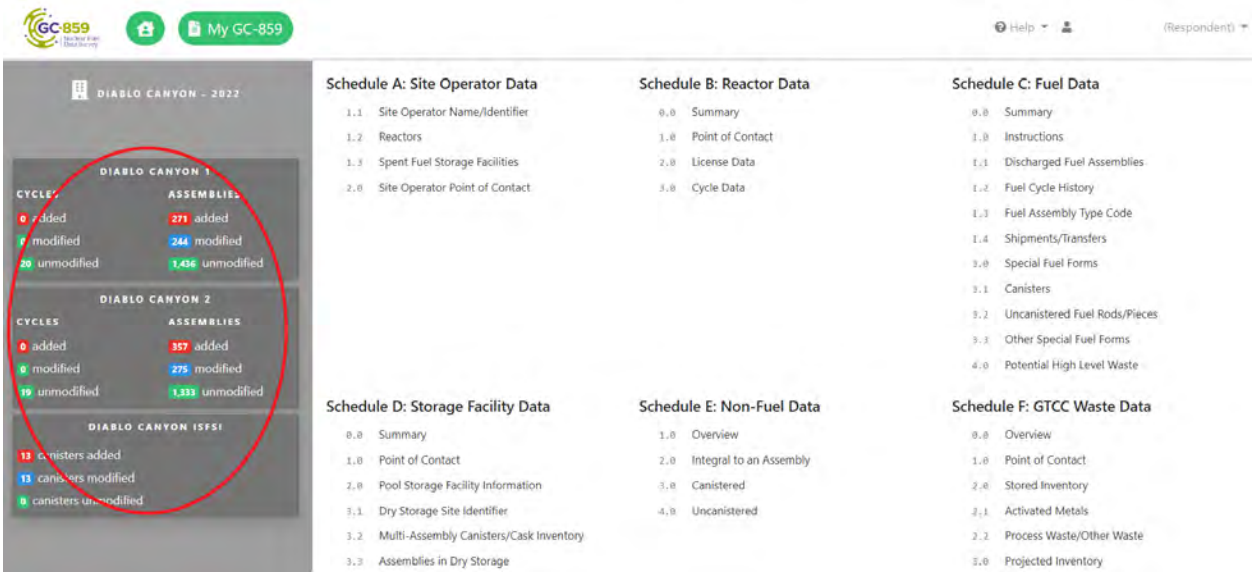


Fig. 2.13: "My GC-859" Screen Including Data Summary

2.1 Schedule B Comments

Finally, user can proceed to the comment section using the button "Take me to Schedule B Comments" shown above in Fig. 2.4. Users provide any comments concerning Reactor Data (Section B.1, B.2 and B.3) and should label comments by the Schedule and Item Number to which they refer. To enter and edit comments, users click the "Edit Comments" button in Fig. 2.14. After completing comments proceed to Schedule C.

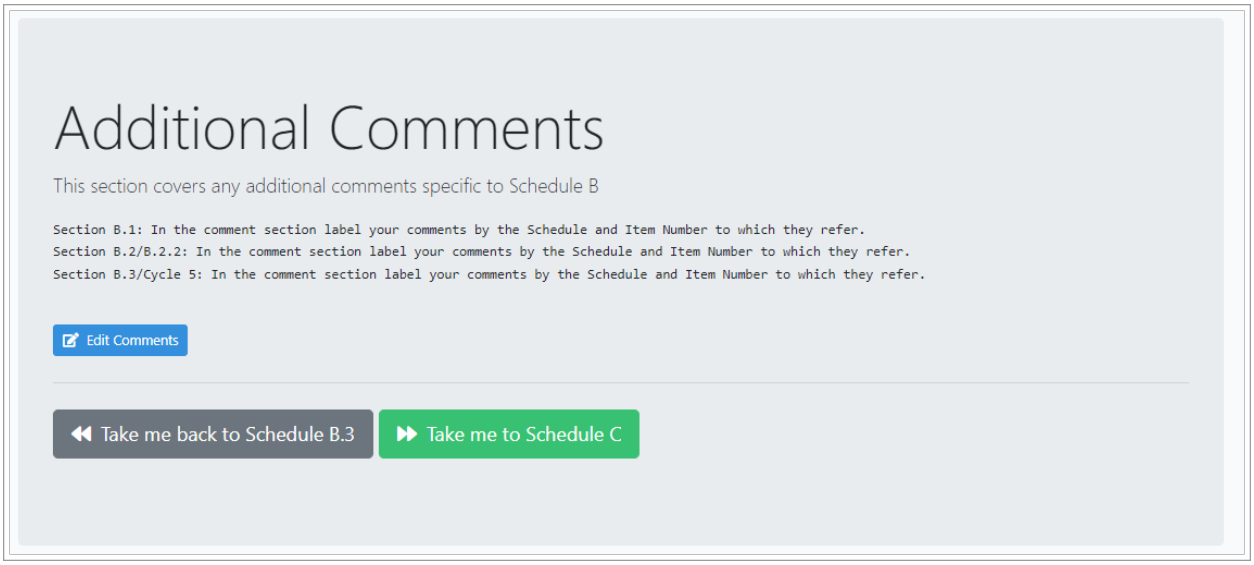


Fig. 2.14: Reactor Data Comments

CHAPTER

THREE

SCHEDULE C: FUEL DATA

Once all of the information from Schedule B has been reviewed and entered, the user can proceed to Schedule C by clicking on the green "Take me to Schedule C" button shown in Fig. 2.14. Upon clicking this button, or navigating to Schedule C using other methods previously discussed such as clicking the "My GC-859" button (see Fig. 1), the user will see a screen similar to that in Fig. 3.1 below. The counters show a high-level summary of what's included in the base data, and how much information a user already provided. After reviewing the summary users can proceed to Schedule C.1.

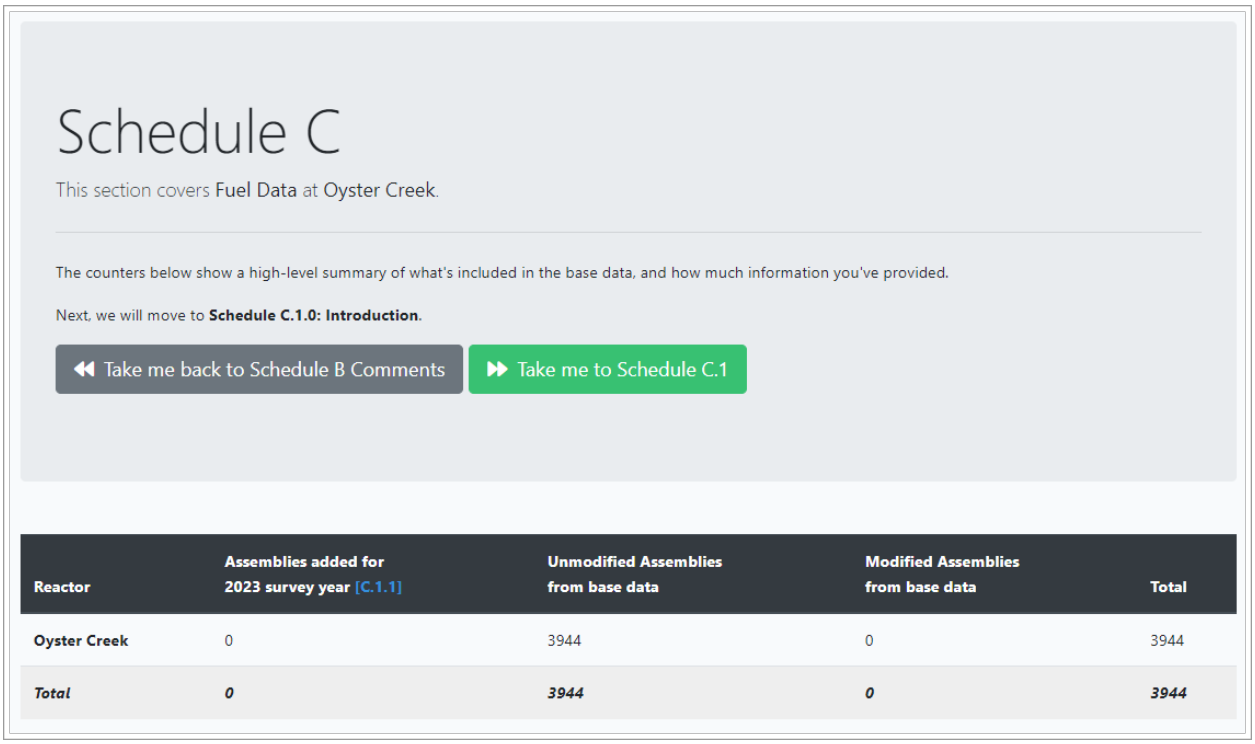


Fig. 3.1: Schedule C Front Screen

In Schedule C.1, Fig. 3.2, users can review instructions and proceed to Schedule C.1.1 on site.

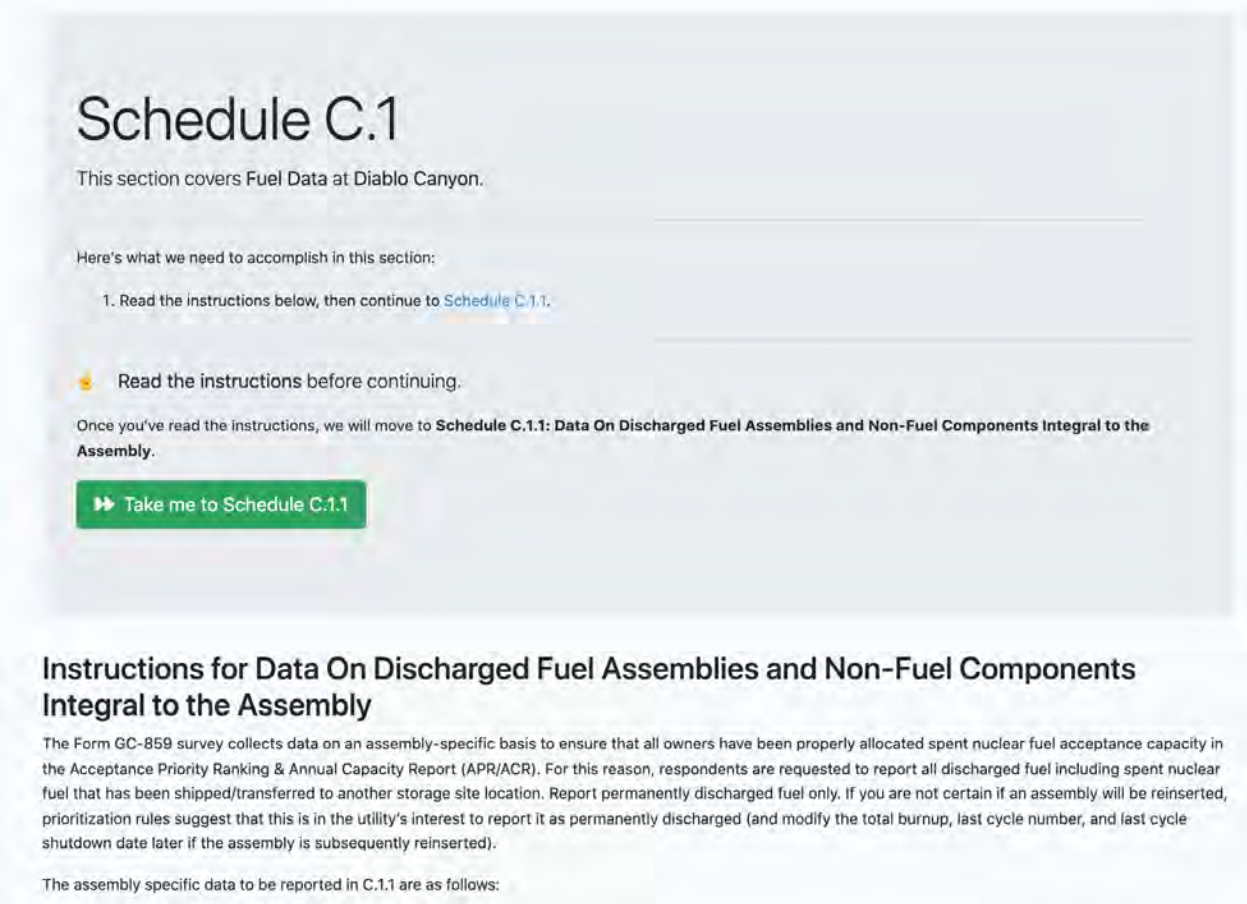


Fig. 3.2: Schedule C.1 Front Screen

3.1 Schedule C.1.1: Data on Discharged Fuel Assemblies

Once the user has read the instructions on the Schedule C.1 page, they can click on the green "Take me to Schedule C.1.1" button to proceed to entering fuel assembly data. The next screen the user will encounter will be similar to Fig. 3.3 below.

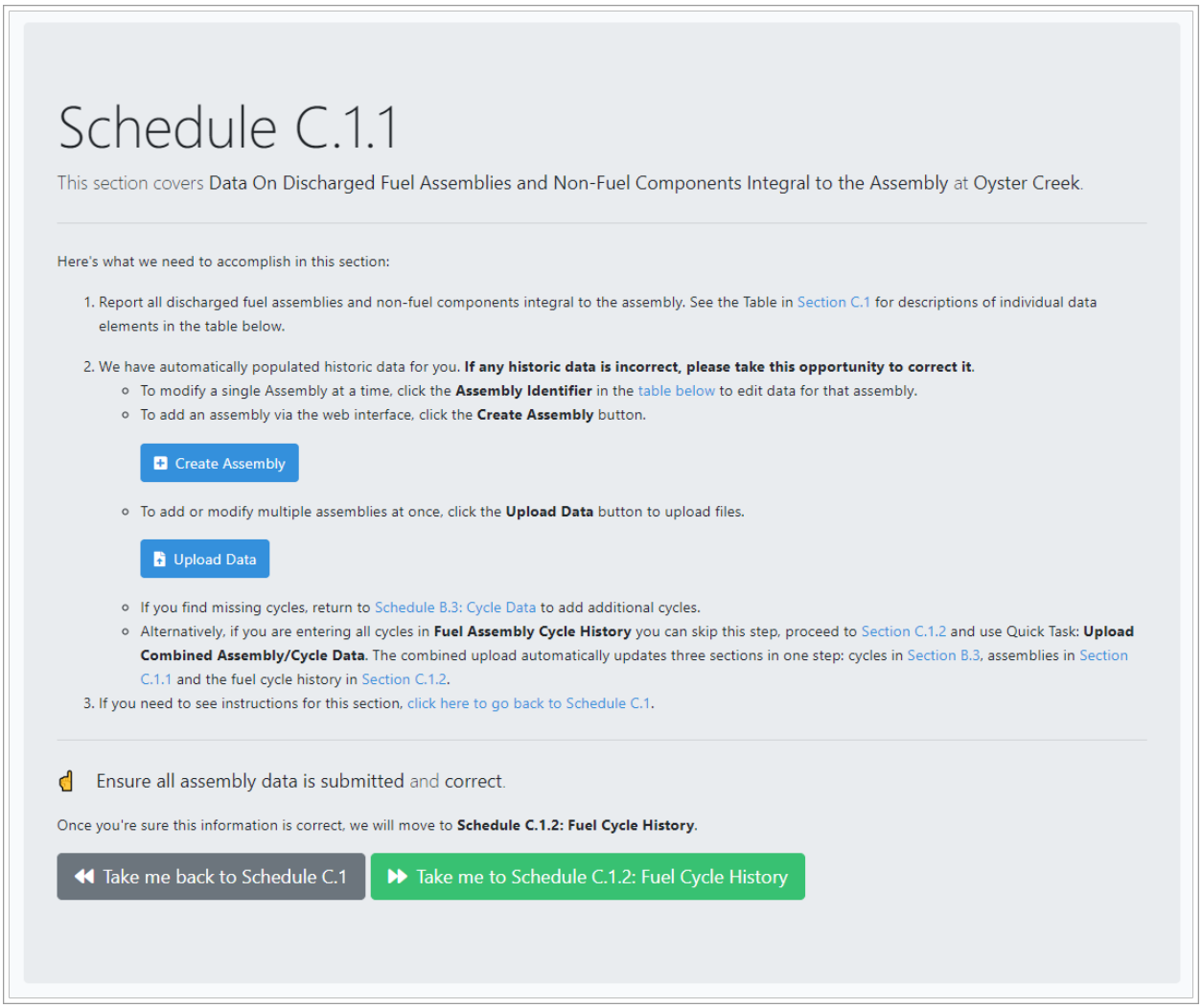


Fig. 3.3: Schedule C.1.1 Front Screen

If the user scrolls below what is shown in Fig. 3.3 on the Schedule C.1.1 form, they will be able to see existing assembly information that has been previously entered. An example of what a user would see is shown below in Fig. 3.4. Items that are blue are hyperlinked. Some of these will take the user to a screen where they can review and modify the data. In addition, user can use a search bar on the right of the screen to search a specific assembly information.

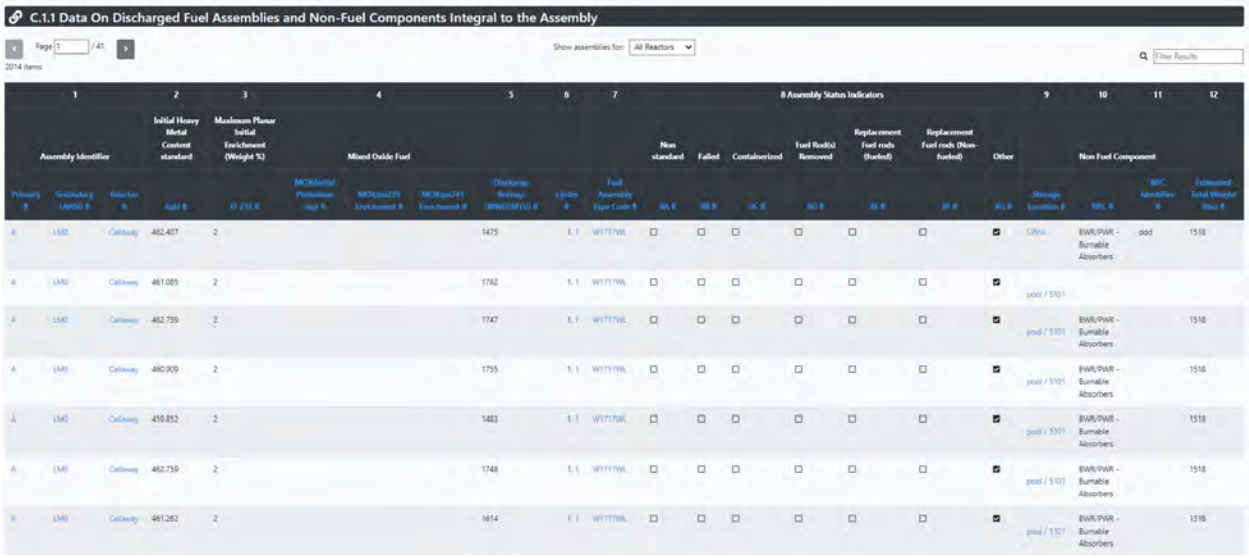


Fig. 3.4: Schedule C.1.1 Data on Discharged Fuel Assemblies and Non-Fuel Components Integral to the Assembly. (Data shown are for example only.)

If the user needs to add new assembly data, they can click on the blue “Create Assembly,” or “Upload Data” buttons shown in the “Create Assembly” form will take the user to a form, shown in Fig. 3.5, where they can enter individual assembly data. Data that is required contains an asterisk (*) next to it. If this data is not entered the user will see an error message before they can proceed.

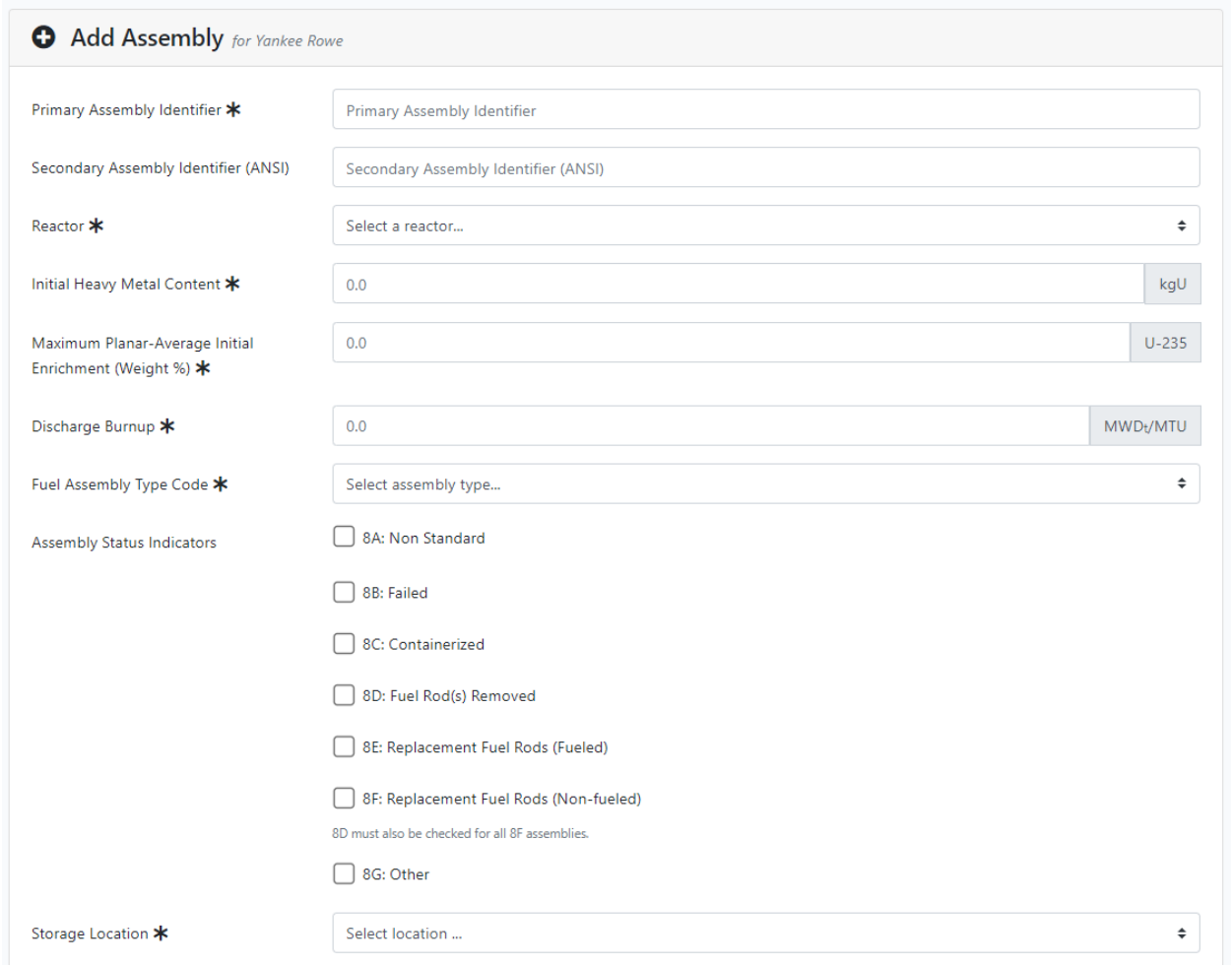


Fig. 3.5: Schedule C.1.1 Add Individual Assembly

Fig. 3.5 has a drop-down menu of fuel assembly type codes. For a description of the assembly that these codes are associated with, the user can go to Appendix E of the survey form. This can be accessed by clicking the help button at the upper right part of the screen circled in Fig. 3.6 . This will show a drop-down menu and if the user selects "E Fuel Assembly Type Codes," they will see a screen similar to the screen in Fig. 3.6 .

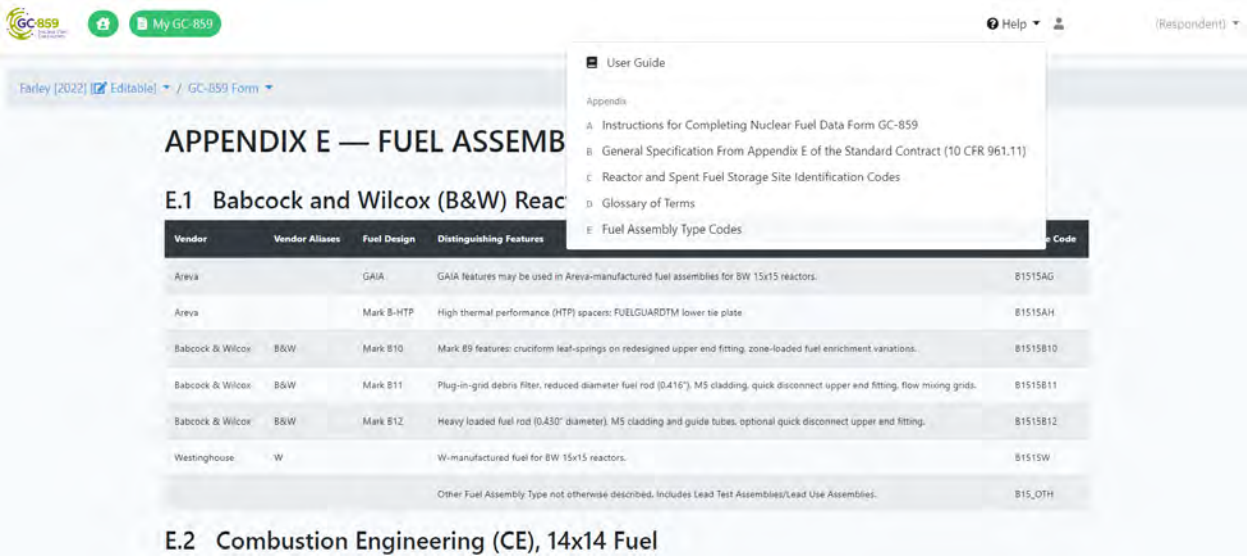


Fig. 3.6: Appendix E of GC-859 from User Guide of Web Application

If the user clicks the "Upload Data" button shown in Fig. 3.3, they will be taken to a screen similar to Fig. 3.7 . This screen has two options for uploading data files for Schedule C.1.1. The option on the left, "Built-In Assembly File," includes only assembly data. When using this option, the cycle data from Schedule B must be input first. The option on the right of Fig. 3.7 , "Built-in Assembly-Cycle Data File," is the same format as the file also available from the Schedule B file upload shown in Fig. 2.7 and combines cycle (B.3.0), cycle history (C.1.2) and assembly data specification (C.1.1) into a single file.

Similar to the file upload screen for Schedule B shown in Fig. 2.7 , clicking either of the gray buttons for each file format option, one is circled in red on Fig. 3.7 , will bring up two options for file upload "Download Sample" and "Download Data for Editing." Similar to the cycle data, clicking on the "Download Sample" option will download a Microsoft Excel (xlsx) file with sample data in the correct format. Clicking on the "Download Data for Editing," will download a Microsoft Excel (xlsx) file with actual, previously entered data.

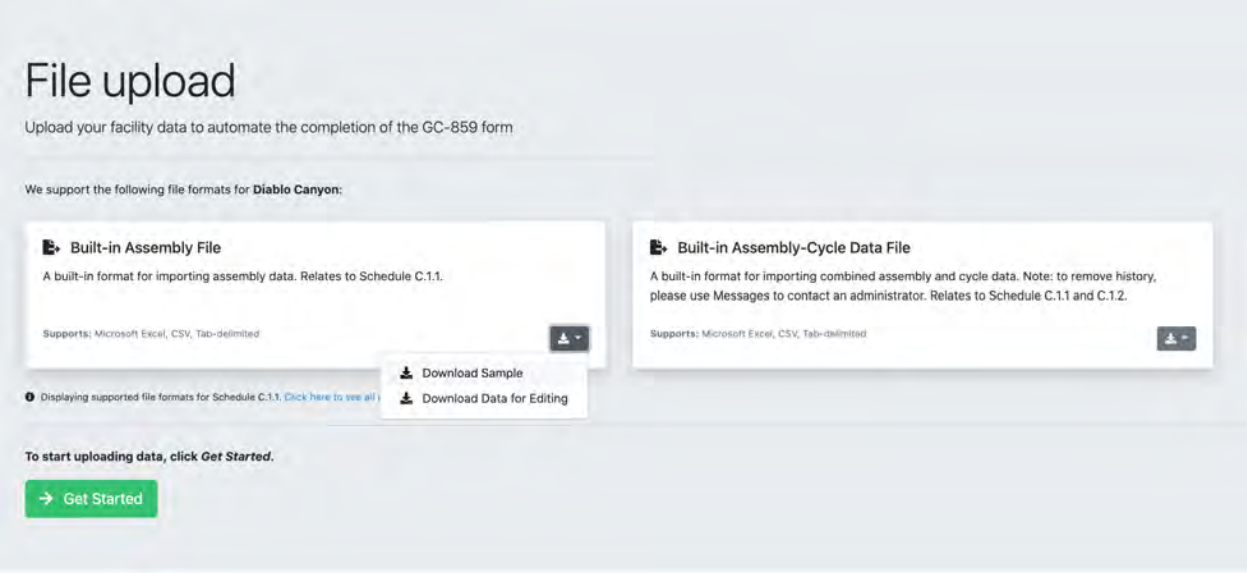


Fig. 3.7: Schedule C.1.1 File Upload

An example of the format needed for the assembly only data is shown in Fig. 3.8 . The units for "Initial Uranium" is kilograms and "Initial Enrichment" is in units of weight percent of U-235. Codes for the assembly type can be found in Appendix E of the GC-859 survey as shown in Fig. 3.6 .

Since this data in Fig. 3.8 was generated by clicking on the "Download Sample" option shown in Fig. 3.7 , it is example data used only to provide the proper data format.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Assembly ID	Secondary ID	Initial Uranium (kg)	Initial Enrichment	Discharge Burnup	Reactor Name	Last Cycle Number	Assembly Type	Non-Standard	Failed	Containerized	Fuel Rods Removed	Replacement Rods Fueled	Replacement Rods Non-	Other
2	EXAMPLE07801	NXN520	468.4	4.1	47056.2	Diablo Canyon	20	W1717WP	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE
3	EXAMPLE07811	TRE795	451	3.9	46283.3	Diablo Canyon	20	W1717WP	TRUE	FALSE	TRUE	FALSE	TRUE	FALSE	FALSE
4	EXAMPLE07801	CTI501	451.4	2.8	45045.6	Diablo Canyon	20	W1717WP	TRUE	FALSE	TRUE	TRUE	TRUE	TRUE	FALSE
5	EXAMPLE07811	ROM572	455.8	4.1	42059.4	Diablo Canyon	20	W1717WP	FALSE	FALSE	FALSE	TRUE	TRUE	TRUE	TRUE
6	EXAMPLE07801	YRI476	458.9	3.3	35465.4	Diablo Canyon	20	W1717WP	TRUE	FALSE	FALSE	TRUE	TRUE	FALSE	TRUE
7	EXAMPLE07811	WUR420	476.2	2.9	31357.3	Diablo Canyon	20	W1717WP	TRUE	FALSE	FALSE	TRUE	FALSE	TRUE	TRUE
8	EXAMPLE07901	NRQ159	454.9	2.8	47648.1	Diablo Canyon	19	W1717WP	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE
9	EXAMPLE07911	NPO081	464.7	4.8	31942.5	Diablo Canyon	19	W1717WP	FALSE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE
10	EXAMPLE07901	RBZ847	452.7	2.8	46626.5	Diablo Canyon	19	W1717WP	TRUE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE
11	EXAMPLE07911	QKK448	457	2.7	36481.9	Diablo Canyon	19	W1717WP	FALSE	TRUE	TRUE	FALSE	TRUE	TRUE	FALSE

Fig. 3.8: Schedule C.1.1 Example Assembly Only Data Format

An example of the format needed for the combined cycle, cycle history, and assembly data is shown in Fig. 3.9 . "initial_uranium" is in units of kilograms, "initial_enrichment" is in units of weight percent U-235 and "max_burnup" is in units of MWd/MTU. This data format accounts for assemblies that have been burned in multiple cycles. For the example data shown in Fig. 3.9 , the first three rows are for the same assembly, but each row represents a different cycle that the assembly was burned in (cycle history as in schedule C1.2). The burnups entered for this data are the cumulative burnup at the end of each cycle. For this assembly, Columns A through O are repeated for the same assembly with the differences in the cycle information shown in Columns P through T. Entering assembly and cycle information using this data format can be done when entering information in Schedule B.3 shown in Fig. 2.7 .

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
assembly_id	initial_uraniu	initial_enrich	assembly_ty	max_burnup	reactor_nam	ansi_id	storage_loca	non_standar	failed	containerizes	fuel_rods_re	replacement	replacement	other	cycle_number	cycle_reactor	start_date	shut_down_c	cumulative_l	nfc_type
EXAMPLE078	460	4	W1717WL	45000	Diablo Canyc	BDB458	Diablo Canyc	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	25	Diablo Canyc	9/23/23	3/23/25	15000	BWR/PWR
EXAMPLE078	460	4	W1717WL	45000	Diablo Canyc	BDB458	Diablo Canyc	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	26	Diablo Canyc	4/23/25	10/23/26	30000	
EXAMPLE078	460	4	W1717WL	45000	Diablo Canyc	BDB458	Diablo Canyc	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	27	Diablo Canyc	11/23/26	5/23/28	45000	
EXAMPLE078	460	4	W1717WP	45000	Diablo Canyc	URW744	Diablo Canyc	FALSE	TRUE	TRUE	FALSE	TRUE	FALSE	TRUE	25	Diablo Canyc	9/23/23	3/23/25	15000	
EXAMPLE078	460	4	W1717WP	45000	Diablo Canyc	URW744	Diablo Canyc	FALSE	TRUE	TRUE	FALSE	TRUE	FALSE	TRUE	26	Diablo Canyc	4/23/25	10/23/26	30000	
EXAMPLE078	460	4	W1717WP	45000	Diablo Canyc	URW744	Diablo Canyc	FALSE	TRUE	TRUE	FALSE	TRUE	FALSE	TRUE	27	Diablo Canyc	11/23/26	5/23/28	45000	
EXAMPLE079	460	4	W1717WV5	45000	Diablo Canyc	TVG491	Diablo Canyc	TRUE	TRUE	FALSE	TRUE	TRUE	FALSE	TRUE	24	Diablo Canyc	10/1/22	4/1/24	15000	
EXAMPLE079	460	4	W1717WV5	45000	Diablo Canyc	TVG491	Diablo Canyc	TRUE	TRUE	FALSE	TRUE	TRUE	FALSE	TRUE	25	Diablo Canyc	5/1/24	11/1/25	30000	BWR/PWR
EXAMPLE079	460	4	W1717WV5	45000	Diablo Canyc	TVG491	Diablo Canyc	TRUE	TRUE	FALSE	TRUE	TRUE	FALSE	TRUE	26	Diablo Canyc	12/1/25	6/1/27	45000	
EXAMPLE079	460	4	W1717WP	45000	Diablo Canyc	GSS482	Diablo Canyc	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	TRUE	24	Diablo Canyc	10/1/22	4/1/24	15000	
EXAMPLE079	460	4	W1717WP	45000	Diablo Canyc	GSS482	Diablo Canyc	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	TRUE	25	Diablo Canyc	5/1/24	11/1/25	30000	
EXAMPLE079	460	4	W1717WP	45000	Diablo Canyc	GSS482	Diablo Canyc	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	TRUE	26	Diablo Canyc	12/1/25	6/1/27	45000	

Fig. 3.9: Schedule C.1.1 Example Cycle and Assembly Data Format

Once the user completes the Microsoft Excel (xlsx, or Comma Separated csv, or tab delimited) data file with the data that they wish to add or modify, the user then clicks the green "Get Started" button on the lower left portion of Fig. 3.7 . This will bring the user to a screen in Fig. 3.10 where they will be prompted to upload the file by dragging and dropping the file onto this part of the screen or navigating to the file location by selecting the "choose file" button below the blue drag and drop area. Upon dropping the file, the application will perform consistency checks and ask the user to finish uploading. A user may need to fix issues found in the consistency checks to finish uploading.

Fig. 3.10: File Upload Screen for Data Files

3.2 Schedule C.1.1: Constellation Specific Assembly Data Format

Constellation (formerly Exelon) facilities will have additional options for uploading assembly data using the Cask Loader format. If the user is entering data for an Constellation facility and they click on the blue "Upload Data" button from the main Schedule C.1.1 screen shown in Fig. 3.3, they will be taken to a screen similar to that shown in Fig. 3.11.

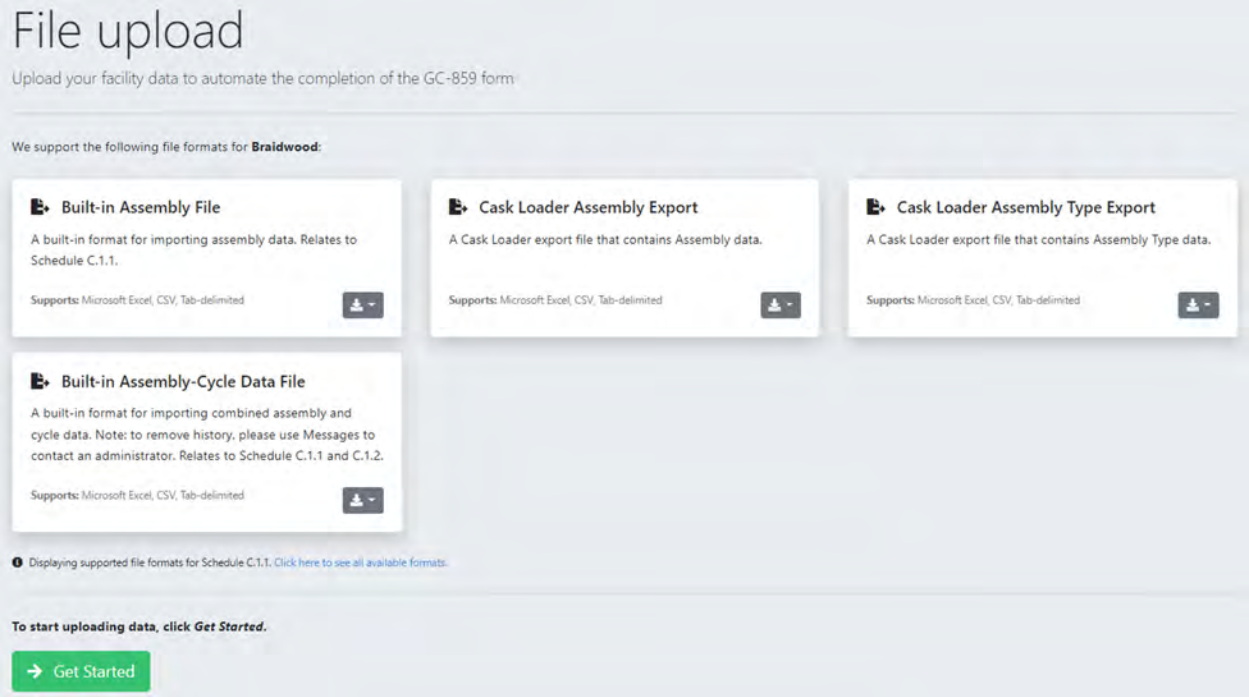


Fig. 3.11: Schedule C.1.1 File Upload for Constellation Facilities

The process for downloading and entering the Microsof Excel (xlsx) data into the correct format is similar to that previously discussed, however there are two additional data files formats available for Constellation facilities shown in Fig. 3.11. This includes "Cask Loader Assembly Export" and "Cask Loader Assembly Type Export."

An example of the "Cask Loader Assembly Export" format is shown below in Fig. 3.12.

id	bundle_id	componen	assembly_type_id	doe_class	doe_category	reactor_unit_id	pool_id	pool_region	pool_location	pool_locati	decay_heat	gamma_so	neutron_sc	date_decay_heat_calc	burnup_mwd_mtu
8309	KB1001			434	S	118	106		N23W23		0.080099	0.843602	0.002887	5/28/2018 00:00:00	20200
12774	KB1002			434	S	118			36		0.08866			6/30/2005 00:00:00	19610
8310	KB1003			434	S	118	105		09		0.116773	1.205544	0.011605	5/30/2016 00:00:00	27080
12775	KB1004			434	S	118			34		0.08816			6/30/2005 00:00:00	19700
8311	KB1005			434	S	118	105		09		0.081698	0.876431	0.002983	5/30/2016 00:00:00	20160
12776	KB1006			434	S	118			32		0.10142			6/30/2005 00:00:00	22210
12777	KB1007			434	S	118			32		0.12105			6/30/2005 00:00:00	25920
12778	KB1008			434	S	118			31		0.11874			6/30/2005 00:00:00	25160
12779	KB1009			434	S	118			40		0.12456			6/30/2005 00:00:00	26600
6565	KB1010			434	S	118	106		N18W15		0.099894	1.055765	0.007386	5/28/2018 00:00:00	23710
12780	KB1011			434	S	118			35		0.08821			6/30/2005 00:00:00	19290

Fig. 3.12: Schedule C.1.1 Example of Cask Loader Assembly Export Format for Constellation Facilities

The reactor identifier from Cask Loader format will need to be altered to conform to the data recognizable by the GC-859 survey web program. The program will check the data and send the user through automated steps where it will predict the data that conforms to that in the database and ask the user to confirm the predictions. For example Fig. 3.12 shows "reactor_unit_id" as "118". An example of what a user might see as part of this process is shown in Fig. 3.13. After uploading the file shown partially in Fig. 3.12, the program asks the user if reactor id 118 is associated with a correct reactor unit.

Fig. 3.13: Schedule C.1.1 Constellation Specific Data Questions

Cask Loader assembly types are different from those in the GC-859 survey program, so the user will be asked to upload an Assembly Type export from Cask Loader to provide a translation between the two formats. This is shown in Fig. 3.14, where the web application has identified that there are four assembly types that are not known.

Fig. 3.14: Schedule C.1.1 File Upload for Cask Loader Assembly Type Export for Constellation Facilities

The user can also upload an example of the Cask Loader Assembly Type Export form by clicking on the drop-down menu in the "Cask Loader Assembly Type Export" box shown in Fig. 3.11. Clicking the drop-down will provide a sample file with this file format for the user to modify. An example of this file format is shown in Fig. 3.15.

id	name	product_lir	vendor	init_assem	max_lattic	element_t	assembly_I	upper_fitti	lower_fittir	element_tc	element_a	cladding_m	cladding_tl
585	Q1C21A_Opt2-3.98-18GZ8.00	10x10G	Westingho	3.98	4.47	Rod	10014E12	AA301036	AA284990	158.516	145.28	Zr-2	0.0238
433	Q1C01A_GE7x7,UO2,2.12, Dished w/ Gd2O3 in 3 Rods	7x7B	GE/GNF	2.12	2.12	Rod	731E683	731E683	731E683	158.45	144	Zr-2	0.032
434	Q1C01B_GE7x7,UO2,2.12, Undished w/ Gd2O3 in 3 Rods	7x7B	GE/GNF	2.12	2.12	Rod	731E683	731E683	731E683	158.45	144	Zr-2	0.032
435	Q1C01C_GE7x7,UO2,2.12, Dished w/ Gd2O3 in 2 Rods	7x7B	GE/GNF	2.12	2.12	Rod	731E683	731E683	731E683	158.45	144	Zr-2	0.032
436	Q1C01D_GE7x7,UO2,2.12, Undished w/ Gd2O3 in 2 Rods	7x7B	GE/GNF	2.12	2.12	Rod	731E683	731E683	731E683	158.45	144	Zr-2	0.032
445	Q1C05A_8DRB265-6Gd2.0-80M-145	8x8C	GE/GNF	2.65	2.82	Rod	829E518	829E518	829E518	158.95	145.24	Zr-2	0.032
437	Q1C02A_GE7x7, 2.30 w/o, Undished w/ 3 Gd rods 2.50	7x7B	GE/GNF	2.3	2.3	Rod	814E834	814E834	814E834	158.6	144	Zr-2	0.037
438	Q1C02B_GE8x8, 2.50 w/o, Undished w/ 4 Gd rods 1.50	8x8B	GE/GNF	2.5	2.5	Rod	814E872	814E872	814E872	158.4	144	Zr-2	0.034
439	Q1C02C_GE7x7, MO2 Center Assembly	7x7B	GE/GNF	2.56	2.56	Rod	814E834	814E834	814E834	158.6	144	Zr-2	0.037
440	Q1C02D_GE7x7, MO2 Peripheral Assembly	7x7B	GE/GNF	2.37	2.37	Rod	814E834	814E834	814E834	158.6	144	Zr-2	0.037
441	Q1C03A_8D262-4Gd1.5-80M-144	8x8B	GE/GNF	2.62	2.62	Rod	814E977	814E977	814E977	158.6	144	Zr-2	0.034
442	Q1C03B_8D250-4Gd1.5-80M-144	8x8B	GE/GNF	2.5	2.5	Rod	829E166			158.6	144	Zr-2	0.034
443	Q1C03C_8D250-4Gd1.5-80M-144	8x8B	GE/GNF	2.5	2.5	Rod	814E954	814E954	814E954	158.6	144	Zr-2	0.034

Fig. 3.15: Schedule C.1.1 Example of Cask Loader Assembly Type Export File for Constellation Facilities

After uploading the Cask Loader Assembly Type Export file in the screen showed in Fig. 3.14, the web application will check the data and will request that the user provide a translation between the assembly types specified in the Cask Loader Assembly Export File and the GC-859 Assembly types. An example of this is shown in Fig. 3.16. The web application uses data from the assembly type export (e.g., product line [column C], vendor [column D], cladding [column M] as shown in Fig. 3.15) to group similar types and asks the user to select a corresponding GC-859 assembly type from a drop down list as shown in Fig. 3.16 that closely corresponds to the group.

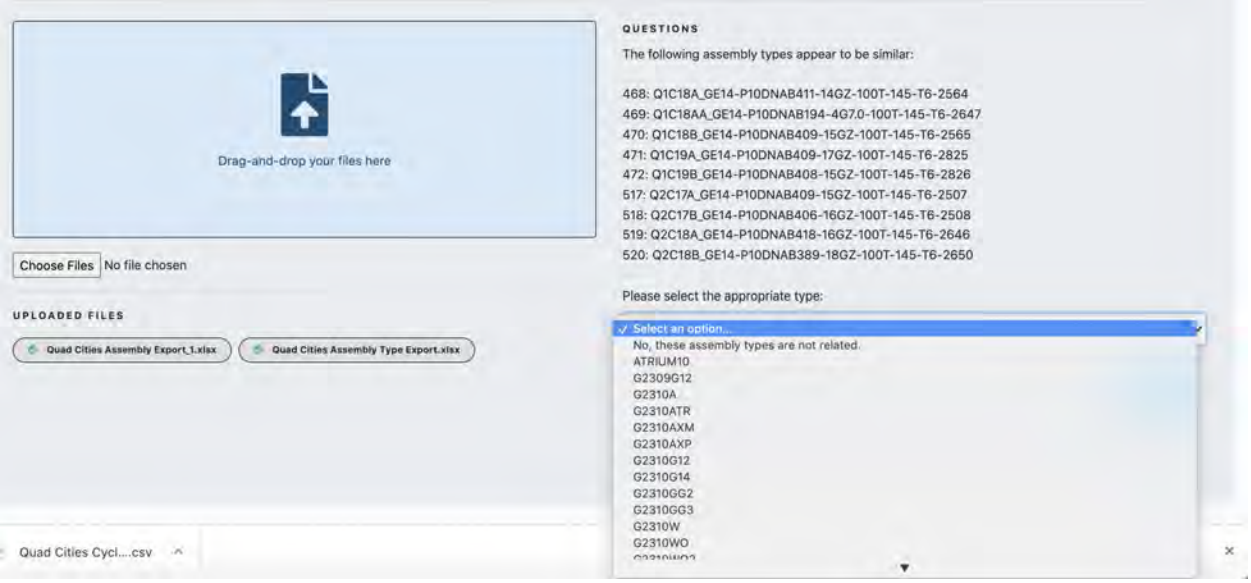


Fig. 3.16: Schedule C.1.1 Cask Loader Specific Assembly Type Questions

3.3 Schedule C.1.1: Southern Nuclear Specific Assembly Data Format

Southern Nuclear facilities will also have an additional option for uploading assembly data using the TracWorks format. If the user is entering data for a Southern Nuclear facility and they click on the blue "Upload Data" button from the main Schedule C.1.1 screen shown in Fig. 3.3, they will be taken to a screen similar to that in Fig. 3.17.

Fig. 3.17: Schedule C.1.1 File Upload for Southern Nuclear Facilities

The process for downloading and entering the xlsx/csv/tab data into the correct format is similar to that previously discussed, however there is an additional data file format available for Southern Nuclear facilities. The files for using this option are accessible by clicking the gray drop-down box in Fig. 3.17 that is within the white box labeled "TracWorks GC-859 C.1.1 Export." An example of the "TracWorks GC-859 C.1.1 Export" file format is shown below in Fig. 3.18.

Assembly Identifier - Primary	Assembly Identifier - Secondary	Initial Heavy Metal Content	Initial Enrichment	Mixed Oxide Fuel Data	Discharge Burnup	Last Cycle Number	Fuel Assembly Type Code	Non-Standard	Failed	Containerized	Fuel Rod(s) Removed	Replacement Rc
ABB227	ABB227	179.343	3.942		47155.2917	29	G4610G14					
ABB228	ABB228	179.392	3.942		47099.0744	29	G4610G14					
ABB229	ABB229	179.496	3.942		46985.5375	29	G4610G14					
ABB232	ABB232	179.417	3.941		47485.9817	29	G4610G14					
ABB235	ABB235	179.301	3.941		47796.8303	29	G4610G14					
ABB236	ABB236	179.308	3.941		46055.1963	29	G4610G14					
ABB238	ABB238	179.246	3.939		47333.8643	29	G4610G14					
ABB239	ABB239	179.248	3.939		44269.4703	29	G4610G14					
ABB240	ABB240	179.249	3.94		49266.1962	29	G4610G14					
ABB241	ABB241	179.208	3.94		45998.979	29	G4610G14					
ABB250	ABB250	179.235	3.941		47301.8976	29	G4610G14					

Fig. 3.18: Schedule C.1.1 Example of TracWorks Export Format for Southern Nuclear Facilities

Some of the data in the TracWorks format will need to be translated in order to be recognizable by the GC-859 survey web program. The program will check the data and send the user through automated steps where it will predict the data that is compatible with the database. The user will then be asked to confirm the predictions. After uploading the data file format shown partially in Fig. 3.18, the program asks the user a series of questions shown in Fig. 3.19. The questions associated with the TracWorks data that the GC-859 web program was unable to recognize in Fig. 3.19 are (1) which reactor does the excel spreadsheet Book4.xlsx from the example case contain data for, (2) what non-fuel component does "FC" describe, and (3) for storage location "2001" in the example case, does this refer to the pool or ISFSI.

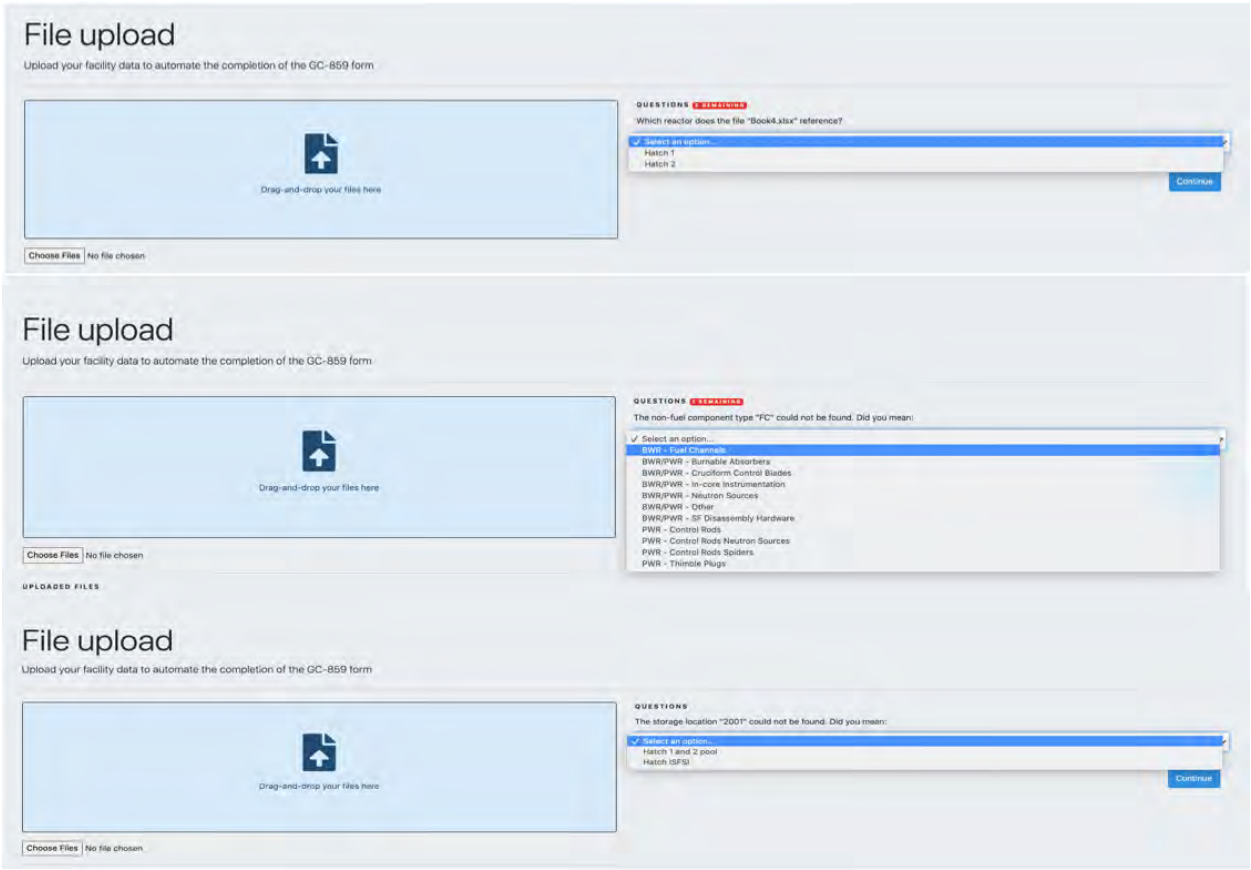


Fig. 3.19: Schedule C.1.1 TracWorks Specific Data Questions

3.4 Schedule C.1.2: Fuel Cycle History

As stated in the GC-859 form, Schedule C.1.2 is voluntary. Cycle data is entered or uploaded in Schedule B.3 and assembly data is entered or uploaded in Schedule C.1.1. The cycle history information can be entered during data entry into B.2 or C1.1 as discussed above. If the history information is entered during data entry to B.3 or C1.1, the information is displayed in Schedule C.1.2, Fuel Cycle History. Schedule C.1.2 can be entered by clicking the green "Take me to Schedule C.1.2: Fuel Cycle History," shown on the bottom of Fig. 3.3 or navigating to Schedule C.1.2 using other methods previously discussed such as clicking the "My GC-859" button, a user will see a screen similar to the one below in Fig. 3.20.

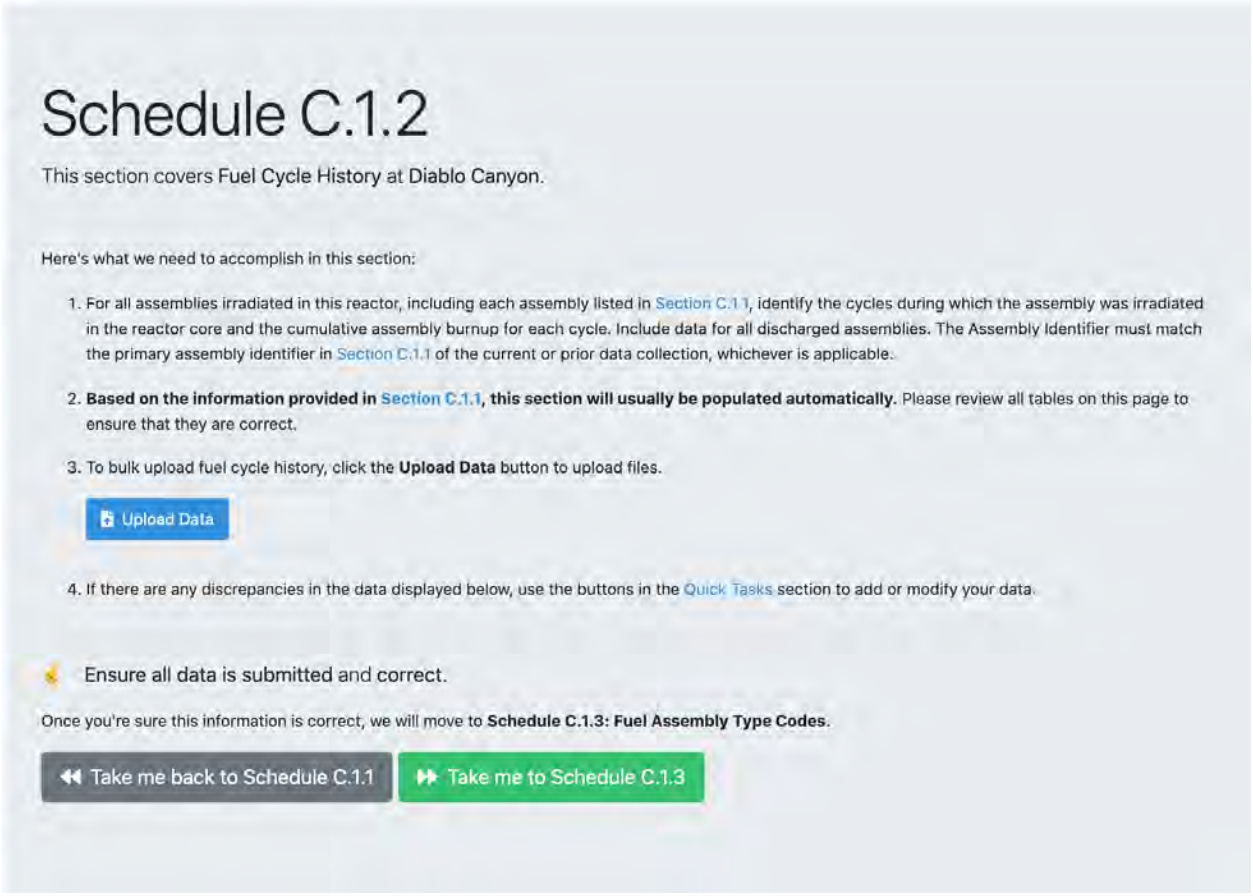


Fig. 3.20: Schedule C.1.2 Fuel Cycle History Front Screen

Scrolling down from the screen shown in Fig. 3.20 a user can review information and continue to modify and add new information from previous schedules if desired. Immediately below the information in Fig. 3.20, a user can scroll down to see information similar to Fig. 3.21. There are options here for uploading assembly and cycle data as discussed in previous schedules. In addition there is an option for exporting the data.

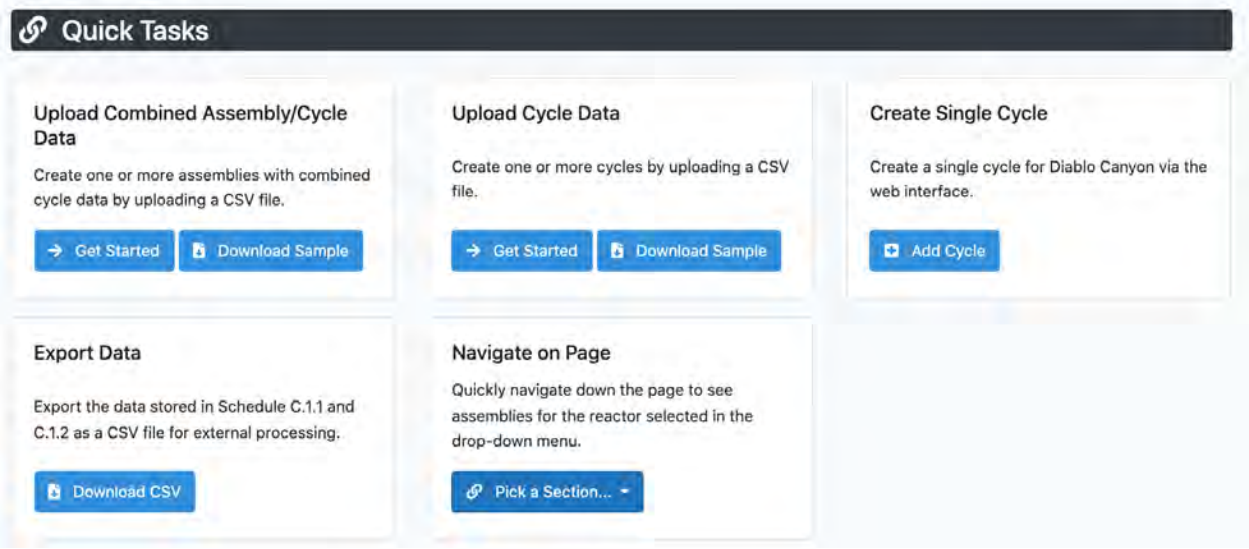


Fig. 3.21: Schedule C.1.2 Quick Tasks

Further down the Schedule C.1.2 page the user can scroll down to see fuel assembly and cycle information similar to that in Fig. 3.22. Blue hyperlinks can be clicked to navigate and review this information.

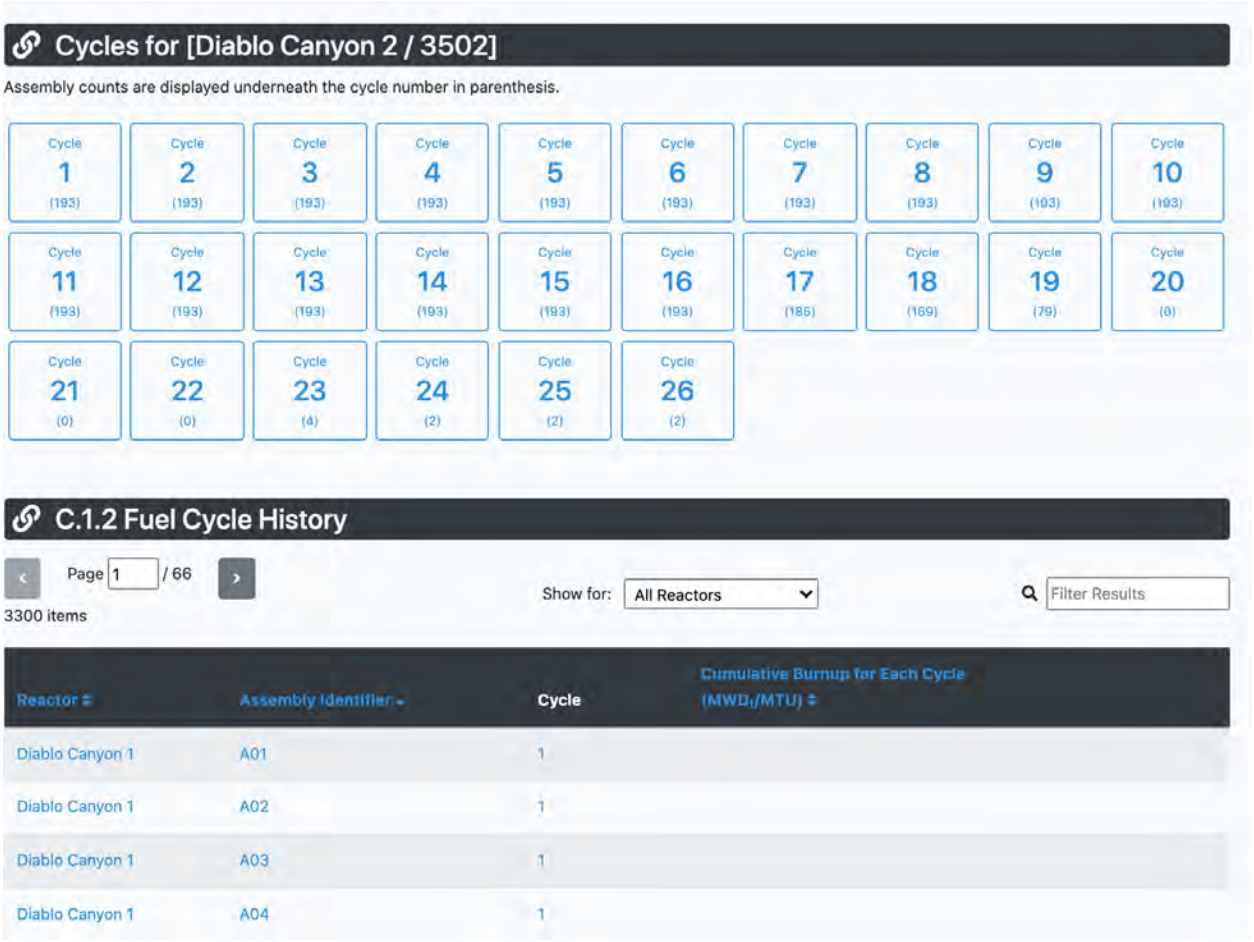


Fig. 3.22: Schedule C.1.2 Assembly and Cycle Information

Clicking the "Upload Data" button shown in Fig. 3.20 will show some options for uploading files. There are three available formats for uploading cycle data shown. Two of these data uploading formats have been previously covered in Schedules B.3, and C.1.1, "Built-in Cycle File," and "Built-in Assembly-Cycle Data File," respectively. Clicking on the gray boxes similar to those circled in Fig. 2.8 and Fig. 3.7 will bring down the drop-down menus that will have two options, "Download Sample," will download a Microsoft Excel (xlsx) file in the correct format for uploading, while "Download Data for Editing," will download a Microsoft Excel (xlsx) file of previously entered data that can be appended or modified.

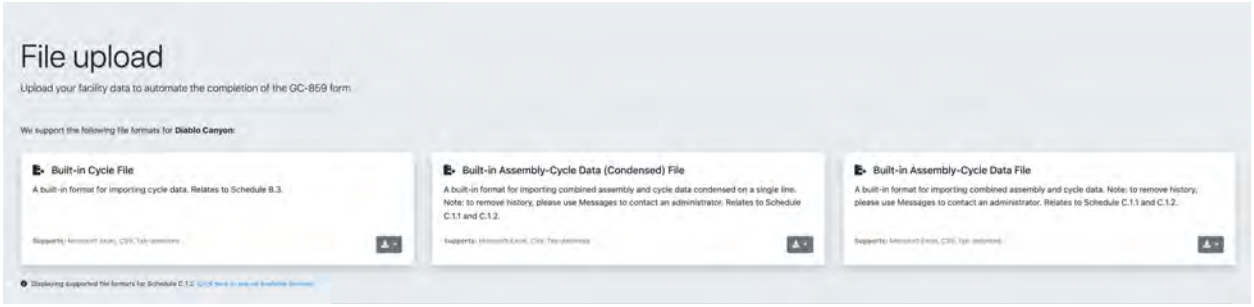


Fig. 3.23: Schedule C.1.2 Cycle Data File Upload

The middle option on Fig. 3.23, "Built-in Assembly-Cycle Data (Condensed) File" is an available format for uploading data onto a single line. To use this data format, the user needs to have created cycle information in Schedule B.3 and assembly information in Schedule C.1.1. The assembly cycle information will be entered in the format shown in below. This differs from the format available in "Built-In Assembly-Cycle Data File" shown in Fig. 3.9 in that each assembly would have its own row in the table rather than being repeated for each cycle it is burned in.

Assembly Identifier	Cycle 1 Reactor	Cycle 1 Number	Cycle 1 Cumulative Exposure	Cycle 2 Reactor	Cycle 2 Number	Cycle 2 Cumulative Exposure	Cycle 3 Reactor	Cycle 3 Number	Cycle 3 Cumulative	Cycle 4 Reac	Cycle 4 Num	Cycle 4 Cum	Cycle 5 Reac	Cycle 5 Num	Cycle 5 Cu
EXAMPLE9789139	Diablo Canyon 1	28	15000	Diablo Canyon 1	29	30000	Diablo Canyon 1	30	45000						
EXAMPLE978914	Diablo Canyon 1	28	15000	Diablo Canyon 1	29	30000	Diablo Canyon 1	30	45000						
EXAMPLE9799140	Diablo Canyon 2	27	15000	Diablo Canyon 2	28	30000	Diablo Canyon 2	29	45000						
EXAMPLE979914	Diablo Canyon 2	27	15000	Diablo Canyon 2	28	30000	Diablo Canyon 2	29	45000						

Fig. 3.24: Schedule C.1.2 Assembly-Cycle Data Condensed File

3.5 Schedule C.1.2: Constellation Specific Cycle History Data Format

Constellation plants have specific Constellation Cycle History Report format that can be used. Instead of seeing the screen in Fig. 3.23, Constellation plants will see a screen similar to that in Fig. 3.25, which contains the fourth data format option: "Constellation Cycle History Report." An example of the format for the Constellation Cycle History Report is shown in Fig. 3.26.

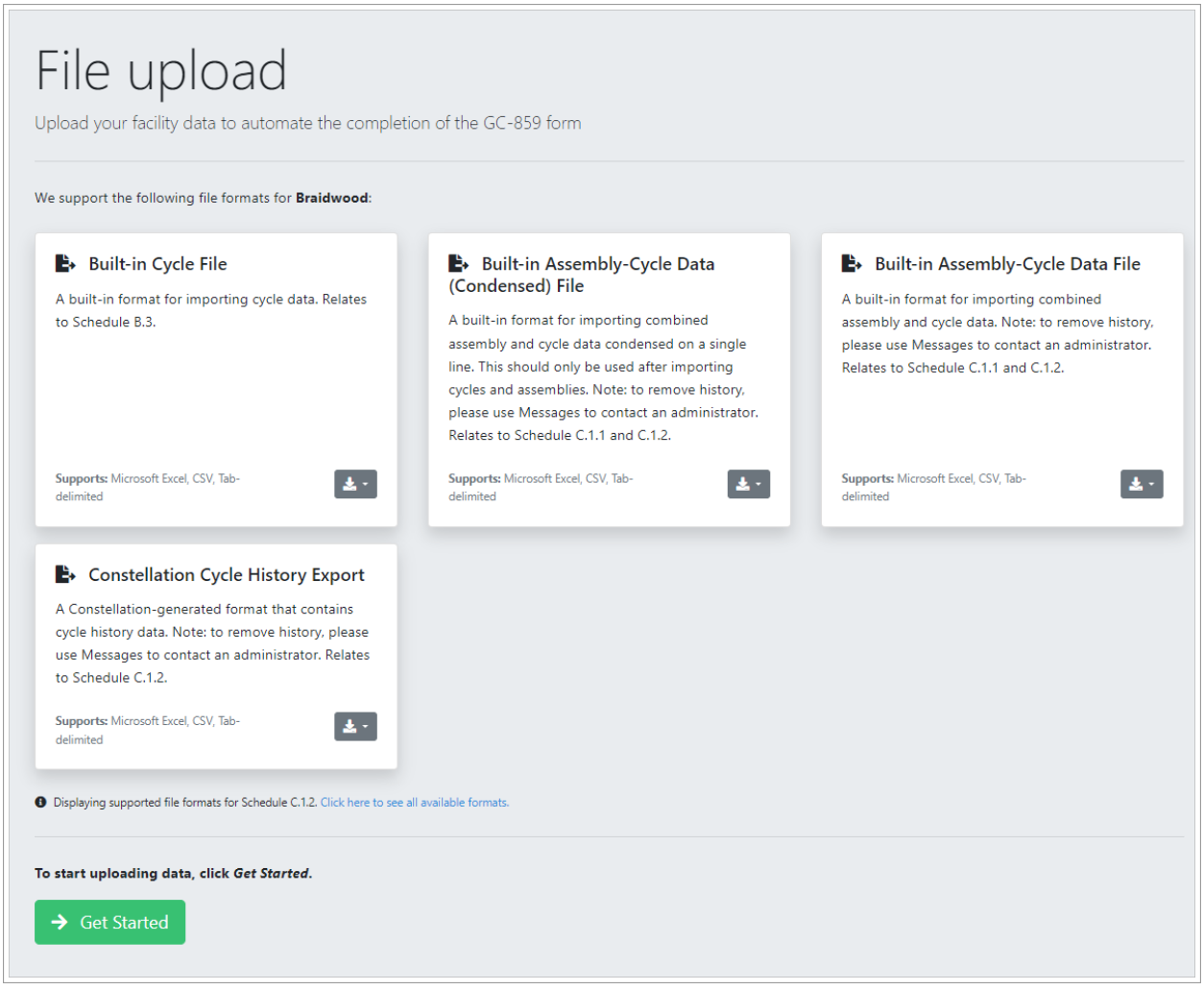


Fig. 3.25: Schedule C.1.2 Constellation Cycle Data File Upload

Assembly	Discharge	Discharge	Cycle 1	Unit	EOC 1 Date	Cycle 1 Expos	Cycle 2	Unit	EOC 2 Date	Cycle 2 Ex	Cycle 3	Unit	EOC 3 Date	Cycle 3 Ex
ABC123	1/1/2021	12345.67	1	Unit 1	1/2/2017	22917.53	2	Unit 1	7/3/2018	44238.33	3	Unit 1	1/2/2020	51074.26
ABC124	1/2/2021	12345.67	1	Unit 2	1/3/2017	32041.08363	2	Unit 2	7/4/2018	48038.31	3	Unit 2	1/3/2020	60916.95
ABC125	1/3/2021	12345.67	1	Unit 1	1/2/2017	25095.81795	2	Unit 1	7/3/2018	44386.6	3	Unit 1	1/2/2020	55098.19
ABC126	1/4/2021	12345.67	1	Unit 2	1/3/2017	32868.26	2	Unit 2	7/4/2018	48737.26	3	Unit 2	1/3/2020	59146.61
ABC127	1/5/2021	12345.67	1	Unit 1	1/2/2017	29123.88774	2	Unit 1	7/3/2018	49298.91	3	Unit 1	1/2/2020	57033.77
ABC128	1/6/2021	12345.67	1	Unit 2	1/3/2017	23639.3097	2	Unit 2	7/4/2018	45664.06	3	Unit 2	1/3/2020	52903.79
ABC129	1/7/2021	12345.67	1	Unit 1	1/2/2017	29370.08836	2	Unit 1	7/3/2018	50086.52	3	Unit 1	1/2/2020	59260.9
ABC130	1/8/2021	12345.67	1	Unit 2	1/3/2017	23393.87752	2	Unit 2	7/4/2018	44446.75	3	Unit 2	1/3/2020	51199.63
ABC131	1/9/2021	12345.67	1	Unit 2	1/3/2017	29689.16329	2	Unit 2	7/4/2018	44959.77	3	Unit 2	1/3/2020	53238.18

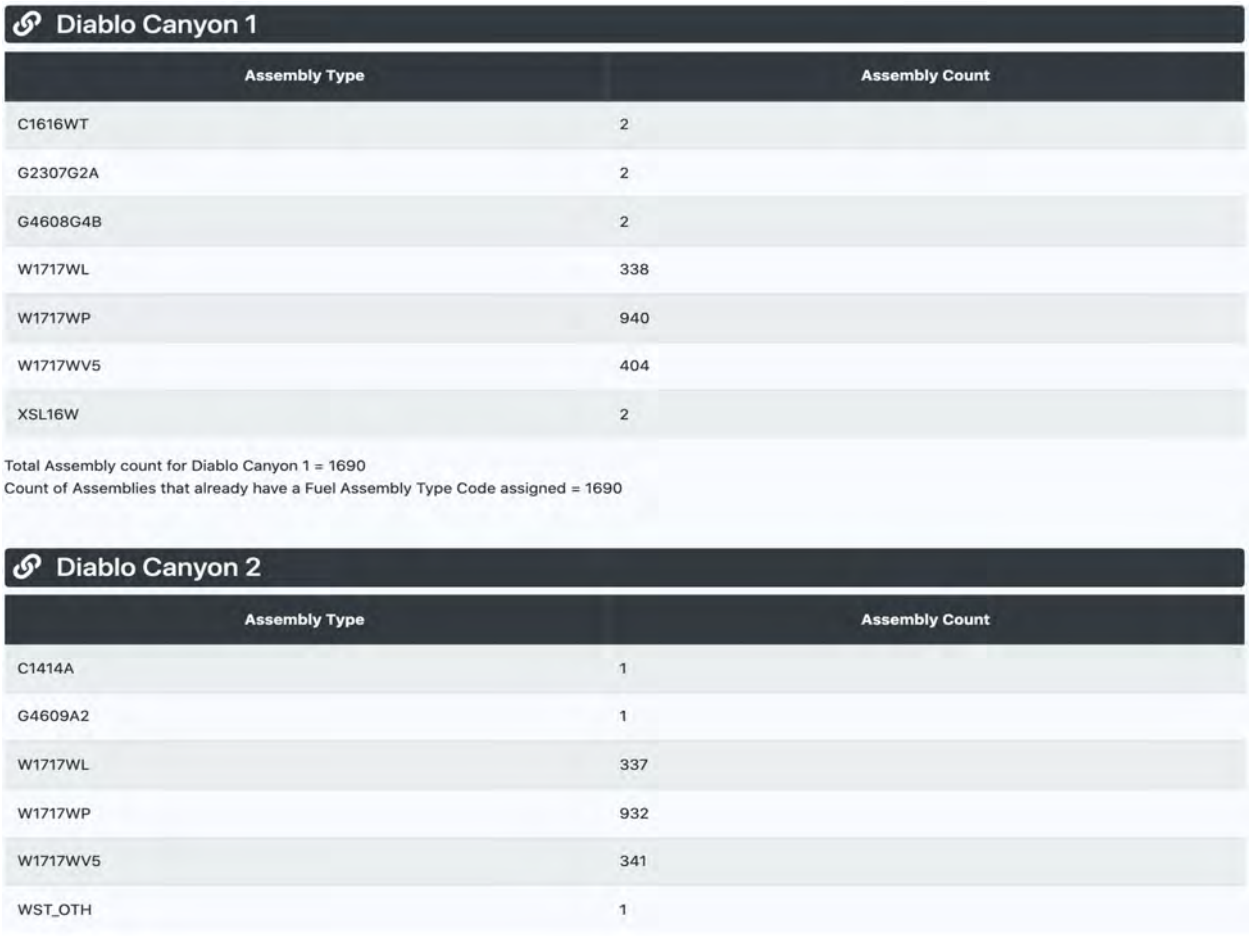
Fig. 3.26: Schedule C.1.2 Example Format for Constellation Cycle History Report

Similar to the assembly data loaded using the Cask Loader format for Schedule C.1.1, the reactor identifiers will need to be translated to data recognizable by the GC-859 survey web program. The program will check the data and send the user through automated steps where it will predict what the data is that conforms to that in the database and ask the user to confirm the predictions. For example Fig. 3.26 shows "reactor_unit_id" as "118." A user would see the same questions in Fig. 3.13 where in this example the program asks the user if reactor id 118 is associated with Quad Cities 1 or 2.

3.6 Schedule C.1.3: Fuel Assembly Type Codes

When Schedule C.1.2 data entry is complete the user can advance to Schedule C.1.3 by clicking the green button "Take me to Schedule C.1.3" shown on the bottom of Fig. 3.20 or by navigating to Schedule C.1.3 using other methods previously discussed such as clicking the "My GC-859" button.

The information in Schedule C.1.3 is only for review and will look similar to that in Fig. 3.27 as this information was previously entered as part of the assembly information in Schedule C.1.1 or C.1.2. If the assembly type information displayed in Schedule C.1.3 needs to be changed, the data in Schedule C.1.1 or C.1.2 will need to be modified. A description of the fuel assembly associated with each code can be found in Appendix E of the GC-859 survey which is accessible through the help menu shown in Fig. 3.6 .



Diablo Canyon 1

Assembly Type	Assembly Count
C1616WT	2
G2307G2A	2
G4608G4B	2
W1717WL	338
W1717WP	940
W1717WV5	404
XSL16W	2

Total Assembly count for Diablo Canyon 1 = 1690
Count of Assemblies that already have a Fuel Assembly Type Code assigned = 1690

Diablo Canyon 2

Assembly Type	Assembly Count
C1414A	1
G4609A2	1
W1717WL	337
W1717WP	932
W1717WV5	341
WST_OTH	1

Fig. 3.27: Schedule C.1.3 Assembly Type Information

3.7 Schedule C.1.4: Shipments/Transfers of Discharged Fuel

Schedule C.1.4 covers shipments/transfers of discharged fuel. If fuel is to be shipped or transferred a user can click on the blue "Create Fuel Transfer" request button shown in Fig. 3.28.

Fig. 3.28: Schedule C.1.4 Front Screen

If the user clicks on the blue "Create Fuel Transfer Request" button shown on Fig. 3.28, this will display a form needed to submit a request to transfer an assembly similar to that shown in Fig. 3.29.

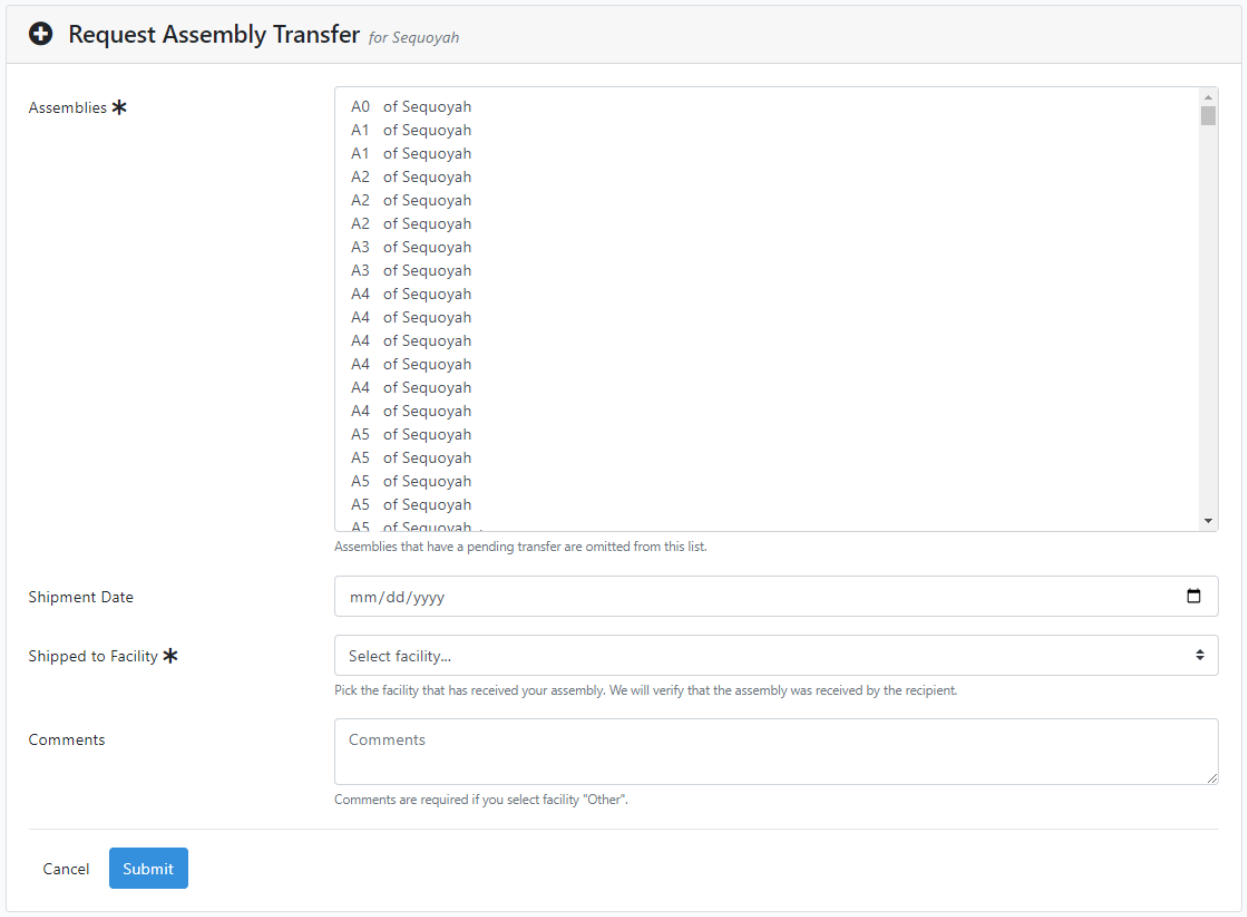


Fig. 3.29: Schedule C.1.4 Request Assembly Transfer Form

After the user fills out the form shown in Fig. 3.29 and clicks the blue “Submit” button, it will send an email to the receiving plant contact to verify that the assembly was transferred there. An email will also be sent to the system administrator. This email will contain a notification that there is a fuel transfer request and it can be viewed by clicking on the link within the message. The message will look similar to Fig. 3.30.

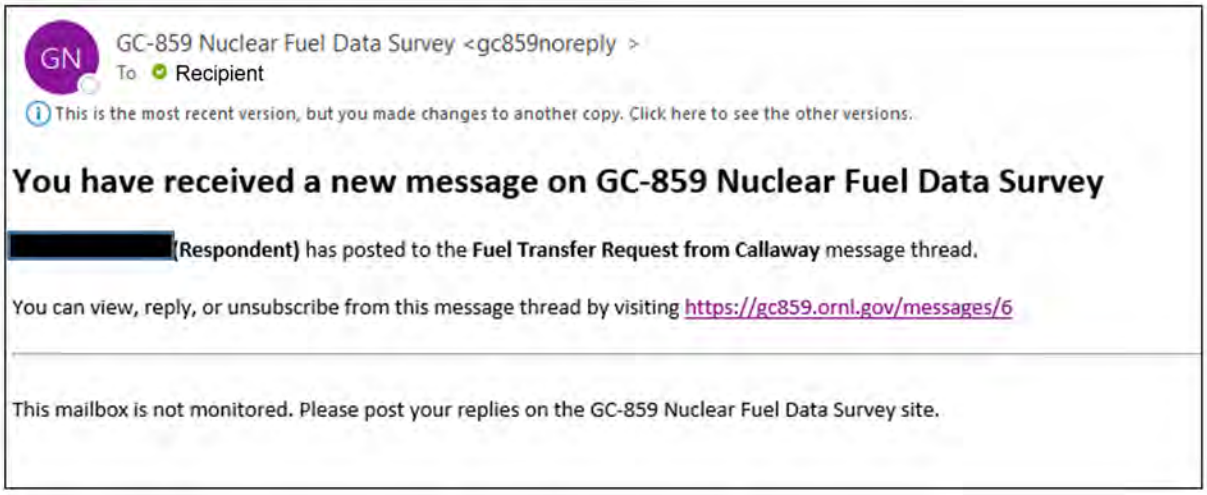


Fig. 3.30: Schedule C.1.4 Example Email Sent for Requesting Fuel Transfer

The recipient of the email can either click on the link to view the message or navigate to their messages from within the web application by clicking on their name in the upper right-hand corner of the screen which will reveal a drop-down menu where they can click on the "Messages" shown in to see their messages.

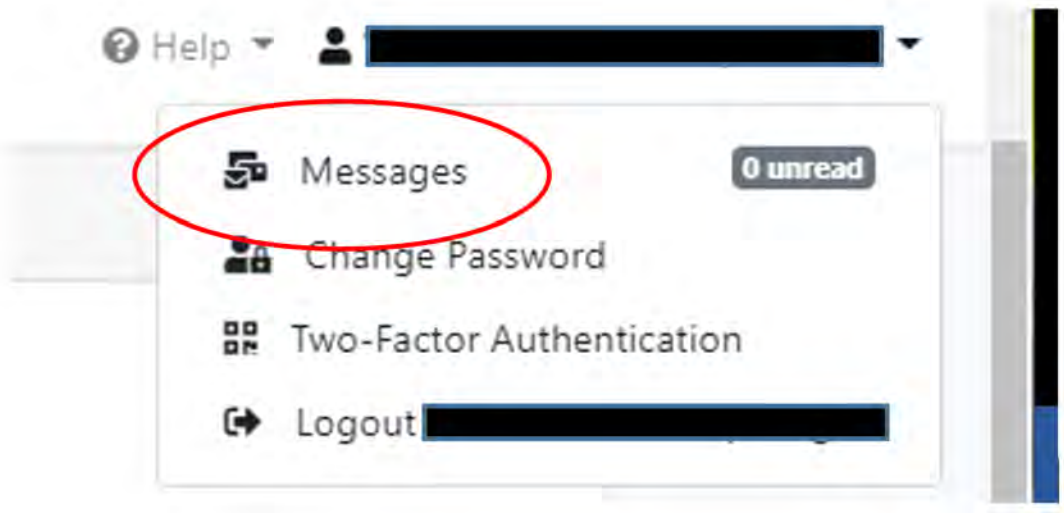


Fig. 3.31: Accessing Messages

3.8 Schedule C.2: Projected Assembly Discharges

Since Schedule C.2 was removed from the GC-859 survey, navigating to this section does not provide any opportunity to view, change or input data.

3.9 Schedule C.3: Special Fuel Forms

The next schedule where a user can provide data is Schedule C.3 for special fuel forms. If a user needs to enter information about a single assembly canister they can click on the blue "yes" button shown in Fig. 3.32.

Fig. 3.32: Schedule C.3 Front Screen

If a user selects the "yes" button on Fig. 3.32 they will be taken to a screen similar to that in Fig. 3.33.

3.10 C.3.1 Special Fuel Form - Canisters

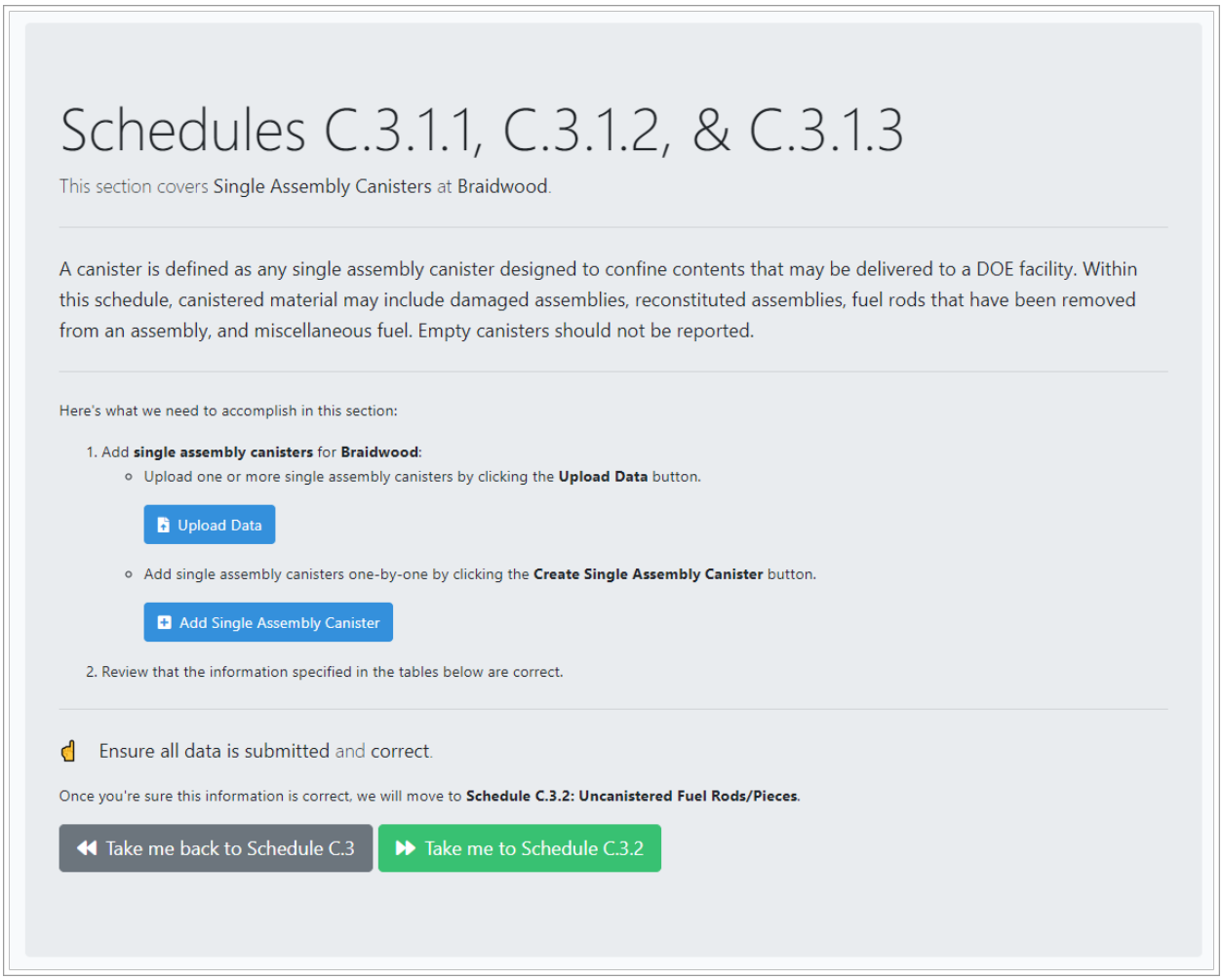
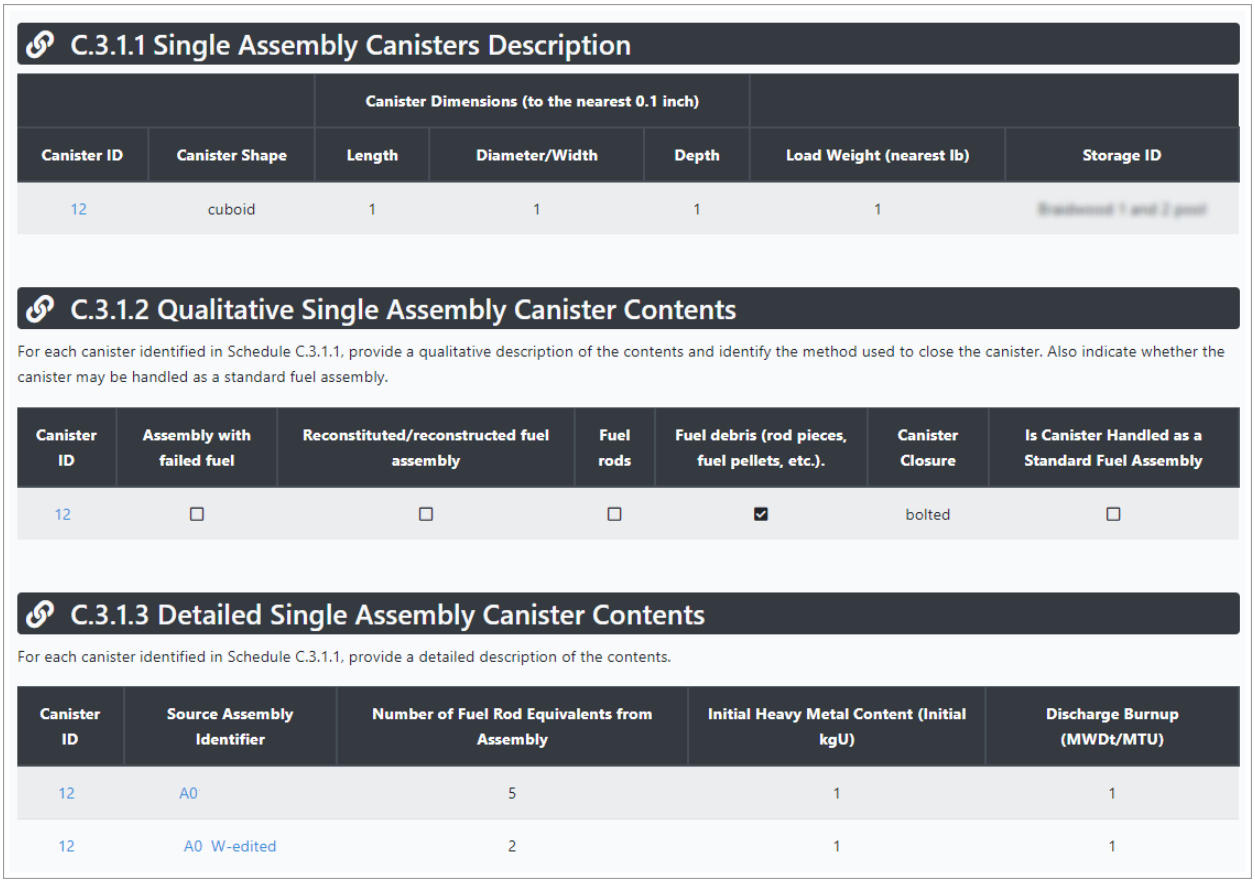


Fig. 3.33: Schedules C.3.1.1, C.3.1.2 and C.3.1.3 Single Assembly Canisters

If the user scrolls down from the screen shown in Fig. 3.33, they will be able to see all previously entered information within Schedules C.3.1.1, C.3.1.2 and C.3.1.3 similar to what is shown in Fig. 3.34. Clicking on the blue hyperlinks under “Canister ID” will allow the user to open up a form for editing information for each entry.



C.3.1.1 Single Assembly Canisters Description

		Canister Dimensions (to the nearest 0.1 inch)				
Canister ID	Canister Shape	Length	Diameter/Width	Depth	Load Weight (nearest lb)	Storage ID
12	cuboid	1	1	1	1	[redacted]

C.3.1.2 Qualitative Single Assembly Canister Contents

For each canister identified in Schedule C.3.1.1, provide a qualitative description of the contents and identify the method used to close the canister. Also indicate whether the canister may be handled as a standard fuel assembly.

Canister ID	Assembly with failed fuel	Reconstituted/reconstructed fuel assembly	Fuel rods	Fuel debris (rod pieces, fuel pellets, etc.).	Canister Closure	Is Canister Handled as a Standard Fuel Assembly
12	☐	☐	☐	☑	bolted	☐

C.3.1.3 Detailed Single Assembly Canister Contents

For each canister identified in Schedule C.3.1.1, provide a detailed description of the contents.

Canister ID	Source Assembly Identifier	Number of Fuel Rod Equivalents from Assembly	Initial Heavy Metal Content (Initial kgU)	Discharge Burnup (MWDt/MTU)
12	A0	5	1	1
12	A0 W-edited	2	1	1

Fig. 3.34: Schedule C.3 Data

The user can navigate to the form for filling out information on a new single assembly canister by clicking on the “add single assembly canister” button shown on the bottom of Fig. 3.33. This will bring up a form similar to that in Fig. 3.35. Required parameters are shown with asterisks (*), if these are not entered an error message saying “please fill out this field” will be displayed upon submission of the data form.

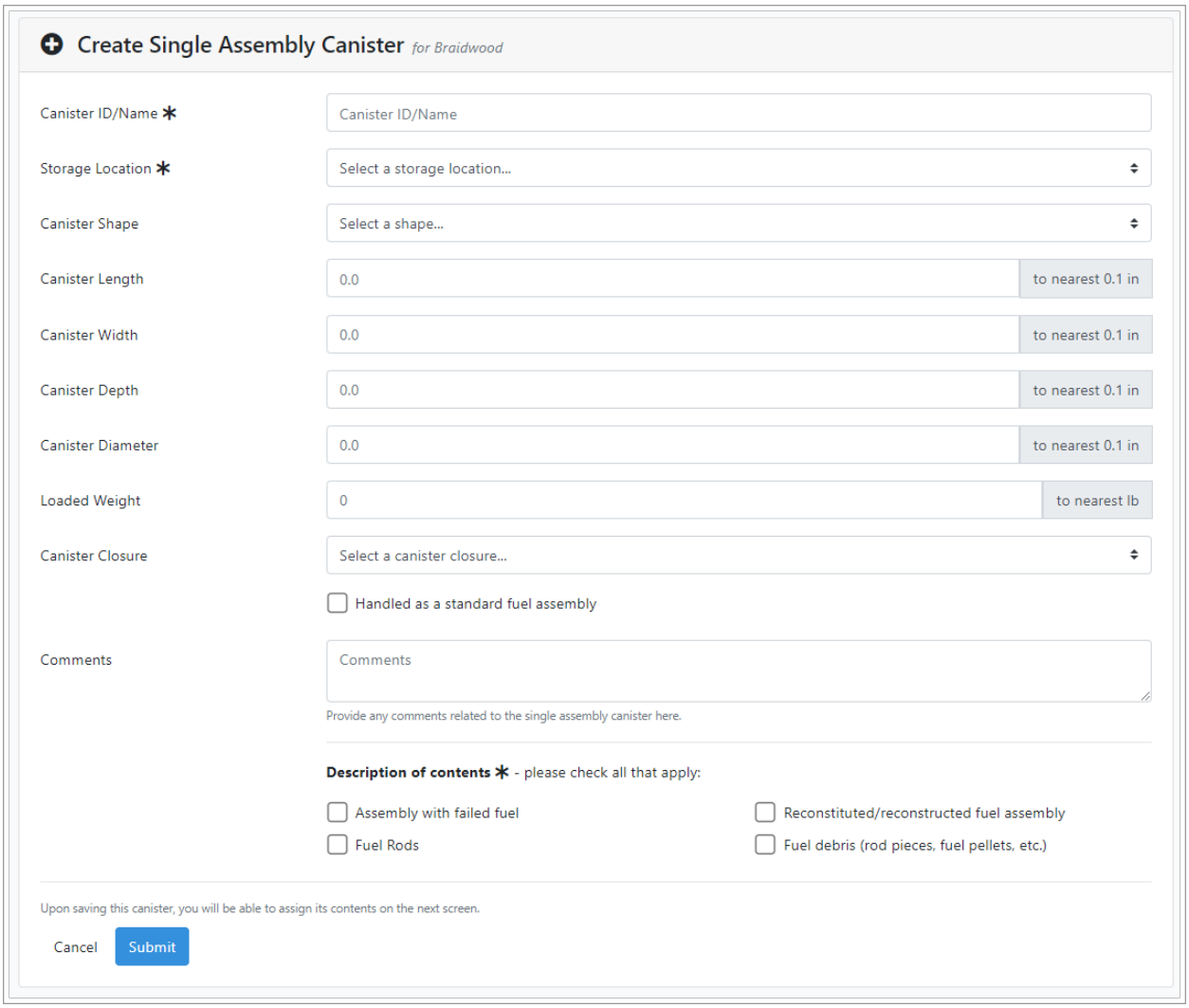


Fig. 3.35: Schedule C.3 Form to Add Single Assembly Canister

Similar to entering assembly and cycle data, a Microsoft Excel (xlsx) file with this information can be uploaded by clicking on the blue “upload data” button. This will take the user to a screen where they can download the right format (order and names of columns, data fromat) for uploading the tabulated information. This process is the same as that which has been described for cycle and assembly data.

3.11 C.3.2 Special Fuel Form - Uncanistered Fuel Rods/Pieces

Proceeding next on the wizard will take a user to reporting of Uncanistered Fuel Rods and Fuel Rod Pieces. The landing page for schedule C.3.2 is again divided into two parts. The instructions are in the top part of the page as shown in Fig. 3.36.

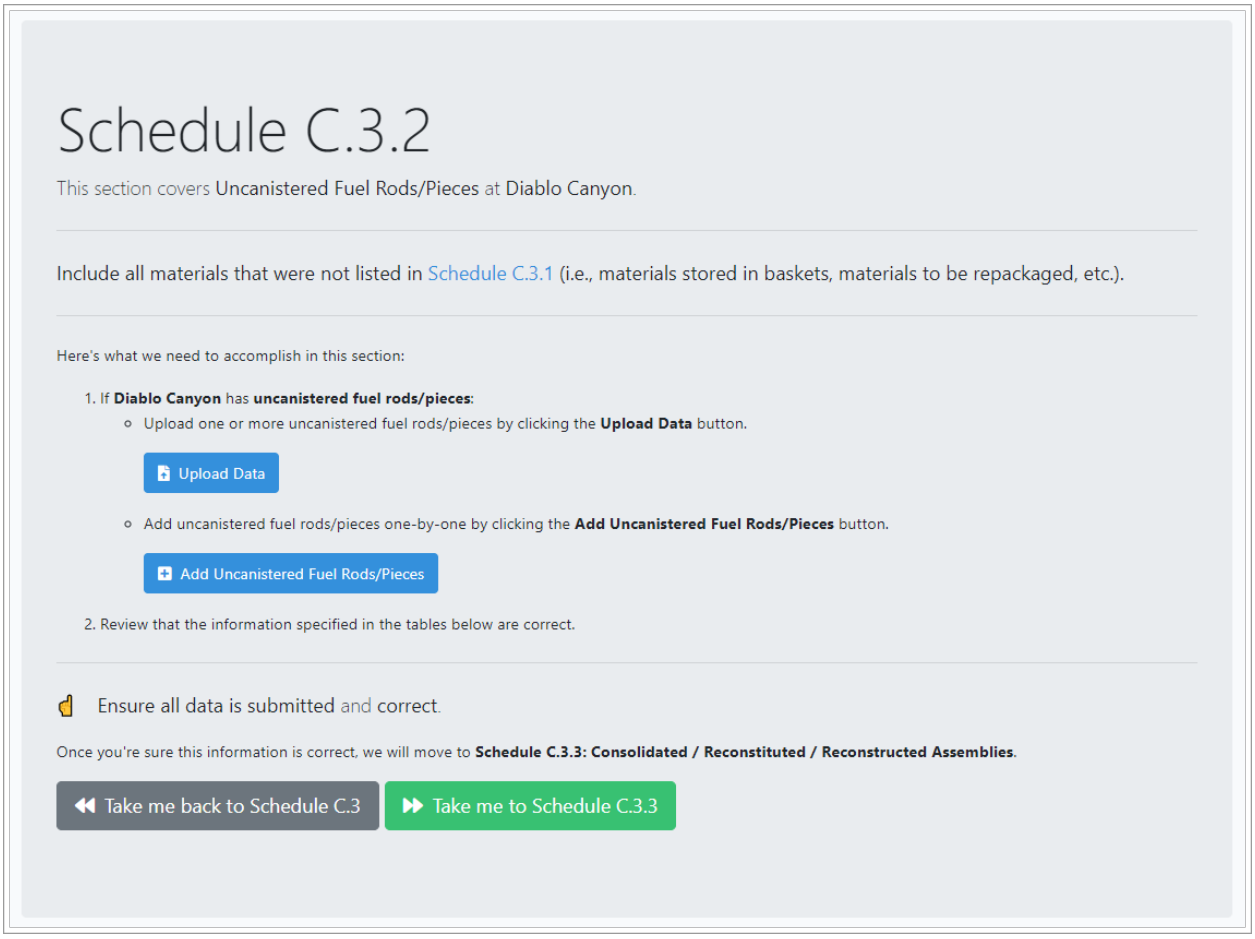


Fig. 3.36: Instructions for Schedule C.3.2

The bottom page provides the summary of current inventory as shown in Fig. 3.37.

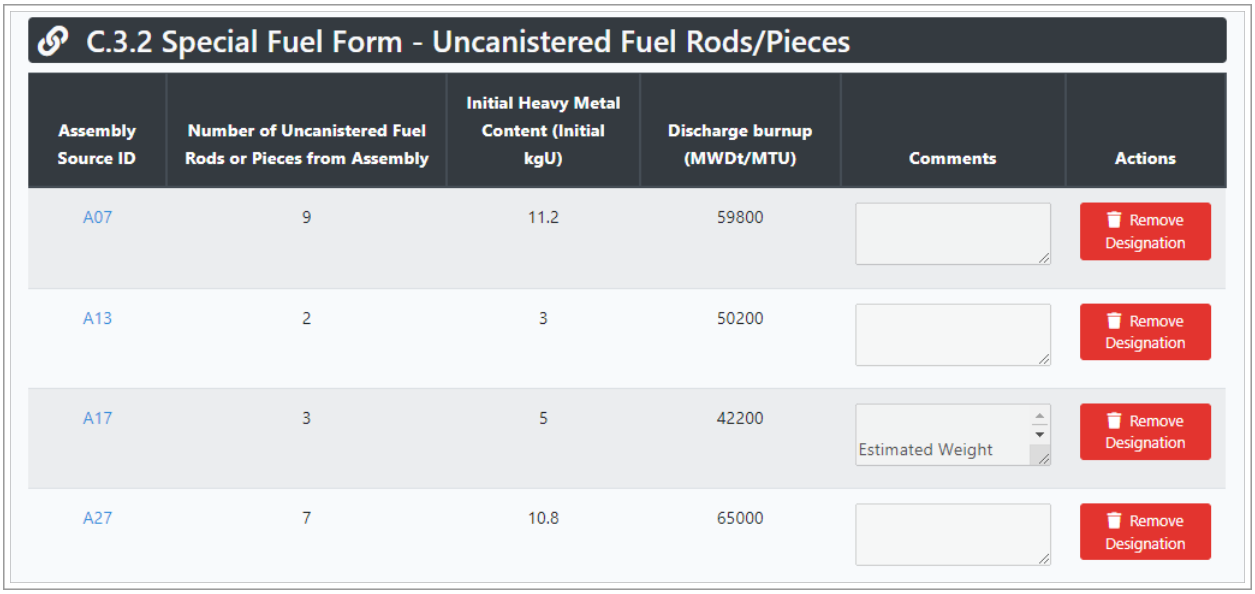


Fig. 3.37: Inventory Summary for Schedule C.3.2

Users can enter data by uploading a list of inventory using the "Upload Data" button. Alternatively, users can add rods and pieces individually through a web form. The web form outlines the required data to be provided for each fuel rod or fuel rod piece as shown in Fig. 3.38.

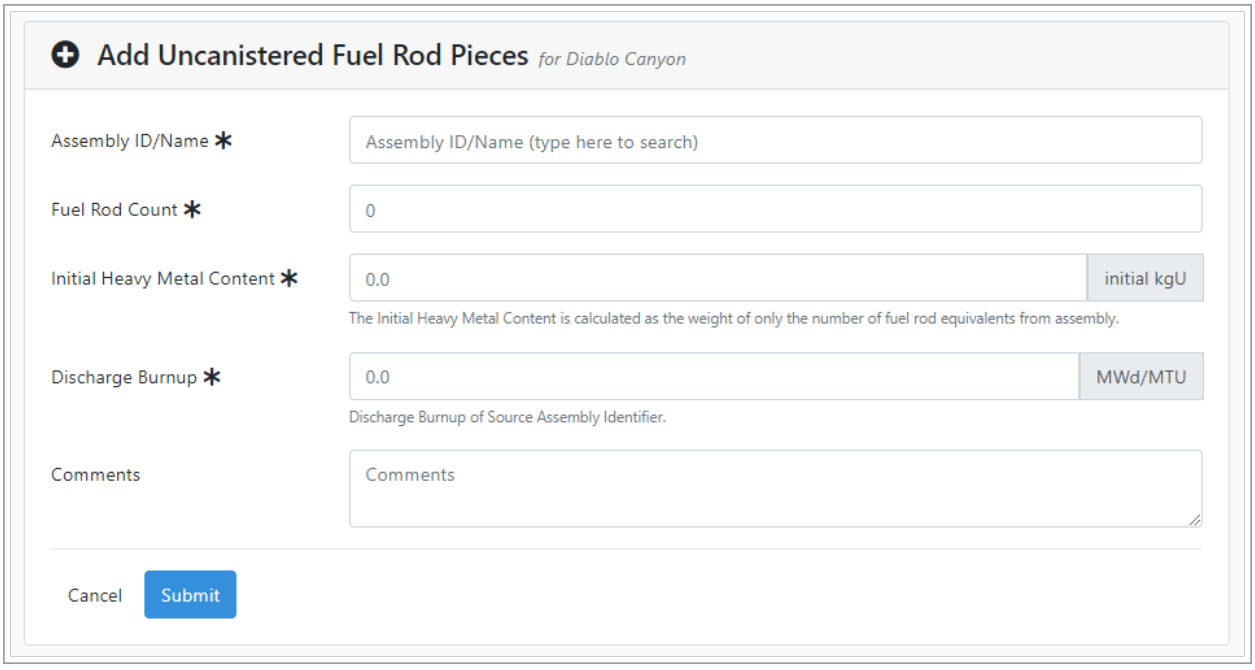


Fig. 3.38: Form to Enter a Single Fuel Rod or Fuel Rod Piece into Schedule C.3.2

For the "Data Upload" function, users need to prepare a Microsoft Excel (xlsx), or Comma Separated (csv), or tab separated (tab) file with the data from the form entered on one line per each fuel rod or each fuel rod piece as shown in Fig. 3.39. After that, the file upload function is similar to what was shown in Fig. 3.7 and Fig. 3.10. After a successful

upload, the system returns a message on how many entries were imported. Users can compare this number with a number of expected imported pieces or lines in the import file.

	A	B	C	D	E	F
1	reactor_name	assembly_id	fuel_rod_count	initial_u_kg	discharge_burnup_mwd_per_mthm	comments
2	Diablo Canyon 1	A13	2	3	50200	
3	Diablo Canyon 1	A17	3	5	42200	Estimated Weight
4	Diablo Canyon 1	A27	7	10.8	65000	
5	Diablo Canyon 1	A07	9	11.2	59800	

Fig. 3.39: Example Upload Form for Schedule C.3.2

3.12 C.3.3 Special Fuel Form - Consolidated/Reconstituted/Reconstructed Assemblies; Dimensionally or Other Than LWR Non-Standard Assemblies and Failed Fuel

Next, users will be asked if they have to report any Consolidated, Reconstituted, or Reconstructed Assemblies. This will take users to a landing page for schedule C.3.3.1 in Fig. 3.40.

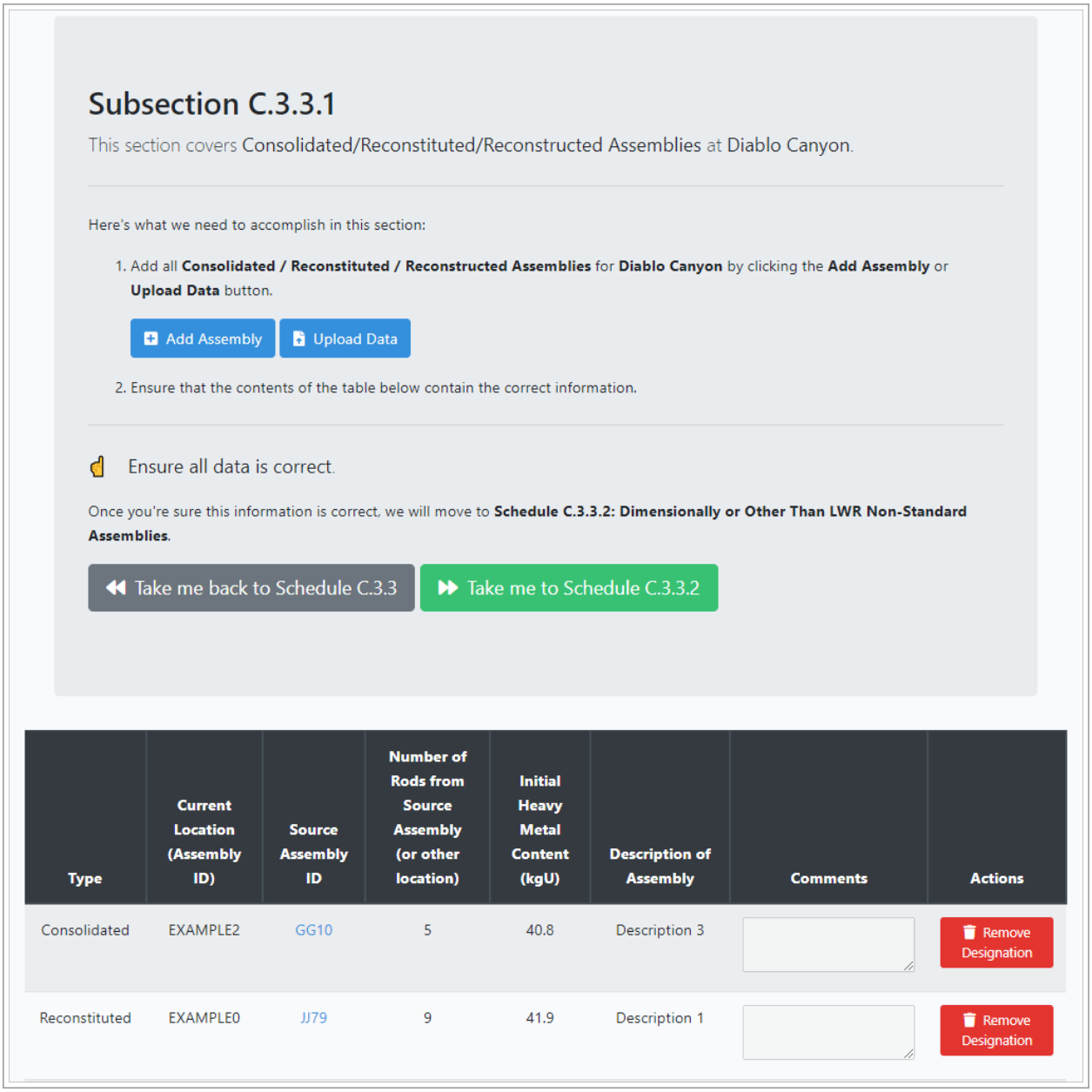


Fig. 3.40: Landing page for schedule C.3.3.1

Users can enter data by uploading a list of inventory using the "Upload Data" button. Alternatively, users assemblies individually through a web form. The web form outlines the required data to be provided for assembly as shown in Fig. 3.41.

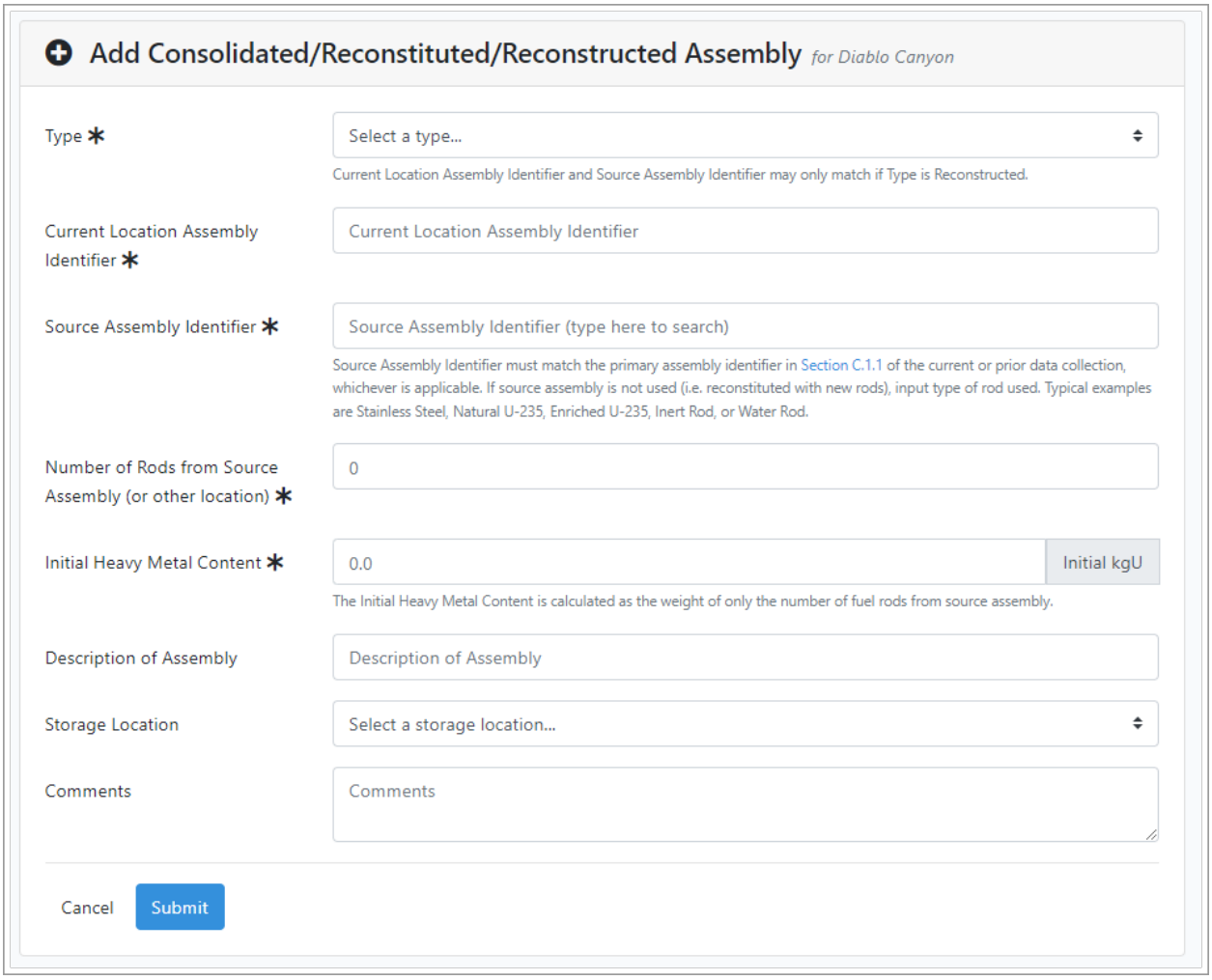


Fig. 3.41: Form to Assemblies into Schedule C.3.3.1

For the "Data Upload" function, users need to prepare a data file (xlsx, csv or tab) with the data from the form entered on one line per each assembly as shown in Fig. 3.42. After that, the file upload function is similar to what was shown in Fig. 3.7 and Fig. 3.10. After a successful upload, the system returns a message on how many entries were imported. Users can compare this number with a number of expected imported assemblies or lines in the import file.

Consolidated Type	Current Location Assembly Identifier	Source Assembly Identifier	Source Assembly Contributing Reactor	Number of Rods from Source Assembly (or other location)	Initial Heavy Metal Content (kgU)	Description of Assembly	Storage Location	Comments
Reconstituted	EXAMPLE0	JJ79	Diablo Canyon 1	9	41.9	Description 1	Diablo Canyon 2 pool	
Reconstructed	EXAMPLE1	V88H	Diablo Canyon 2	10	58.9	Description 2	Diablo Canyon ISFSI	
Consolidated	EXAMPLE2	GG10	Diablo Canyon 1	5	40.8	Description 3	Diablo Canyon ISFSI	
Reconstituted	EXAMPLE3	Z36	Diablo Canyon 2	7	42.7	Description 4	Diablo Canyon ISFSI	
Consolidated	EXAMPLE4	T25	Diablo Canyon 2	5	16.6	Description 5	Diablo Canyon 1 pool	

Fig. 3.42: Example Upload Form for Schedule C.3.3.1

Dimensionally or Other Than LWR Non-Standard Assemblies are covered in schedule C.3.3.2. The approach to add and review non-standard assemblies is similar to description in schedule C.3.3.1. A single assembly form entry has three entries: Assembly Identifier, Contributing Reactor and a Description field. Similarly if users opt for the "Upload Data" approach, the xlsx/csv/tab import file must have three columns with the same headings. Each line of xlsx/csv/tab file will contain information for a single assembly. The file upload function is similar to what was shown in Fig. 3.7 and Fig. 3.10. After a successful upload, the system returns a message on how many entries were imported. Users can compare this number with a number of expected imported assemblies or with the number of lines in the import file.

3.13 Schedule C.4: Potential High-Level Waste

Schedule C.4 covers potential high-level waste. If the user completes Section C.3 or navigates to Section C.4 using other means, they will see a screen similar to that in Fig. 3.43. This figure shows what the screen would look like once the user clicks on the "yes" button which will reveal the blue buttons at the bottom of the screen. These are the "Add High Level Waste" and "Upload Data." Clicking the "Add High Level Waste" button will take the user to a form for entering the data. Clicking the "Upload Data" button will take the user to a screen where the user can download a Microsoft Excel (xlsx) file with the format acceptable for uploading this data. After completing the Microsoft Excel (xlsx/csv/tab) file they can click the green "Get Started" button which will take them to the page where the xlsx/csv/tab file can be uploaded.

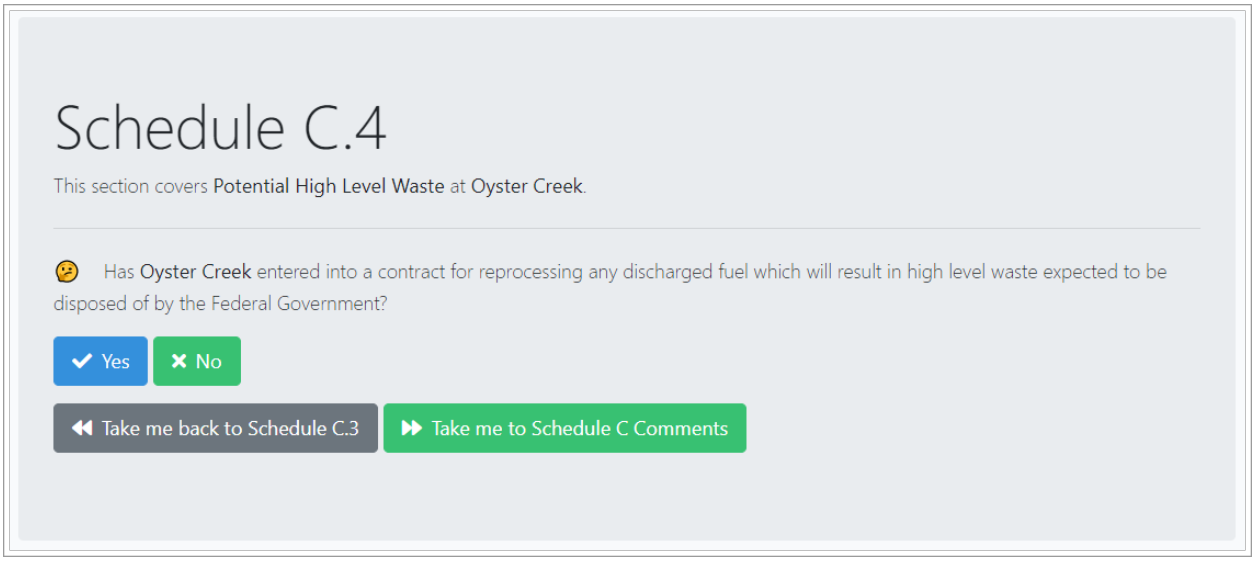


Fig. 3.43: Schedule C.4 Potential High-Level Waste

3.14 Schedule C Comments

Finally, user can proceed to the comment section using the button "Take me to Schedule C Comments" shown above in Fig. 3.43. Users provide any comments concerning Fuel Data (Section C.1 through C.4) and should label comments by the Schedule and Item Number to which they refer. To enter and edit comments, users click the "Edit Comments" button in Fig. 3.44. After completing comments proceed to Schedule D.

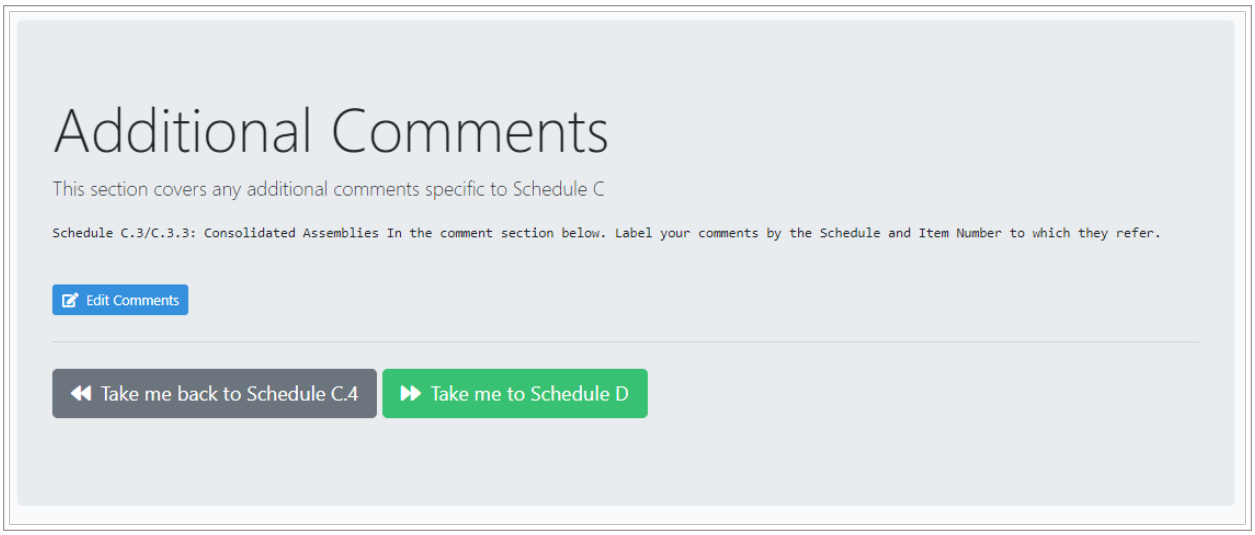


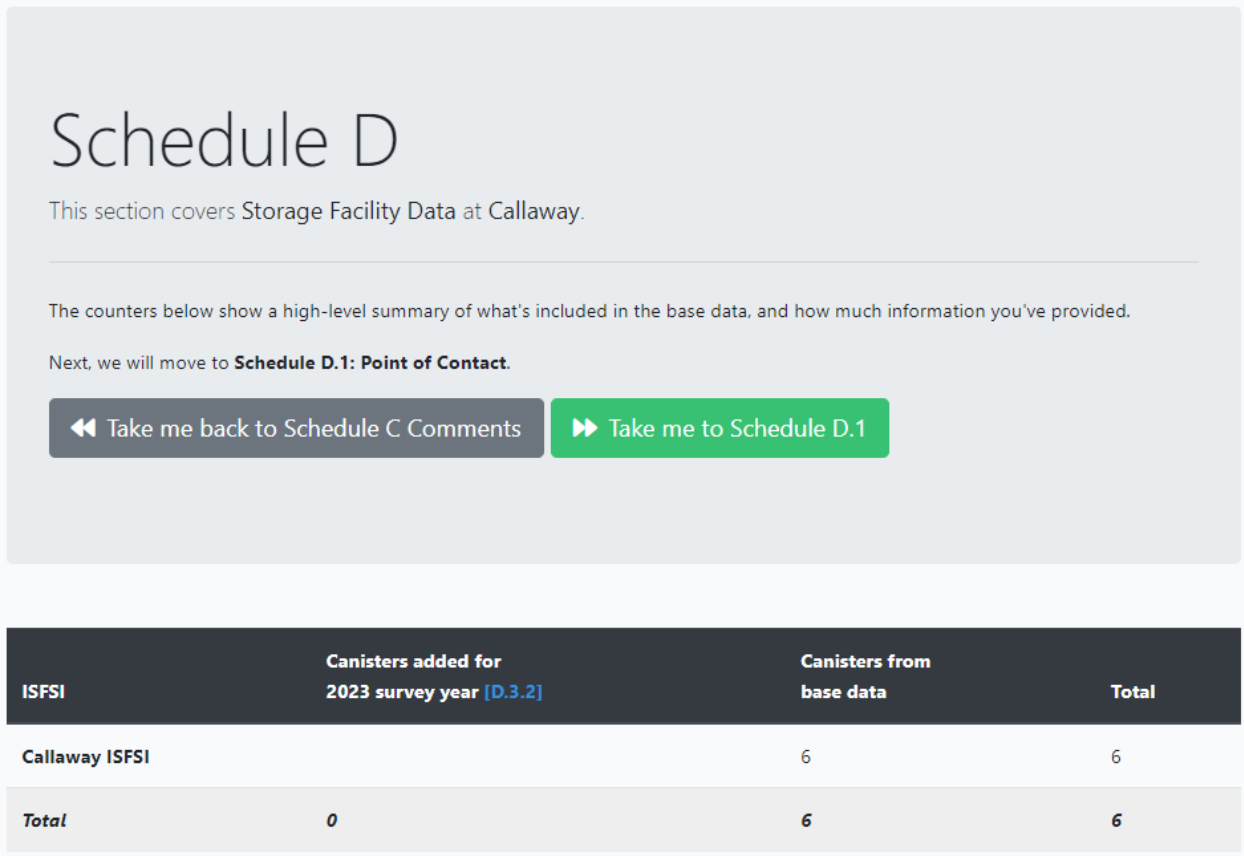
Fig. 3.44: Schedule C Comments

CHAPTER

FOUR

SCHEDULE D: STORAGE FACILITY DATA

When Schedule C is complete or the user navigates to Schedule D, they will see a screen similar to that in Fig. 4.1. The information at the bottom of Fig. 4.1 shows the number of canisters added for the survey year. If the user clicks on the "Take me to Schedule D.1.0" in Fig. 4.1 they will be asked to review and verify points of contact. This information was entered in Schedule A.



ISFSI	Canisters added for 2023 survey year [D.3.2]	Canisters from base data	Total
Callaway ISFSI		6	6
Total	*0*	*6*	*6*

Fig. 4.1: Schedule D Storage Facility Data Front Screen

4.1 Schedule D.2 Storage Facility Information Pool Storage

When the user has completed Schedule D.1 or has navigated to Schedule D.2 using other means such as clicking on the green "My GC-859" button at the top of the screen (see Fig. 1), they will see a screen similar to that in Fig. 4.2 that will them to enter pool storage information.

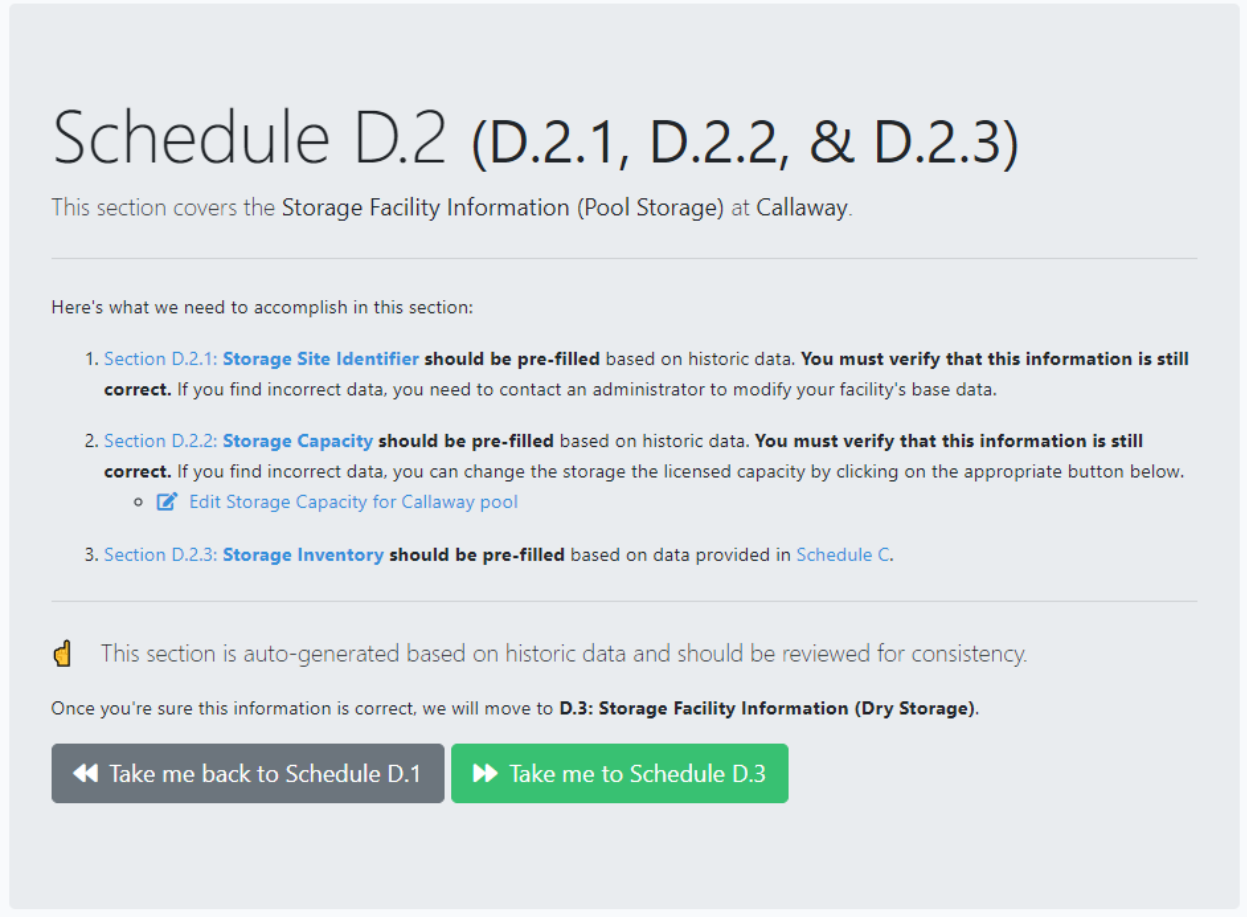


Fig. 4.2: Schedule D.2 Storage Facility Information Pool Storage

Hyperlinks in blue text in Sections 1 and 2 of Fig. 4.2 will scroll the user to the summary information located at the bottom of the page. Summary information in Schedule D.2 includes the storage capacity of each pool at the facility and the number of assemblies stored in each pool. An example is shown in Fig. 4.3. Information in Section 2 can be changed by clicking on the hyperlinks "Edit Storage Capacity ." The information in Section 3 of Fig. 4.2 is pool storage inventory and is pre-generated based on the information entered in Schedule C. If the user wishes to modify the data in Section 3, they will have to go back to the data entry for Schedule C.

D.2.1 Storage Site Identifier

Storage Site Identifier	EIA Number
Diablo Canyon 1 pool	3501
Diablo Canyon 2 pool	3502

D.2.2 Storage Capacity

	Pool	Number of BWR Assemblies	Number of PWR Assemblies	Comments
Current NRC Licensed Storage Capacity	Diablo Canyon 1 pool	0	132	
Current Installed Storage Capacity	Diablo Canyon 1 pool	0	132	
Current NRC Licensed Storage Capacity	Diablo Canyon 2 pool	0	1324	
Current Installed Storage Capacity	Diablo Canyon 2 pool	0	132	

D.2.3 Storage Inventory

Contributing Reactor Name	Pool	Number of Assemblies
Diablo Canyon 1	Diablo Canyon 1 pool	88
Diablo Canyon 2	Diablo Canyon 2 pool	84
Diablo Canyon 1	Diablo Canyon 2 pool	
	Total Storage Site Inventory	**172**

Fig. 4.3: Schedule D.2 Data

4.2 Schedule D.3 Storage Facility Information Dry Storage

When the user has completed reviewing the information in Schedule D.2 they can click on the green “take me to Schedule D.3” button to continue on to Schedule D.3 or navigate to Schedule D.3 using other means previously mentioned. When beginning Schedule D.3 the user will see a screen similar to the one in Fig. 4.4. The Schedule D.3 form allows the user to enter information related to dry storage canisters located at a facility. The form in Fig. 4.4 allows users to perform the following actions:

1. Add canister models and input the coordinate system that provides the orientation of fuel assemblies loaded in the canister relative to the drain tube. This function is designed aid the user when importing canister loading maps in Schedule D.3.3.

2. Add data for individual canisters.
3. Add reference PDFs canister loading maps that can be associated with canisters.

Since last reporting data, many facilities have begun loading new canisters designs. To check the designs that have been reported in previous surveys and add new ones the user can click the blue "Manage Canister Models" button at the top of the form shown in Fig. 4.4 or click the "See Canister Models" button under the Quick Tasks section of the form. Selecting either of these options will take user to a screen similar to Fig. 4.5. Once in this form the user has the option to add new canister designs by clicking the "Add Unlisted Canister" in the upper left corner or modify the coordinate system of canister designs by clicking the "Edit Position Labels" button in the bottom right corner.

If the user adds a canister design, they will be taken to a menu to select available designs. If a design is not available, the user should contact the admin using the message app and the admin can add the new design using administrative tools. If the user elects to modify the canister coordinate system to match the scheme used at their site, they will be taken to a screen similar to Fig. 4.6. These position labels will need to be consistent with those that are entered in the cask loading map data file shown in Fig. 4.16 under the Schedule D.3.3 form. The orientation of the loading map can be determined based on the location of the drain tube. It was observed that few utilities previously provided both drain tube and a north-south direction indicator. User can rotate a canister to indicate proper orientation and also adjust the north-south direction as needed to indicate the direction of the drain tube or a cell position on the storage pad. The numbering scheme, orientation, and directions are site specific and need to be specified for each site if different. These features are optional.

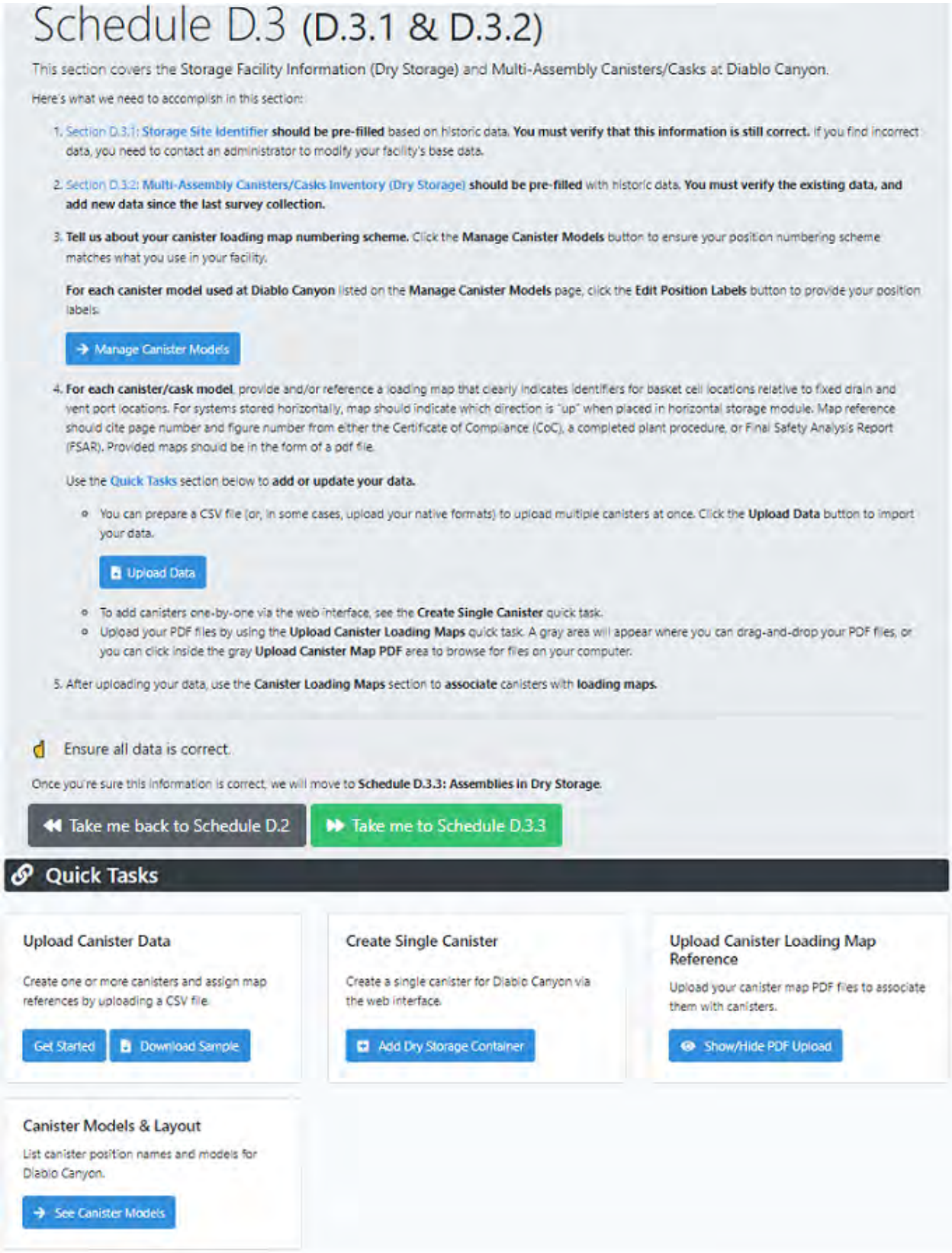


Fig. 4.4: Schedule D.3 Dry Storage Facility Information

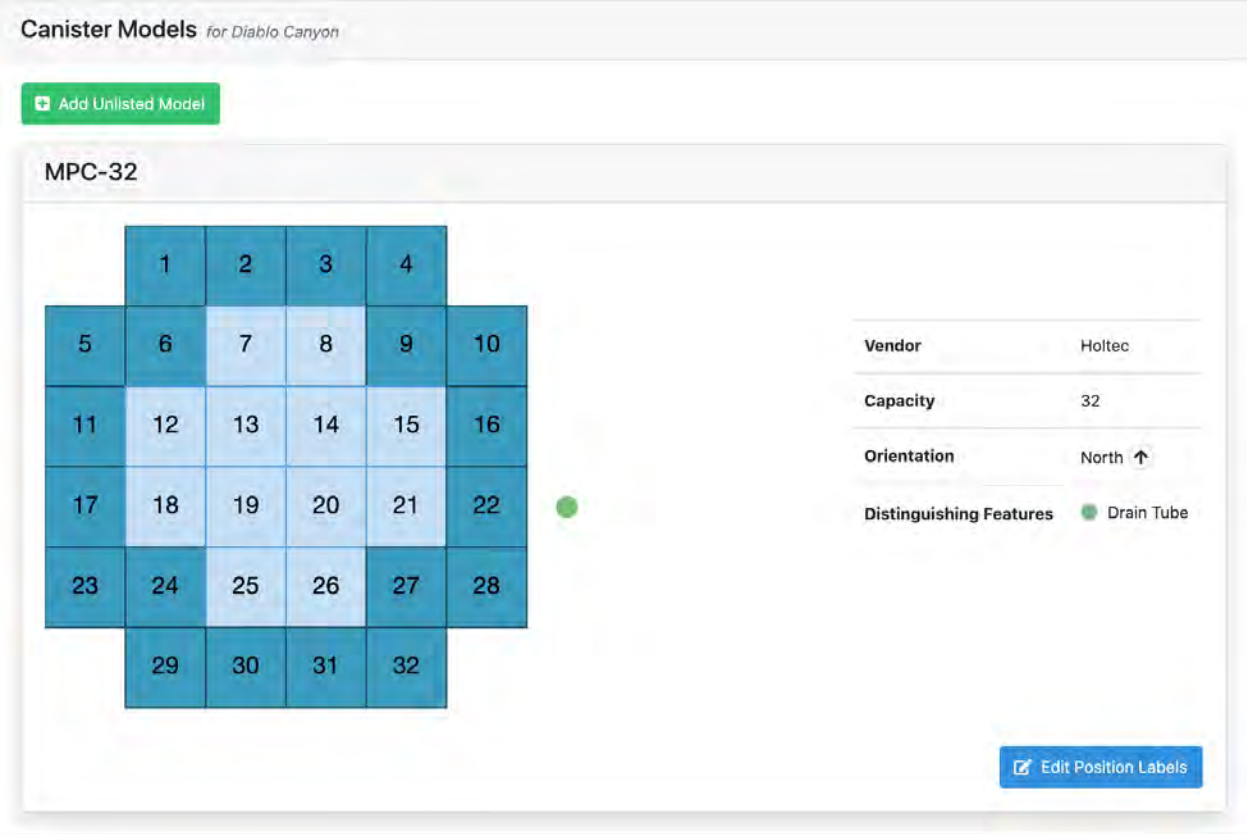


Fig. 4.5: Schedule D.3 Canister Models

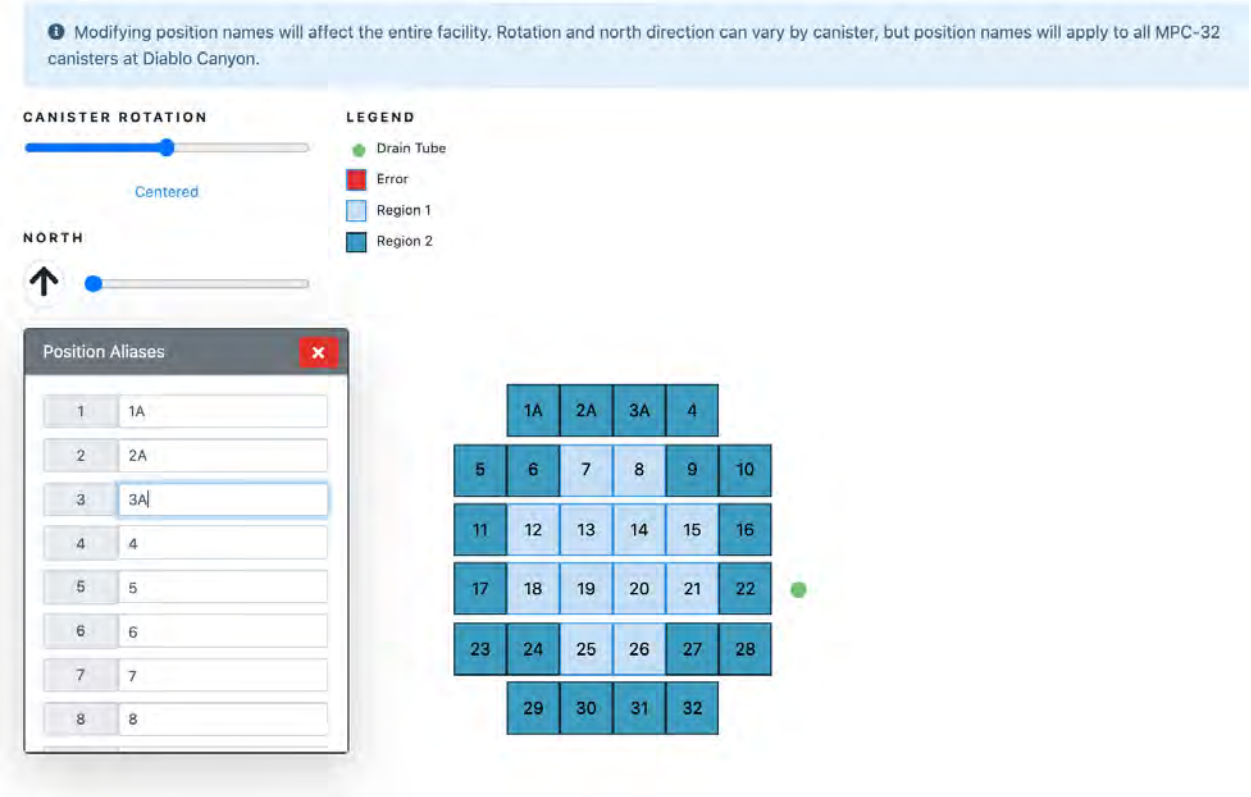


Fig. 4.6: Schedule D.3 Assign Positions to Canister Models

The user has two options for adding new canisters, adding a single canister in a web form or uploading a Microsoft Excel (xlsx), or Comma Separated (csv), or tab separated (tab) file with one or more canisters. If the user would like to upload data for a single new canister, they can click on the blue "Add Dry Storage Container" button located under the "Create Single Canister" section of the "Quick Tasks" section shown in Fig. 4.4. This will open up a form similar Fig. 4.7. Once in the canister addition form, the "Vendor/Model Number" of the cask from the drop-down menu will display a graphic of the canister below the data form for some cask models. Not all cask models will have a corresponding loading map graphic shown in Fig. 4.6 that appears below the form in Fig. 4.7. If a user is adding a new canister and there is no layout available and they wish to have one added, they need to contact an administrator.

As an alternative to entering data for each storage system with the web form, users may upload a Microsoft Excel (xlsx), or Comma Separated (csv), or tab separated (tab) file, which may be more convenient if there are multiple canisters that need to be entered. One way to begin the process of uploading a file with canisters is to click on the blue "Get Started" button in the Upload Canister Data section of the "Quick Tasks" section of the screen shown in Fig. 4.4. This will take the user to the upload screen that will be similar to Fig. 4.8. Once at the file upload screen, the user has the option of downloading Microsoft Excel (xlsx) files with either sample data or previous facility data, by clicking the gray drop-down menu. An example of the Microsoft Excel (xlsx) file format provided is shown in Fig. 4.9. Clicking the "Download Data for Editing" will download a Microsoft Excel (xlsx) file that can be modified or appended to make changes to existing data or add new data. After adding new data users can proceed to the upload screen by clicking "Get Started."

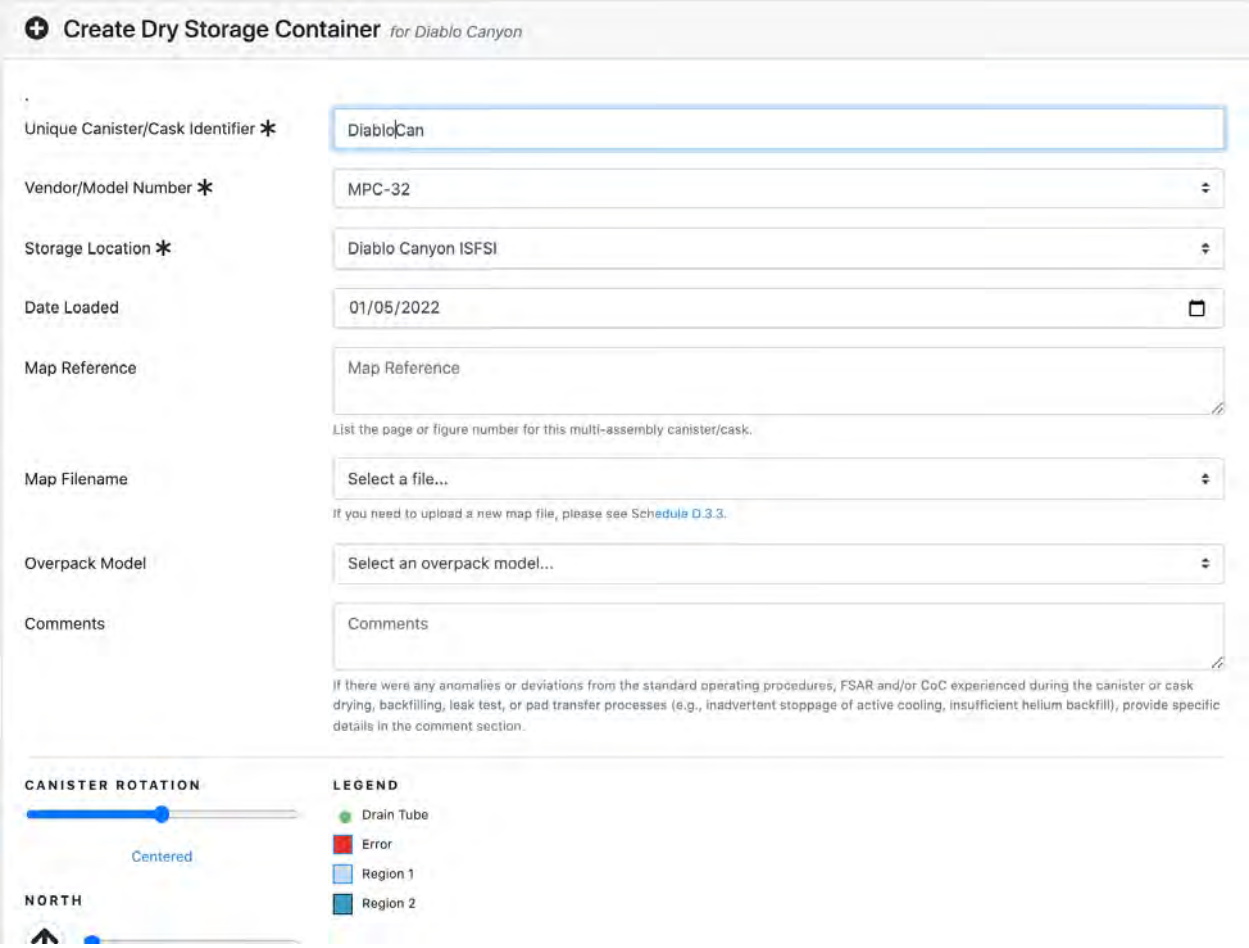


Fig. 4.7: Schedule D.3 Create Dry Storage Container

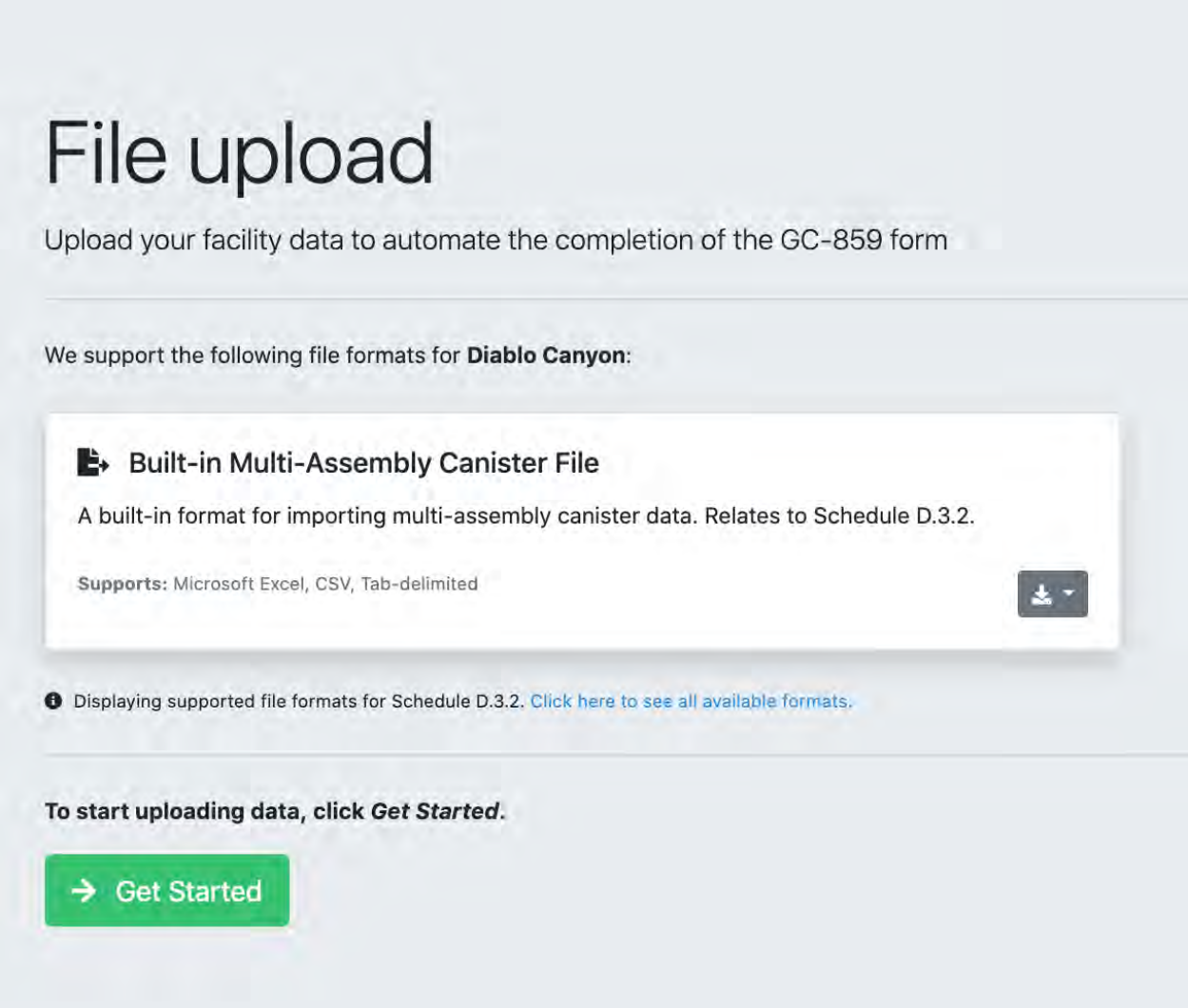


Fig. 4.8: Schedule D.3 Canister Data File Upload

A	B	C	D	E	F	G
canister_id	isfsi	canister_model	inservice_date	map_reference	overpack_model	comments
XMPL-K-78-14	Diablo Canyon ISFSI	MPC-32	12/14/13	Page 5, Figure b.0	HI-STORM 100	Contains 4 damaged fuel assemblies
XMPL-U-78-14	Diablo Canyon ISFSI	MPC-32	3/27/21	Page 7, Figure c.9	HI-STORM 100	
XMPL-P-78-14	Diablo Canyon ISFSI	MPC-32	8/3/12	Page 5, Figure h.2	HI-STORM 100	
XMPL-K-79-14	Diablo Canyon ISFSI	MPC-32	1/12/20	Page 5, Figure y.8	HI-STORM 100	
XMPL-J-79-14	Diablo Canyon ISFSI	MPC-32	2/7/12	Page 0, Figure k.5	HI-STORM 100	
XMPL-W-79-14	Diablo Canyon ISFSI	MPC-32	1/22/18	Page 8, Figure f.1	HI-STORM 100	

Fig. 4.9: Schedule D.3 Upload Canister Data Format

After clicking on the “Get Started” button shown in the user will be able to upload a file by either dragging the file into the window or navigating to the file location by clicking on the “choose file” button below the blue “drag-and-drop your files here” space. The system does some data checking and if canister or overpack models are not recognized will show the message on the right in Fig. 4.10 giving the user the option to select from known canister or overpack models. If the file has been uploaded correctly and all data checking has been completed and corrected, the user will receive a message showing that the file has been successfully uploaded similar to that in Fig. 4.11.

Fig. 4.10: Schedule D.3 File Upload and Data Checking

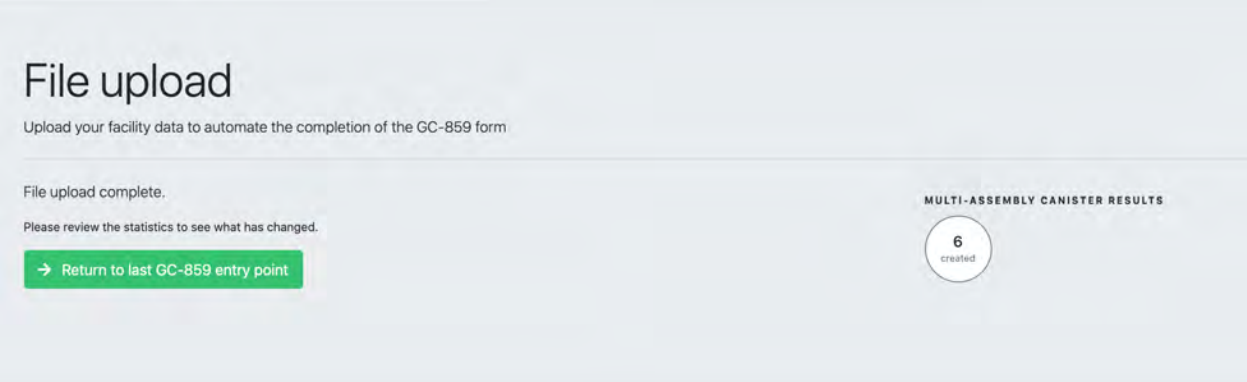


Fig. 4.11: Schedule D.3 Successful File Upload

A third function of the Schedule D.3 form is to permit users to upload loading map PDFs that can be referenced in other Schedule D forms. To upload the reference PDFs the user should click on the "Show/Hide PDF Upload" button in the "Upload Canister Loading Map Reference" section under Quick Tasks in the main D.3 form (Fig. 4.4). Selecting this option will expand this form to allow the user to drag and drop files or open a navigation window to select them. These reference PDFs can be selected from "Map Filename" portion of the single canister form (Fig. 4.7) and portions of the document can be referred to in the "Map Reference" field in Fig. 4.7 or in Column E in of the multiple canister upload file shown in Fig. 4.9. This "map reference" can be used to state a specific page and figure number when a single file is used to describe loading maps for multiple canisters. An example of this is shown in Column E of Fig. 4.9 that states the page and a figure number. This file may be used to describe loading maps for multiple canisters and can be used as a reference for data in Schedule D.3.3.

Clicking on the blue "Show/Hide PDF Upload" button on the main Schedule D.3 page as shown on the right of Fig. 4.4 will navigate user to the lower part of the Schedule D.3 page where they have access to canister loading map files by clicking on the hyperlinks. As shown in Fig. 4.12, clicking on the file name shows a drop-down menu with options to view and download the loading map files, as well as show and modify linked canisters.

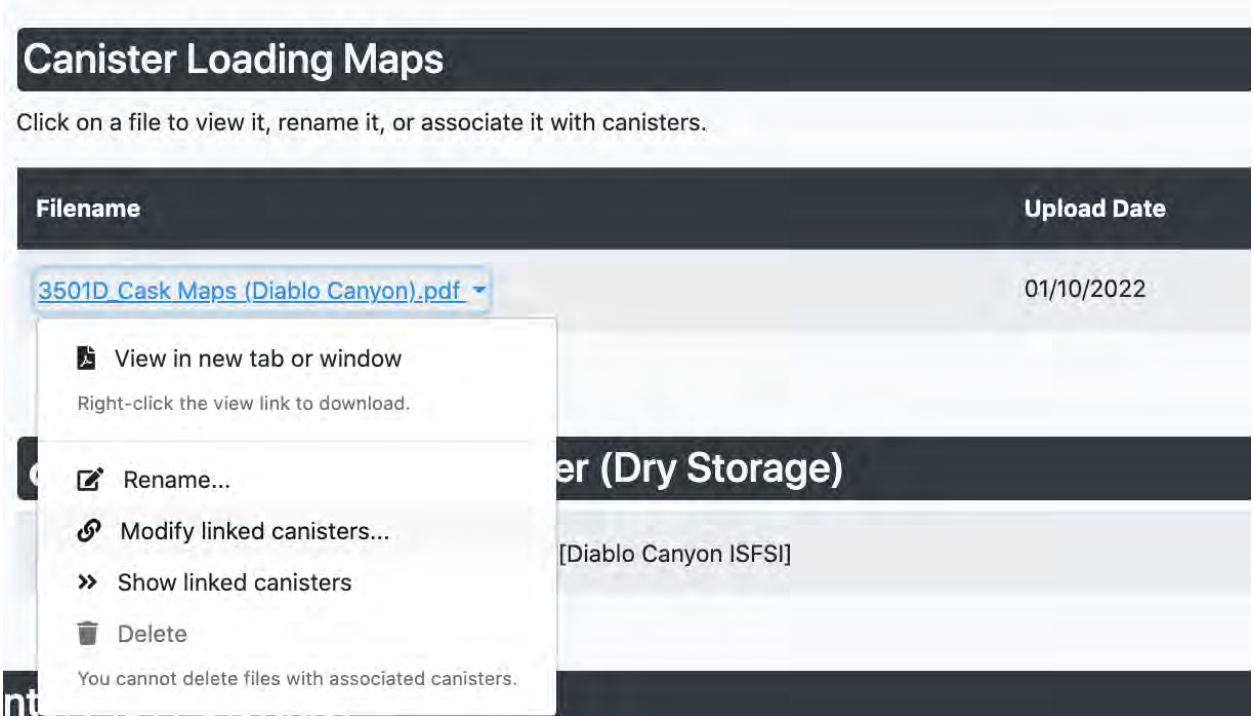


Fig. 4.12: Schedule D.3 Canister Loading Map File Options

Once the user has completed uploading canister information, canister loading information may be reported in Schedule D.3.3. Schedule D.3.3 can be accessed by clicking on the "Take me to Schedule D.3.3" which will be a green button on the screen shown in Fig. 4.4 or by navigating to Schedule D.3.3 using other means. The screen for Schedule D.3.3 will look similar to that in Fig. 4.13.

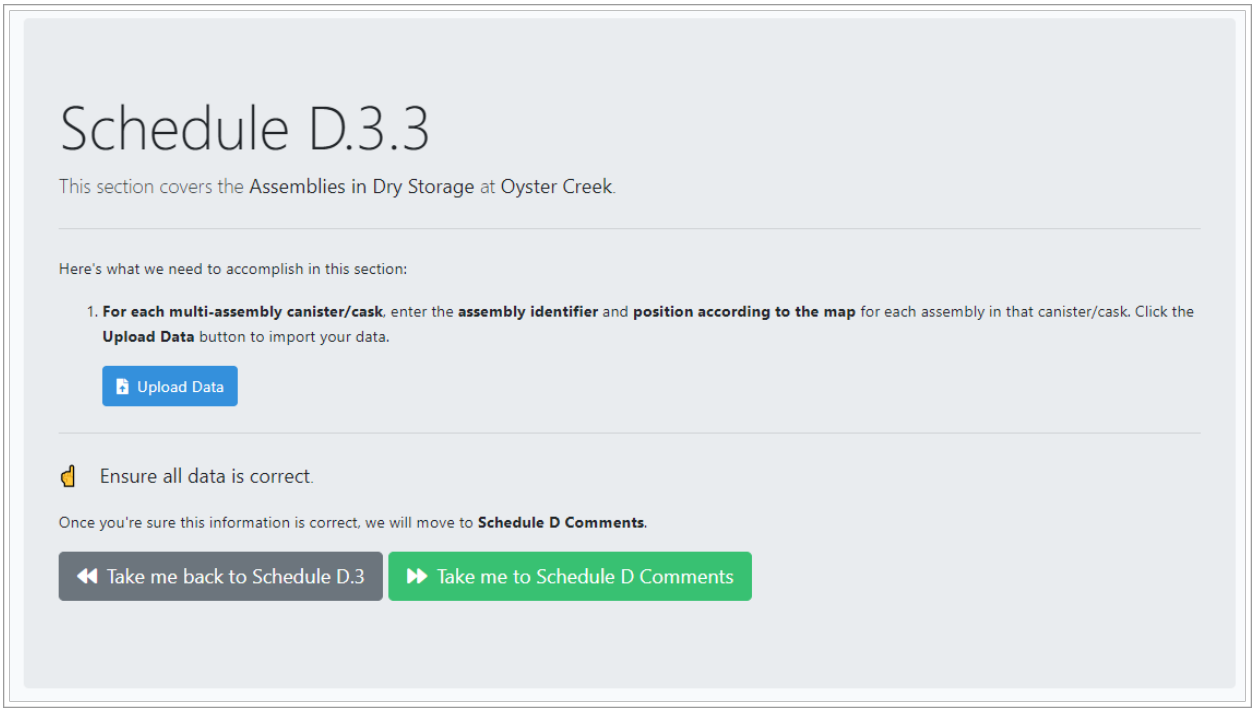


Fig. 4.13: Schedule D.3.3 Front Screen

If the user scrolls down from the screen shown in Fig. 4.13 they will see all previously uploaded canister maps with positions and assemblies assigned to these positions similar to Fig. 4.14. The assembly identifiers are hyperlinked to the assembly information provided in Schedule C and the canister identifiers are also hyperlinked to the canister information provided in Schedule D 3.2. To create new canister assignments for assemblies the user can click on the blue "Upload Data" shown in Fig. 4.13. This will take the user to a file upload screen shown in Fig. 4.15.

Canister loading map data will be uploaded from an input data file. The format for the input file can be downloaded by clicking the gray button with an arrow shown on Fig. 4.15 which will result in a drop-down menu with two options. If the user clicks on "Download Sample," they will download a file that shows the acceptable format of the upload data file in a Microsoft Excel (xlsx) file format. The data in this file is only used to provide an example of the format. If the user clicks on "Download Data for Editing," they will get previously entered data that they can edit or append. An example of this format is shown in Fig. 4.16. Once the user has created the upload file with the canister loading map they wish to upload they can access the file upload screen by clicking on the green "Get Started" button at the bottom of Fig. 4.15. After a file has been uploaded the user will see a screen similar to that in Fig. 4.17. The successfully uploaded file will appear under "uploaded files," on the lower left of Fig. 4.17. In this example, the name of the file was "Diablo Canyon Canister Map Data Example - 2022.xlsx". Additional files can be uploaded by repeating the process of either dragging and dropping the files into the space shown in Fig. 4.17, or by navigating to the file location and selecting the file the user wishes to upload. When all files have been uploaded the user can click the "Finished Uploading" button and this will take them to the screen shown in Fig. 4.18. Besides a Microsoft Excel (xlsx) file format, users can use Comma Separated (csv) or tab separated (tab) file formats for data upload. The downloaded examples are always in Microsoft Excel (xlsx) file format.

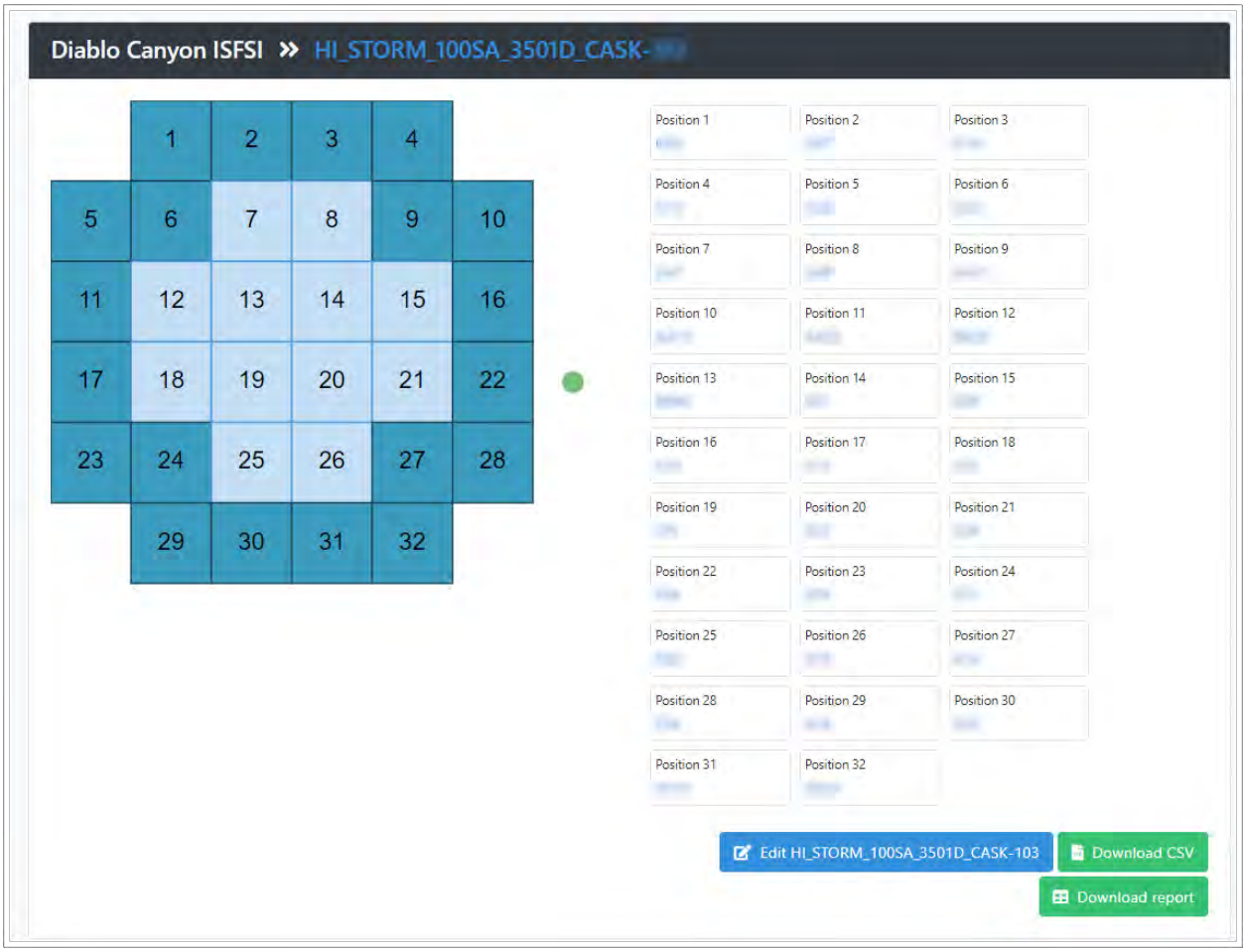


Fig. 4.14: Schedule D.3.3 Example of Canister Loading Maps

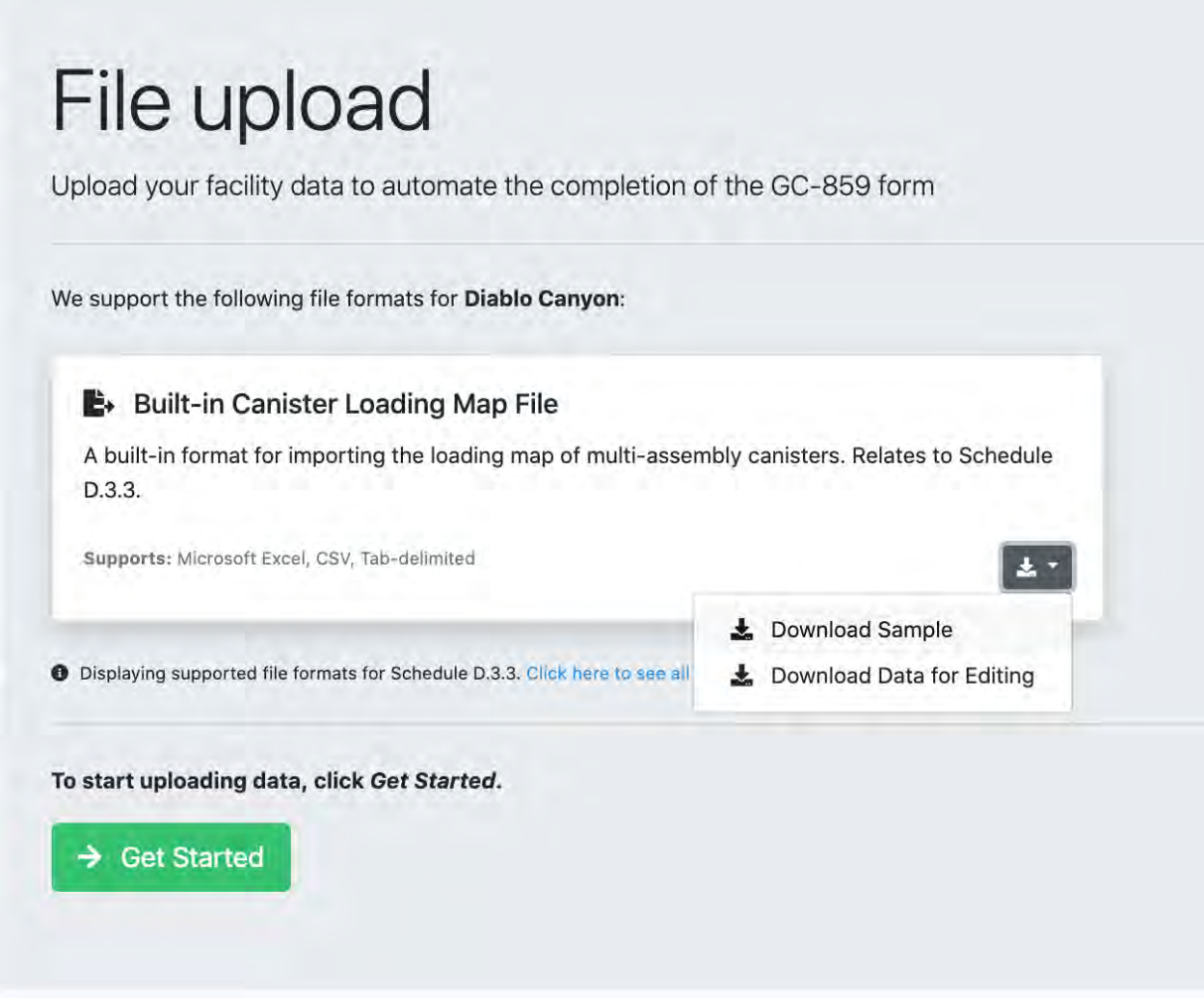
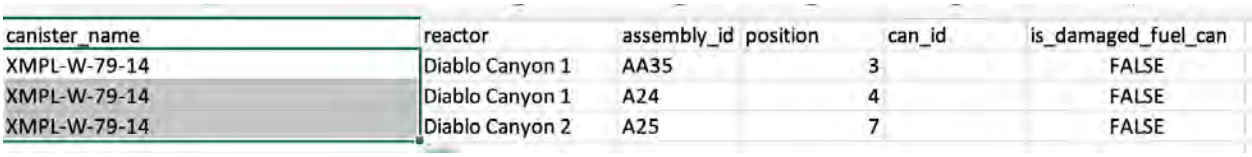


Fig. 4.15: Schedule D.3.3 File Upload



canister_name	reactor	assembly_id	position	can_id	is_damaged_fuel_can
XMPL-W-79-14	Diablo Canyon 1	AA35	3		FALSE
XMPL-W-79-14	Diablo Canyon 1	A24	4		FALSE
XMPL-W-79-14	Diablo Canyon 2	A25	7		FALSE

Fig. 4.16: Schedule D.3.3 Loading Map Data File Format

Fig. 4.17: Schedule D.3.3 Canister Map File Uploaded

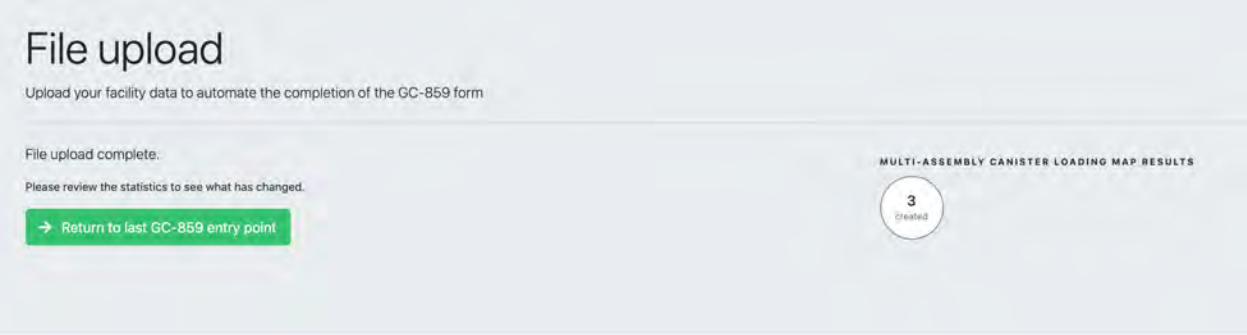


Fig. 4.18: Schedule D.3.3 Completion of Canister Map File Upload

4.3 Site Specific Canister Data File Format Upload

Southern Nuclear and Constellation facilities will have an additional option for uploading canister data using the Trac-Works format. If the user is entering data for a Southern Nuclear or a Constellation facility and they click on the blue "Upload Data" button from the main Schedule D.3.3 screen shown in Fig. 4.4, they will be taken to a screen similar to that in Fig. 4.19.

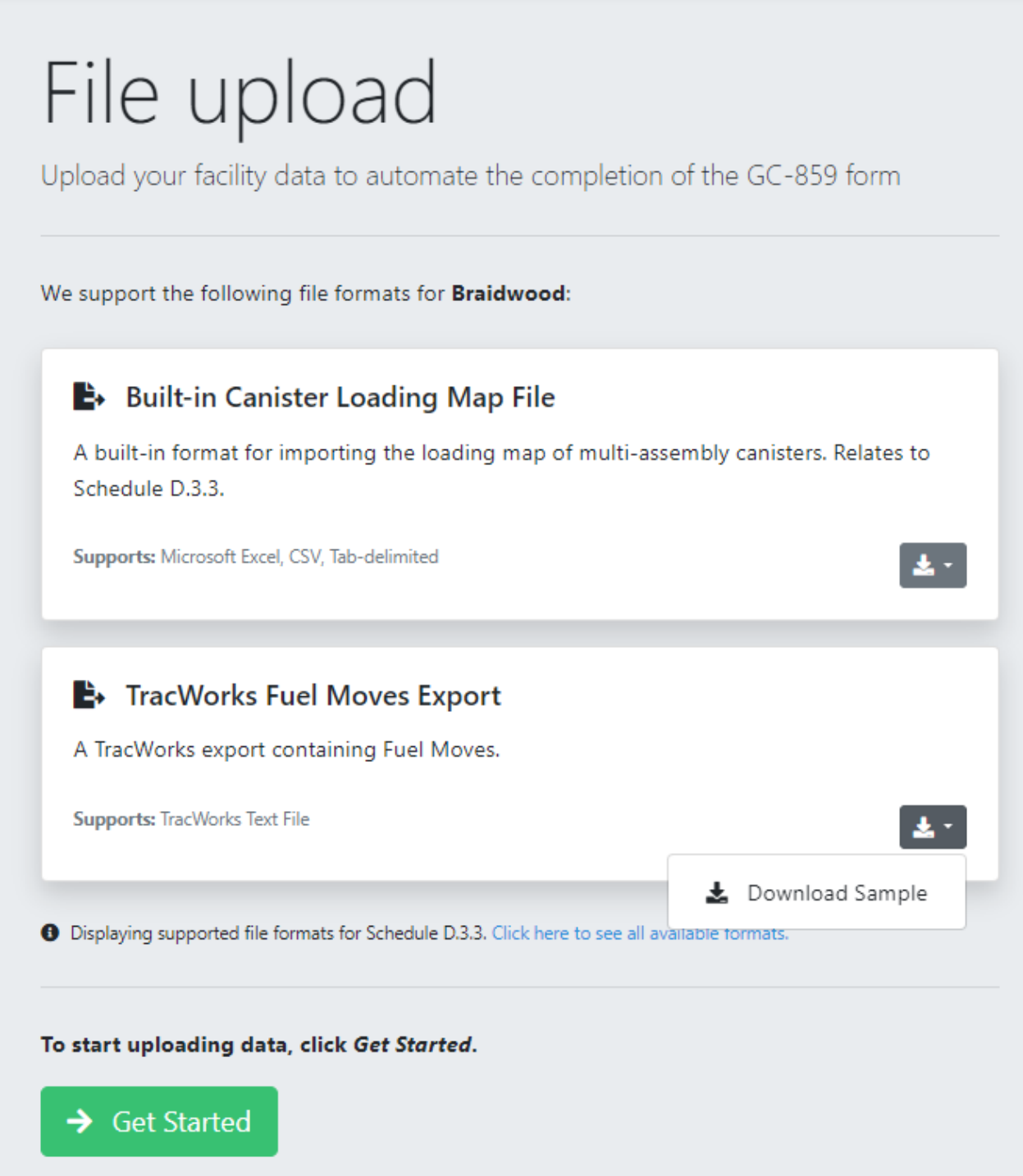


Fig. 4.19: Schedule D.3.3 File Upload for Constellation Facilities

The process for downloading and entering the data into the correct format is similar to that previously discussed, however there is an additional data file format available for Southern Nuclear and Constellation facilities. The files for using this option are accessible by clicking the gray drop-down box "Download Sample" shown in Fig. 4.19. In Fig. 4.20 an example of the file format is shown for Southern Nuclear Facilities. The file format has three columns: a unique canister name, a unique assembly identifier from Schedule C.1.1 and a position where the assembly is located in the

spent fuel basket.

```
Unique Canister/Cask Identifier Assembly Identifier     Position According to Map
MPC-001 ABC123  MPC-1
MPC-001 ABC234  MPC-2
```

Fig. 4.20: Schedule D.3.3 Example of TracWorks Fuel Moves Export format for Southern Nuclear Facilities

The example in Fig. 4.21 is for Constellation Facilities.

```
Demo Places Unit 1            N U C L E A R  F U E L  D A T A  B A N K  S Y S T E M -- Version 2.1.0                PAGE     1
01/01/2019 12:22:33                                  AUDIT  CODE  REPORT
                                        FUEL MOVES 09/08/2020 - 09/08/2020 SORTED BY LOCATION

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
               RIS   ASSEMBLY   CURRENT ITEM  CURRENT           PREVIOUS AUDIT               CURRENT AUDIT
                                 CONTROL AREA  LOCATION      DATE   AREA TYPE NUMBER      DATE   AREA TYPE NUMBER
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

               ABC   ABC123       DEF        MPC00101    03/07/2015    2    3     3   09/08/2020    4    3     4
               ABC   ABC234       DEF        MPC00102    03/07/2015    2    3     3   09/08/2020    4    3     4
               ABC   ABC456       DEF        MPC00103    03/07/2015    2    3     3   09/08/2020    4    3     4
               ABC   ABC567       DEF        MPC00104    03/07/2015    2    3     3   09/08/2020    4    3     4
               ABC   ABC678       DEF        MPC00105    03/07/2015    2    3     3   09/08/2020    4    3     4
               ABC   ABC890       DEF        MPC00106    03/07/2015    2    3     3   09/08/2020    4    3     4
CURR. ICA COUNT      6
GRAND     COUNT      6

CURRENT AREA AUDIT TYPE:  MPC-001-234 Inventory Verif 10/10/2020
```

Fig. 4.21: Schedule D.3.3 Example of TracWorks File Format Constellation Facilities

Some of the data in the TracWorks format will need to be translated in order to be recognizable by the GC-859 survey web program. The program will check the data and send the user through automated steps where it will predict the data that is compatible with the database. The user will then be asked to confirm the predictions. After uploading the data file, the program asks the user a series of question to link the unknown columns to data in the GC-859 database. This process is similar to discussion under Fig. 3.19.

4.4 Schedule D Comments

Finally, user can proceed to the comment section using the button “Take me to Schedule D Comments” shown above in Fig. 4.13. Users provide any comments concerning Storage Facility Data (Section D.1 through D.3) and should label comments by the Schedule and Item Number to which they refer. To enter and edit comments, users click the “Edit Comments” button in Fig. 4.22. After completing comments proceed to Schedule E.

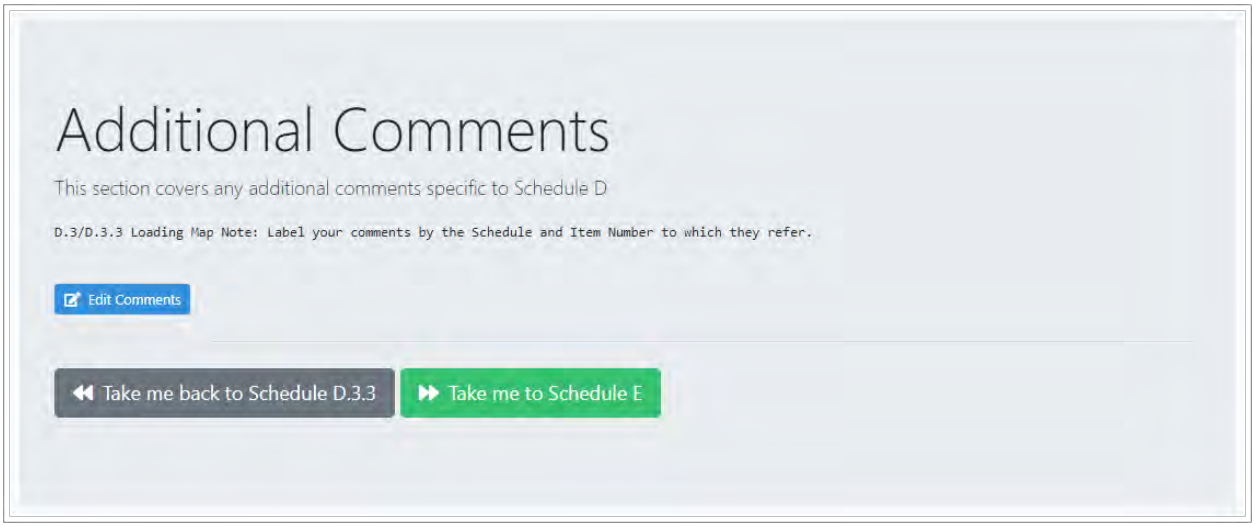


Fig. 4.22: Schedule D Comments

CHAPTER

FIVE

SCHEDULE E: NON-FUEL DATA

After clicking on the "Take Me to Schedule E" or navigating to Schedule E using other means, users will be directed to a screen similar to Fig. 5.1. To proceed, click on the green "Take me to Schedule E.2" button displayed in Fig. 5.1. This will lead users to the screen shown in Fig. 5.2.

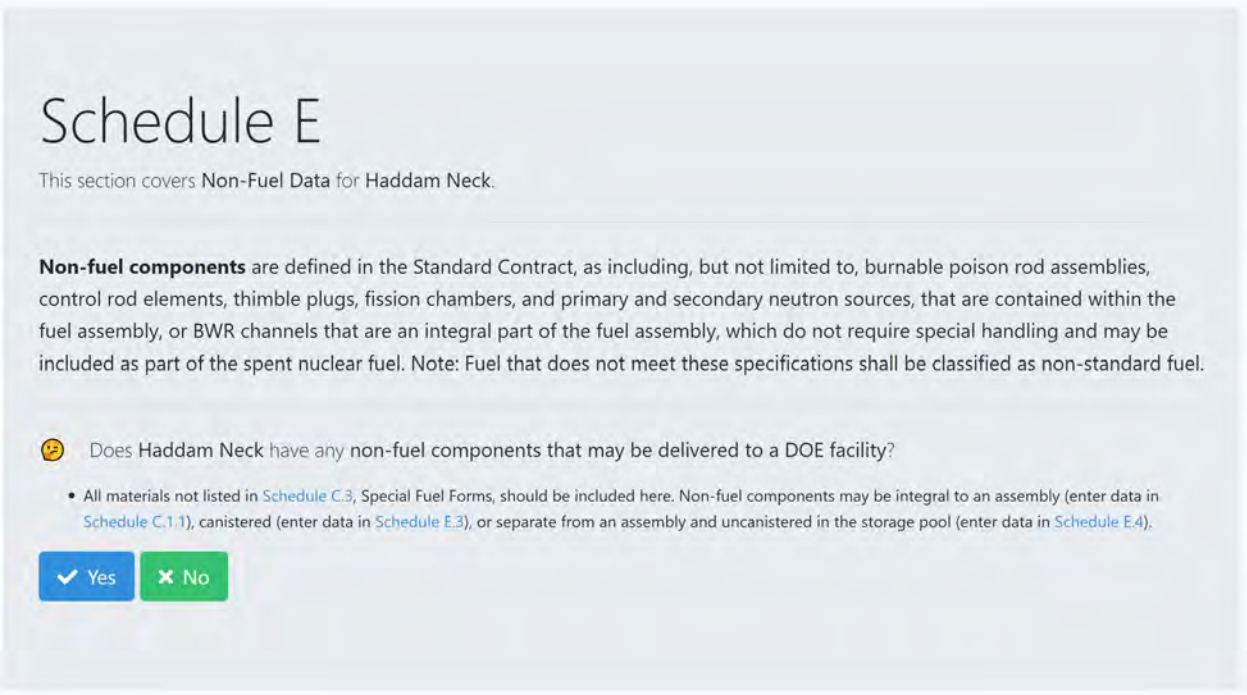


Fig. 5.1: Schedule E Non-Fuel Data Front Screen

Schedule E.2 serves as a placeholder for consistency with prior surveys. This data is reported in C.1.1 (Fig. 3.3) columns 10, 11, and 12. For non-fuel components (NFCs) which have been moved during the current reporting period to or from an assembly identified as being discharged in a previous reporting period, NFC-related information for the affected assembly or assemblies can be updated in schedule C.1.1 using an edit window similar to Fig. 3.5 or upload feature in Fig. 3.7.

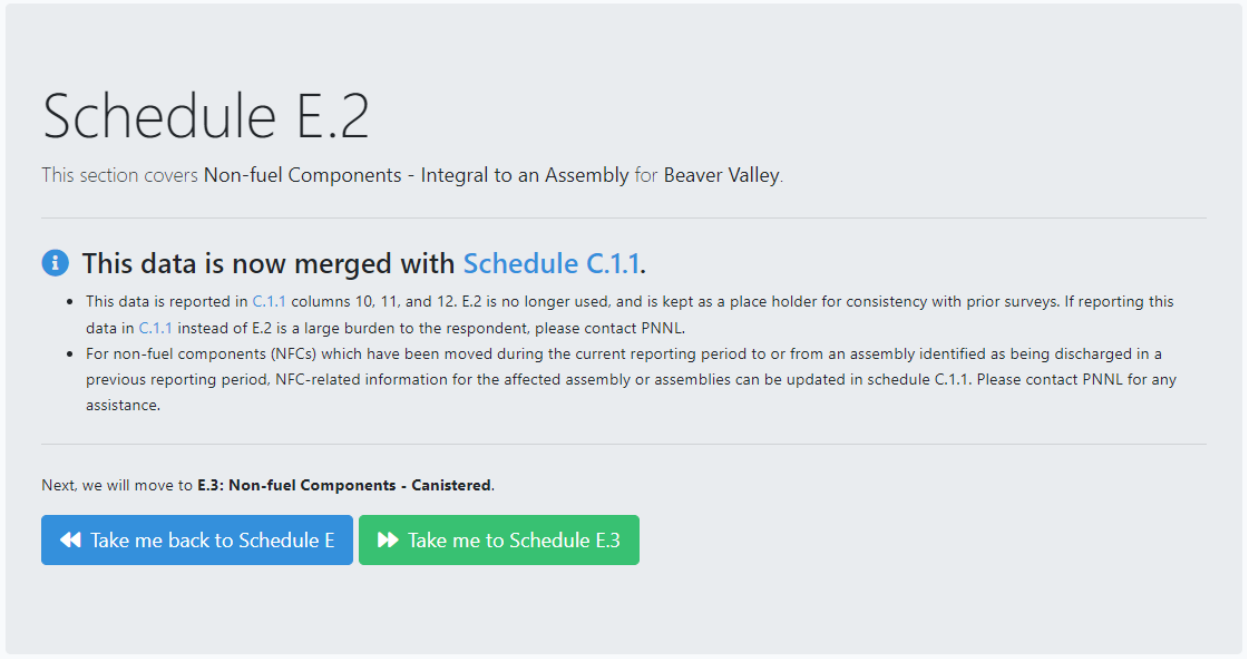


Fig. 5.2: Schedule E.2 Non-Fuel Components Integral to an Assembly

Clicking on the green "Take me to Schedule E.3" button shown in Fig. 5.2 will lead the user to Schedule E.3 which is shown in Fig. 5.3. Schedule E.3 is where the user can report canistered non-fuel components. If the user has canister non-fuel components to enter, they will click on the blue "Yes" button shown below in Fig. 5.3 and the bottom of the screen containing the two blue buttons, "Add Canistered Non-fuel Component," and "Upload Data" will be displayed.

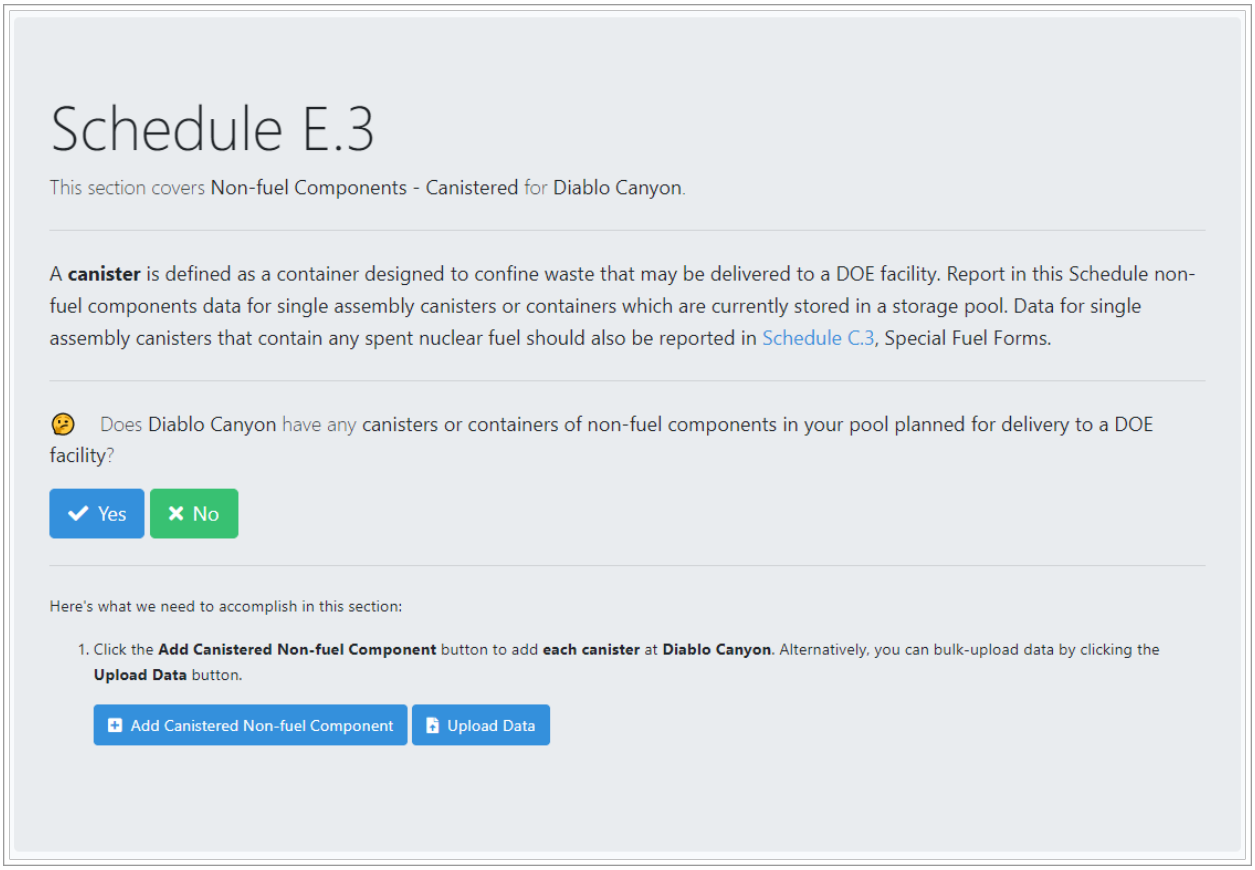


Fig. 5.3: Schedule E.3 Canistered Non-Fuel Components Front Screen

Clicking on the "Add Canistered Non-fuel Component" button shown in Fig. 5.3 will take the user to a form shown in Fig. 5.4 that can be filled out to enter information about the canistered non-fuel component.

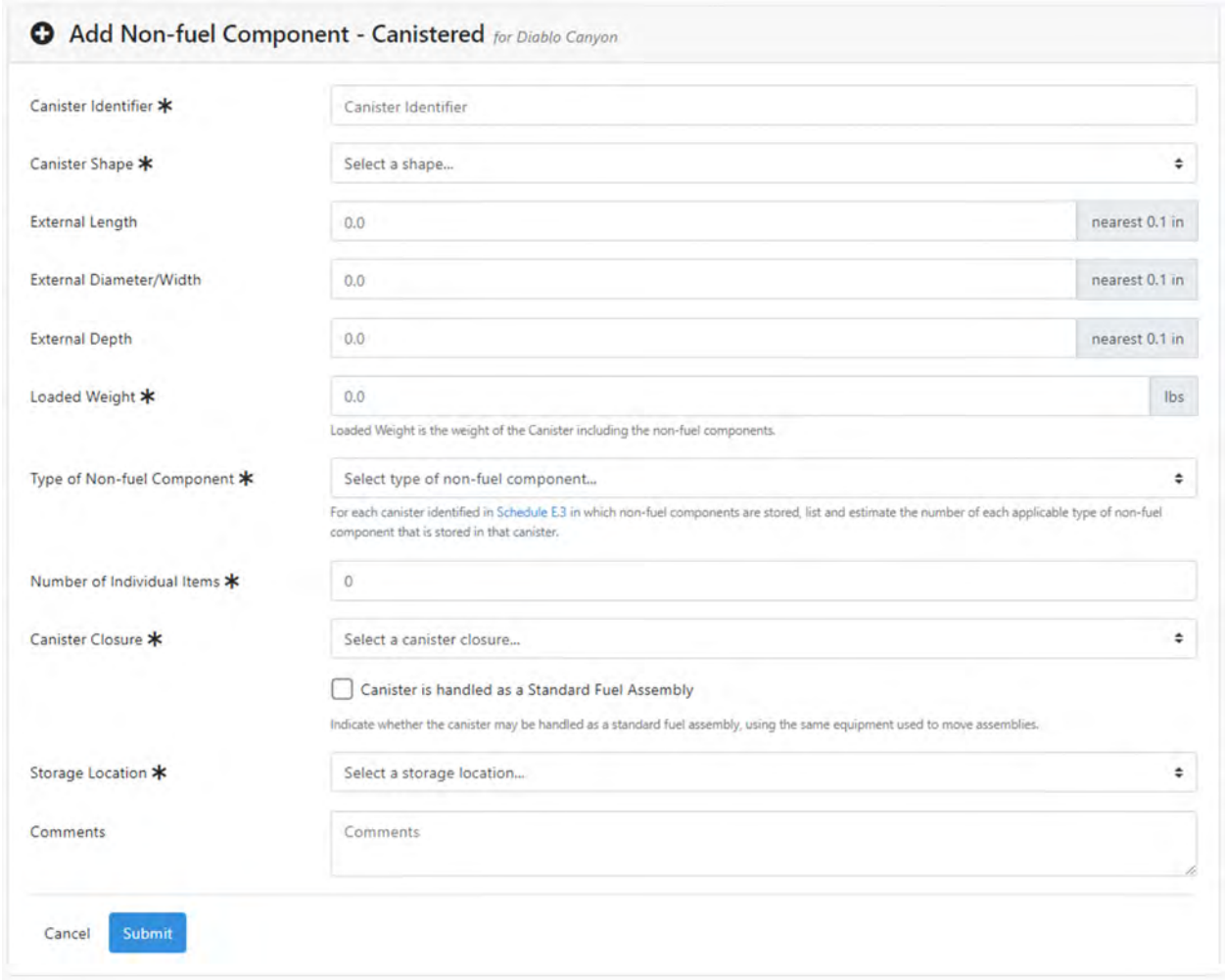


Fig. 5.4: Schedule E.3 Canistered Non-fuel Component Entry Form

After the user completes the form and hits the blue "submit" button at the bottom of the form shown in Fig. 5.4 they will be taken back to the Schedule E.3 screen shown in Fig. 5.3.

If the user wishes to use the file data import format, they can click the blue "Upload Data" button shown on the bottom of Fig. 5.3. This will take the user to a file upload screen shown in Fig. 5.5. Clicking on the gray down arrow button will open a drop-down menu provides two options, "Download Sample," and "Download Data for Editing" and similar to that process, clicking on "Download Sample" will download a Microsoft Excel (xlsx) file that has example data with the correct format, while "Download Data for Editing" will bring up a Microsoft Excel (xlsx) file that has previously entered data so that new data will need to be appended, and previously entered data can be modified if errors are found.

Once the user has completed the file with the correct format for uploading, they can click on the green "get started" button shown at the bottom of Fig. 5.5. The user can upload files by either dragging and dropping the files onto the "Drag-and-drop your files here" space shown on the file upload screen or by clicking the "choose files" button and navigating to the file location and selecting the file the user wishes to upload. Note that the upload also supports a Comma Separated (csv) or a tab separated (tab) file in addition to Excel files.

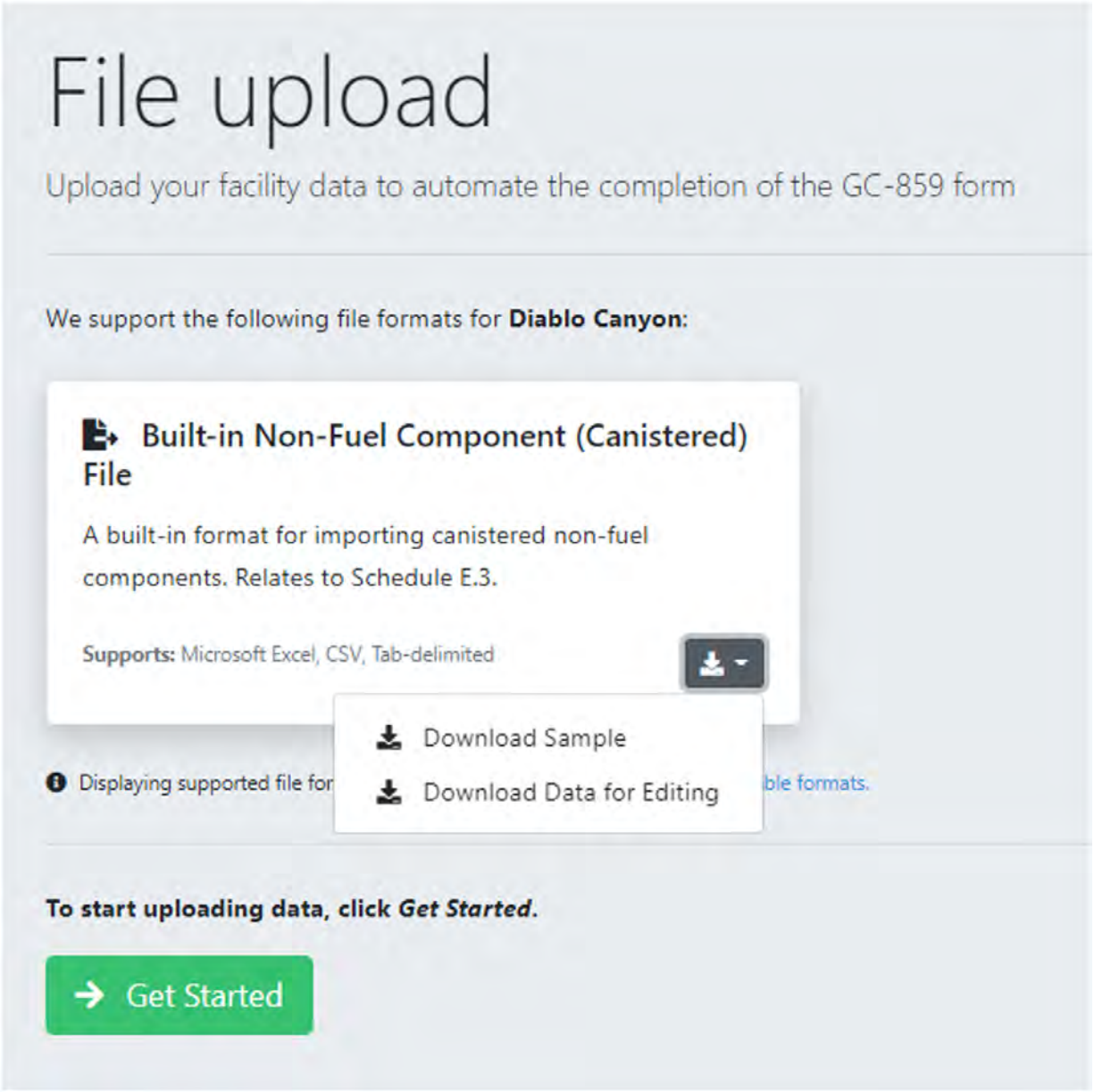


Fig. 5.5: Schedule E.3 File Upload for Canistered Non-fuel Components

Once the user has entered the canistered non-fuel components and returned to the screen shown in Fig. 5.3, they will be able to scroll down from this screen and see all the canistered non-fuel components that have been entered and can verify any new data that has just been entered.

When the user has finished entering all canistered non-fuel data and has returned to the screen shown in Fig. 5.3, they can enter Schedule E.4 by clicking on the green "Take me to Schedule E.4" button. This is not shown in Fig. 5.3 but would be below what is shown there. Alternatively, they can navigate to Schedule E.4 using other means such as clicking the green "My GC-859" button at the top of the screen (see Fig. 1).

Schedule E.4 is for non-fuel components separated from an assembly and uncanistered. Upon entering Schedule E.4 the user will see a screen similar to that shown in Fig. 5.6.

If the user needs to enter information into Schedule E.4 there are two methods for doing so, they can click on the blue

"Add Uncanistered Non-fuel Component" button shown on the left in Fig. 5.6 which will bring up a form to fill out or they can click on the blue "Upload Data" button on the right in Fig. 5.6 which will navigate the user to a file upload page where they can download a a Microsoft Excel (xlsx) file file that contains the allowable format as well as a link for uploading the a Microsoft Excel (xlsx)file file once it's complete.

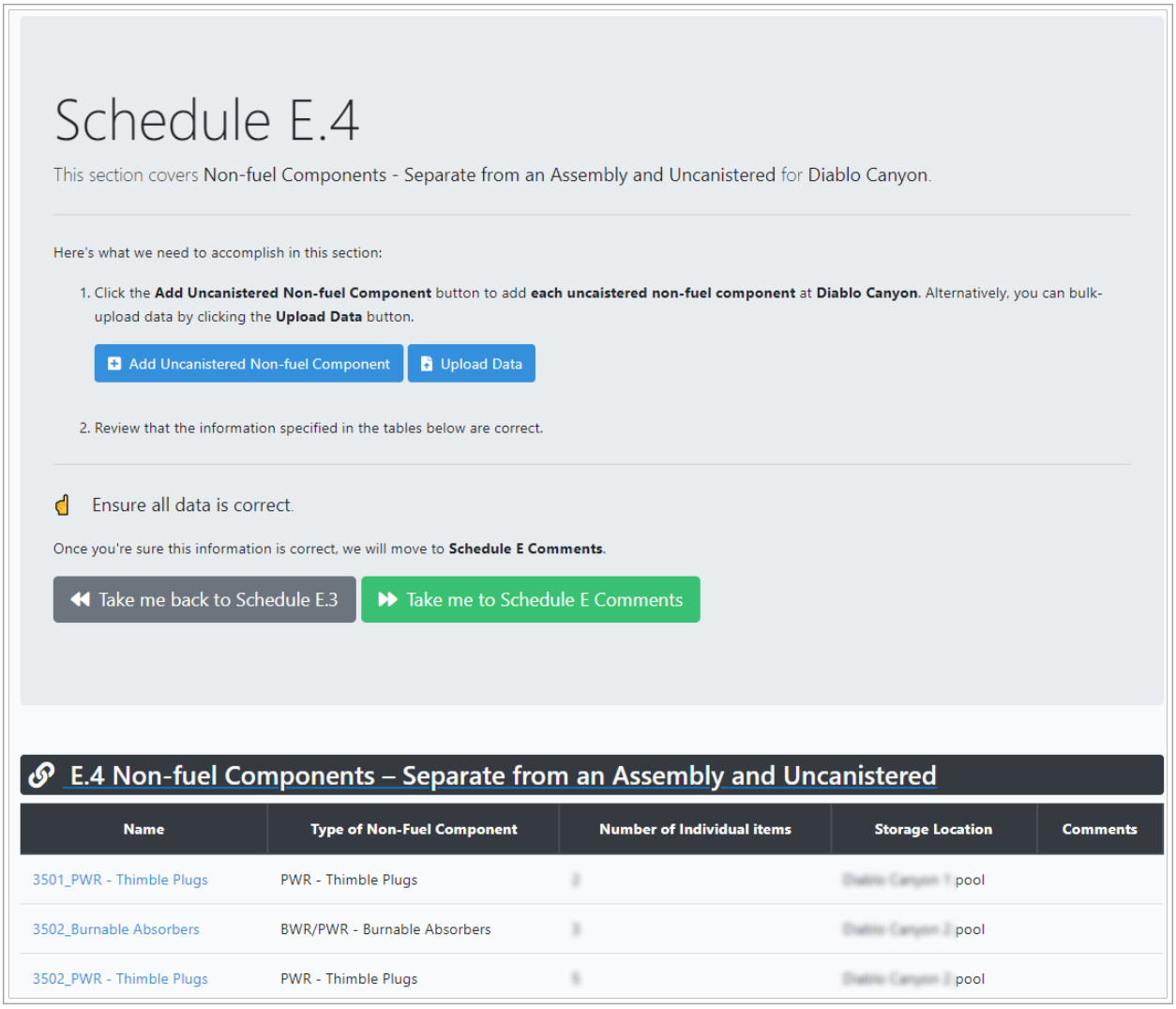


Fig. 5.6: Schedule E.4 Non-Fuel Components Separate from a Fuel Assembly and Uncanistered Front Screen

5.1 Schedule E Comments

Finally, user will be directed to the comment section for Schedule E. Users provide any comments concerning Non-Fuel Data (Section E.1 through E.4). Users should label comments by the Schedule and Item Number to which they refer. To enter and edit comments, users click the "Edit Comments" button in Fig. 5.7. After completing comments proceed to Schedule F.

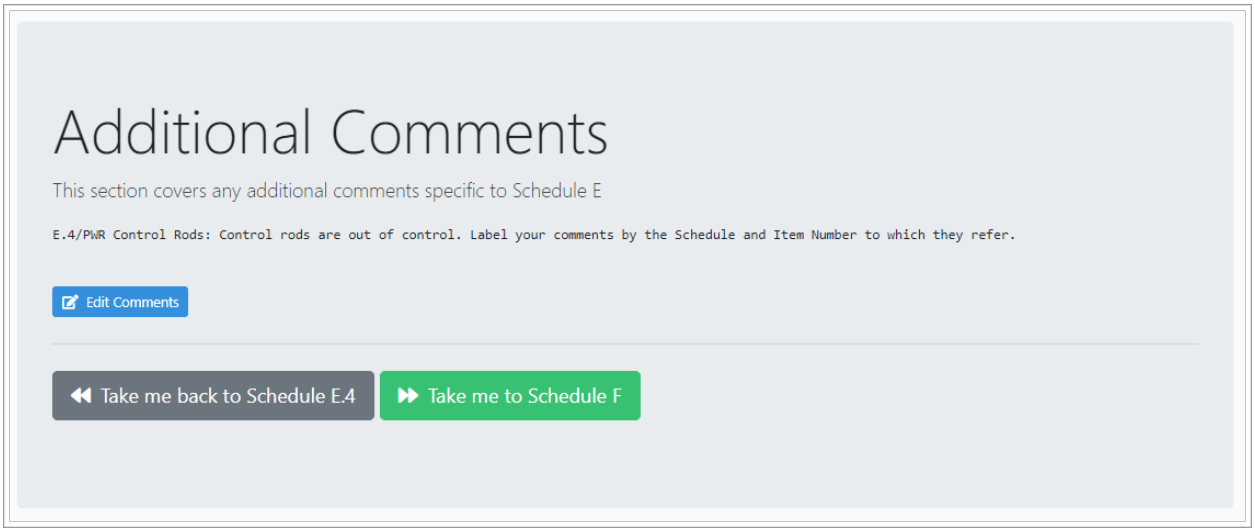


Fig. 5.7: Schedule E Comments

CHAPTER

SIX

SCHEDULE F GREATER-THAN-CLASS C WASTE DATA

When the user has completed entering data into Schedule E, they can navigate to Schedule F by clicking on the green "Take me to Schedule F" button shown in Fig. 5.7 or by navigating to Schedule F using other means such as clicking on the green "My GC-859" button near the top of the page (see Fig. 1). Upon entering Schedule F the user will see a page similar to Fig. 6.1. If the reactor does not have any previously entered Schedule F data the user may see a screen similar to Fig. 6.2.

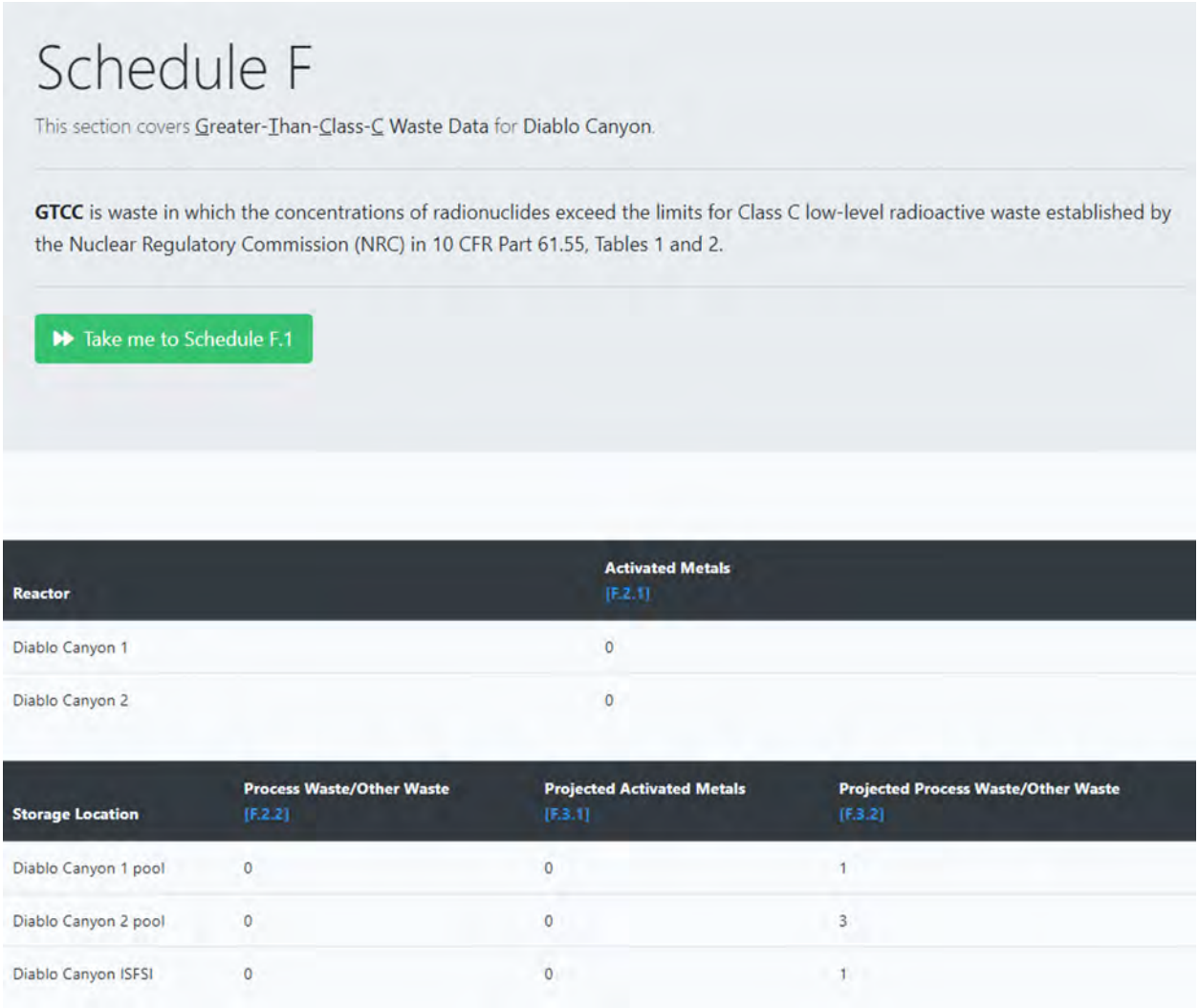


Fig. 6.1: Schedule F Greater-than-Class-C Waste Data Front Screen

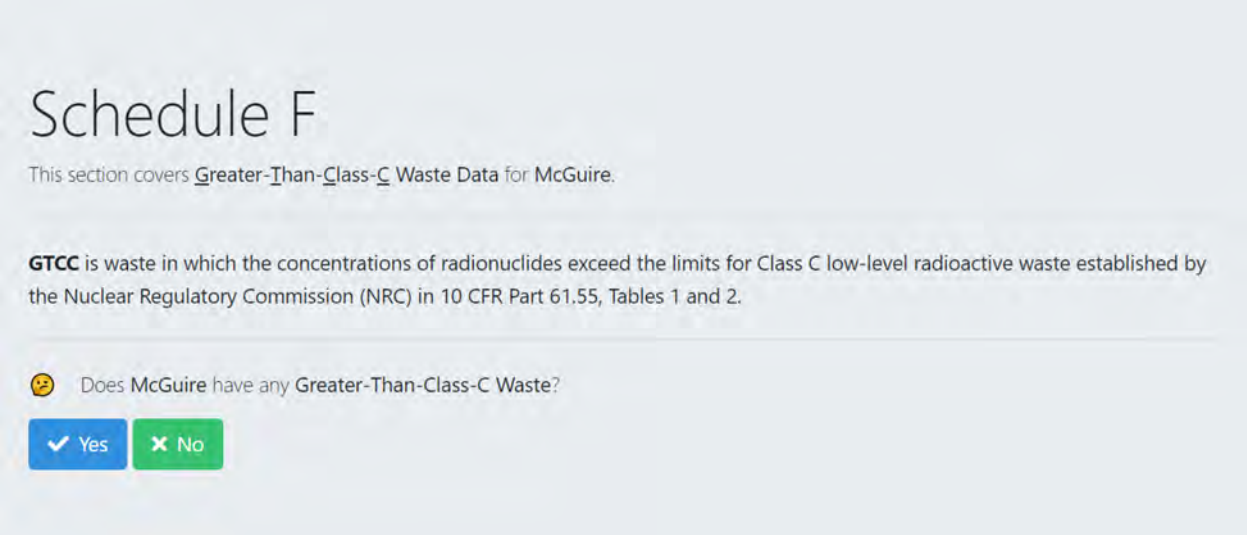


Fig. 6.2: Schedule F Greater-than-Class-C Waste Data Alternate Front Screen

Navigating to Schedule F.1 will take the user to a screen to verify the point of contact information for GTCC waste. The user can get to Schedule F.2 by either clicking on the green "Take me to Schedule F.2" button from the Schedule F.1 screen (not shown) or navigating directly to Schedule F.2 using other methods. Once they get to Schedule F.2.1 they will see a screen similar to that in Fig. 6.3. If there are activated metals that were previously entered, the user can scroll down to see a summary of what was entered. The screen in Fig. 6.3 shows an example of a Schedule F section where no data has previously been entered. If the user has data that needs to be reported, the user can click on the blue "Yes" button, which will expand the screen to include the information shown below these buttons in Fig. 6.3 giving two options for reporting activated metals. Clicking the left "Add Activated Metals" button shown on the left in bottom left of Fig. 6.3 will bring up a form to fill out or clicking on the blue "Upload Data" button on the bottom right in Fig. 6.3 will navigate the user to a file upload page where they can download a a Microsoft Excel (xlsx)file that contains the allowable format as well as a link for uploading the file once it's complete. Note that the upload also supports a Comma Separated (csv) or a tab separated (tab) file in addition to Excel files.

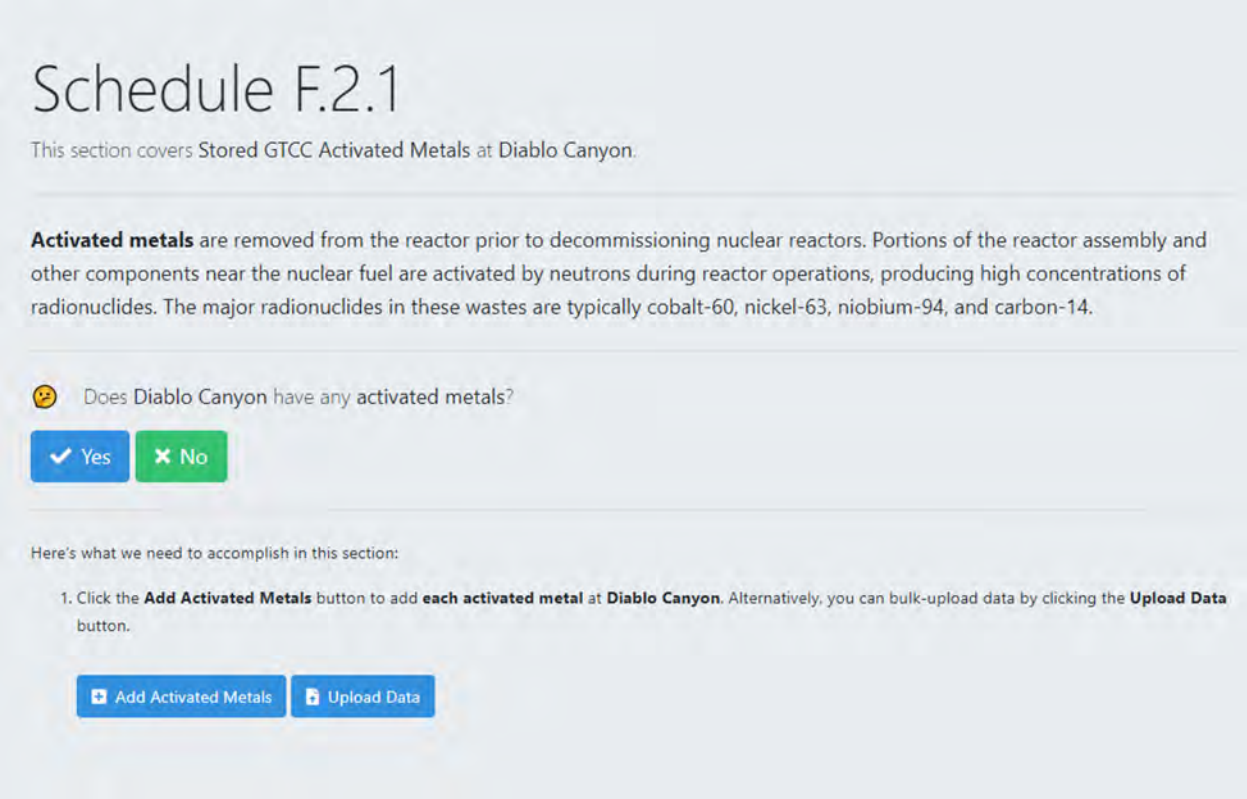


Fig. 6.3: Schedule F.2.1 Stored GTCC Activated Metals Front Screen

All data for other F Schedules, Schedule F.2.2 Stored Process Waste/Other Waste, Schedule F.3.1 Projected GTCC Activated Metals, and Schedule F.3.2 Projected GTCC Process Waste/Other Waste, have the same process for entering data as that shown for Schedule F.2.1.

6.1 Schedule F Comments

Finally, user will be directed to the comment section for Schedule F. Users provide any comments concerning GTCC Waste (Section F.1 through F.3). Users should label comments by the Schedule and Item Number to which they refer. To enter and edit comments, users click the “Edit Comments”, similar to button in Fig. 5.7 shown in previous chapter. After completing the comments, proceed to data certification.

CHAPTER

SEVEN

RESET TO BASE DATA

A user can revert all changes by using the “Reset to Base Data” function. This will erase all changes that were entered since the initial data status for the current survey period. The purpose of this function is to delete all changes made as a practice or for training purposes or to correct a mistake or series of mistakes during data entry. To access this menu, a user clicks on the green “My GC-859” button at the upper left-hand part of the screen, circled in Fig. 7.1 in red (1). The user then clicks on “Reset to Base Data” circled below in red circle (2).

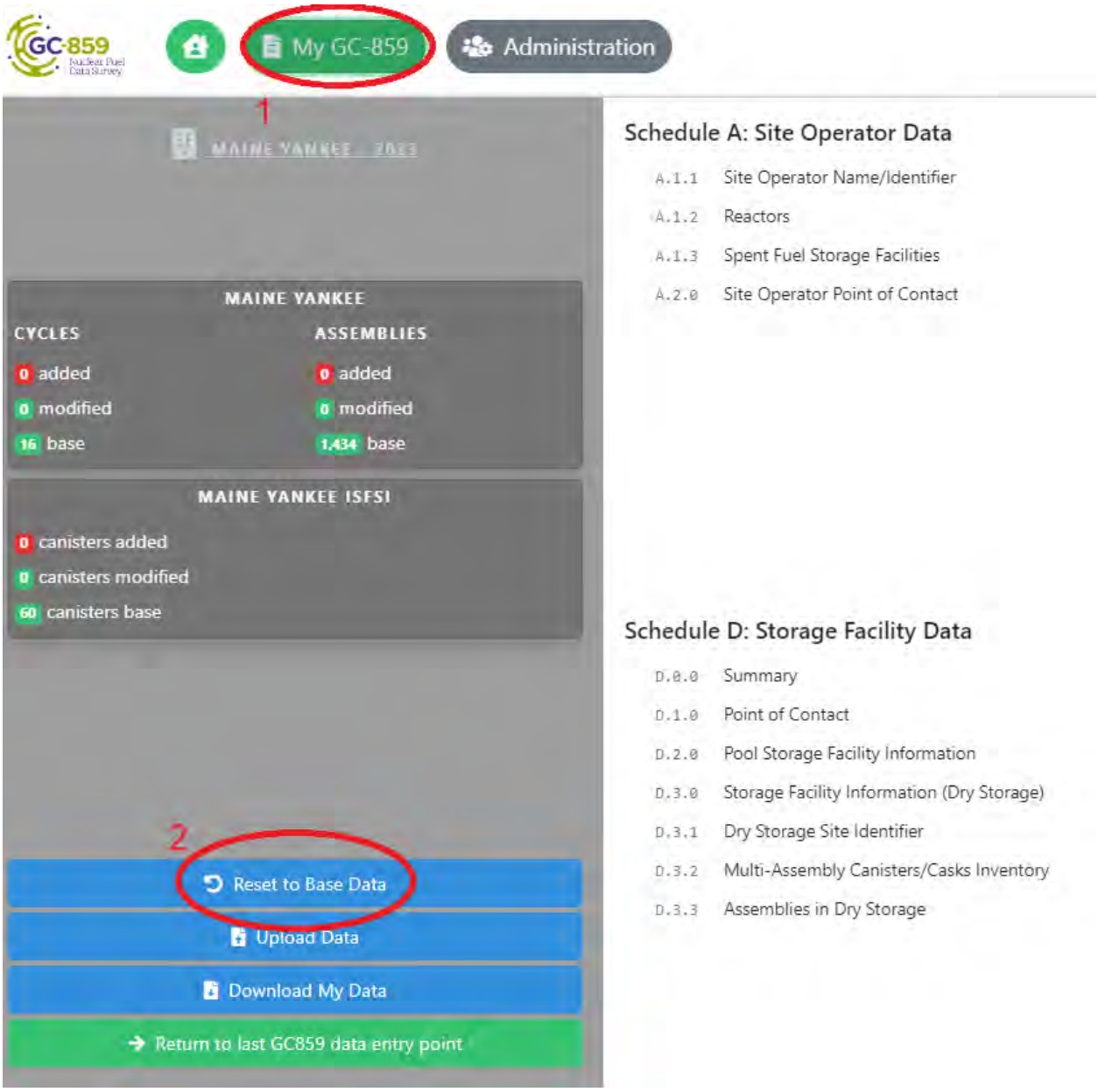


Fig. 7.1: Access the Reset to Base Data Function

To prevent an accidental loss of data, the user is asked twice to confirm the data reset. In the first window, shown in figure Fig. 7.2, click "Proceed" to continue restoring to base data.

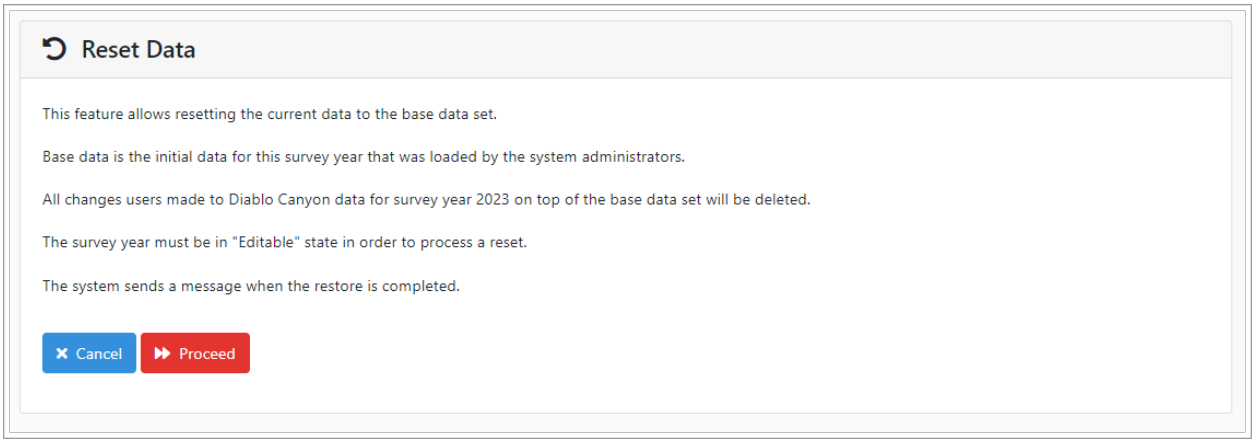


Fig. 7.2: Reset Data Screen

After clicking “Proceed”, a pop-up window Fig. 7.3 will show up, asking for an additional confirmation.

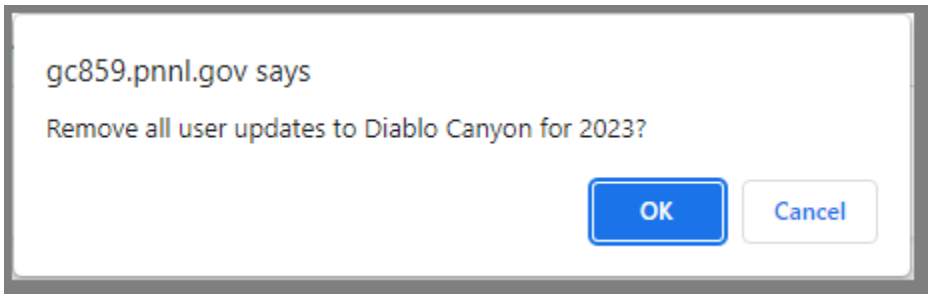


Fig. 7.3: Reset Data Po-pup Screen

After clicking “OK”, a final window in Fig. 7.4 initiates the reset process by putting system into a maintenance mode. Press Home to return to main dashboard.

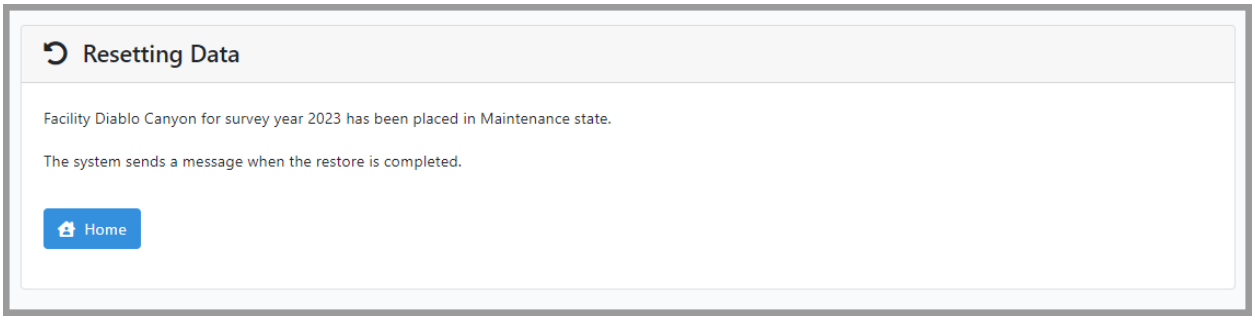


Fig. 7.4: Reset Data Confirmation Window

This process should only take few minutes. *Please refrain from making changes to the system at this time.* Check email address associated with your user name for a message stating that system was reverted back from Maintenance mode to Editable mode. Example of the email is in Fig. 7.5. This step completes the reset process.

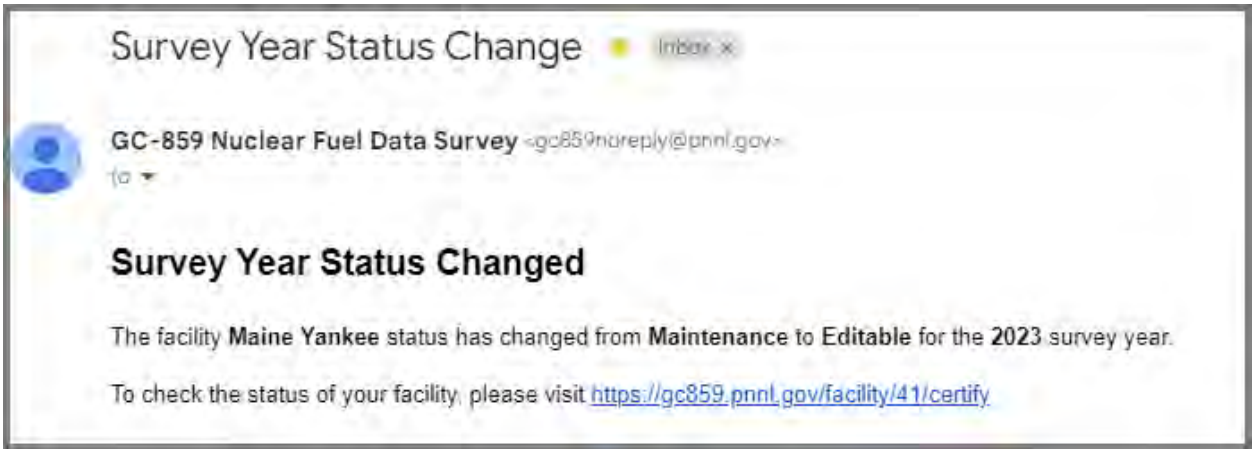


Fig. 7.5: Reset Data Confirmation Email

To abandon data restoration process, click "Cancel" in figure Fig. 7.2 which returns the user to the main dashboard. Or click "Cancel" in the pop menu in Fig. 7.3 and then "Cancel" in the reset data screen in Fig. 7.2.

Note: *Using the data reset function after transferring the fuel in schedule C.1.4 may result in loss of data. Coordinate with the site administrator on this specific case.*

CHAPTER

EIGHT

REQUIRED ENTRIES

On the input form some of the entries are required and some maybe optional. The required entries are marked either by an asterisk next to the header or described below the text field. A detailed contextual description of the required field can be shown by hovering the cursor over the asterisk. Alternatively, a description of the required field is shown below the input field. Examples of required fields are highlighted red in Fig. 8.1.

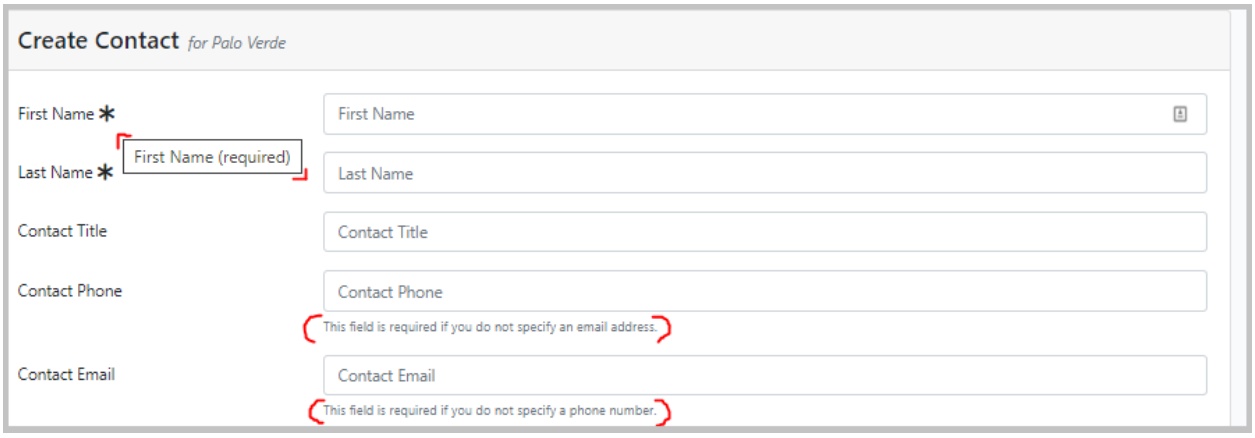


Fig. 8.1: Example of Required Fields

If the required field is not filled, an error message will be show upon submitting the form to the system. The system will not proceed until the required entries are provided. The following two figures Fig. 8.2 and Fig. 8.3 present the errors returned upon submitting an empty required field.

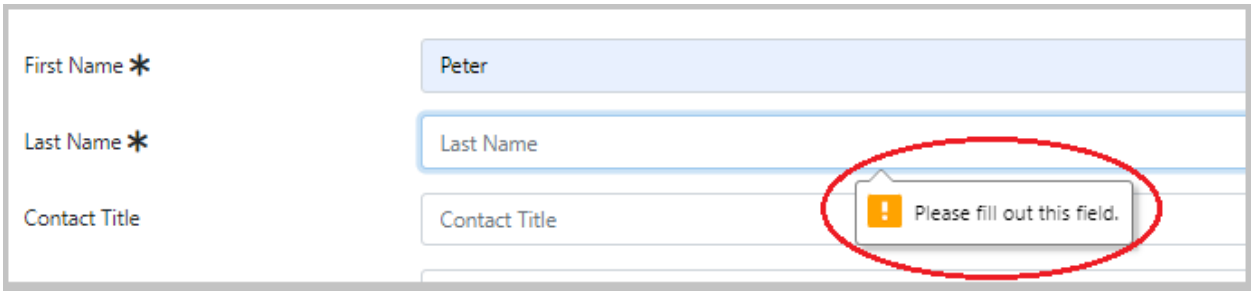


Fig. 8.2: Required Field Error

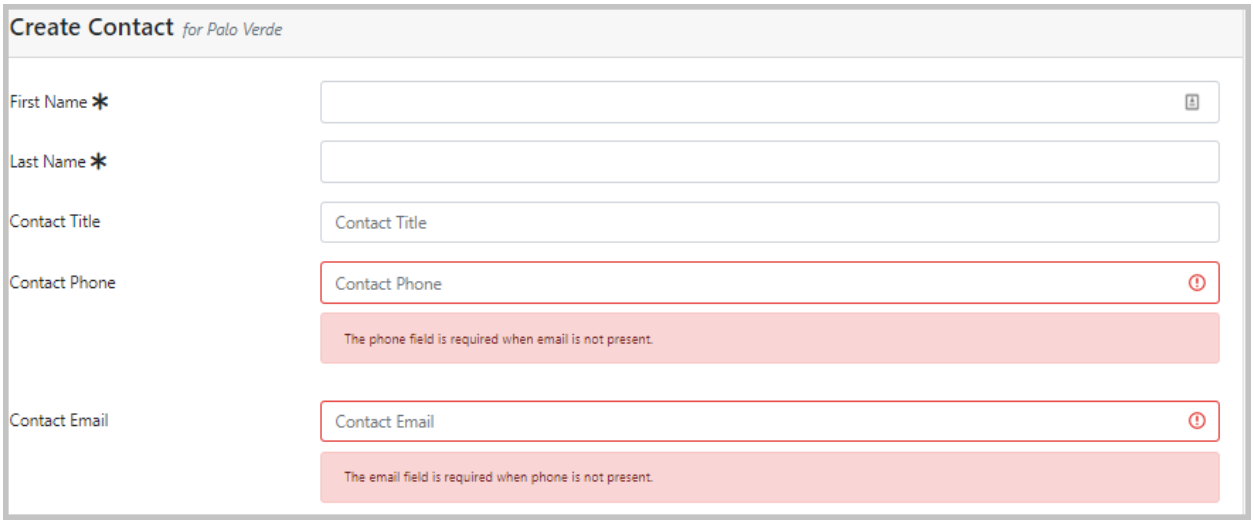


Fig. 8.3: Required Field Error

CHAPTER

NINE

FAST TRACK SUBMISSION - NO NEW DATA TO REPORT

In cases with no new data to report for example for plants that were shutdown for an extended period of time, a fast track submission is available. The respondent is required to review and update Schedule A. If there have been no changes to data in Schedules B through F since the last survey, the responded can proceed to the Data Certification page using the button circled in red in Fig. 9.1. This case may apply to plants shutdown for extended period of time or when since the last survey:

- No spent nuclear fuel (SNF) or high level waste (HLW) was discharged from the reactor to the spent fuel pool (Schedule B, C);
- No SNF and HLW transferred from wet storage to dry storage (Schedule D);
- There were no changes the capacities wet and dry storage (Schedule D);
- No SNF, HLW, or dry storage canisters were transferred off-site (Schedule C, D);
- No changes were made to non-fuel data (Schedule E);
- And no changes have been made to stored or projected GTCC waste (Schedule F).

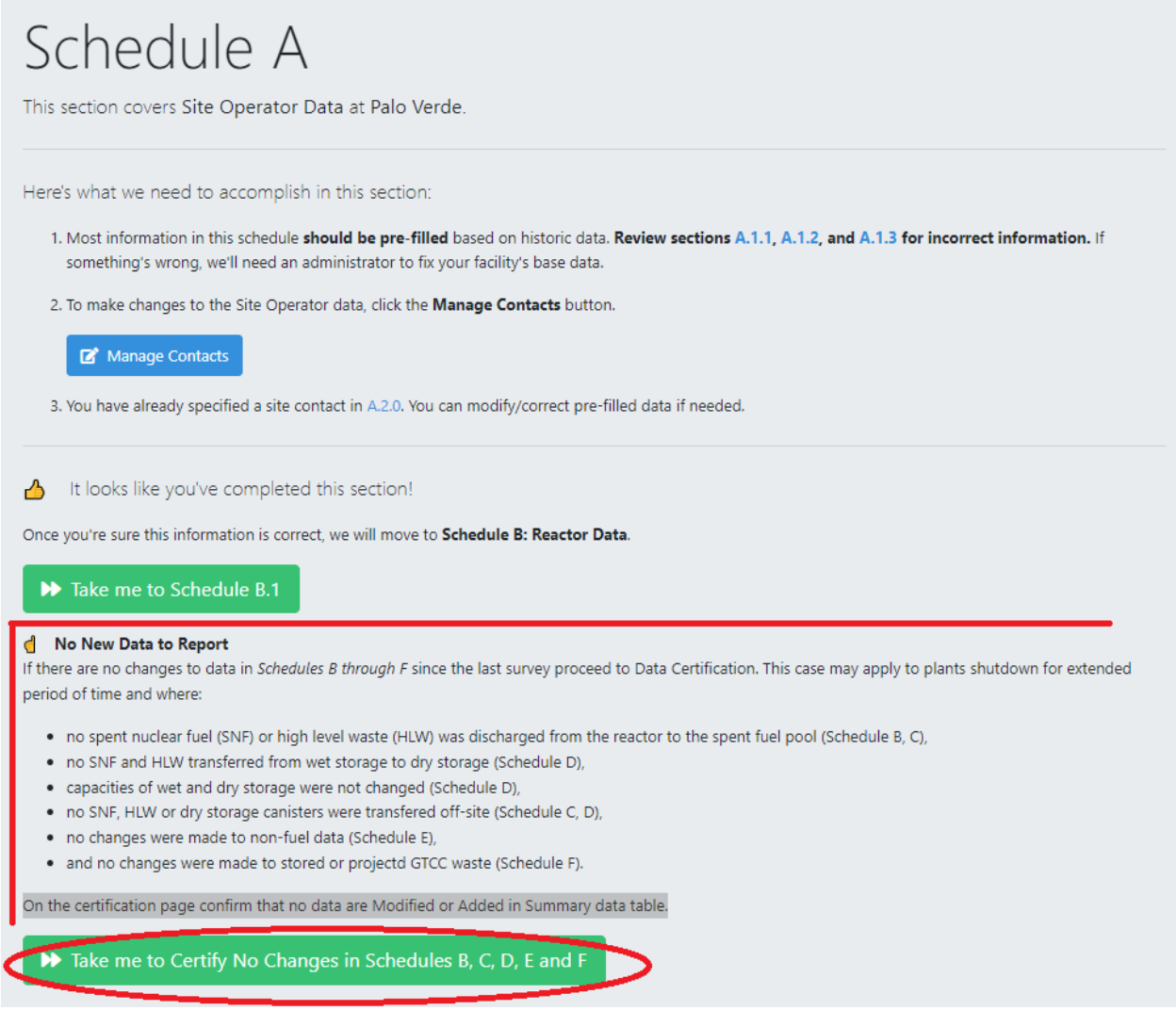


Fig. 9.1: Fast Track Submission - No New Data to Report

Note that the button in Fig. 9.1 will only display if the contacts are entered correctly in the contact management page. If the contacts are entered and there are no changes to report in Schedules B through F, proceed to the data certification page. On the certification page, confirm that no data has been Modified or Added in the Summary data table (all 0 in both columns) as shown in Fig. 9.2 below.

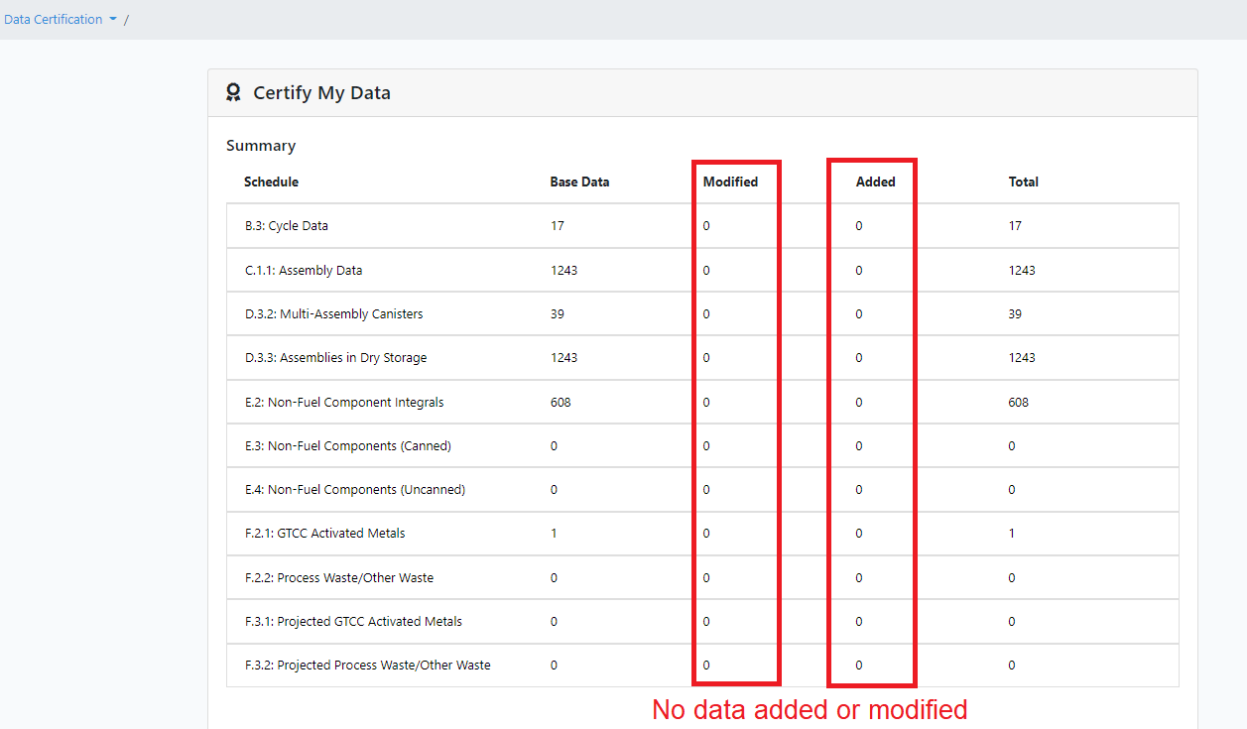


Fig. 9.2: No New Data on Certification Page

CHAPTER

TEN

NOTICES

Legislative Authority

Data on this mandatory form are collected under authority of the Federal Energy Administration Act of 1974 (15 USC Schedule 761 et seq.), and the Nuclear Waste Policy Act of 1982, as amended (42 USC 10101 et seq.). Failure to file after receiving Energy Information Administration (EIA) notification may result in criminal fines, civil penalties and other sanctions as provided by the law. Data being collected on this form are not considered to be confidential.

Title 18 U.S.C. 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.

Public Reporting Burden

The public reporting burden for this collection of information is estimated to average 90 hours per response. The estimate by respondent category is 100 hours per response for operating nuclear reactors, 60 hours per response for permanently shutdown nuclear reactors, and 40 hours per response for storage facilities and research/test reactors. The estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Energy Information Administration, Office of Survey Development and Statistical Integration, EI-21, 1000 Independence Avenue, S.W., Washington, DC 20585, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 735 17th Street, N.W., Washington, DC 20503.

Unsolicited and Prohibited Data

Information regarding security measures or material control and accounting procedures is not solicited; inclusion of such information in this data is specifically prohibited.