Common Data Element Repository (CDER) Library,

Release 2.2

Information Collection (IC) Builder

Contents

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1. Purpose

The purpose of this document is to help users understand how to use the Information Collection (IC) Builder available in the Common Data Element Repository (CDER) Library.

2. Prerequisites

CDER Library is open for all users. However, users with Federal government email addresses (ending with .gov or .mil) are encouraged to sign in using MAX.gov to access additional features. The Information Collection (IC) Builder and the Forms Repository feature are only accessible to MAX.gov account holders. (For MAX.gov login questions, please visit MAX.gov).

3. Background

The Common Data Element Repository (CDER) Library is an online searchable repository of Federal government program data elements/terms, definitions, and attributes. The 4 founding principles of the CDER Library are:

1. Provide framework for, and access to, agreed-upon data standards
2. Improve Federal financial transparency
3. Promote consistency of Federal financial business elements/terms, definitions, and attributes
4. Assist the Federal government in Paperwork Reduction Act (PRA) processing

4. Information Collection (IC) Builder

The IC Builder allows users to build information collections by using harmonized data elements from OMB-approved forms, and by creating their own data elements. Upon signing in to CDER Library, users can access the IC Builder from the landing page, either by selecting "Build an Information Collection" from the Information Collection Builder drop-down menu, illustrated in Figure 1; or by clicking on the "Information Collection (IC) Builder" content box, illustrated in Figure 2.

Figure 1. Accessing the Information Collection Builder through the Drop-down Menu
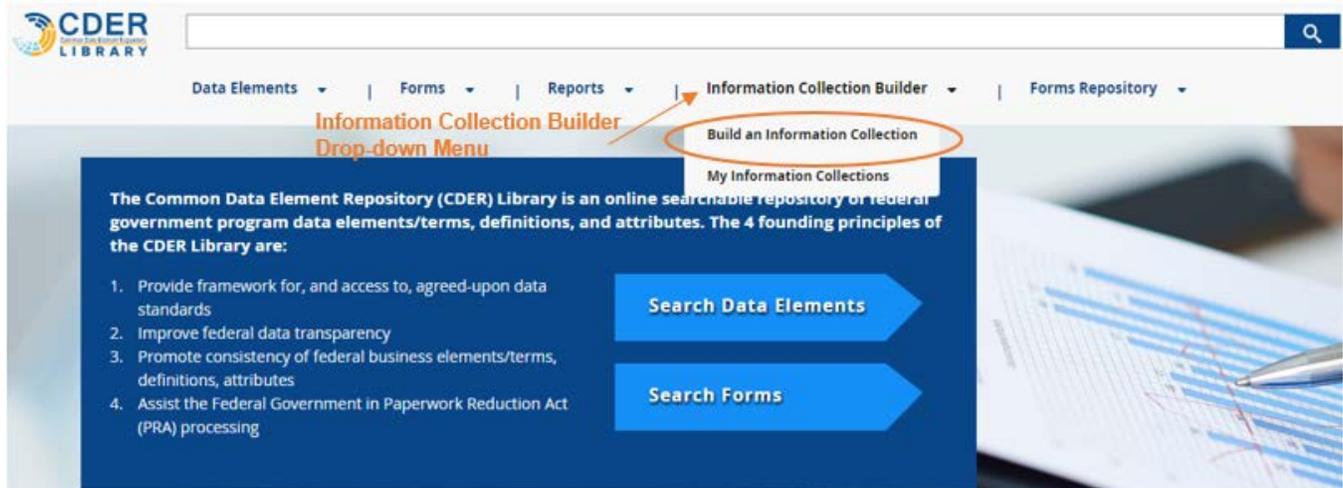
Figure 2. Accessing the Information Collection Builder through the Content Box
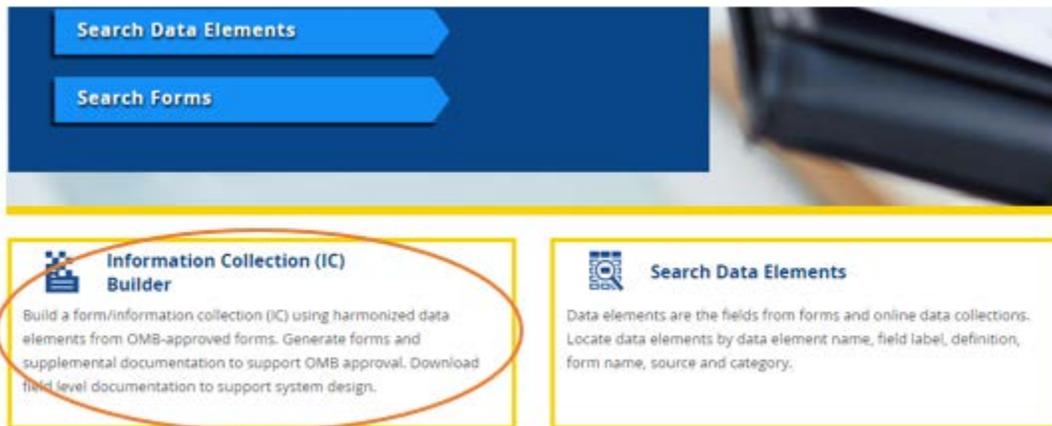
4.1 Build an Information Collection

The IC Builder assists users with creating information collections. It offers a full-text search function that allows users to find standardized data elements to add to their information collections by searching for key words in existing fields. This function enables a simple and quick search for data elements by searching data element names, data element field labels, sets, and form names already stored within CDER Library. Users are also able to create their own fields and assign customized attributes to add to their information collections through the "Create New Field" function. The IC Builder guides users through three steps for creating their own information collections:

1. Build- The user will name the information collection and any sections; and can add fields by searching existing fields within CDER Library, or by creating custom fields.

2. Preview- The user can preview the information collection and make any necessary edits, such as removing or relocating a field or section.
3. Report- The user can view the completed information collection; and will have the option to download the information collection into a PDF or Microsoft Word format, and to add a cover sheet that maps the fields in the information collection to existing forms within CDER Library.

4.1.1 Build

Users begin to create their information collections by adding fields during the Build step. To add fields, a user must first enter the IC Name in the "Enter IC Name" text field, shown in Figure 3. This is the title of the agency's form or the system document that collects data for grant purposes; for example, Progress Performance Report. The user must enter a name before adding fields.

After entering a name for the information collection, the user has the option to add a section title in the "Enter Section Title" text field. A section title allows the user to name a group of related data elements within the information collection for organizational purposes; for example, "Contact Person Information." Users must click "Add" to add a section title. When a section is not necessary, this step may be bypassed.

Figure 3. Enter IC Name and Section Title
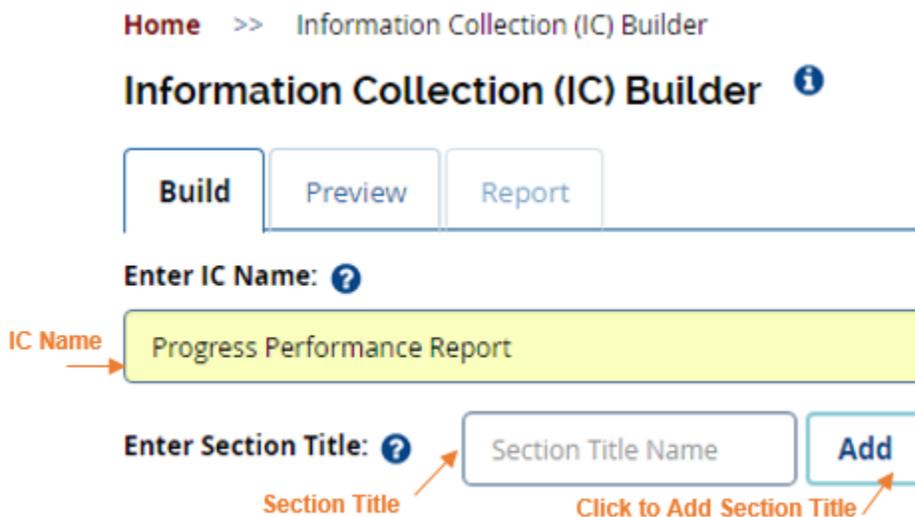
Users can begin to add fields to their information collections by finding data elements, using CDER Library's full-text key word search. Users can search all existing CDER Library fields for fields that match selected key words or phrases; or by using the All Fields drop-down menu, can limit the search to data element field label, data element name, set, or form name. After entering a key word or phrase (e.g., contact person name) into the text field, the user can then click "Find" to begin a full-text search. Users

seeking results that exactly match the entered phrase should use quotation marks ("contact person name") to indicate that search results must show only identical fields. To add fields to a specific section, users must check the button next to the section, as illustrated in Figure 4.

Figure 4. Searching Existing Fields
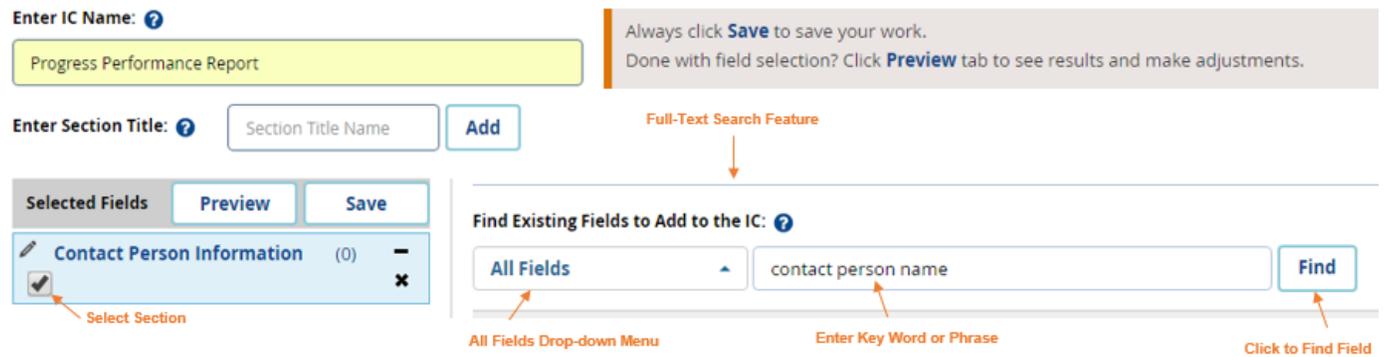
The CDER Library search feature allows users to view existing fields that most closely match the key word or phrase entered, highlighting exact matches in yellow (Refer to Data Elements Search section in the Search Functions User Guide). A user can add the appropriate field label to the section by clicking on the "Add" button, as illustrated in Figure 5.

Users can also view forms and sets that a field is associated with in the "Form Name" and "Set" columns, as illustrated in Figure 5. The "+" next to each field label allows users to view child rows that detail attributes associated with the data element, including data type, data format, list of values, minimum and maximum length/value, and instructions. Note that some fields have more than one label to choose from, as shown in the second row with the Data Element Name "Contact Person Name" (also illustrated in Figure 5). Such instances occur when the fields have been used in multiple existing systems in a variety of layouts (e.g., used in a table vs. a stand-alone question), and there is no one specific field label that can accommodate the different uses. Users should choose the labels that are most consistent with the other fields in their information collections.

Figure 5. Key Word or Phrase Search Results

In the "Form Name" column, users can access the form detail page of any listed form by clicking on the hyperlink. The "Select" button allows users to view all fields in a form through a pop-up window, as illustrated in Figure 6. A user can add all fields by clicking "Add" at the bottom of the pop-up window. The user can delete unwanted fields by using the "x" button at the end of the row, and then clicking "Add." After the user clicks "Add," all of the desired sections and fields will be added to the user's information collection, as illustrated in Figure 7. Users can edit sections or fields that they have added, using the editing feature; or can remove fields or sections, using the "x" button.

The "Set" column also allows users to easily add fields that are in the same set to their information collections. Similar to the Form Name column, the user can access the set detail page through the hyperlink, and by pressing "Select," can access a pop-up window to add all fields in a set; or select fields to add, using the "x" button.

Figure 6. Form Pop-up Window

Figure 7. Adding Data Elements through Select Feature

As users add sections and data elements, they can edit or delete as needed by using the edit or delete icon in each row. Users can also view or hide the data elements for each section by using the "-" button that appears in each section row, as shown in Figure 7, above.

The field editing feature available in CDER Library, accessed through the editing button shown in Figure 7, above, allows users to edit the field label, data type, data format, minimum and maximum length value, and list of values through a pop-up editing box, as illustrated in Figure 8. The field label, data element name, data type, data format, and minimum/maximum values are pre-populated based on the existing CDER Library field. Users can also add definitions, instructions, and business rules for the field; and can indicate required, auto-populated, and auto-calculated field entry. Data element name cannot be modified.

Figure 8. Editing Fields Pop-up Box

If a key word search does not return matching results, users can add their own fields to their information collections by selecting "Create New Field," as illustrated in Figure 9. This allows users to create and edit data elements by using the pop-up box shown in Figure 10. When users create their own fields, no data is pre-populated and there is no data element name field, as the field does not exist within CDER Library. As indicated by the asterisk, a user must enter a field label and instructions before adding the field.

Figure 9. Create New Field

Figure 10. Edit New Field
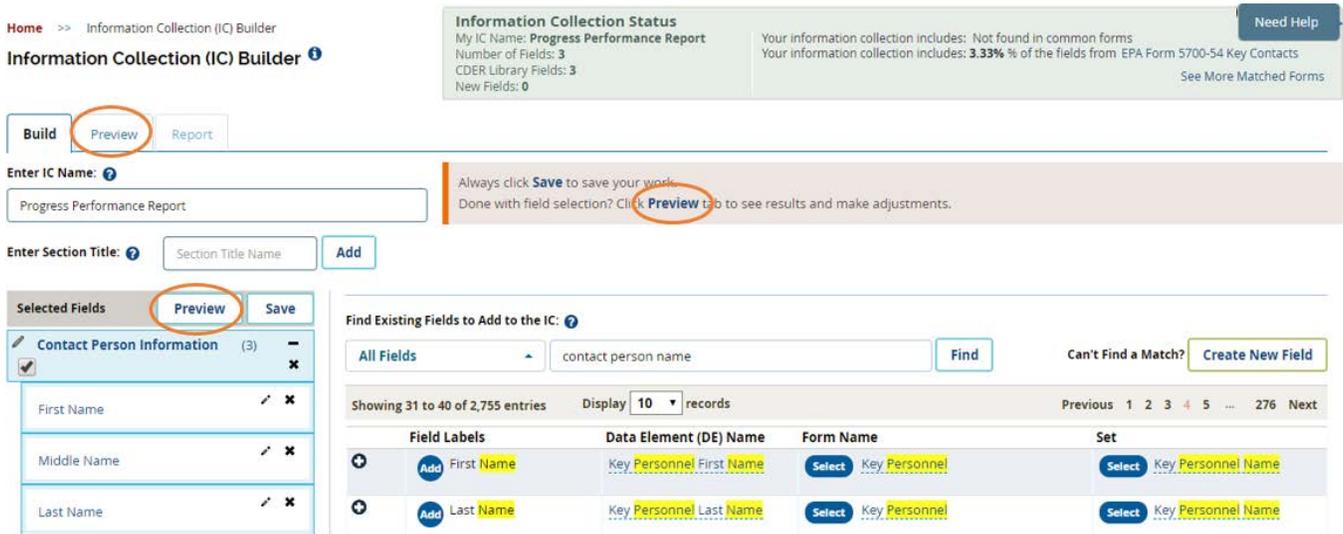

4.1.2 Preview

A user can preview an information collection any time during the building process by accessing the "Preview" tab, clicking the "Preview" button next to Save, and clicking on the "Preview" link in the instructions under the Information Collection Status bar, shown in Figure 11.

Figure 11. Preview Tab

The preview feature allows a user to view all fields added to an information collection. Users are also able to add/edit sections and fields on this page. After reviewing the information collection for completeness, the user can save the collection by clicking "Save," either in the instructions, on the upper-right side of the page; or at the bottom-left side of the page, under the fields, as illustrated in Figure 12. A pop-up notification will appear, confirming that the information collection has been successfully saved. Preview also conducts a completeness check, providing warnings such as "Warning: Instructions are not provided." The user can then edit the fields in response to these warnings.

Figure 12. Saving Information Collection
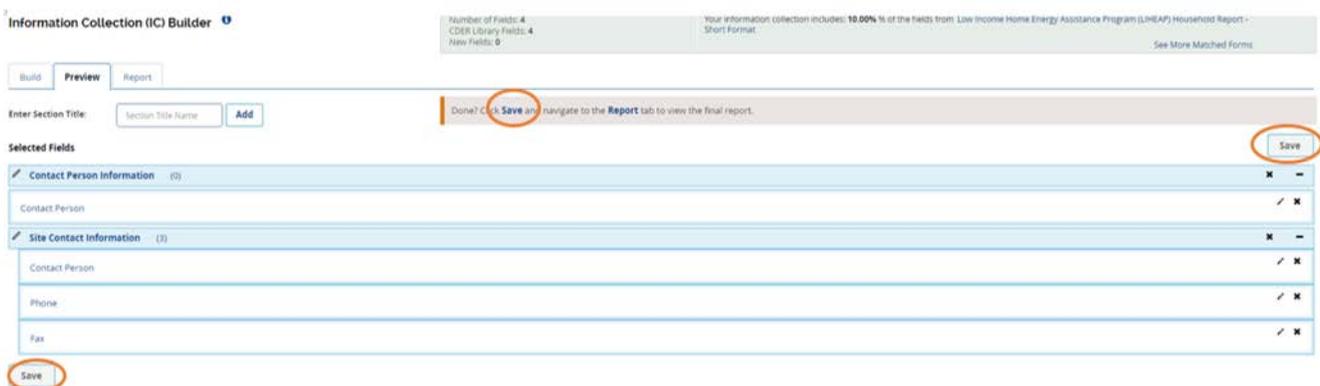
4.1.3 Report

After previewing and saving a created information collection, users can access created reports through the "Report" tab, as shown in Figure 13. The report section of the IC Builder allows the user to view the

field labels added to a collection in sequential order; as well as the associated data element name, data type, data format, and list of values. The user can also download the information collection in PDF or Microsoft Word format, or download created fields and associated attributes to support information collection design in CSV or XML format. CDER Library also generates a cover sheet, which maps the fields that have been added to a created information collection to existing data elements and forms within CDER Library, to support the OMB approval process. The cover sheet also lists matched forms within CDER Library, including the match percentage. Users can download this document in PDF format.

Figure 13. Report Tab

4.1.4 Information Collection Status

CDER Library's Information Collection Status feature, shown in Figure 14, allow a user to easily view the status of an information collection, including the IC's name, total number of fields added, and number of added fields that exist within CDER Library. In the right-hand column, the user can view the forms (common or other forms) stored within CDER Library that best match the information collection, based on the number of identical fields; and can directly access the forms through the hyperlink provided. The status reports the percentage of matching fields from the form that is most similar to the user's information collection. Users can also click on "See More Matched Forms" to view other forms within CDER Library that contain the same fields.

Figure 14. Information Collection Status Feature

4.1.5 Need Help

When help is needed, users can click on the "Need Help" button located on the top right-hand side of the page next to the Information Collection Status bar, as illustrated in Figure 14, above. The Need Help pop-up box, illustrated in Figure 15, will open, directing users to the help page, that provides tips on dragging and organizing the fields. Users can also enter free-form comments or questions in the text box, and will receive answers from CDER Library within two business days. To submit a question or comment, users must enter text in the comment text box.

Figure 15. Need Help Comment Box

Need Help?	✖

Needs tips on dragging and organizing the fields? Check out the help page.

Did not find what you want? Submit your question to the CDER Library and we will get back to you within 2 business days!

* Comment:

(maximum of 2000 characters)

Submit   Close

4.1.6 Drag and Drop

CDER Library allows users to drag and drop fields added to information collections in both the Build and Preview tabs; to change the order of the fields or sections, or to move a field into a different section. This drag and drop feature is also available for sections, allowing users to rearrange the order of their sections. To use this feature, the user places the mouse over the desired field or section, clicks on the specific field or section, and drags it to the preferred location. To ensure that the field or section is properly relocated, the user must correctly align the field with the one below or above it, and unclick the mouse. If a field cannot be dragged to a certain area (e.g., a field cannot be treated as a section with additional fields under it), a dark shaded background will appear in the area where the user is attempting to drop the field. Multiple layers (i.e., a sub-section with additional fields under a section) are not supported; only one layer (i.e., one layer of field under a section) is permitted.

Figure 16. Drag and Drop Feature
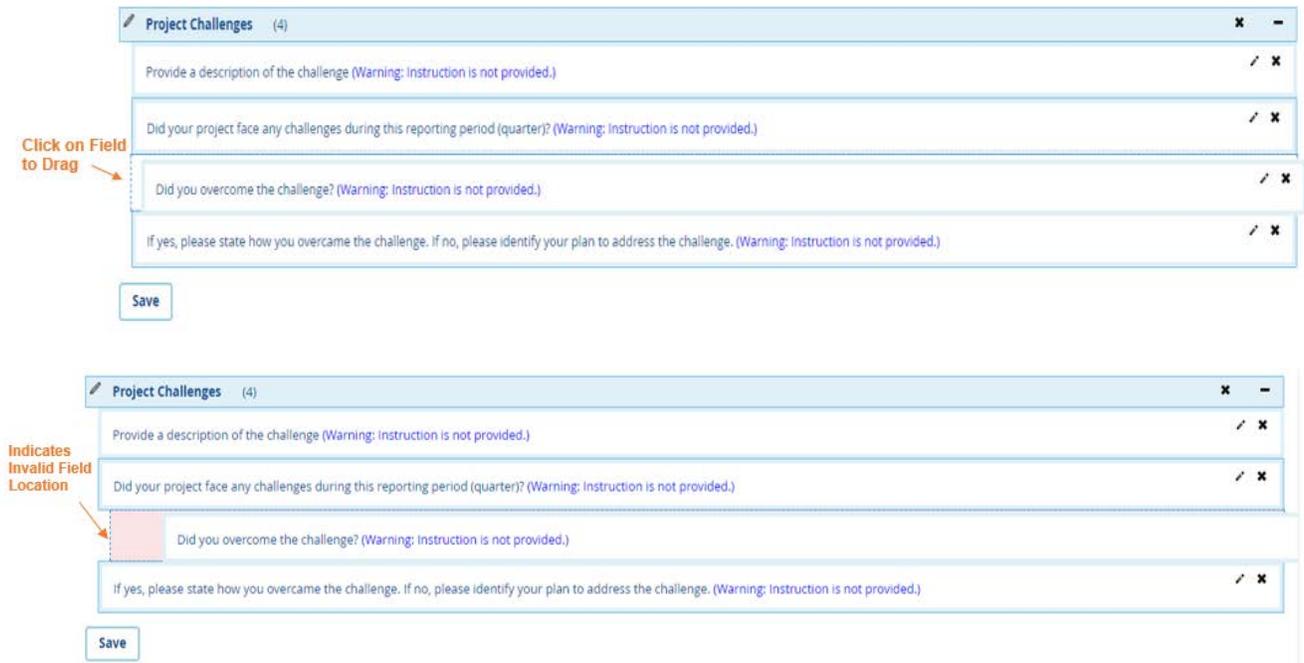
4.1.4   Exiting IC Builder

Users who attempt to exit the IC Builder before saving their work will receive a pop-up notification warning that changes may not be saved. To exit prior to saving, users must confirm their exit by clicking the "Leave" button, as shown in Figure 17.
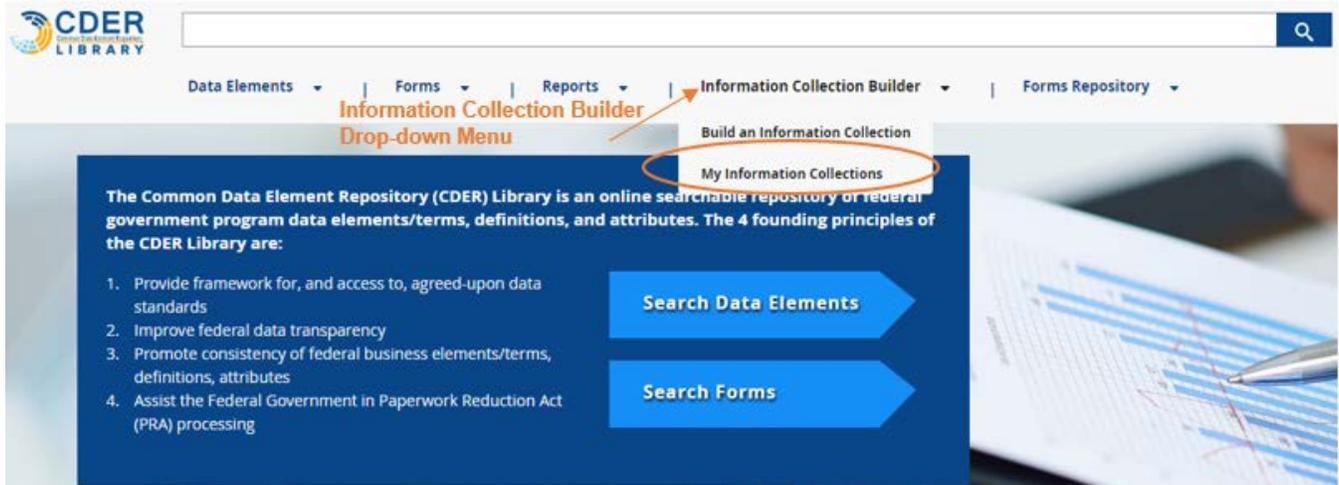
Figure 17. Leave Validation

4.2 My Information Collection

CDER Library users can view previously created collections by accessing the "My Information Collections" page through the "Information Collection Builder" drop-down menu, illustrated in Figure 18.

Figure 18. Accessing My Information Collections

4.2.1 Information Collection Table

The "My Information Collections" page allows users to view their ICs by name, date of creation, and date of last update, in the "Created Date" and "Last Updated Date" columns, as shown in Figure 19.

Figure 19. Viewing My Information Collections

4.2.2 Actions on Information Collection

As shown in Figure 20, the fourth column, "Action," allows a user to easily edit an information collection by linking directly to the "Build" feature of CDER Library. A user can also download an information collection into a Microsoft Word document, download the cover sheet, or remove the information collection from their My Information Collections repository. When attempting to remove an information collection, the user will receive a pop-up confirmation, as shown in Figure 20. The user must click "Yes" to finish removing the information collection.

Figure 20. Removing an Information Collection