Low Carbon Fuel Standard

REPORTING TOOL

Design Specifications

Reporting and Credit Tracking

Regulated Party Facing Pages

September 16, 2009

LCFS RT	DOCUMENT APPROVAL HISTORY	
	Prepared By	Ben Crawford (FCCC)
	Reviewed By	Christina Zhang-Tillman, Greg O'Brien (ARB)
	Approved By	Christina Zhang-Tillman, Greg O'Brien (ARB)

DATE	DOCUMENT VERSION	REVISION DESCRIPTION	AUTHOR
08/24/2009	1.0	Initial Draft	Christina Zhang-Tillman
8/27/2009	1.1	Draft 2	Ben Crawford
9/1/2009	1.2	Draft 3	Ben Crawford
9/9/2009	1.3	Draft 4	Ben Crawford
9/10/2009	1.4-1	Draft revision sent to group for review	Ben Crawford
12/17/2009	2.0	Revision Containing Details on XML	Ben Crawford
1/7/2010	2.1	Revision of XML Section	Ben Crawford

APPROVAL DATE	APPROVED VERSION	APPROVER
9/16/2009	1.4	Christina Zhang-Tillman, Greg O'Brien (ARB)

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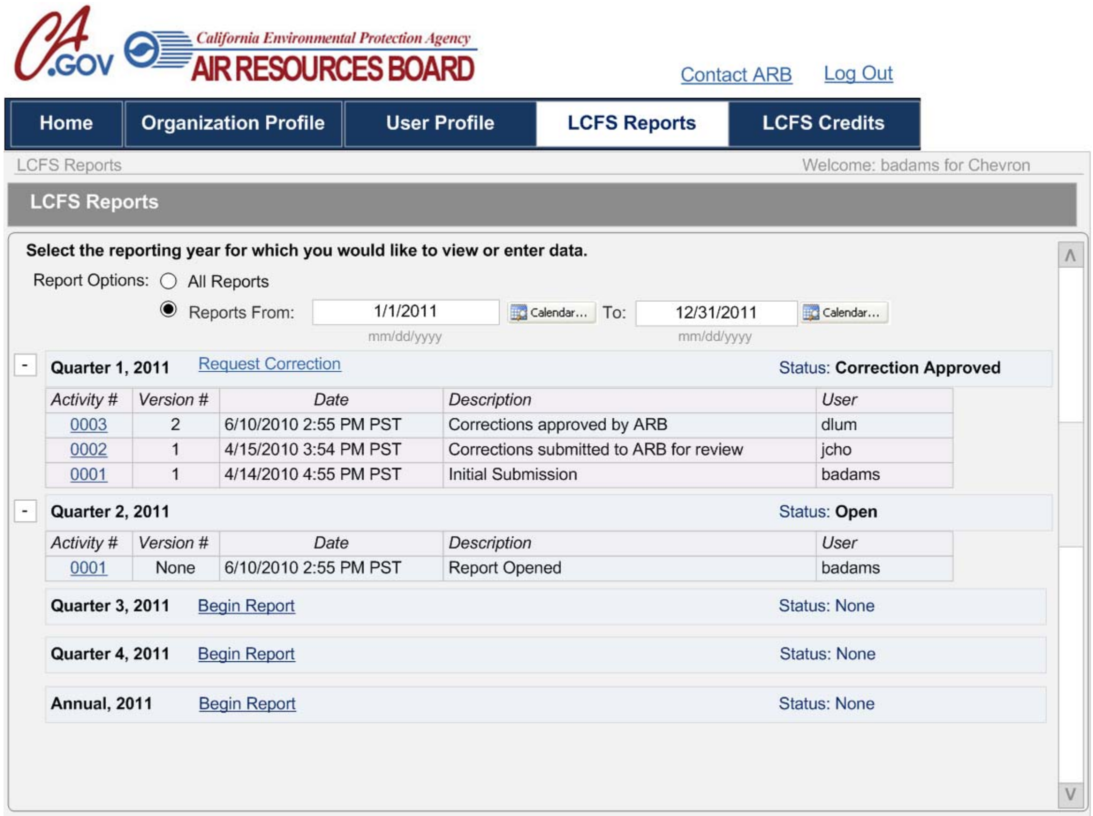
1. LCFS REPORTS: MAIN PAGE



1.1. DESCRIPTION

This page displays a list of reports associated with an organization based on the user's input date range. The reports will be displayed with the most recent year on top. Under each year, the page will display its four quarterly and its annual report. Under each report's header (ex. "Quarter 1, 2011) the history of that period's report is displayed in a grid. Salient changes to a report are denoted by changes in the ACTIVITY # . Changes in the ACTIVITY # are triggered when the report's STATUS has changed. STATUS changes are brought about when the report changes steps in its process (for example when a report goes from simply being "open" to "submitted").

This page is intended to be primarily navigational. It enables the user to:

- Select the interval from which they would like to view reports;
- Drill down into the specifics of a report at any time in its evolution through the Reporting Tool;
- Begin a new report; and

- Begin a Correction to a previously submitted report.

1.2. INTERACTION

The user enters this page by clicking on the LCFS Reports tab or the “Enter or Change Report Information” link from the home page. By clicking on an activity number of a report or Begin Report link or Request Correction Link, the user is taken to LCFS Report Details. By selecting another tab the user will exit from this page.

1.2.1. PAGE ENTRY

- A user clicks on the LCFS Report tab or the “Enter of Change Report Information” link from the home page.

1.2.2. PAGE EXIT

- By clicking on an activity number of a report or Begin Report link or Request Correction Link, the user is taken to LCFS Report Details. By selecting another tab the user will exit from this page.

1.3. DETAILS

Upon entering the page, the system defaults the Report Option to “All Reports”, consequently a list of all reports belonging to the organization will be displayed. There will be a section for each quarter and another section for the annual report. The page will display each quarter section in descending order followed by the annual report section. If multiple years are selected, they will be displayed in descending order with the most recent year on top.

The history of the reports will be kept and displayed in nested section for each quarter and annual report. The user can open each nested section by clicking on the + or -. The section will contain an activity number, version number, date, activity description and a user field.

If a report has been submitted, a status “Submitted” will be shown. If a Correction Request has been submitted, the report status will be changed to “Correction Pending”. Once a correction is accepted, the status will be shown as “Correction Accepted”. If a correction request is rejected the status will be changed to “Correction Rejected”.

At the header-level, each quarterly and annual report will be assigned a “STATUS”. There are seven possible statuses:

1. **None:** No action has been taken with regard to this report.
2. **Open:** The report has been opened and some data saved to the system.
3. **Submitted:** The report has been completed and submitted to ARB.
4. **Correction Pending:** A regulated party has opened and saved data in a correction request form.
5. **Correction Submitted:** A regulated party has submitted a completed correction request to ARB.
6. **Correction Accepted:** ARB has received and accepted a regulated party’s correction request.
7. **Correction Rejected:** ARB has received and rejected a regulated party’s correction request.

The activity number is incrementally increased each time a status is changed. The version number is incrementally increased when report status is changed to “Submitted” or “Correction Accepted”. The date and user is assigned each time a status is changed to identify the date the status was changed and who made the change. The user is the logged in user. Only users with “signatory authority” will be able to change the status to “Submitted”.

For all quarterly reports, the Begin Report link is active. If a report is in a future quarter, the Submit button is not displayed, even for signatory users.

For the annual report, the Begin Report link is not active until Q4 report is submitted. The annual report is concatenation of all the quarterly reports plus the annual credit/deficit summary in Quarterly View (see page Credits, Quarterly Summary View)

The “Request Correction” link will not become available until after a report has been submitted. The “Request Correction” link will not be available if a Report Correction is already in progress (ex. If the report’s status is “Correction Pending” or “Correction Submitted”) The “Request Correction” link will only be available once ARB has evaluated the previous correction request and changed the report’s status to “Correction Accepted” or “Correction Rejected”.

In short, the “Request Correction” link is only available for the following report statuses:

“Submitted”,

“Correction Accepted”,

“Correction Rejected”.

If the regulated party must make a change to their data before they submit their annual report, the user must go to the quarterly reports and use the “Request a Correction” functionality to modify the data. This data change must go through the entire “Correction Request” process and be approved by ARB (thus changing the report’s status to “Correction Accepted”). Once the change has been approved, the user should then run the annual report which will then take into account the updated (presumably correct) data.

If the user has already submitted an annual report and realizes that there is an error in their data, they must go back and modify the quarterly report in which the error exists.

FIELD	TYPE	DESCRIPTION
Report Options	Radio button	Allow users to display reports according to selected button. Default is “All Reports” Calendar icon allows users to enter date field by selecting the date on the calendar. Mask is mm/dd/yyyy

FIELD	TYPE	DESCRIPTION
Status	Text	Shows the status of a report. Values are: None, Open, Submitted, Correction Pending, Correction Accepted, Correction Rejected, Correction Submitted.
Version	Auto increment number	A new report version is created upon the first “submission” as well as all subsequent accepted corrections.
Activity Number	Auto increment number with Link	Sequential numbers for each report with a change in status. When the link is clicked, the Report Details page is displayed
Submission Date	Date	Date/timestamp of the report that has had a change in status

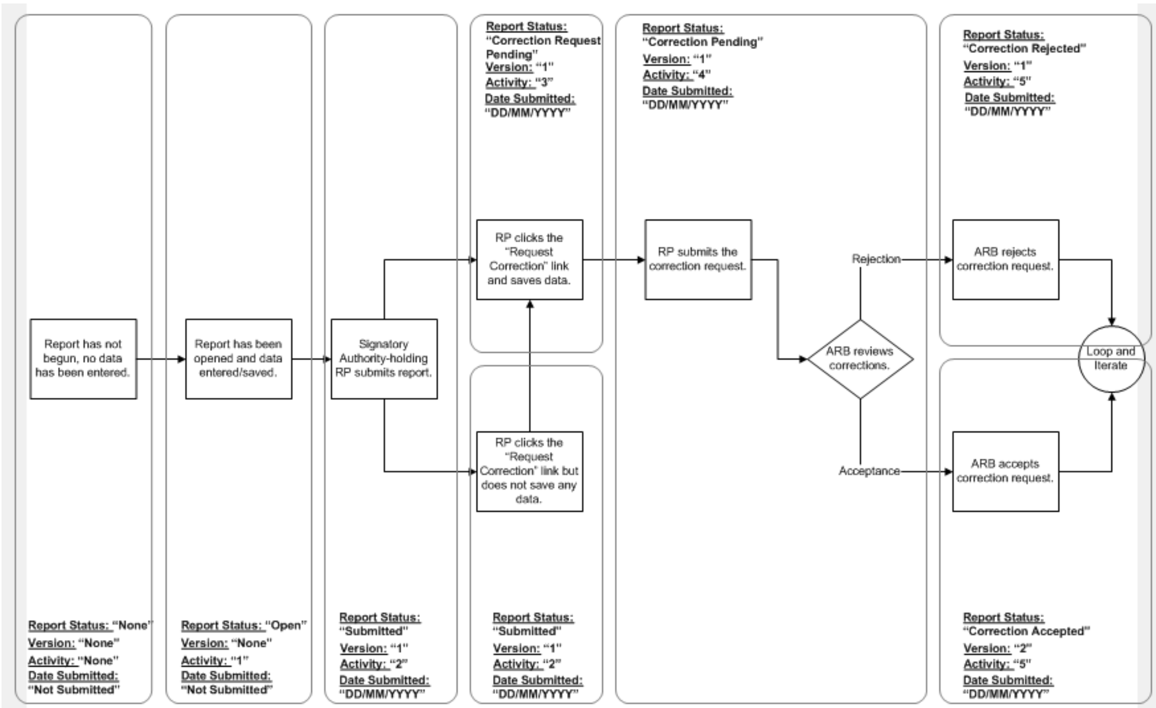
FIELD	TYPE	DESCRIPTION
Description	Text	1. None: system does not display any description 2. **Open:** "Report has been created but not submitted" 3. **Submitted:** "Initial report submission" 4. **Correction Pending:** "Report correction in progress" 5. **Correction Submitted:** "Report correction submitted to ARB" 6. **Correction Accepted: "**Correction request accepted by ARB." 7. **Correction Rejected:** "Correction request rejected by ARB"
Submit User	Text	User that changed the status of the report. This includes the ARB staff members too when report status as been changed to "Correction Accepted" or "Correction Rejected"
Begin Report – Quarterly	Link	Link to Report Details page for data entry or data import.
Begin Report – Annual	Link	Link to Report Summary – Annual page; The submit button on the Report Summary will not be active until Q4 has been 'Submitted".

FIELD	TYPE	DESCRIPTION
Request Correction	Link	Link displays dynamically for any quarterly report with a successful submission (or accepted correction). It enables the user to begin a report correction.

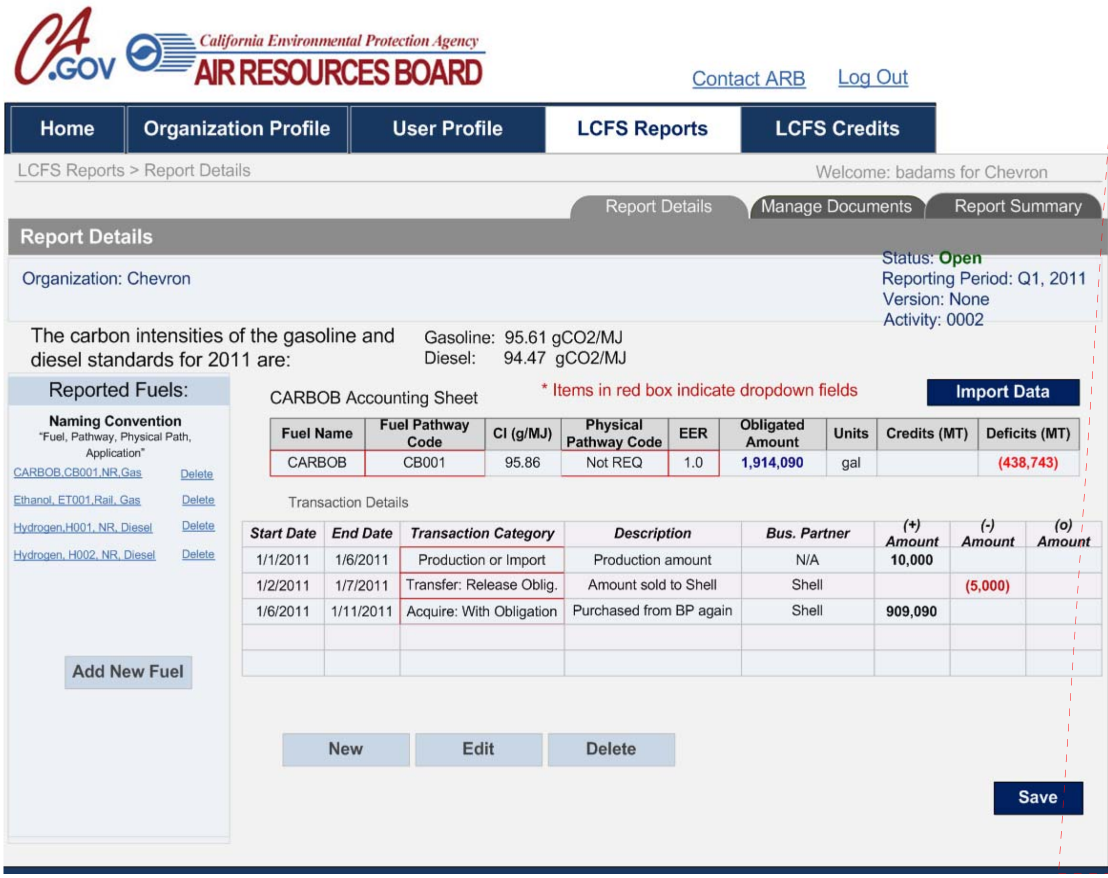
1.4. BUSINESS RULES

- The “date” field is the date and time the report status is changed in the system.
- The “user” field is the user that changed the status. This includes the ARB staff when the status “Correction Accepted”or “Correction Rejected”.
- Request Correction link is only available for reports that are in the “Submitted” status. The Request Correction link will not activate if “Correction Pending” or “Correction Submitted” are the report’s status. The Request Correction link will become active again if the status is “Correction Rejected” or “Correction Accepted”
- The report detail is accessed by the Activity number link. The report detail is read-only with a disabled Submit button when the following conditions are met:
  - Report status is “Submitted”, “Correction Accepted”, or “Correction Rejected” .for all users
  - Report status is “Open” or “Correction Pending” and the user is a Reviewer.
- If a report has been started but the quarter start date is in the future (before end of previous quarter) then do not allow the submit button to be displayed, even for signatory users.
- If Q4 report has not been submitted, do not allow the submit button on the Annual Report summary to be active.
- Annual report cannot be submitted unless all quarters have been “Submitted” .
- If a correction request was made on a quarterly report and ARB has not approved or rejected it, the annual report will contain the latest approved version of the quarterly reports and a system text will be shown on the annual report indicating that it’s not the latest “version” and that there is a correction request on the specific quarter(s) pending ARB approval.
- Annual report is concatenation of the quarters. The only method to modify the annual report is to change the quarter data by a “Request Correction” followed by the “Correction Accepted” by the ARB staff.
- The Annual report gives the user the ability to see the summation of credits even before the Annual Report is submitted.
- Activity numbers are assigned to reports that have a change in status including “Submitted” or “Correction Accepted”
- Version numbers are assigned to reports that have a status of “Submitted” or “Correction Accepted”

Changing Statuses as a Report Flows Through the CRT System



2. LCFS REPORTS: REPORT DETAILS



Comment [czt1]: Business Partner column should be next to Transaction Category column.

2.1. DESCRIPTION

The main LCFS Reports page will enable the regulated party users to create a new report or view an existing report, as well as all underlying transactions. When the user visits the page via "Begin Report" link on the main LCFS Reports page, this page will be loaded as an empty form. At this point, the user can create a brand new quarterly report. No activity number is associated to it until it is saved. After entering and saving fuel detail information into the system from this page then the system will automatically create an activity number of 001. Alternatively, if the user clicks on an existing activity number the page will be loaded with the previously saved data from the system. The user could add additional fuel data or edit/delete an existing line of data as long as the report status is not "Submitted", "Correction Pending" or "Correction Submitted". In these cases the user will only have Read-Only access to the report.

This page also enables users to report the new fuel detail information. Firstly, the user could manually add the individual fuel information along with the associated transactions via “Add New Fuel” button. Alternatively, the user could upload an XML file via “Import Data” button for the bulk data. Once an XML file has been successfully uploaded into system then all data from the XML will be presented on the page for the user to review them.

Each reported fuel is displayed as a link and when it is clicked, the right hand side of the form is loaded with the fuel information along with all associated transactions data for the user to update the necessary changes. An existing reported fuel along with all associated transactions can be deleted by the “Delete” link next to each “reported fuel” which is located at the left panel. The report status must be “Open” to use this delete function.

The user could report one or more transactions for a given fuel via the “Transaction Details” grid. In order to be able to add a new transaction, edit or delete an existing one. Both “Edit” and “Delete” buttons are located under this grid. The grid’s last row has open fields for the user to input data in a new row. The user could do the multiple editing and deletion of transactions by selecting/highlighting multiple rows in the grid. Multiple selections of the transaction records is enabled by holding either Shift key or Ctrl key while selecting records with the cursor.

For each reported fuel, either the Credits (MT) or the Deficits (MT) will automatically be calculated by the system.

2.2. INTERACTION

This section identifies how a user enters, interacts, and leaves the Report Details page.

2.2.1. PAGE ENTRY

A user clicks on the “Begin Report” or the “Activity Number” link (e.g, 0002) on the main LCFS Reports page or clicks on “Report Details” tab or clicks on “Enter or Correct Report Information” link under “Compliance Report” header on the Home page.

2.2.2. PAGE EXIT

A user clicks on “LCFS Reports” tab or click other tabs: “Manage Documents”, “Report Summary” or clicks on the “Submit Report” button or select another tab from the top menu tabs. ~~or clicks the “Cancel” button on “LCFS Credits/Deficits Verification” page during a Submit.~~

2.3. DETAILS

Upon entering the page, the form will be blank by default if the user comes to this page from “Begin Report” link at the main LCFS Reports page”. Alternatively, if the user comes to this page via “Activity number” link on the main LCFS Report page” then the form will be populated with previously saved data from the system.

The following details about the report are being displayed at the top right of the report:

- Status(*None*, *Open, Submitted, Correction Pending, Correction Submitted, Correction Accepted, Correction Rejected,*– Refer to the detail description of possible "Status" values at Section 1.3- Details).

- Organization (the organization/regulated party name of the current logged in user).

- Date (the value will reflect the date the report is saved. Not currently shown on mockup).

- Reporting Period (the quarter and year separated by a comma (e.g., Q1, 2011) as shown on the mock-up in Section 2).

- Version: (the version number of the report). A newly submitted report will have the version number of "01".

- Activity: (the activity number of the report based on changes of the report "status"). When a user creates a brand new report via "Begin Report" link, the report will have the action "01" by default after saving the first piece of data into the system. Whenever the "status" of the report changes, then the activity number will be incremented. By the system.

Next, the carbon intensities standard values for the Gasoline and the Diesel of a selected reporting year will be displayed from the CI lookup table. The lookup table stores these values per reporting year which ARB maintains so that it stays updated with the latest data.

- Reported Fuels : Add, Edit or Delete

On the left panel of the form, there is a "Reported Fuels" section. By default, the list is empty. In order to report a new fuel details, the user could click on "Add New Fuel" button. After the user has added new fuel information with any associated transaction(s) and has saved it, the newly added fuel will appear as a link item under "Reported Fuels" section along with the "Delete" link. To delete an existing reported fuel, clicking "Delete" will prompt the user with the delete confirmation message containg the "Yes" or "No" delete option confirmation. Clicking "Yes" will delete the fuel and all associated transactions information (if any). Clicking "No" will cancel the deletion. Editing an existing reported fuel is accomplished by clicking on one of the existing reported fuel link. The right hand side of the form is loaded with all previously saved data for the selected fuel. The combination of the Fuel Name, Fuel Pathway Code (FPC), the Physical Pathway Code (PPC) and the EER value uniquely identify a particular new fuel added by the user. The reported fuel name uses this unique combination of naming convention in order to identify each fuel present. The display fuel names are sorted alphabetically.

When the user clicks on "Add New Fuel" button, the right hand side form will be brought up blank with the drop down list populated with the values in the corresponding lookup tables for the new data entry. The Fuel Pathway Code drop down list will be populated with values based on the selected Fuel Name. Similarly, the "EER" drop down list will also be populated with values based on the selected Fuel Name. The "Units" column value will also be populated based on the selected Fuel Name and is read-only. The CI (g/MJ) is also read-only and will be displayed based on the selected FPC. The "Physical Pathway Code" drop down list is populated with all the available values in the system. The "Obligated Amount" is read-only and is given the value of "0" initially by default. Whenever a new transaction record is saved or edit an existing transaction with the updated amount, the "Obligated Amount" will reflect the accumulated value of the individual amounts from each of the transactions. The “Credits (MT)” or “Debits (MT)” will automatically be calculated based on the obligated amount reported.

- Transaction Details

Any transaction associated with a given fuel is reported in the Transaction Details grid. By default, this grid is empty and the Edit and Delete button is disabled. The last line of the grid has open empty fields for the user to insert a new transaction record. While adding a new transaction, the “Start Date”, the “End Date”, the “Transaction Category”, and one entry from among “(+) Amount”, “(-) Amount” or “(O) Amount” are required. After entering the amount, the “Obligated Amount” and “Credits (MT)” or “Debits (MT)” for the reported fuel will automatically calculated.

The Business Partner drop down list is populated with all available organization names in the system. The list will provide all available organization names in the system. If the selected fuel is a bio fuel (Ethanol for now), the Business Partner dropdown lists the registered ethanol producers that meet the CI value and physical pathway combination and all regulated parties in the system (excluding that of the logged-in user). This field will auto-complete based on the user’s entry.

As long as the grid has at least one record, the “Edit” and “Delete” buttons will be enabled. To edit one or more existing transaction record, select the record(s) and click on the “Edit” button. The selected rows will be opened for inline editing. Multiple selections of the records will be allowed by holding either Shift or Ctrl key. To delete one or more existing transaction record, select the desired row(s) and click on the “Delete” button. A delete confirmation message will prompt the user with “Yes” or “No”. If the user chooses “Yes” then all the selected records are deletec. If the user clicks on “No” then no deletion will occur.

- Saving Reported Fuels

By clicking on the “Save” button will save a new reported fuel along with any associated transactions will be saved. After saving the data, the form will be blank except for the drop down lists populated with the values from the corresponding lookup tables.

- Import Data

Upon clicking on “Import Data” button another page will be displayed for the user to upload an XML file. Please refer to Section 8 for more details on “Import Data” functionality. At the time the XML file is uploaded, the user will be given the options to either append the transactions or replace all existing transactions in the system.

2.4. FIELD DESCRIPTION

FIELD	TYPE	DESCRIPTION
Status	Text	Shows the status of a report. Values are: • None • Open, • Submitted, • Correction Pending • Correction Submitted, • Correction Accepted, Correction Rejected.
Organization	Text	Shows the registered organization name of the current logged in user
Date	DateTime	Will reflect the date the report is saved or submitted.
Reporting Period	Text	Shows the selected quarter and the selected year separated by a comma (e.g., Q1, 2011). The possible values for four quarters of a given year are: Q1, Q2, Q3 and Q4.
Version Number	Number	"None" by default for the report with the status "Open". For any subsequent submitted report via "Request Correction" link, the version number will be incremented when the report status changes to "Submitted" or "Correction Accepted". Otherwise, the version remains unchanged.

FIELD	TYPE	DESCRIPTION
Activity Number	Number	• When a quarterly report is started and report status is "Open" an activity number "01" will be automatically generated by the system after the first save. When the report status has changed to "Submitted" the activity number remains "01". Subsequent changes in report "status" will increment the activity number by 1. • For an annual report submittal, the activity number "01" will be assigned by default. Any subsequent submissions of the report will increment the activity by 1.
Carbon Intensity Standard of the Gasoline for the reporting year	Number	Retrieves the CI value from the "Compliance Schedule" lookup table
Carbon Intensity Standard of the Diesel for the reporting year	Number	Retrieves the CI value from the "Compliance Schedule" lookup table
Reported Fuel Name	Hyperlink	The combination of Fuel Name, Fuel Pathway Code, Physical Pathway Code and EER value is used for the naming convention of the link. Clicking on the link will load all existing fuel data associated transactions to the right side grid.
Delete(under Reported Fuels section on the left panel)	Link	Clicking on the link will prompt the user with the Delete Confirmation Message to delete (Y/N) the existing reported fuel along with any associated transaction records.

FIELD	TYPE	DESCRIPTION
Add New Fuel	Button	Clicking on the button will load the empty right side of the form with 4 fields with drop down lists populated with the values in the corresponding lookup tables
Fuel Name	Drop Down List	Populate with all fuel names value in the "Fuel Name" lookup table. For values of the look up table, refer to document : XXXX. It is required field. The Fuel Name must be selected first. The Fuel Pathway Code drop down will then be activated and listing populated. [Required Field]
Fuel Pathway Code (FPC)	Drop Down List	By default, this list is populated with all values from the "Fuel Pathway" lookup table after filtering on the Fuel Name selected. For values of the lookup table, refer to document: XXXX. Once the FPC is selected the PPC drop down is activated and the listing populated. [Required Field]
CI (g/MJ)	Text	By default, the value is displayed based on the selected Fuel Pathway Code. Selecting a different FPC results in a a new value being displayed for that FPC. [Read Only]
Physical Pathway Code (PPC)	Drop Down List	Populated with all the Physical Pathway Codes based on the previous selections (Fuel Name, FPC and CI). The system will display two columns in the drop down selections showing PPC and corresponding Pathway Description. System will store code only with the reports. [Required Field]

FIELD	TYPE	DESCRIPTION
EER	Drop Down List	By default, it will be populated with the EER of the defaulted Fuel Name. After selecting a different Fuel Name, it will be populated accordingly based on the selected Fuel Name. The system will display two columns showing EER and corresponding LDV/MDV or HDV description. System will store EER only with the report. [Required Field]
Obligated Amount	Integer	Display as comma separated for every three digits. [Read Only]
Units	Text	Displayed for the unit of the selected Fuel Name. After selecting a different Fuel Name, the value is displayed based on the newly selected Fuel Name. [Read Only]
Credits (MT)	Integer	Read-Only field. The system will automatically calculate the value based on the selected Fuel Name, Fuel Pathway Code, EER and the Obligated Amount. Display as Bold Green. Units are metric tons (MT) [Read Only]
Deficits (MT)	Integer	The system will automatically calculate the value based on the selected Fuel Name, Fuel Pathway Code, EER and the Obligated Amount. Display as Bold Red with parenthesis. Units are metric tons (MT) [Read Only]
Start Date	Date Time	Input field along with calendar control. The user manually enters a particular date or selects a date from the calendar control. [Required Field]

FIELD	TYPE	DESCRIPTION
End Date	Date Time	Input field along with calendar control. The user could either manually type in a date or pick a date from the calendar control. [Required Field]
Transaction Category	Drop Down List	Options provided are from the "Transaction Category" lookup table. The selection possibilies are: • Production or Import • Transfer: Release Obligation • Transfer: Retain Obligation • Acquire: Without Obligation • Acquire: With Obligation [Required Field]
Business Partner	Text	Auto Complete feature to be activated. Populate with all available organization names in the system. If the Business Partner is not in the populated list, the user can enter one. This field is not related to the registered organization within the system. If organization changes its name within the system's Organization Profile, historical fuel transaction will not reflect the change. This feature simply gives the user suggestions of a Business Partner to use for a fuel transaction.
Description	Text	Input Field. It is optional field.

FIELD	TYPE	DESCRIPTION
(+) Amount	Integer	Input Field. Display as comma separated for every three digit. If “Transaction Category” has either one of the following values: • Production or Import • Acquire: With Obligation then, this is a [Required Field]. Otherwise, [Optional Field].
(-) Amount	Integer	Input Field. Display as comma separated for every three digits. If “Transaction Category” provides the following option: • Transfer: Release Obligation then, this is a [Required Field]. Otherwise, [Optional Field].
(O) Amount	Integer	Input Field. Display as comma separated for every three digit. If “Transaction Category” is either one of the following options: • Transfer: Retain Obligation • Acquire: Without Obligation then, this is a [Required Field]. Otherwise, [Optional Field].
Edit	Button	When the user selects one or more rows from the “Transaction details” grid and click on this button, all selected rows will be available for editing. “Edit” and “Delete” button text is toggled to “Save” and “Cancel”. After clicking on the “Save”, the button text will be toggled back to “Edit” and “Delete”.

FIELD	TYPE	DESCRIPTION
Delete	Button	When the user selects one or more rows from the "Transaction Details" grid and click on the button, a delete confirmation message will be displayed with "Yes" or "No". If the user chooses "Yes" then will delete all selected rows. If No is selected then nothing changes.
Save	Button	When this button is clicked, fuel data along with all associated transactions will be saved to the system. Before saving, data validation will occur. (Refer to Section 2.5 "Business Rules" for the validation rules). After saving the data, newly reported data will be associated with a link on the left panel under "Reported Fuel". Any saved fuel data will not be viewable by ARB until the user submits it via the "Submit Report" button.
Submit Report	Button	This button is only enabled for users with "Signatory Authority" privilege. If the user clicks on it to submit the data to ARB, the "Credits/Deficits Verification" page is displayed to the user (See Section X.XX).
Import Data	Button	Allows user to import the XML file. XML Data Import Page is displayed.

2.5. BUSINESS RULES

- If the page is displayed from the "Begin Report" link, the empty form is loaded by default.
- The carbon intensities of the Gasoline and Diesel Standards for a selected reporting year will be retrieved from the lookup table (if any).

- The reported fuel names on the left panel will be sorted alphabetically (if any).
- After entering or selecting the Fuel Name, the Fuel Pathway Code, the Physical Pathway Code, the EER value and the Obligated Amount, the Credits (MT) or Deficits (MT) will be calculated automatically by the system. The calculated value is displayed in the appropriate column.
- The calculated Credits or Deficits values are to be rounded to the nearest whole number.
- For the calculation formula used for determining Credits or Deficits refer to the document :"Calculation Notes.docx". For the calculation method for High Carbon Intensity CARBOB, please refer to the document: "HCICO Management Proposal….docx".
- The Deficits (MT) value will be displayed with parenthesis and in bold red.
- The Credits (MT) value will be displayed in bold green.
- Upon selecting the Fuel Name from the drop down list by the user, all associated Fuel Pathway Codes for the selected fuel name will be populated in "Fuel Pathway Code" drop down list. The Fuel Name must be selected first, which will then activate the FPC drop down.
- Upon selecting a Fuel Pathway Code by the user, the corresponding "CI (g/MJ)" value will be automatically displayed by the system. It is Read-Only field. The "Fuel Pathway" drop-down list has two columns: the "Fuel Pathway Code" and the "Fuel Pathway Description".
- Upon selecting the Fuel Name, the "EER" drop down list will be populated based on the selected Fuel Name. The drop-down list has two columns: "EER Value" and "Application Name Description (which has only two possible values: "Light Duty Vehicle/Medium Duty Vehicle: LDV/MDV" or Heavy Duty Vehicle: "HDV"). If the selected Fuel Name has only an ERR value then only the "EER value" will be displayed and "LDV/MDV or HDV" application description is not to be displayed. If the selected Fuel Name has more than one "EER" value then those values will be available along with the Application Name Description in the drop-down list.
- The "Physical Pathway Code" drop down list will be populated with all the physical pathway codes which were previously registered. A "Not REQ" physical pathway code will also be available along with other pre-registered physical pathway codes (if any) for the user to choose. The "Physical Pathway" drop down list has two columns: the "Physical Pathway Code" and the "Physical Pathway Description".
- The "Units" column value will be displayed based on the selected Fuel Name and it is Read-Only field. For instance, if the selected Fuel Name value is "CARBOB" then the "Units" shown will be in "gal". If the selected Fuel Name value is "Hydrogen" then the "Units" shown will be in "kg".
- The "Obligated Amount" value will be calculated and displayed as comma separated for every three digit.
- "The Transaction Details" grid is empty by default.
- A calendar control will be displayed for the "Start Date" and the "End Date" fields in the "Transaction Details" grid. The user could manually input the date value or pick a particular date from the calendar control. These are required fields.
- The "Transaction Category" is a drop down list and it will be populated with values from the "Transaction Category" lookup table. This is a required field.

- The “Business Partner” is a drop down list and it will be populated with all available organizations in the system and ethanol producers (with same CI and PPC). This is optional field.
- The “Description” is a user input field and it is optional.
- The (+) Amount and the (-) Amount will be displayed comma separated for every three digit. They are required fields.
- The (-) Amount will be displayed with parenthesis and in red and (+) Amount is displayed in green.
- The (O) Amount will be displayed with parenthesis and in bold grey.
- By clicking on “New” button, a new empty row will be available in “Transaction Details” grid.
- One or more existing transaction records will be edited by selecting any desired rows in the “Transaction Details” grid and click on the “Edit” button. A Save is then required.
- One or more existing transaction records will be edited by selecting any desired rows in the “Transaction Details” grid and click on the “Delete” button. A confirmation message with “Yes” or “No” will be prompted to user. If the user clicks on “Yes” then one or more selected rows will be deleted. If the user chooses “No” then it will cancel the deletion.
- Selection of multiple rows in “Transaction Details” grid will be allowed by clicking on more than one row by holding either “Shift” or “Ctrl” key.
- The Regulated Parties users with “Reviewer” privilege will only be able to view and have Read-Only access to the report.
- The Regulated Parties users with either “Contributor” or “Administrator” (with or without signatory authority) privilege will have the full access to the form. The “Submit Report” will only be enabled for the “Administrator” users with “Signatory Authority”.
- After clicking on the “Save” button, the reported fuel along with all associated transactions will be saved into the system. The newly added Reported Fuel will appear as a link on the left panel under “Reported Fuels” section.
- After saving a reported fuel data the form will be blank.
- After saving a reported fuel, a fuel name will be displayed as a link along with “Delete” link on the left panel under “Reported Fuels” section.
- When the “Delete” link beside a Reported Fuel link is clicked, a confirmation message with “Yes” or “No” will be prompted to the user. If the user chooses “Yes”, the given Reported Fuel along with all associated transactions will be deleted from the system. If the user chooses “No” from the delete confirmation, no deletion will occur.
- When the user clicks on an existing Reported Fuel link, the right hand side form will be populated with fuel information on the top grid and the transactions details information on the bottom “Transaction Details” grid (if any) where the user can make necessary modifications, if the report status is “Open”.
- When the “Import Data” button is clicked, the “Import XML File” page will be loaded (please refer to Section – XX for the “Import XML File” page mock-up) for the user to upload their pre-complied XML data into the system. Upon the successful upload of the XML file, each of the reported fuel data in the XML file will be presented as a link under “Reported Fuels” section on the left panel. If a Reported Fuel link is clicked, the fuel details along with the transaction details (if any) will be displayed on the right hand side form. Any pre-existing Reported Fuels along with their associated transactions will be

consolidated with the imported data from the XML file upon the successful upload of the XML. Also, there will be an option for the user to delete existing transactions and replace them with transactions from a new XML file.

- The user could add additional fuel data (or edit or delete) existing fuel data in the existing report and save these to the system as long as the report has not yet been submitted to ARB (i.e., report status is "Open").
- As long as the grid has at least one record, the "Edit" and "Delete" buttons will be enabled. Otherwise, they are disabled by default.
- The list of "Reported Fuel" names at the left panel will have the automatic vertical scroll bar when the list of fuel names doesn't fit on one page.
- A given quarterly or an annual report will become "Read-Only" when it has the status of "Submitted" or "Correction Submitted", "Correction Rejected" or "Correction Accepted".
- An Auto Complete feature is available for "Business Partner" input field. For instance, when a user types in the value "a", all organization names or the fuel producer names starting with "a" will be displayed in the list. If the user types in a Facility ID, the corresponding ethanol producer name and facility id will be displayed. The available list will be all available organization names in the system for all fuels.. If the selected fuel is a bio fuel (Ethanol for now) and also the selected fuel pathway and the selected physical pathway are for the bio-fuel then, the available list for "Business Partner" field will be the combination of all available organization names and those bio-fuel producers.
- The search criteria for the Auto Complete feature of the "Business Partner" field is by the organization name or the bio-fuel producer or Facility ID.
- The naming convention of a reported fuel name is the combination of the Fuel Name, Fuel Pathway Code and the Physical Pathway Code and a EER number (only applies if a selected fuel has more than one EER value). For instance, Hydrogen_H001_NR_Diesel_01 or Hydrogen_H001_NR_Diesel_02.
- The transaction date range must be within the quarter date range. For instance, if a user is entering Q1 2010 data, the transaction Start Date must be greater or equal to Jan 1 2010 and the End Date must be less than or equal to March 31, 2010.
- When the user clicks on the "Save" button, the following validations should occur:

  1) Check for the following required fields:

     From the top grid, the Fuel Name, the Fuel Pathway Code, the EER, the Obligated Amount.

     From the "Transaction Details" grid, the Start Date, the End Date, the Transaction Category and Business Partner (present or Null),

     (+) Amount is required if the selected "Transaction Category" has the following options:

     Production or Import, Acquire with Obligation

     (-) Amount is required if the selected "Transaction Category" has one of the following options:

     Transfer: Release Obligation

     (O) Amount is required if the selected "Transaction Category" has one of the following options:

Transfer: Retain Obligation

Acquire : Without Obligation

- **Managing HCICO Calculations (See HCICO spreadsheet for reference)**
When the user selects "CARBOB" as their fuel and "CARBOB-Crude from HCICO" as the fuel pathway, the system must determine what kind of a calculation is applicable: Either a standard deficit calculation or an incremental HCICO deficit calculation. This depends upon whether or not the fuel produced is 100% derived from HCICO or a mixture of HCICO and non-HCICO .

  To determine which equation is used, the user is provided a set of radio buttons to indicate that a) the reported HCICO is a volume fraction of the total CARBOB reported or b) the reported HCICO is not mixed with non-HCICO CARBOB (100% HCICO).

  Upon selecting the option, the system will calculate the deficits for HCICO using the incremental calculation if the option is (a) and the standard calculation if the option is (b).

  How to Calculate Transactions Dealing with CARBOB from 100% High Carbon Intensity Crude Oil
  When the user selects the "CARBOB production from 100% HCICO" transaction category, they are signaling to the system that they are reporting a real batch CARBOB that was produced 100% from HCICO. Consequently, this calculation is no different than any other credit calculation in the system. Here are the steps:

  1. Utilizing the reported quantity and lookup values, convert the fuel quantity into Megajoules.
  $Fuel\ Quantity \times Energy\ Density\,(e_i) = Fuel\ Quantity\ in\ MJ$
  2. The system next looks up what the LCFS Carbon Intensity Standard is for the given year based on the current year and the fuel application (LDV/MDV Replaces Gasoline and HDV Replaces Diesel)
  $CI_{Standard}$
  3. Next the system looks up what the Unadjusted Carbon Intensity value is for CARBOB derived from HCICO (this value does not yet exist in our lookup tables).
  CI_i
  4. Based on the fuel type, fuel pathway and application [In this case CARBOB, HCICO, LDV/MDV] the system looks up the appropriate EER value (which for all CARBOB pathways should be 1.0).
  EER
  5. The system then calculates the Reported Carbon Intensity for CARBOB from HCICO which is:
  $CI_{Reported} = \frac{CI_i}{EER}$
  6. The system must then determine how much gas or diesel fuel (in MJ) the reported fuel is displacing. Since in this instance we are talking about

CARBOB (gasoline) there should be a 1-to-1 relationship between the Fuel Quantity in MJ we originally calculated and $E_{Displaced}$

$E_{Displaced} = Fuel\ Quantity \times Energy\ Density\ (e_i) \times EER$

7. Finally we are ready to make a credit/debit calculation:

$$Credits\ or\ Debits\ Generated = \left(Carbon\ Intensity^{XD}_{Standard} - Carbon\ Intensity\right.$$

In plain English:
Credits/Deficits generated by some quantity of 100% HCICO CARBOB =
The year's carbon intensity standard minus the reported carbon intensity of HCICO CARBOB times the energy-quantity of the fuel produced times "C" which is merely a constant equal to .00001.

How to Calculate Transactions Dealing with CARBOB from < 100% High Carbon Intensity Crude Oil
The first thing to know about these transactions is that regulated parties will be reporting their total CARBOB production (regardless of how much was made from HCICO) as if it was all produced using California average crude oil (even though it was not). For the proportion that was made from HCICO, we are going to use the "Incremental HCICO Deficit Calculation" transaction category and the HCICO fuel pathway to generate what is known as a incremental HCICO deficit calculation which will add deficits to the regulated party's balance to represent the proportion ofCARBOB that was made from HCICO.
This "incremental" deficit will be calculated in *almost* the exact same way as normal credit/deficit calculations with a small (but important) difference (highlighted in red):

1. Utilizing the reported quantity and lookup values, convert the fuel quantity into Megajoules.

   $Fuel\ Quantity \times Energy\ Density\ (e_i) = Fuel\ Quantity\ in\ MJ$
2. The system next looks up what the Unadjusted Carbon Intensity is for CARBOB made from California Average Crude Oil.

   $$CI_{Average} = 95.86$$
3. Next the system looks up what the Unadjusted Carbon Intensity value is for CARBOB derived from HCICO (this value does not yet exist in our lookup tables).

   CI_{HCICO}
4. Based on the fuel type, fuel pathway and application [In this case CARBOB, HCICO, LDV/MDV] the system looks up the appropriate EER value (which for all CARBOB pathways should be 1.0).

   EER
5. The system must then determine how much gas or diesel fuel (in MJ) the reported fuel is displacing. Since in this instance we are talking about CARBOB (gasoline) there should be a 1-to-1 relationship between the Fuel Quantity in MJ we originally calculated and $E_{Displaced}$

   $E_{Displaced} = Fuel\ Quantity \times Energy\ Density\ (e_i) \times EER$

6. Finally we are ready to make a credit/debit calculation:

$$Marginal\ Debits\ Generated = (Carbon\ Intensity_{Average} - Carbon\ Intensity_{HCICO}) \times$$

Comment [czt2]: This is only the incremental portion of the deficit. The other deficit, based on non-HCICO CARBOB, must also be calculated.

7. Because this is a incremental deficit calculation and the regulated party has already reported the "total obligated quantity" of their CARBOB, the quantities entered into the system under the "Incremental HCICO Deficit Calculation" transaction category should NOT be counted or summed into their total obligated amount. It should ONLY be used to calculate the number of incremental deficits generated.

2.6. ADDITIONAL RELEVANT PAGE VIEWS

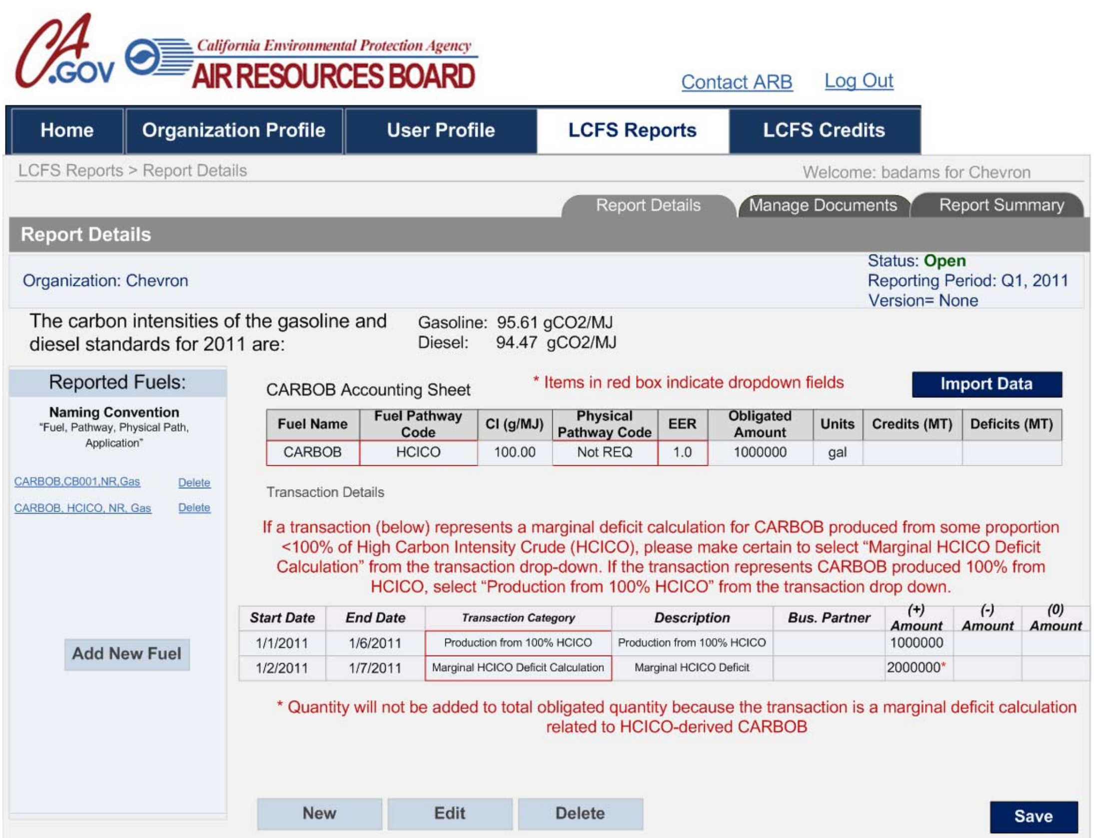


Figure 1 Managing HCICO CARBOB

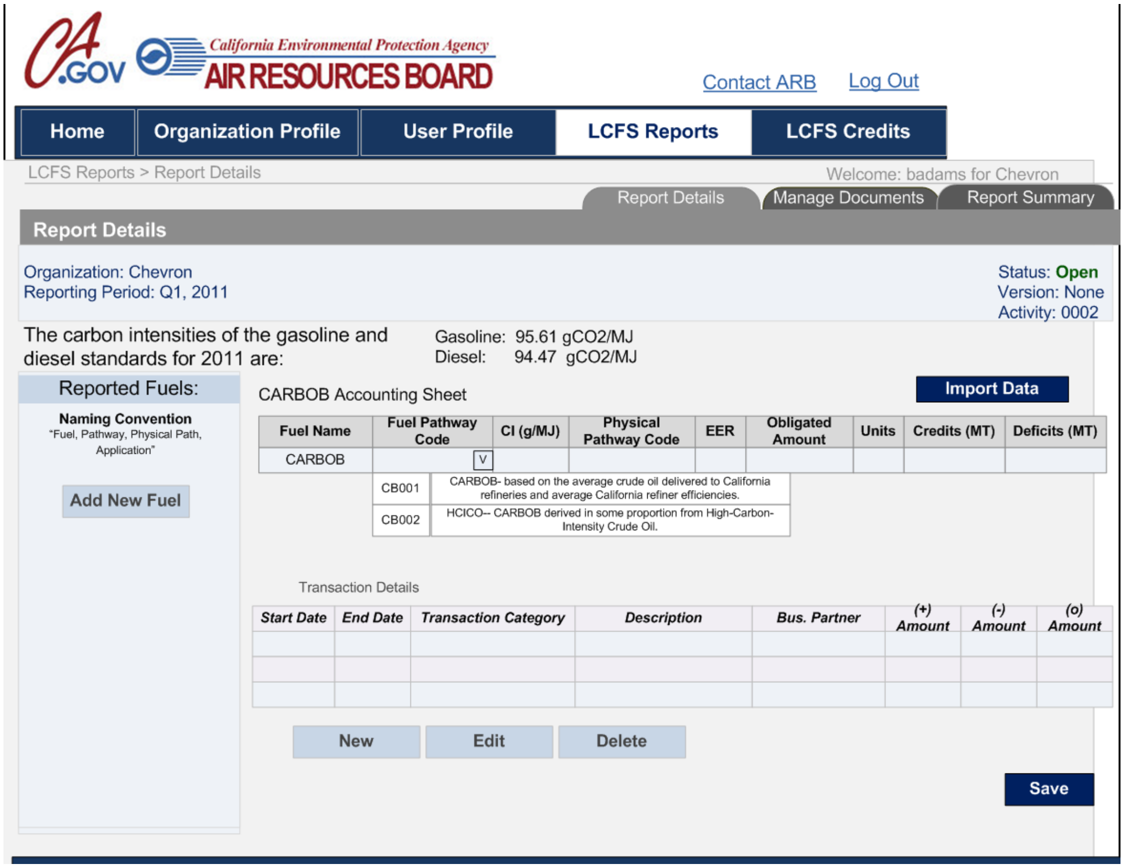


Figure 2 Dual Drop-Downs for Fuel Pathway

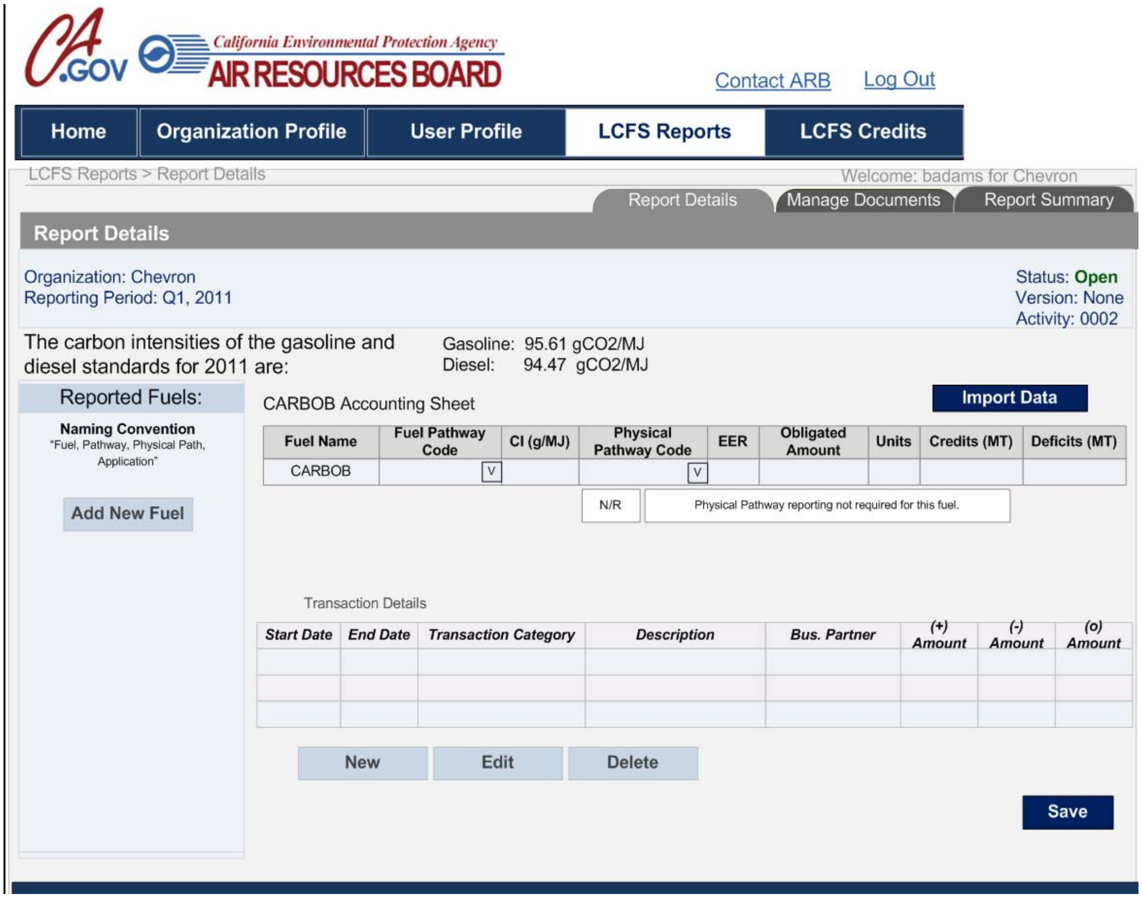


Figure 3 Dual Drop-Downs for Physical Pathway

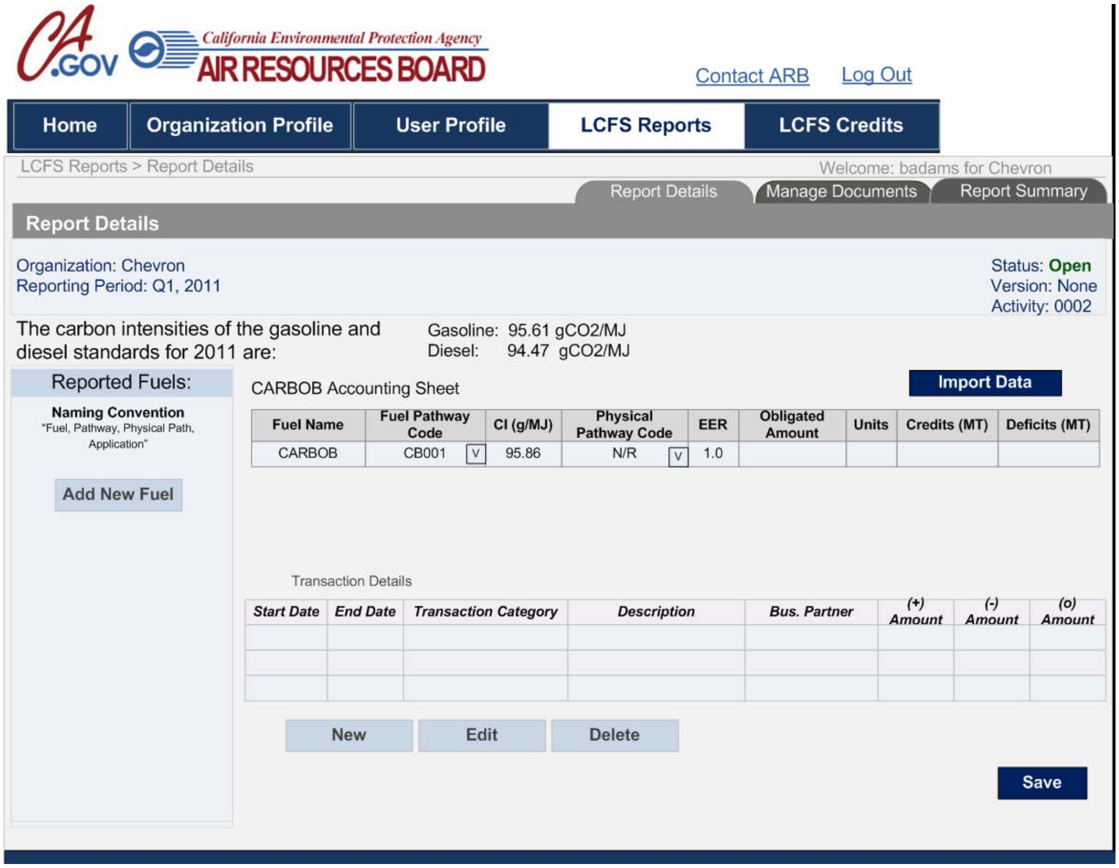


Figure 4 No Drop-Down Provided on EER When Only One Application Exists

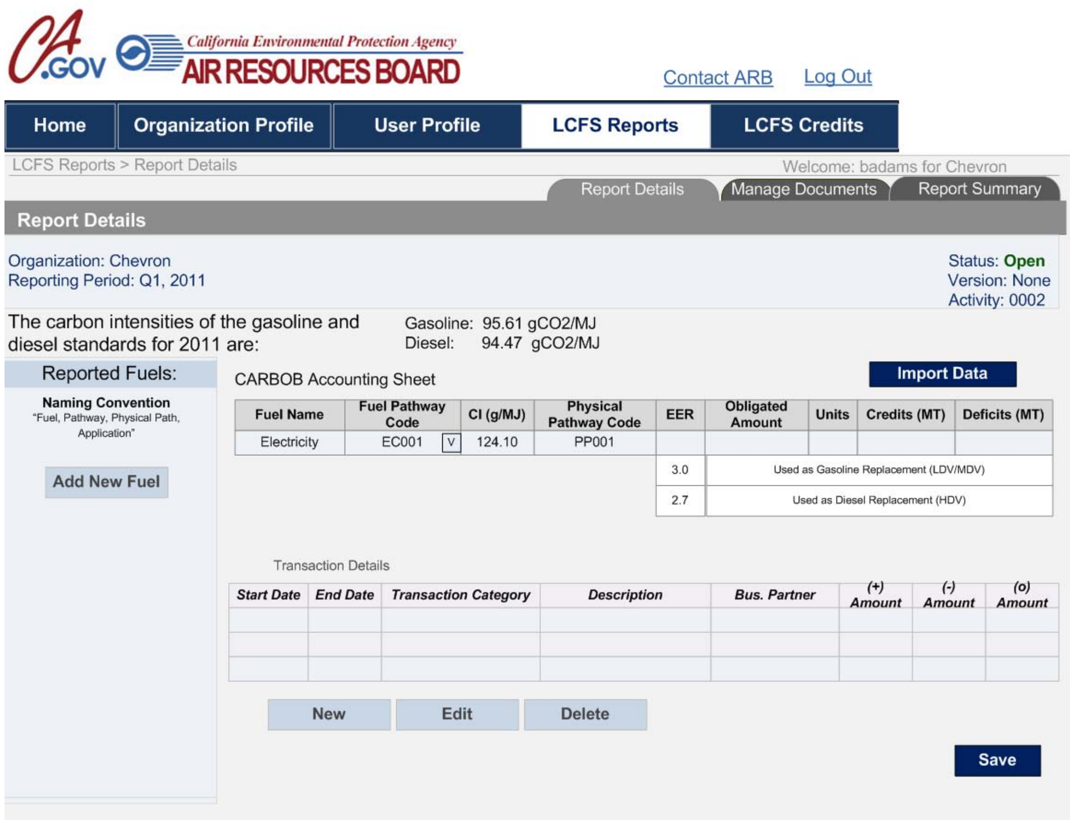
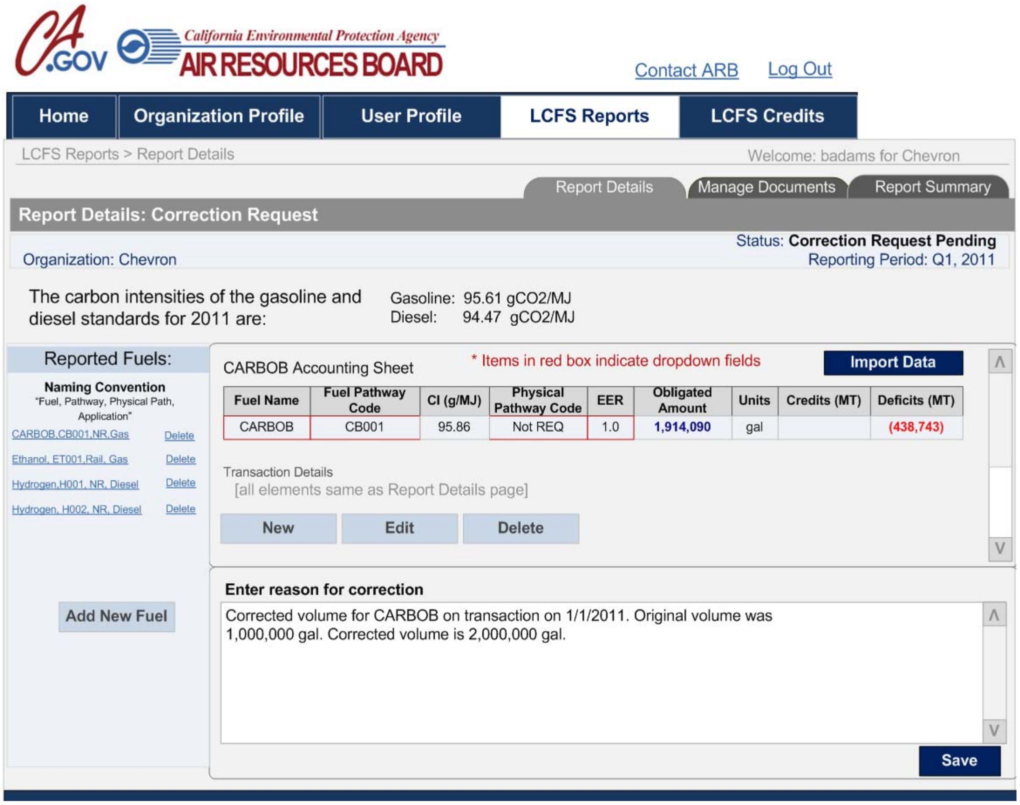


Figure 5 Dual Drop-Downs for EER when Multiple Applications are possible for a fuel.

3. LCFS REPORTS: REPORT DETAILS – CORRECTION REQUEST



3.1. DESCRIPTION

This Report Details – Correction Request page will enable the Regulated Parties to request a correction for the previously submitted quarterly report for a given year. By default, the page will be loaded with the latest version of previously submitted data for a given quarter and a given year for which the user intends to make the correction request.

The user is allowed to add a new fuel or edit or modify any of the existing reported fuels along with the associated transactions. If the user makes the correction for the obligated amount for a given reported fuel, the Credits (MT) and the Deficits (MT) will be re-calculated accordingly by using either a standard method for Non High Carbon Intensity CARBOB and other fuel types or an incremental fractional method for High Carbon Intensity CARBOB. Please refer to "CalculationNotes.docx" for further details about the calculation methods.

All other functionalities available on this page are exactly the same as those available on the "creation or modification of a new or an existing quarterly report" page via "Begin Report" link on the main LCFS Reports page. ~~or via clicking on an existing report ID link.~~

3.2. INTERACTION

This section identifies how a user enters, interacts, and leaves the page.

3.2.1. PAGE ENTRY

A user clicks on “Request Correction” link on LCFS Reports Main page.

3.2.2. PAGE EXIT

A user clicks on “LCFS Reports” tab or click other tabs: “Manage Documents”, “Report Summary” or clicks on the “Submit Report” button or select another tab from the top menu tabs. ~~or clicks “Cancel” button on “LCFS Credits/Deficits Verification” page.~~

3.3. DETAILS

Upon entering the page, the form will be loaded by default with the latest version of previously submitted data to ARB by default.

All the functionalities and the information available on this page are exactly the same as those available on the “creation or modification of a new or an existing quarterly report” page via “Begin Report” link ~~or via clicking on an existing report ID link~~. Please refer to “Section 2.3: Details” for the detailed descriptions of those functionalities.

However, there are some slight changes to display the report details which are being displayed on top of the report. The following pieces of information are different:

- Status – By default, “Correction Pending” will be displayed since the user is still making the necessary corrections and has not yet submitted it to ARB for acceptance or rejection. Once it has been submitted to ARB then the status will be changed to “Correction Accepted” or “Correction Rejected”” after review by ARB.

- “Previous Submission Date” – It displays the submitted date of the base report on which the user is doing the correction. It will be updated to reflect the submitted date of the current correction request once the correctin request has been submitted.

- “Correcting Version #:” will be displayed (Instead of “Version #”) – This displays the “base” report version on which the RP user is doing the modification.

Comment [czt3]: I think the “version number” reflects all corrections. Therefore, no need for another version number.

- Activity # – this is an additional piece of information which does not exist on “creation of a new quarterly report” page. It is system-generated auto number which is kept incremented whenever a user does an action which changes the report status after submitting it to ARB. The action could be a creation of a new quarterly report or a submission of an initial report to ARB, a submission of the request of correction to ARB for approval, and ARB accepts or rejects a particular set of the submitted data.

  For example, if a user creates a new quarterly report for a given year then the system will automatically generate an activity number after clicking on “Save” button for the first time. The user corrects some data or information in the initial submission and re-submits it to ARB. After submitting to ARB, a new activity number will be generated. However, after submitting it to ARB, a user may discover that some of the information in the corrected report needs further correction so a “Request Correction” is made on the previously submitted corrected data. (A report can be resubmitted for correction only after ARB has approved or rejected the previous submission). After submitting this set of data, another activity number will automatically be generated by the system. ARB will review the most recent set of corrected data submitted and will approve or reject the request. In either case, another action number will be generated by the system. ARB will “replace” the previous set of corrected data submitted since it is no longer the latest version. The activity number will be incremented for this.

- Changes to the report must be highlighted (same for imported data).
- The user must enter a reason for the change in the memo field below.

3.4. FIELD DESCRIPTION

Status	Text	Shows the status of a report. Values are: • None • Open, • Submitted, • Correction Pending • Correction Submitted, • Correction Accepted, • Correction Rejected.
Organization	Text	Shows the registered organization name of the current logged in user
Date	DateTime	Will reflect the date the report is saved.
Reporting Period	Text	Shows the selected quarter and the selected year in a comma separated format (e.g., Q1, 2011). The possible values for four quarters of a given year are: Q1, Q2, Q3 and Q4.

Comment [czt4]: All fields are exactly the same as the Report Details mockup.

Correcting Version Number	Number	"None" by default for the report with the status "Correction Open". If the report has been submitted and ARB approves the correction request of the user then the version number of the report will be incremented by 1. Otherwise, the version remains unchanged.
Activity Number	Number	• When a quarterly report is begun by using "Begin Report", an action number "01" will be automatically generated by the system after saving the first piece of data. Subsequently, if the report status change is occurred then another action number will be generated for the report by increasing 1. • For an annual report, it will have the action number "01" by default. Any subsequent submission of the report will generate a new action number by increasing 1.
Previously Submitted Date	DateTime	• Will display the submitted date of the base report on which the user is doing the correction. It will be updated and reflected the submitted date of the current correction request once it has been submitted.
Carbon Intensities standard of the Gasoline for a selected reporting year	Number	Retrieves the value from the "Compliance Schedule" lookup table

Carbon Intensities standard of the Diesel for a selected reporting year	Number	Retrieves the value from the "Compliance Schedule" lookup table
Reported Fuel Name	Hyperlink	The combination of Fuel Name, Fuel Pathway Code, Physical pathway Code and EER value is used for the naming convention of the link. Clicking on the link will load the existing fuel data along with any associated transactions on the right hand side form.
Delete(under Reported Fuels section on the left panel)	Link	Clicking on the link will prompt the Delete confirmation message to the user to delete the existing reported fuel along with any associated transaction records
Add New Fuel	Button	Clicking on the button will load the empty right hand side form with the drop down list fields populated with the values in the corresponding lookup tables.
Fuel Name	Drop Down List	Populate with all fuel names value in the "Fuel Name" lookup table. For values of the look up table, refer to document : XXXX. It is required field.
Fuel Pathway Code	Drop Down List	By default, it is populated with all values from the "Fuel Pathway" lookup table. After selecting a Fuel Name, it will be populated with all corresponding Fuel Pathway code for a selected Fuel Name. For values of the lookup table, refer to document: XXXX. It is required field.

CI (g/MJ)	Text	Read-only field. By default, the value is displayed based on the defaulted Fuel Pathway Code. After selecting a different Fuel pathway code, a new value will be displayed based on the selected Fuel Pathway Code.
Physical Pathway Code	Drop Down List	By default, "Not REQ" is selected and is populated with all pre-registered Physical Pathway Code for the selected organization of the current logged-in user.
EER	Drop Down List	By default, it will be populated with the defaulted Fuel Name. After selecting a different Fuel Name, it will be populated accordingly based on the selected Fuel Name. It is required field.
Obligated Amount	Integer	Read-only field. Display as comma separated for every three digit.
Units	Text	Read-only field. By default, it is displayed for the unit of the defaulted Fuel Name. After selecting a different Fuel Name, the value is displayed based on the selected Fuel Name.
Credits (MT)	Integer	Read-Only field. The system will automatically calculate the value based on the selected Fuel Name, Fuel Pathway code, EER and the Obligated Amount. Display as Bold Green.
Deficits (MT)	Integer	Read-Only field. The system will automatically calculate the value based on the selected Fuel Name, Fuel Pathway code, EER and the Obligated Amount. Display as Bold Red with parenthesis.

Start Date	Date Time	Input field along with calendar control. The user could either manually type in a particular date or pick a date from the calendar control. It is required field.
End Date	Date Time	Input field along with calendar control. The user could either manually type in a particular date or pick a date from the calendar control. It is required field.
Transaction Category	Drop Down List	Populate the values from the "Transaction Category" lookup table. The possible values are: • Production or Import • Transfer: Release Obligation • Transfer: Retain Obligation • Acquire: Without Obligation • Acquire: With Obligation It is required field.
Business Partner	Text	Auto Complete feature to be activated. Populate with all available organization names in the system. If the Business Partner is not in the populated list, the user can enter one. This field is not related to the registered organization within the system. If organization changes its name within the system's Organization Profile, historical fuel transaction will not reflect the change. This feature simply gives the user suggestions of a Business Partner to use for a fuel transaction.
Description	Text	Input Field. It is optional field.

(+) Amount	Integer	Input Field. Display as comma separated for every three digit. If "Transaction Category" has either one of the following values: • Production or Import • Acquire: With Obligation then, this field is required. Otherwise, it is optional.
(-) Amount	Integer	Input Field. Display as comma separated for every three digit. If "Transaction Category" has either one of the following values: • Transfer: Release Obligation then, this field is required. Otherwise, it is optional.
(O) Amount	Integer	Input Field. Display as comma separated for every three digit. If "Transaction Category" has either one of the following values: • Transfer: Retain Obligation • Acquire: Without Obligation then, this field is required. Otherwise, it is optional.
Edit	Button	When the user selects one or more rows from the "Transaction details" grid and click on this button, all selected rows will be opened for editing. "Edit" and "Delete" button text is toggled to "Save" and "Cancel". After clicking on the "Save", the button text will be toggled back to "Edit" and "Delete".

Delete	Button	When the user selects one or more rows from the “Transaction Details” grid and click on the button, a delete confirmation message will be displayed with “Yes” and “No”. If the user chooses “Yes” then will delete all selected rows. Otherwise, nothing changes.
Save	Button	When this button is clicked, a fuel data along with all associated transactions will be saved into the system. Before saving, fields validation will take place. Refer to Section 2.5 “Business Rules” for the validation rules. After saving the data, a newly reported data will appear as a link on the left panel under “Reported Fuel” section. Any saved fuel data will not be able to view by ARB until the user submits it via “Submit Report” button.
Submit Report	Button	The button is only enabled for users with “Signatory Authority” privilege. If the user clicks on it to submit the data to ARB, the “Credits/Deficits Verification” page is displayed to the user.
Import Data	Button	Allows user to import the XML file
Reason	Text	Memo field to allow user to enter a reason for the correction. Required Field

3.5. BUSINESS RULES

- The page will be loaded with the latest version of previously submitted data for a given quarter and a given year.
- Report’s “Status” will be “Correction Pending” by default until submitted to ARB. After the user has submitted the report to ARB, the Status will change from “Correction Pending” to “Correction Submitted”.

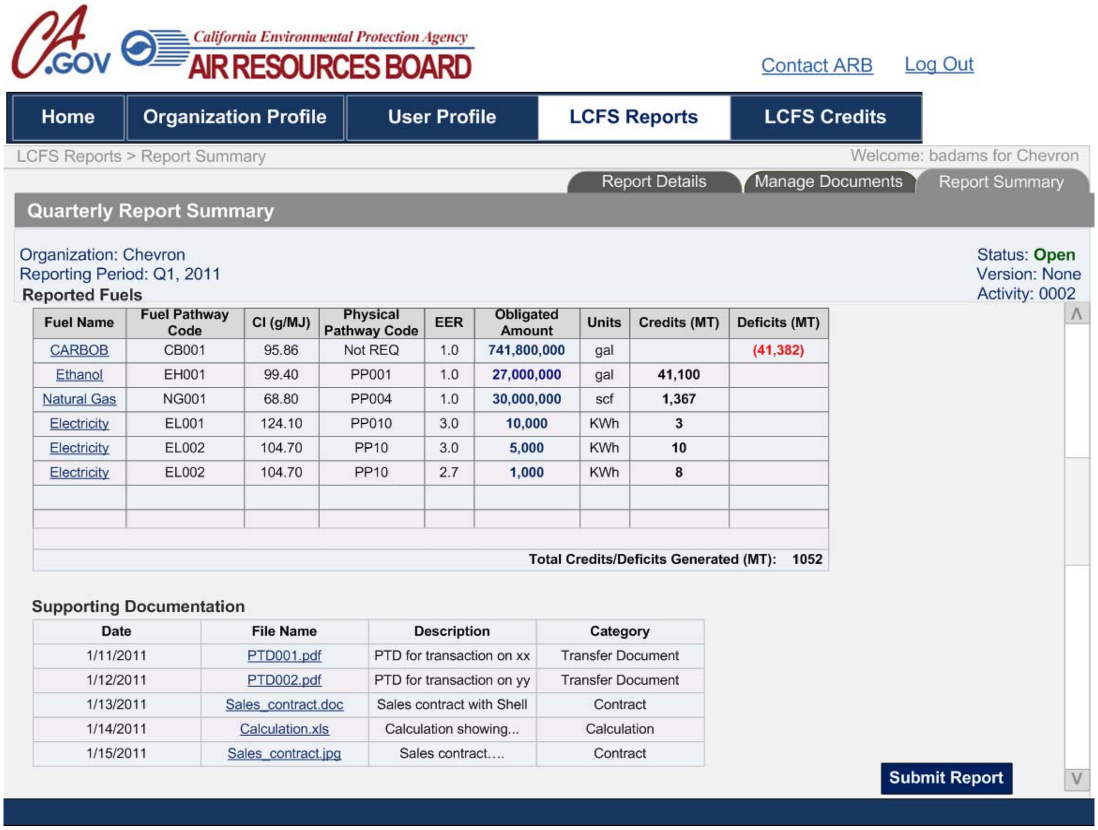
- "Correcting/Base Report Version" will display the base version of the report the user is correcting. It will be the latest version of the previously submitted report to ARB.

- The rest of the business rules for the functionalities on the page will be the same as for those defined in "Section 2.5: Business Rules" for LCFS Report Details.

- Only one "Correction Request" will be allowed at a time when a correction request for a quarterly report of a given user is in "Correction Submitted" status and ARB has not either accepted or rejected it, the user is not be allowed to make another correction request for the same report.

- "Enter Reason for Correction" field ties to the report level. The modifications made within a given correction request report will have to be explained in this field. It is a required field.

4. LCFS REPORTS: QUARTERLY REPORT SUMMARY



CA.GOV California Environmental Protection Agency AIR RESOURCES BOARD

Contact ARB Log Out

Home | Organization Profile | User Profile | LCFS Reports | LCFS Credits

LCFS Reports > Report Summary

Welcome: badams for Chevron

Report Details | Manage Documents | Report Summary

Quarterly Report Summary

Organization: Chevron
Reporting Period: Q1, 2011

Status: Open
Version: None
Activity: 0002

Reported Fuels

Fuel Name	Fuel Pathway Code	CI (g/MJ)	Physical Pathway Code	EER	Obligated Amount	Units	Credits (MT)	Deficits (MT)
CARBOB	CB001	95.86	Not REQ	1.0	741,800,000	gal		(41,382)
Ethanol	EH001	99.40	PP001	1.0	27,000,000	gal	41,100	
Natural Gas	NG001	68.80	PP004	1.0	30,000,000	scf	1,367	
Electricity	EL001	124.10	PP010	3.0	10,000	KWh	3	
Electricity	EL002	104.70	PP10	3.0	5,000	KWh	10	
Electricity	EL002	104.70	PP10	2.7	1,000	KWh	8	

Total Credits/Deficits Generated (MT): 1052

Supporting Documentation

Date	File Name	Description	Category
1/11/2011	PTD001.pdf	PTD for transaction on xx	Transfer Document
1/12/2011	PTD002.pdf	PTD for transaction on yy	Transfer Document
1/13/2011	Sales_contract.doc	Sales contract with Shell	Contract
1/14/2011	Calculation.xls	Calculation showing...	Calculation
1/15/2011	Sales_contract.jpg	Sales contract....	Contract

Submit Report

4.1. DESCRIPTION

The Quarterly Report Summary is a page that enables regulated parties to view a summary of the fuel data that has been entered into the system for any quarter. The overarching purpose of this page is to enable the regulated party to confirm the veracity and accuracy of their fuels data and ultimately to submit the report. On the top of this page the user should be able to readily determine the Reporting Period, Report Status, Version, and Activity.

Reported fuel data will be displayed in the "Reported Fuels" grid containing the following columns:

- Fuel Name
- Fuel Pathway Code
- CI (Carbon Intensity in g/MJ)
- Physical Pathway Code
- EER
- Obligated Amount

- Stipulated Units
- Associated Credits Generated (in "MT" Metric Tons)
- Associated Deficits Generated (in "MT" Metric Tons)

At the bottom of this grid, credits and deficits should be summed and a "Total Credits/Deficits Generated (MT)" should be calculated.

Below the fuel data and the associated credits/deficits summation this page should display another grid which contains a listing of all supporting documents uploaded with this report. The "Supporting Documentation" grid should contain the following columns:

- Date of Upload
- File Name
- Description
- Category

4.2. INTERACTION

4.2.1. PAGE ENTRY

This page can only be accessed after a user has elected to view a report from the main LCFS Reports page (see section 1). Navigation to this page can then be accomplished by clicking on the "Report Summary" tab.

4.2.2. PAGE EXIT

A user may leave this page by clicking on the "Manage Documents" or "Report Details" tabs, or any of the site navigation tabs such as "Home", "Organization Profile", "User Profile", etc.

4.3. DETAILS

There are two core purposes for this page: 1.) To view a summary of the data that has been entered into the system by utilizing the "Report Details" page; 2.) For Signatory-Authority-Holding users to submit a quarterly report.

Data cannot be modified from this page, only submitted. Users can link back to a detailed description of the data input by clicking on any of the line-item links found under the "Fuel Name" column in the "Reported Fuels" grid. These links will navigate the user back to the "Report Details" page to view the specific transactions input for a unique fuel /fuel_pathway/ physical_pathway/ EER combination.

At the bottom of the Credits (MT) column and the Deficits (MT) column, this page should display a summation of all credits/deficits generated. Below those column sums this page should display a line that reads "Total Credits/Deficits Generated (MT):" which is calculated by taking the sum of all credits plus the sum of all deficits.

Uploaded supporting documents can be viewed by clicking on the line-item links found under the "File Name" header.

If the individual user viewing this page has signatory authority status within the system AND the report has not yet been submitted, that user should see a "Submit Report" button displayed in the bottom right hand corner of the page. If the report has been submitted, no such option should be displayed to any user.

4.4. FIELD/ OBJECT DESCRIPTION

FIELD	TYPE	DESCRIPTION
• Fuel Name	• Link	This link describes the general class of fuel that is reported. It links back to the 'Report Details' where data was entered for a unique fuel (identified by a unique combination of Fuel Name, Fuel_Pathway, Physical_Pathway and EER)
• Fuel Pathway Code	• Text	This text symbol represents the specific Fuel_Pathway for the type of fuel that was reported.
• CI (g/MJ)	• Numerical	The carbon intensity value is displayed here and referenced from a database lookup table. Unique CI values exist for each unique combination of Fuel Name and Fuel Pathway.
• Physical Pathway Code	• Text	This text symbol represents the specific Physical_Pathway for the type of fuel that was reported.
• EER	• Numerical	Depending upon the application for the fuel (LDV/MDV or HDV) the EER number may be different. This value is referenced in the database tables unique to the Fuel, Fuel_Pathway and Application.
• Obligated Amount	• Numerical	The summation of all positive and negative fuel reporting obligations originating from production, purchase and sale of fuel.

FIELD	TYPE	DESCRIPTION
• Units	• Text	Each type of fuel must be reported in a certain stipulated unit. This field displays that unit. It is associated in the database with a given Fuel Name.
• Credits (MT)	• Numerical	References values calculated on the “Report Details” tab. It is the sum of all credits generated from the production, purchase or sale of fuel.
• Deficits (MT)	• Numerical	References values calculated on the “Report Details” tab. It is the sum of all deficits generated from the production, purchase or sale of fuel.
• Total Credits/Deficits Generated (MT)	• Numerical	This is the sum of all credits and deficits generated in a given quarter.
• Date	• MM/DD/YYYY	Corresponds to the date stamp associated with a file upload.
• File Name	• Text	Displays the name of the file uploaded.
• Description	• Text	A copy of user-entered text that describes what information the document contains.
• Category	• Text	A user assigned, generic category for a file. Possible categories include “Transfer Document”, “Contract”, and “Calculation”
• Submit Report	• Button	Displays when the report status is “Not Submitted” and the user has the appropriate signatory authority flags.
• Report ID	• Integer	References the value assigned to a report on the “Report Details” tab

FIELD	TYPE	DESCRIPTION
• Organization	• Text	References the Organization to whom the displayed report belongs.
• Reporting Period	• Text	References the year and quarter of the report on display.
• Status	• Text	Shows the status of a report. Values are: • None • Open, • Submitted, • Correction Pending • Correction Submitted, • Correction Accepted, • Correction Rejected.
• Submission Date	• Variable	This field will display either “Not Submitted” if no submission has been received or the corresponding date when the submit button has been clicked.
• Version #	• Integer	A Version # is assigned in two instances: 1.) When a report for a quarter has been submitted for the first time Version #1 is assigned. 2.) When a correction has been submitted AND approved a “one-unit higher” version # is assigned.

4.5. BUSINESS RULES

- The summary view should be used to submit a report. The page should dynamically display the “Submit” option for users with signatory authority when a report for a given quarter or year has not yet been submitted.

- Once the “Submit” button has been clicked, we want to display a secondary confirmation message just to ensure that they user’s intention was to submit data for their compliance obligation.

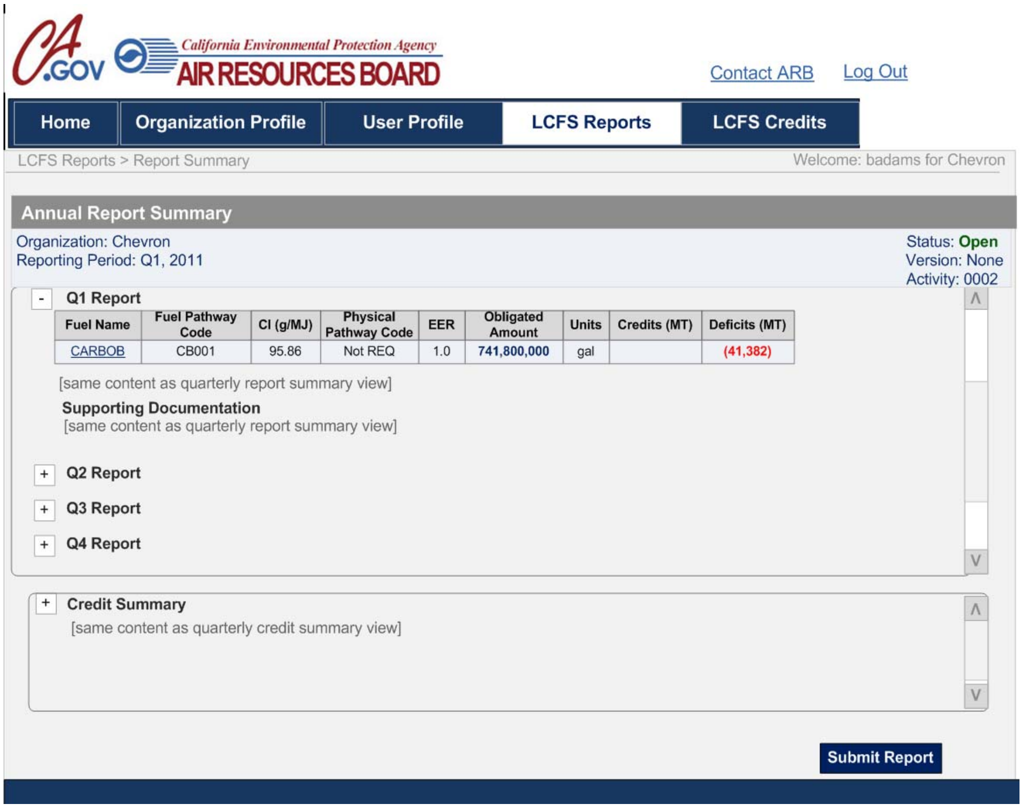
- The “Reported Fuels” grid should summarize the detailed information entered into the ‘Report Details” tab. Specifically, this grid should display all of the top line items from the “Report Details” tab. One of these top line items will exist anytime a user has entered fuel data with a unique combination of Fuel Name, Fuel Pathway, Physical Pathway and Application (EER).

- The “Supporting Documentation” grid should pull its data from the “Manage Documents” tab and display the given quarter’s uploaded documents in summary fashion.

- Credits/Deficits should be calculated and then rounded to the nearest whole unit (MT).

- Liquid Fuels must be reported in Gallons (gal)
- Natural Gas must be reported in Standard Cubic Feet (scf)
- Electricity must be reported in Kilowatt Hours (kWh)
- Hydrogen must be reported in Kilograms (kg)
- Report due dates:
    - Quarter One : (Jan-Mar) Report Due by May 31st 12:00AM
    - Quarter Two: (Apr-Jun) Report Due by Aug 31st 12:00AM
    - Quarter Three: (Jul-Sept) Report Due by Nov 30th 12:00AM
    - Quarter Four: (Oct-Dec) Report Due by Feb 28th 12:00AM

5. LCFS REPORTS: ANNUAL REPORT SUMMARY



5.1. DESCRIPTION

The Annual Report Summary is a page that enables regulated parties to view a summary of the information that has been entered into the system for the entire calendar year. The overarching purpose of this page is to enable the regulated party to confirm the veracity and accuracy of their fuels data and ultimately to submit the annual report. On the top of this page the user should be able to readily determine the report's: Reporting Period (e.g., Q1, 2011), Report Status, Version and Activity.

Reported fuel data will be displayed Quarter-by-Quarter in a format that allows the user to View/Hide each quarter's data. Under each quarter's header the page will display the data from the "Quarterly Report Summary" including both the "Reporting Fuels" grid and "Supporting Documentation" grid.

Below the summary of the year's fuel data (broken down by quarters) the page will display the "Credit Summary" grid. This grid pulls data from the four quarters' fuel data production and resulting credit/deficit generation as well as credit transaction data from the "LCFS Credits" tab. This grid displays a quarterly breakdown of all credits/deficits generated by fuel production as well as any credit transactions (credits sold, purchased, exported, etc). This section provides a breakdown of the total credits/deficits incurred during the four quarters of the year as well as a summation which represents the total credits/deficits incurred for the entire year.

5.2. INTERACTION

5.2.1. PAGE ENTRY

This page can only be accessed after a user has elected to view an annual report from the LCFS Reports landing page.

5.2.2. PAGE EXIT

A user may leave this page by clicking on the “Manage Documents” or “Report Details” tabs, or any of the site navigation tabs such as “Home”, “Organization Profile”, “User Profile”, etc.

5.3. DETAILS

There are two core purposes for this page: 1.) To view a summary of the data that has been entered into the system during the four quarters of the year and; 2.) To enable users with signatory authority to submit the organization’s annual compliance report.

Data cannot be modified from this page, only submitted. Users can link back to a detailed description of the fuel data input by clicking on any of the line-item links found under the “Fuel Name” column in the “Reported Fuels” grid. These links will navigate the user back to the “Report Details” page of a quarterly report to view the specific transactions input for a unique fuel /fuel_pathway/ physical_pathway/ EER combination.

For each quarter, the bottom of the Credits (MT) column and the Deficits (MT) column should display a summation of all credits/deficits generated. Below those column sums this page should display a line that reads “Total Credits/Deficits Generated (MT):” which is calculated by taking the sum of all credits plus the sum of all deficits. Additionally, a total credit/deficit summation for the entire year should be displayed under the end of Q4’s data.

Uploaded supporting documents can be viewed by clicking on the line-item links found under the “File Name” header.

If the individual user viewing this page has signatory authority status within the system AND the report has not yet been submitted, they should see a “Submit Report” button displayed in the bottom right hand corner of the screen. If the report has been submitted, no such option should be displayed to any user.

5.4. FIELD/ OBJECT DESCRIPTION

For a description of the fields, objects and headers in the fuel-reporting section of this page, please see section 4.4 of this document.

FIELD	TYPE	DESCRIPTION
• Beginning Balance	• Integer	Indicates the value of an organization's credit balance (in metric tons) carried over into the beginning of a new reporting period.
• Credits/Deficits Generated	• Integer	Indicates the number of credits/deficits (in metric tons) that resulted from fuel generation in a given reporting period.
• Credits Purchased	• Integer	Indicates the sum of all credit purchase transactions that an organization executed during a given reporting period.
• Credits Sold	• Integer	Indicates the sum of all credit sale transactions that an organization executed during a given reporting period.
• Credits Exported	• Integer	Indicates the sum of all credit export transactions executed during a given reporting period.
• Credits Retired	• Integer	Indicates the sum of all credit retirement transactions executed during a given reporting period.
• Ending Balance	• Integer	Indicates an organization's credit balance at the end of a given reporting period. It is found by taking the beginning balance and finding the sum of all credits/deficits generated/purchased/sold/exported and retired.
• Q1: Jan 1 to March 30	• Text (Column Header)	A column header in the matrix indicating that all values under it belong to the Q1 reporting period.
• Q2: April 1 to June 30	• Text (Column Header)	A column header in the matrix indicating that all values under it belong to the Q2 reporting period.
• Q3: July 1 to Sept 30	• Text (Column Header)	A column header in the matrix indicating that all values under it belong to the Q3 reporting period.
• Q4: Oct 1 to Dec 31	• Text (Column Header)	A column header in the matrix indicating that all values under it belong to the Q4 reporting period.

FIELD	TYPE	DESCRIPTION
• Total (MT)	• Text (Column Header)	A column header indicating that all values below it represent four-quarters-worth of credit/deficit generation and transactions.

5.5. BUSINESS RULES

- The summary view should be used to submit a report. The page should dynamically display the “Submit” option for users with signatory authority when a report for a given quarter or year has not yet been submitted.
- Once the “Submit” button has been clicked, display a secondary confirmation message just to ensure that they user’s intention was to submit data for their compliance obligation.

6. LCFS CREDITS: MAIN SCREEN AND CREDIT BALANCE TOOL

California Environmental Protection Agency AIR RESOURCES BOARD

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Home | Organization Profile | User Profile | LCFS Reports | LCFS Credits

LCFS Credits Welcome: badams for Chevron

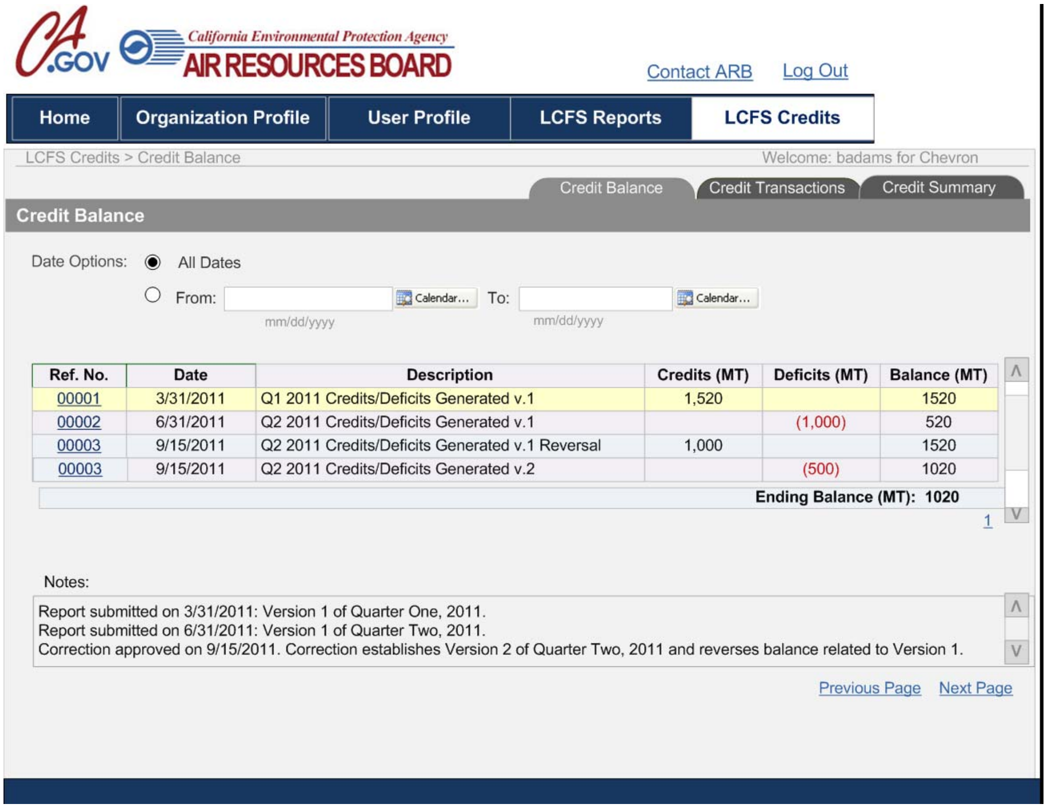
Credit Balance | Credit Transactions | Credit Summary

LCFS Credits

LCFS Credit/Deficit Verficiation

All LCFS credits and deficits reported, posted, and calculated herein are subject to ARB review and verification.

[enter legal text]



6.1 DESCRIPTION

This page will display the balance of all credits and deficits of all quarterly reports (either initial submissions reports and/or accepted report corrections.) It will include an ending date of the quarter for the quarterly reports with a description and additional notes.

6.2 INTERACTION

The user enters this page by clicking on the site navigation LCFS Credit tab and then clicking on the Credit Balance Tab. By selecting another tab the user will exit from this page.

6.2.1 PAGE ENTRY

- A user clicks on the site navigation LCFS Credit tab and then clicking on the Credit Balance Tab.

6.2.2 PAGE EXIT

- By clicking another tab the user will exit from this page.

6.3 DETAILS

Upon entering the page, the system defaults the Date Option to “All Dates”. Also, the user will be given an option to select a date time period for the Date Option.

This page displays the quarter reports credit/deficit generated for the selected time period. The credit/deficit generated for the quarter reports will be from the quarter reports with a status of “Submitted” and “Correction Accepted”. If a quarter report has a “Correction Accepted” status, the previous version of the “Submitted” or “Correction Accepted” will appear as a reversal after the latest quarter report with “Correction Accepted” status. The credit/deficit generated from the quarterly reports will be placed in either a Credit or Deficit column and a running balance will be calculated. An ending balance will be calculated from all the list quarter reports credit/deficit generated. An associated activity number will be displayed for each listed quarter report. Also a description will be displayed for each listed quarterly report. The date will be the quarter report’s ending quarter date if the quarter report is submitted before the end of the quarter. Or, if the quarter report is submitted after the quarter date, then the date will be the date the report was submitted. The listing will be in descending order by Date. There will be a notes area that will give further information about the quarter report.

6.4 FIELD DESCRIPTION

FIELD	TYPE	DESCRIPTION
Date Options	Radio button	Allow users to display reports according to selected button. Default is “All Dates” Calendar icon allows users to enter date field by selecting the date on the calendar. Mask is mm/dd/yyyy
Activity Number	Number (Sortable)	Number associated with the quarter report or credit transaction
Date	Date (Sortable)	Date associated with the quarter report. If the quarterly report is submitted before the end of the quarter, then the date is the end of the quarter. If the quarterly report is submitted after the end of the quarter but before the due date, the date is the quarter end date.
Description	Text	For quarterly reports, it would display the quarter and year along with the words “credit/deficit generated”.

FIELD	TYPE	DESCRIPTION
Credits (MT)	Integer	Depending on the quarter reports ending balance or credit transaction amount, this will display the credit amount.
Deficit (MT)	Integer	Depending on the quarter reports ending balance or credit transaction amount, this will display the deficit amount.
Balance (MT)	Integer	Running balance of credit or deficit columns
Ending Balance (MT)	Integer	Net balance of all credit and deficits listed
Notes	Text	By highlighting the activity number, additional information about the record, such as the date of the actual submission, will be given along with quarter and year in a sentence form.

6.5 BUSINESS RULES

- The quarter reports that will be included will be those with a status of ‘Submitted” and “Correction Accepted”.
- If the latest quarter report has a ‘Correction Accepted”, then the previous version of either “Submitted” or “Correction Accepted” will appear as a reversal.
- If a user submits a report before or at the quarter end date, the Date is the submission date of the report. If a user submits a report after the quarter end date but before or at the due date, the Date is the quarter end date (additional note will show actual submission date). If a user submits a report after the due date, the Date (After ARB approval) will be the quarter end date (additional note will show actual submission date and a late submission notice).
- The description of the quarter reports will included the quarter (i.e. Quarter 4th), year (Year 2011) appended with the words “credit/deficit generated”
- The Balance (MT) will be a running balance of all credits and deficits
- The Ending Balance (MT) will be the net balance of all credits and deficits for the time period selected.
- All records will be listed in order by Activity Number and Date, which are sortable to the user.
- The activity number will be a link to original quarterly report.
- Notes area will give additional information about a highlighted record. For instance, if a report was submitted after the quarter end date, the notes area will display the actual submission date.

7. LCFS CREDITS: QUARTERLY AND ANNUAL CREDIT SUMMARY

California Environmental Protection Agency
AIR RESOURCES BOARD

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Home | Organization Profile | User Profile | LCFS Reports | LCFS Credits

LCFS Credits > Credit Summary Welcome: badams for Chevron

Credit Balance | Credit Transactions | Credit Summary

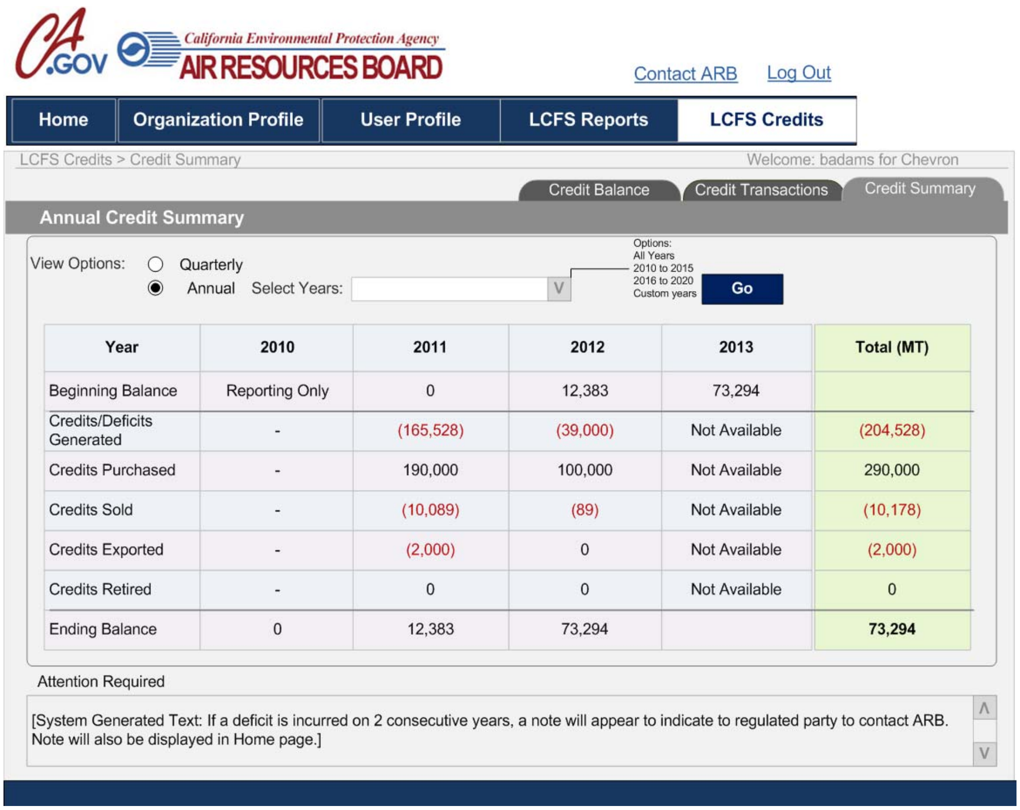
Quarterly Credit Summary

View Options: ◉ Quarterly ○ Annual Select Year: [V] Options: 2010 2011 2012 ...... Go

2011	Q1: Jan. 1 to March 30	Q2: April 1 to June 30	Q3: July 1 to Sept. 30	Q4: Oct. 1 to Dec. 31	Total (MT)
Beginning Balance	0	(1,382)	1,618	62,529	
Credits/Deficits Generated	(41,382)	(47,000)	(39,000)	(38,146)	(165,528)
Credits Purchased	40,000	50,000	100,000	0	190,000
Credits Sold	0	0	(89)	(10,000)	(10,089)
Credits Exported	0	0	0	(2,000)	(2,000)
Credits Retired	0	0	0	0	0
Ending Balance	(1,382)	1,618	62,529	12,383	**12,383**

Attention Required

[System Generated Text: if Total credit/deficit was negative and the credit/deficit ratio was not met, a note will appear to indicate to regulate party to contact ARB. Note will also be displayed in Home page]



Year	2010	2011	2012	2013	Total (MT)
Beginning Balance	Reporting Only	0	12,383	73,294	
Credits/Deficits Generated	-	(165,528)	(39,000)	Not Available	(204,528)
Credits Purchased	-	190,000	100,000	Not Available	290,000
Credits Sold	-	(10,089)	(89)	Not Available	(10,178)
Credits Exported	-	(2,000)	0	Not Available	(2,000)
Credits Retired	-	0	0	Not Available	0
Ending Balance	0	12,383	73,294		**73,294**

7.1 DESCRIPTION

This page is intended to allow the RP user to view the credit/deficit outcomes resulting from their fuel production, fuel transactions and credit transactions. With the toggling of a radio button the user can indicate whether they would like to view the data year-over-year or for the four quarters of any selected year.

7.2 PAGE ENTRY

7.2.1 PAGE ENTRY

The user accesses this page by clicking on the top “LCFS Credits” button and then selecting the “Credit Summary” tab.

7.2.2 PAGE EXIT

The user can exit this page simply by navigating away from it—either by selecting a different tab or going to a different top menu such as “LCFS Reports” or “User Profile” for example.

7.3 DETAILS

When accessing this page, the user must first decide whether they wish to view quarter-by-quarter or year-by-year data. They should indicate their desire by clicking the appropriate radio-button. This radio-button selection will then dynamically generate a drop-down menu to the right. From this drop down menu, the user must much further specifications about how they wish to view the data.

If the “Quarterly” radio-button is activated this drop down will ask the user to select a year from which they would like to view the summarized quarterly-credit data.

If the “Annual” radio-button is activated this drop down will ask the user to select which (one or more) years for which it should pull and display data.

The user should click the “Go” button when they are ready to retrieve data.

Once the system has run the appropriate query, it will display the information broken down according to the following categories (displayed vertically on the left hand side of the screen):

- Beginning Balance- This is the balance that was available to an organization at the beginning of a reporting period.
- Credits/Deficits Generated- This is the sum of the credits generated in a reporting period minus the sum of the deficits generated.
- Credits Sold- This is a summation of all credits sold by the organization during the reporting period.
- Credits Purchased- This is a summation of all credits purchased by the organization during the reporting period.
- Credits Exported- This is a summation of all credits exported out of the LCFS program during the reporting period.
- Credits Retired- This is a summation of any credits retired during the reporting period.
- Ending Balance- This is the total (potentially positive or negative) of all the above categories, specifically:

$$Ending\ Balance = Beginning\ Balance + Credits\ or\ Deficits\ Generated - Credits\ Sold + Credits\ Pur$$

Along the top and horizontal dimension of this display the system will show columns with the user-defined periods in ascending (chronological) order.

At the bottom of the screen lies a dialog box that is intended to deliver compliance notifications to the regulated parties. (For compliance rules please see section 5.7)

7.4 FIELD/ OBJECT DESCRIPTION

FIELD	TYPE	DESCRIPTION
• View Options (Quarterly/Annual)	• Radio Button	This radio button allows the user to indicate whether they wish to view data by quarters or years.
• Select Year	• Drop Down Menu	This menu displays dynamically based upon the radio-button selection of the user. If the radio button indicates “quarterly” the drop down should display a list of all selectable years for which quarterly reports exist. If the radio button indicates “annual” the drop down should display a list for all selectable years for which an annual report exists. This drop down should enable multiple item-selections.
• “Go”	• Button	The “Go” button is intended to trigger the process of running the query and displaying the results.

7.5 BUSINESS RULES

$$Credit\ Balance = Credits_{Generated} + Deficits_{Generated} + Credits_{Carried\ Over} + Credi$$

$$Credit\ to\ Deficit\ Ratio = |([Credits]_{\downarrow Generated} + [Credits]_{\downarrow (Carried\ Over)} + [C$$

Conditions

Current Year's Credit Balance is POSITIVE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE

Previous Year's Credit Balance was POSITIVE	TRUE	TRUE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE
Absolute Value of (Ratio of Credits to Debits) in Current Period is GREATER THAN .9	TRUE	FALSE	TRUE	FALSE	TRUE	FALSE	TRUE	FALSE

Outcome

Current Year's "Initial" Compliance Status	Compliant	Compliant	Compliant	Compliant	In Deficit	Violation	Violation	Violation

Action

Notify ARB with Autoemail	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	TRUE	TRUE
Flag Report for ARB Attention	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	TRUE
Notify RP to Contact ARB (and display on Credit Summary Page)	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	TRUE

- **Definition: "Notify ARB with AutoEmail"**
  Dear [User Name],

  This email is to notify you that [Regulated Party Organization] has submitted an annual report for [year] which had a negative credit balance associated with it.

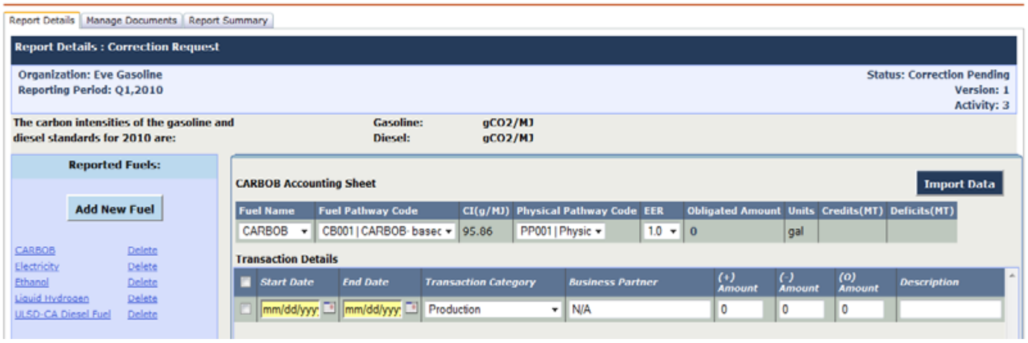
  Regards,
  The Low Carbon Fuel Standard System

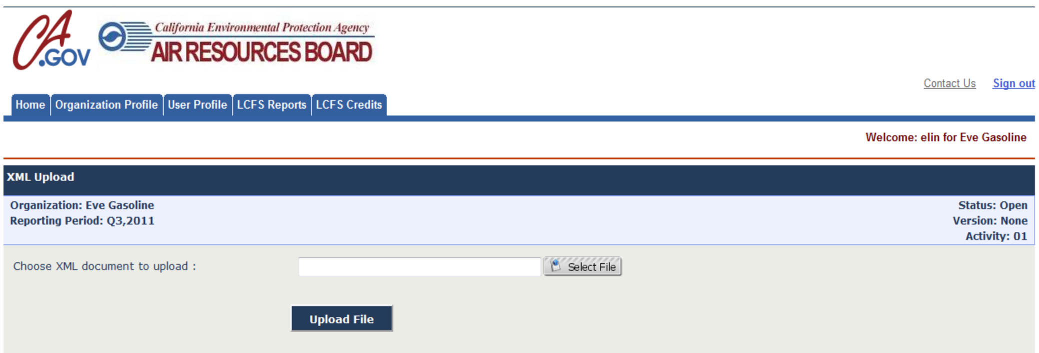
- **Definition: "Notify RP to Contact ARB"**
  Dear [User Name],

  This email is to request that you contact the Air Resources Board as soon as possible to discuss [Organization Name]'s annual report from [year]. Please contact ARB during normal business hours, Monday through Friday (remaining mindful of furloughs during the first three weeks of each month).

  Regards,
  The Low Carbon Fuel Standard System

8. XML UPLOAD FUNCTIONALITY





8.1 DESCRIPTION

This feature will allow regulated parties to “mass” upload fuel transaction detail in XML format for a given quarter. It is intended primarily for regulated parties whose volume of fuel transactions is sufficiently large as to make manual entry (via the web portal) infeasible. Administrators of the LCFS RT system will routinely make available an “XSD” document which stipulates the necessary formatting of the XML data. Using the XSD as a template, regulated parties can create custom code to generate properly-formatted XML data-dumps from their internal software systems.

The feature is available only with a status of “Open” and “Correction Pending”.

8.2 INTERACTION

This section identifies how a user enters, interacts, and leaves the XML Upload page.

8.2.1 PAGE ENTRY

The user clicks on the Report Details tab for a specific quarter, a user clicks on “Import Data” button. [Note: If the user possesses “Administrator” or “Contributor” privileges within the system, they will be able to access this functionality. Users with “Reviewer” privilege will not be able to access this functionality]

8.2.2 PAGE EXIT

The user can navigate away from this page by selecting any of the navigational tabs at the top of the screen. Additionally, if fuel detail transactions exist, the user can exit the XML Upload page by clicking "No" button to return to the same Report Detail page (quarter) at the time the "Import Data" button was originally pressed.

8.3 DETAILS

Once a particular quarter has been selected on the Report Home page, an "Import Data" button will appear (provided the user has sufficient privileges). This button will be visible when that report's status is either "Open" or "Correction Pending". If there are fuel transaction details present that are either Open or Correction Pending, the user will be prompted to delete existing fuel detail transaction before proceeding with the XML upload process. If the user continues, the user will be able to browse to the XML file and select it for upload. After the file is selected, the XML file will go through the following validations:

1. Validated against the current XML schema (XSD). If XML file does not validate against the current XML schema (XSD), an error message will appear telling the user validation against the XSD failed. The upload process will be terminated without performing validations 2 and 3 below.
2. Validate the quarter in header of the XML file to see if it agrees to the particular quarter selected on the Report Detail page when the "Import Data" button was pressed. If the quarter is not the same as the Report Detail page, an error message will appear telling the user that quarter in the XML file does not agree to the one selected on the Report Detail page. The upload process will be terminated without performing validation 3 below.
3. Validate that the fuel transaction start and end dates are within the quarter on the Report Detail page. The system will return an error message on the first occurrence stating one or more of the fuel transaction start and end dates are not within the quarter. This process will only look for the first occurrence and will not notify the end-user of the location of the occurrence.

If all 3 validations pass, the XML file will be saved in the database table and the system will continue with parsing the XML file and inserting the contents into the application system table--same tables as the manual process.

During XML upload, if there are existing records in the data tables with Open or Correction Pending status, the system will inform the user that continuing with the upload will delete existing records. If the user indicates that this is his intention, existing records in the tables will be deleted and the new data will be entered in its place. Should the user indicate that this was NOT their intention, they will be navigated back to the Report Details page and no data changes will be made.

If any of the three validation steps fail, no change to the data tables will occur.

The organization name, the selected quarter and year at the time the user presses the "Import Data' button will be entered into the data tables should the XML document be properly and successfully loaded.

The "+" amount, "-" amount or the "O" amount is based on whether the fuel detail transaction type is one of the following:
Production – "+" amount
Transfer: Release Obligation – "-" amount
Transfer: Retain Obligation – "O" amount
Acquire: Without Obligation – "O" amount

Acquire: With Obligation – "+" amount
Import – "+" amount

The logical structure of the XSD (XML schema document) is as follows:

- **Header**
- **Organization Name**
  - Type: String
  - Restriction: 100 characters
  - Comment: This field is a memo field for the user only. There is no validation on this field and it is not saved into the database.
- **Year**
  - Type: Short
  - Restriction: Greater than or equal to 2010
- **Quarter**
  - Type: Short
  - Restriction: 1, 2, 3 or 4
    - **Fuel Type Detail**
    - **Fuel**
      - Type: Complex type
      - Restriction: Unbound
    - **FuelPathwayCode**
      - Type: String
      - Restriction: CARBOBCB001, CARBOBCB002-HIGH, CARBOBCB002-INC, EthanolET001, EthanolET002, EthanolET003, EthanolET004, EthanolET005, EthanolET006, EthanolET007, EthanolET008, EthanolET009, EthanolET0010, EthanolET0012, Fossil CNGFCNG001_1.0,Fossil CNGFCNG001_0.9, Fossil CNGFCNG002_1.0, Fossil CNGFCNG002_0.9, Biogas CNGBCNG001, ElectricityE001_2.7, ElectricityE001_3.0, ElectricityE002_3.0, ElectricityE002_2.7, ULSD-CA Diesel FuelDS001, Compressed HydrogenCH001, Liquid HydrogenLH001, Compressed HydrogenCH002, Compressed HydrogenCH003 (This needs to be updated with the latest spreadsheet in Basecamp)
    - **PhysicalPathwayCode**
      - Type: String
      - Restriction: PHY01, PHY02, PHY03, PHY04, PHY05, PHY06, PHY07, PHY08, PHY09, PHY10
        - **Fuel Type Transaction Detail**
        - **Transaction-Item Type**
          - Type: String
          - Restriction: Production, Transfer: Release Obligation, Transfer: Retain Obligation, Acquire: Without Obligation, Acquire: With Obligation, Import
        - **Start Date**
          - Type: date
          - Restriction: Valid date
        - **End Date**
          - Type: Date
          - Restriction: valid date
        - **Amount**
          - Type: Integer
          - Restriction: Positive number
        - **Business Partner Name**

        - Type: String
        - Restriction: 100 Characters.
        - Notes: No validation. This is memo only field.
    - **Description**
        - Type: String
        - Restriction: 300 Characters.

8.4 FIELD DESCRIPTION

FIELD	TYPE	DESCRIPTION
“Import Data”	Button	Links Read-Write users to the XML upload page.
“Select File”	Button	Enables user to browse to the location of the XML document they wish to upload.
“Upload File”	Button	This button executes the upload process.
“Yes”	Button	If data already exists in the data tables for a given quarter, the user will be prompted to confirm that they wish to continue with the upload. Selecting the “Yes” button will replace all previous data from the tables.
“No”	Button	If data already exists in the data tables for a given quarter, the user will be prompted to confirm that they wish to continue with the upload. Selecting the “No” button will not make any changes to the data and will navigate the user back to the Report Details page.

8.5 BUSINESS RULES

- Only users possessing Administrator” and/or “Contributor” privileges will be able to access the XML upload functionality.
- Both quarterly and annual reports will still need to be submitted by a user possessing Signatory Authority for their organization—this cannot be accomplished via the XML upload. This is merely a method to mass-upload data into the system.

- After data has already been loaded into the data tables for a particular quarter with Open or Correction Pending status, uploading an XML data set will delete and replace all previously-existing data.
- The XML file must be validated against the current XSD used by the system.
- The XML file must be checked to see if XML header quarter matches the Report Detail page.
- The fuel transaction start and end dates in the XML file must be within quarter from the Report Detail page.