

Verify Workshop For Light-Duty & Heavy-Duty Chassis-Certified Aftermarket Alternative Fuel Converters



January 22, 2009



Agenda

- Introduction- Verify for Light-Duty Aftermarket Alternative Fuel Converters
- Registration & CROMERR Requirements
- General Features & Submission Overview
- System Documentation
- Required Datasets & Submission Processes
- Next Steps
- Verify Help Desk
- Demo



Verify For Alternative Fuel Converters

- Must use Verify for all Model Year 2010 activities
 - Confirmatory Test & Certification
- Must complete Verify registration process for company and all Verify users (see next slide)
- Review Verify user documentation and resources:
 - www.epa.gov/otaq/verify/publications.htm
- Sign up for Verify Listserver:
 - <http://www.epa.gov/otaq/verify/documents/420b07002.pdf>



Verify Registration & CROMERR

- Mfrs must comply with EPA's new Cross-Media Electronic Reporting Rule (CROMERR)
- Each company must register with Verify
 - Manufacturer code electronically reissued.
 - All companies must complete this step- even if you already have an EPA Mfr Code
 - User registration (Verify/CDX user accounts for all users who will be submitting data to Verify for your Mfr Code.)
- For more information, visit the Verify web site at:
 - <http://www.epa.gov/otaq/verify/mfr-code.htm>
 - <http://www.epa.gov/otaq/verify/setup.htm>



Verify's General Features

- Verify only uses 3-character Mfr Code (that is used in Test Group names)
 - The 4-digit Manufacturer Codes are no longer used
- Each Verify/CDX user account is affiliated with only one Mfr Code
- Provides interactive web forms to facilitate data submission
- Uses Extensible Markup Language (XML)
- An XML processing report will be returned to submitter for every submission
 - Report can be viewed with a web browser



Light-Duty Submission Options

- Verify Data Submission Web Site URL:
<https://cdx.epa.gov/>
- Verify Data Submission Options
 1. Interactive web forms
 2. Upload batch XML file via web interface



Light-Duty Submission Processing Reports

- One XML Processing Report will be sent to the submitter's CDX Inbox for each submitted dataset. The processing report will include:
 - A copy of all information submitted by the mfr in this submission
 - Processing status (successful or failed submission)
 - Error messages that specify which data element # is in error
 - Any Verify-generated database fields
 - XSL report viewer (located on Verify Web site) is automatically used by processing report to facilitate easy formatted review



Light-Duty Submission Notifications

- Verify will send the following types of notifications:
 - Submission Processing Reports will be sent to the submitter of each dataset (including requests for dataset reports)
 - Confirmatory Test status updates will be sent to all Verify/CDX users for the same Mfr Code (in their MyCDX inbox) whenever the status of a CT Decision Information dataset is updated (e.g., vehicle selected/waived, EPA test date assigned, EPA test results received in Verify)
 - Certificate Request status updates will be sent to all Verify/CDX users for the same Mfr Code (in their MyCDX inbox) whenever the status of a Request for Certificate dataset is updated (e.g., request approved/denied, certificate issued)
 - Confirmatory Test and Certificate Request status updates will optionally be sent to an email address designated by the mfr



Verify Light-Duty User System Documentation

- www.epa.gov/otaq/verify/publications.htm
 - Light-Duty User Guide
 - Light-Duty Data Requirements
 - Light-Duty Business Rules
 - Maintenance Release Software Release Notes
 - Light-Duty XML Schemas & Schema Change Logs



Verify Light-Duty User Guide

- The draft Light-Duty User Guide provides a mapping of data element numbers on each of the Verify Submission Web screens.

The screenshot displays the 'Verify: Engine and Vehicle Compliance System' web interface. The page title is 'Verify: Engine and Vehicle Compliance System' and the user is logged in as 'CHRISTIPORIER'. The main heading is 'Vehicle Information Dataset Submission'. The form is divided into three sections: 'General Information', 'Vehicle Specifications', and 'Fuel'. Each field is accompanied by a red label indicating its data element number (VI-1 through VI-10). A legend indicates that an asterisk (*) denotes a required field.

Field Name	Data Element Number
Process Code *	VI-0.5
Manufacturer Code	VI-1
Vehicle ID *	VI-2
Configuration Number	VI-3
Manufacturer Vehicle Configuration Number	VI-4
Original Test Group *	VI-5
Original Evaporative/Refueling Family	VI-6
Original Test Vehicle Model Year *	VI-7
Actual Test Vehicle Make *	VI-8
Actual Test Vehicle Model *	VI-9
Vehicle Fuel Category *	VI-10



Verify Light-Duty Data Requirements

- The Light-Duty Data Requirements provide a description of all information to be submitted to Verify by manufacturers.
- A change log of changes made to this spreadsheet is included on the “Changes” tab.

	B	D	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	V	AD	AE	AF	AH
	CFEIS Element Number	EPA Data Element Number	Long Name	Description	Parent's Name	Required	Multiplicity	Basic Data Type	Data Type Description	Min. Length	Max. Length	Pattern	Total Digits	Fractional Digits	Min. Value	Max. Value	Allowed Values	XML Tag	Originator	Collection Point	Collection Type	Applicable Business Rules
Test Vehicle Information																						
4	VI-VI(3-3)	VI-05	Process Code	Select the desired process code for the current submission.	TestVehicleInformationSubmission/ TestVehicleInformationDetails	TRUE		A(1)	Enumeration	1	1						N = New dataset C = Correction of existing Verify dataset	InformationProcessCode	Manufacturer	Front End	XML	VI-BR30 VI-BR31
5	n/a (Verify)	VI-1	Manufacturer Code	The 3-character alphanumeric code assigned by EPA to each manufacturer. This will be derived from user's CDX user account	TestVehicleInformationSubmission/ TestVehicleInformationDetails	TRUE		A(3)	Fixed String	3	3	[A-Z0-9]{3}						EPAManufacturerCode	Verify	Front end	XML	VI-BR1 VI-BR2 VI-BR5 VI-BR6 VI-BR26 VI-BR27
6	VI-VI(17-36)	VI-2	Vehicle ID	A unique alphanumeric identifier assigned by the manufacturer to each test vehicle.	TestVehicleInformationSubmission/ TestVehicleInformationDetails	TRUE		A(20)	String	1	20							VehicleIdentificationTest	Manufacturer	Front end	XML	VI-BR2
7	VI-VI(38-39)	VI-3	Vehicle Configuration Number	A system-generated number that is assigned to each new unique test vehicle configuration. A mfr code, vehicle id, test vehicle configuration number can be used for any test group, evap/refueling family, or model gear- not just the values entered into field #s VI-5, VI-6, and VI-7. may be used by manufacturers to	TestVehicleInformationSubmission/ TestVehicleInformationDetails	FALSE		N(2)	Integer						0	99		VehicleConfigurationNumber	Verify if New, otherwise Manufacturer	Back-end if New Front end if not New	Assigned if New, otherwise XML	VI-BR2 VI-BR28 VI-BR29



Verify Light-Duty Business Rules

- The Light-Duty business rules provide a list of validation rules and error messages for each of the light-duty datasets.

Certification Test Data Business Rules

Test Vehicle (VI) Submission

VI-BR1 - Manufacturer Code (VI-1) must exist in the system.

VI-BR2 - If Process Code (VI-0.5) is equal to 'C' (Correction) and Model Year (VI-7) is greater than or equal to 2011, then a record must already exist in the system with the same Vehicle ID (VI-2), Vehicle Configuration (VI-3), and Manufacturer Code (VI-1).

VI-BR3 - The Model Year (VI-7) must match the model year embedded in the Test Group (VI-5).

VI-BR4 - The Model Year (VI-7) must match the model year embedded in the Evaporative/Refueling Family (VI-6).

VI-BR5 - The Manufacturer Code (VI-1) must match the manufacturer code embedded in the Test Group (VI-5).



Verify Light-Duty Software Release Notes

- The Software Release Notes provide a description of the changes made to the Verify system during maintenance releases.

U.S. EPA CDX/Verify *Verify Maintenance Release 4.b.4, Software Release Notes*

Section 3. Release Content

3.1 New features and the fixes for manufacturers:

Industry Verify Light-Duty:

Title: LD: 4B: New Industry: Portable Fuel Container (CR #57444)

Description: Add a new industry 'Portable Fuel Container' to the manufacturer information (and manufacturer registration) modules. Also include new industries for "ICI: Light-Duty", Alternative Fuel Converter (Light-Duty/Heavy-Duty Chassis Certified), and "Nonroad / Stationary Spark-Ignited Evaporative Component."

- **Benefit:** Added new industries "Portable Fuel Container", "ICI: Light-Duty", "Alternative Fuel Converter (Light-Duty/Heavy-Duty Chassis Certified)" and "Nonroad / Stationary Spark-Ignited Evaporative Component" to manufacturer information.

Title: LD: 4B: TI: BRs: Duplicate Test Result Names should not be allowed for same test (CR #77128)

Description: A business rule is needed to prohibit entry of duplicate test result names for the same test.

- **Benefit:** This is a new business rule that will reject a Test Information dataset if it has two Test Results with the same name.

Title: LD: 4B: Add New Document Type (CR #77460)

Description: Add the Document Type of "Alternative Fuel Conversion Data Submission"



Verify Light-Duty XML Schemas

- The Light-Duty XML Schemas provide the structure, content, and requirements for each of the light-duty Verify datasets.

VERIFY

Light Duty Schema Change Log for changes made for Release 4b.4

This document identifies XML schema changes for the VERIFY Light Duty (LD) application family made for the deployment of VERIFY LD Release 4b.4, December, 2008.

EN_VER_VCS_DocumentDetailsDataElement.xsd

- The data type for data element `PrimaryDocumentFileName` was changed from `NormalizedString50CharType` to `NormalizedString100CharType` at EPA's request.
- The data type for data element `OriginalDocumentName` was changed from `NormalizedString50CharType` to `NormalizedString100CharType` at EPA's request.
- The data type for data element `AlternateFormatDocumentName` was changed from `NormalizedString50CharType` to `NormalizedString100CharType` at EPA's request.
- The enumerations "ALT FUEL CONVERSION DATA SUBMISSION FORM (GT 3Y AND GT 50000M)" and "CAFE DATA FILE MY2008 MY2009" were added to data type



Verify Modules & Datasets For AF Converters

1. Mfr Information

- ✓ Company Information
- ✓ Company Contact Information
- ✓ Divisions (Vehicle Makes)
- ✓ Test Laboratories

2. Compliance Document Upload

- ✓ Document Metadata
- ✓ Attached Document
- ✓ CBI & FOIA versions

3. Confirmatory Test (CT)

- ✓ Vehicle Info
- ✓ Fuel Properties Info
- ✓ Test Info
- ✓ CT Decision Info
- ✓ Shift Schedule Info
- ✓ Supplemental Info

4. Certification (Cert)

- ✓ Carline Info
- ✓ Evap/Refueling Info
- ✓ Test Group Info
- ✓ Request For Certificate Info



LD Datasets: Prerequisites & Overview

Verify 4b Datasets	Prerequisites	Dataset Overview
Divisions in Verify's Mfr Info (Div)	None	A list of all divisions (vehicle makes) for each mfr for each model year. These will be used for the list of certified Makes/Models for each certificate of conformity.
Vehicle Info (VI)	None	A description of each mfr test vehicle configuration
Fuel Properties Info (FP)	None	A description of each fuel batch used by the mfr for vehicle testing
Test Info (TI)	VI & FP	A description of each test conducted by the mfr and EPA including the test parameters and test results
CT Decision Info (CTDI)	TI	An overview of all tests conducted by the mfr for a test vehicle configuration. EPA uses this information to decide which tests to confirm at EPA's test laboratory
Shift Schedule Info (SS)	None	A description of any mfr-specific shift schedules to be used for EPA confirmatory tests. This dataset is only submitted if EPA has selected the test vehicle configuration for EPA confirmatory testing.
Supplemental Info (CTSI)	SS, CTDI	Information needed by EPA to conduct EPA confirmatory tests. This dataset is only submitted if EPA has selected the test vehicle configuration for EPA confirmatory testing.
Carline Info (CL)	None	A list of all carlines (vehicle models) for each mfr for each model year. These will be used for the list of certified Makes/Models for each certificate of conformity.
Evaporative/Refueling Info (Evap)	None	A description of each Evaporative/Refueling family to be certified
Test Group Info (TG)	TI, CL, Evap, Div	A description of each Test Group to be certified. A successful TG dataset submission will result in the creation of a Certificate Summary Information (CSI) report.
Request For Certificate Info (RFC)	TG, TG Application Doc	The official mfr request for EPA to certify a Test Group. This dataset includes required statements of compliance. This dataset is also used to request a dataset be "Unlocked" or to update the Introduction Into Commerce Date for a Test Group.



Light-Duty Submission Process Codes

- **New**
 - The unique identifiers (primary keys) for the submitted dataset must not exist in Verify (see slide 19 for primary keys for each dataset)
- **Correction**
 - The primary keys for the submitted dataset must exist in Verify
 - All corrections must be submitted as a complete replacement dataset
- **Report**
 - Must specify the primary keys for the desired dataset report
 - The requested report will be sent to the requester's CDX Inbox

Note: Mfrs must call the Verify Helpdesk to request that a dataset be deleted

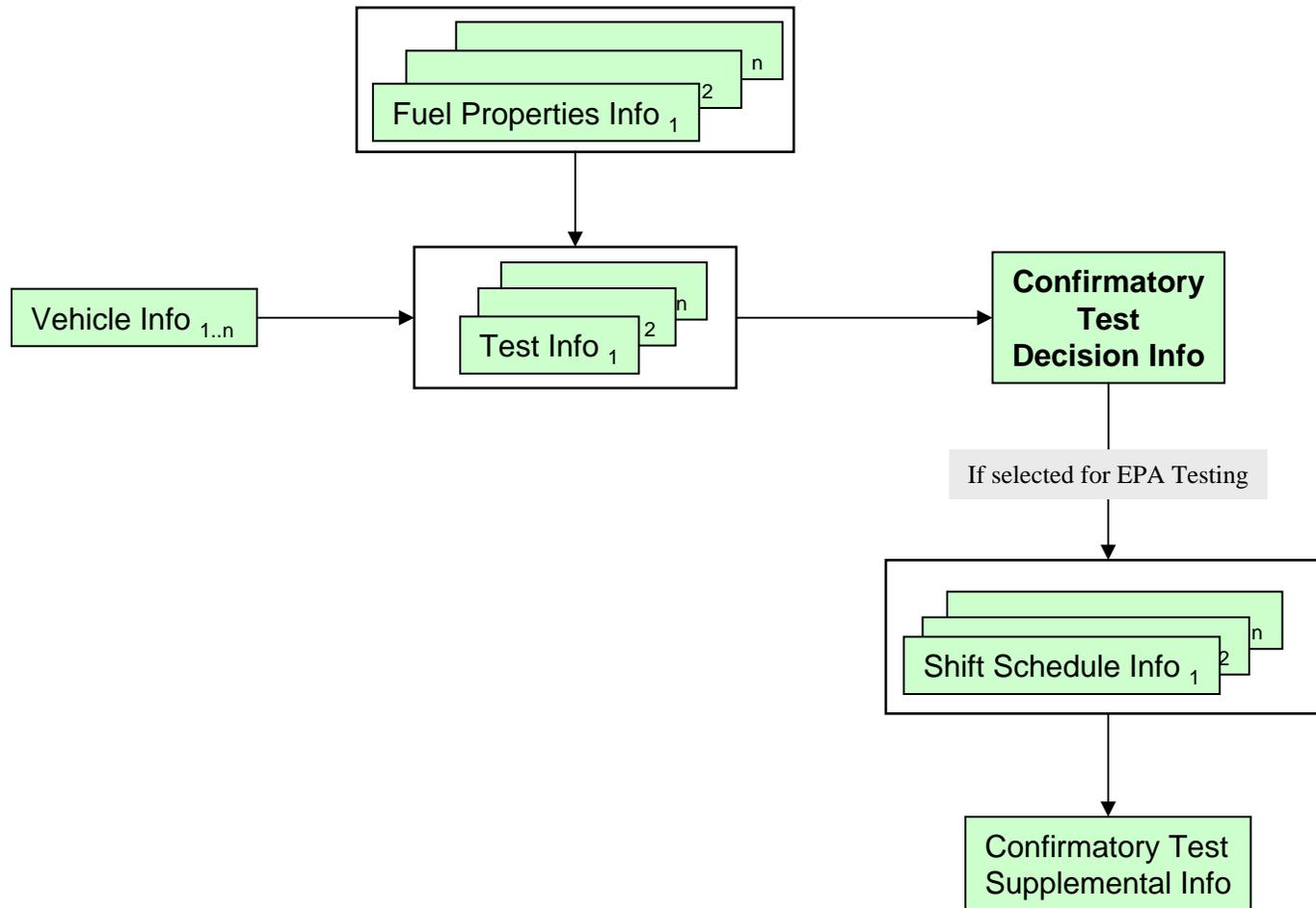


LD Datasets: Prerequisites & Primary Keys

Verify 4b Datasets	Prerequisites	Primary Keys (Unique Dataset Identifiers)
Divisions in Verify's Mfr Info (Div)	None	Mfr Code, Division Code
Vehicle Info (VI)	None	Mfr Code, Vehicle ID, Configuration #
Fuel Properties Info (FP)	None	Mfr Code, Fuel Batch ID, Fuel Calibration #
Test Info (TI)	VI & FP	Test #
CT Decision Info (CTDI)	TI	Mfr Code, Vehicle ID, Configuration #, Model Year
Shift Schedule Info (SS)	None	Mfr Code, Shift Schedule ID #, Shift Schedule Database Code
Supplemental Info (CTSI)	SS, CTDI	Mfr Code, Vehicle ID, Configuration #, Model Year
Carline Info (CL)	None	Mfr Code, Division Code, Carline Code, Model Year
Evaporative/Refueling Info (Evap)	None	Evaporative/Refueling Family, Model Year
Test Group Info (TG)	TI, CL, Evap, Div	Test Group, Evaporative/Refueling Family, Model Year
Request For Certificate Info (RFC)	TG, TG Application Doc	Test Group, Evaporative/Refueling Family, Model Year



LD Confirmatory Test Dataset Submission Process





LD Confirmatory Test Dataset Submission Process

- After Obtaining Mfr Code and Verify User Accounts:
 1. Submit one Vehicle Information dataset for each mfr test vehicle configuration.
 2. Submit one Fuel Properties dataset for each mfr fuel batch used for testing.
 3. Submit one Test Information dataset for each mfr test.
 4. Submit one Confirmatory Test Decision Information (CTDI) dataset for each vehicle configuration that was tested.
 5. For CTDI datasets selected for EPA testing, submit all applicable Shift Schedule datasets and one Supplemental Information dataset.

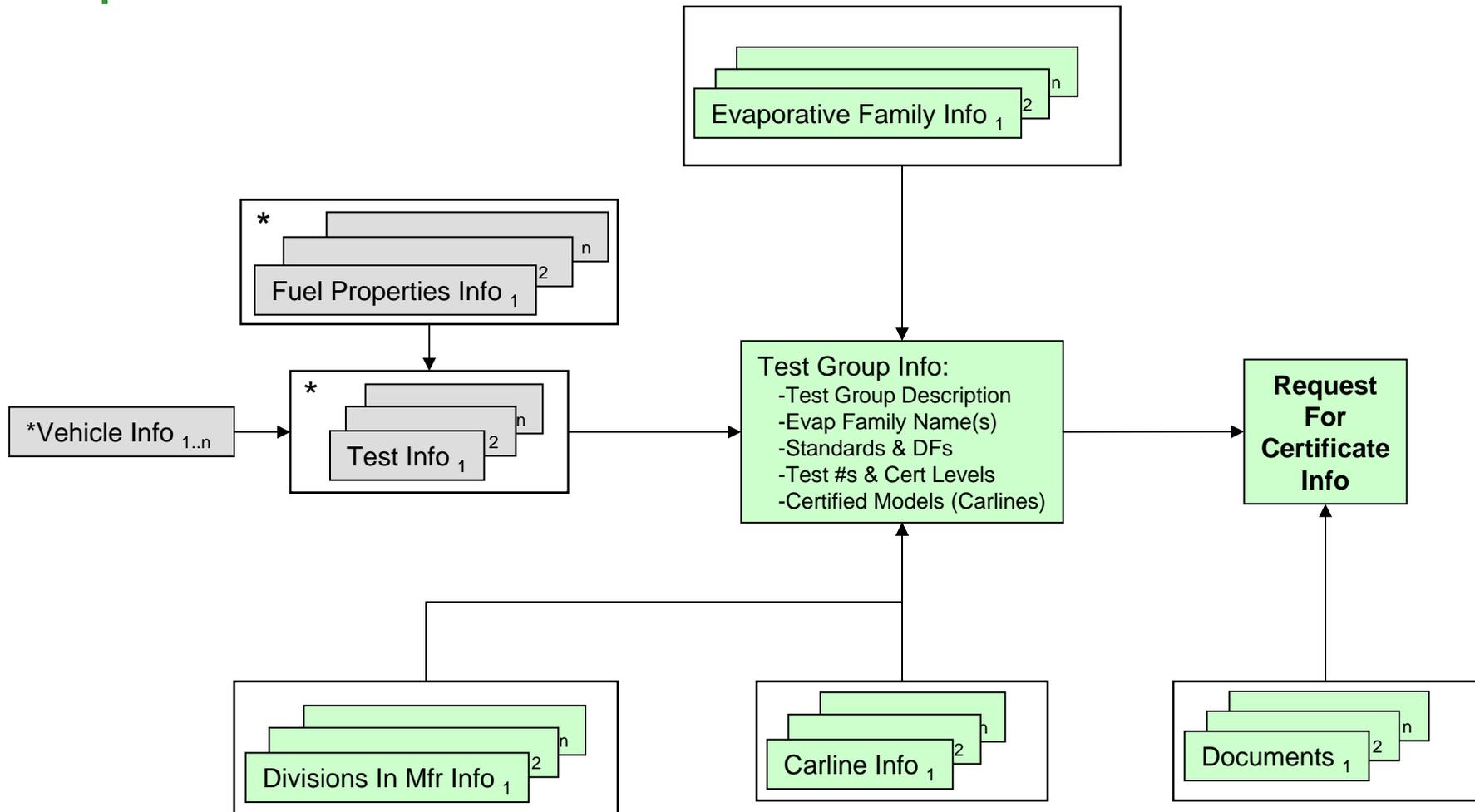


Confirmatory Test Process Highlights

- Shift Schedules and CT Supplemental Information datasets only required if vehicle selected for EPA testing
 - EPA test date not assigned until Shift Schedules and CT Supplemental Information datasets are submitted
- Verify-assigned Test Numbers are 12-characters (8 digits preceded by Test Group code for model year and 3-character mfr code- e.g. ACSC99999999)
- Only Verify Test Information Reports for EPA tests will include calculated cert levels and pass/fail
 - Verify Test Information Reports for Manufacturer tests will not include this information since these calculations won't occur until a test is used in a Test Group Information submission
- If EPA determines that a retest is needed, the retest date will be sent to manufacturer Verify/CDX inbox



LD Certification Dataset Submission Process



* Denotes datasets previously submitted



LD Certification Dataset Submission Process

- After completing the Confirmatory Test process:
 1. Submit all applicable Divisions to Verify's Mfr Information.
 2. Submit all applicable Carline Information datasets.
 3. Submit all applicable Evaporative/Refueling Family Information datasets.
 4. Submit one Test Group Information (CSI) dataset for each Test Group to be certified.
 5. Submit all required compliance documents for each Test Group to be certified (especially CBI & FOIA versions of Application for Certification).
 6. Submit one Request for Certificate dataset for each Test Group and Evaporative/Refueling Family combination.



Certification Process Highlights

- Divisions in Manufacturer Information are not organizational divisions but rather the “Makes” that will be used for Certified Makes/Models that will be listed on Certificates of Conformity
- Each Verify TG dataset includes exhaust and evaporative standards, Deterioration Factors, and tests to demonstrate compliance for the Test Group and for all applicable Evaporative Families
 - In order to use tests that belong to a different manufacturer, have the test owner contact the Verify helpdesk
- When a Test Group dataset is accepted by Verify, Verify will compile one PDF Certificate Summary Information (CSI) Report for each test group and evaporative family combination included in the TG submission
 - CSI Reports will be sent to Manufacturer CDX Inboxes a long with the Test Group dataset Submission Processing Report
- Once a Request for Certificate is submitted to Verify, all associated datasets are locked.
- Certificates of Conformity will use a new template



Manufacturer Next Steps

- If you haven't already done so, request your Mfr Code electronically through Verify and comply with CROMERR requirements
- Establish Verify/CDX user accounts for everyone that will be submitting data to Verify for your Manufacturer Code
- Sign up for EPA's Verify Listserver (see instructions at epa.gov/Verify)
- Review Verify system documentation on Verify Web site
- Submit all Divisions, Test Labs, and Mfr Contacts for your Mfr Code via Verify's Maintain Mfr Info



Verify Help Desk

- By email: verifyhelp@csc.com
- By phone: (888) 890-1995
 - Select option 4 for all Verify-specific questions
 - Select option 5 for all Verify/CDX user registration questions
- Be as specific as possible
 - Provide a detailed description of the question/issue, date/time of issue, copy of dataset, screenshots, etc.



Verify Demo

- A demo of the Verify system will be conducted
 - Logging in to Verify/CDX account
 - Verify Mfr Home Page (MyCDX)
 - Verify/CDX In-Box
 - Checking status of a submission
 - Submission Processing Reports
 - Submitting a light-duty dataset
 - New dataset
 - Correction to a previously submitted dataset
 - Requesting a dataset database report
 - Walk-through light-duty datasets
 - Vehicle Information, Fuel Properties, Test Information
 - CT Decision Info, Shift Schedules, CT Supplemental Information
 - Divisions, Carlines, Evap/Refueling Family Info, Test Group Info, Compliance Documents, Request for Certificate