State of Vermont Department of Motor Vehicles

Commercial Vehicle Operations

CVO Online Distributor Fuel Tax Return XML Upload Guide

Change Log	
Date	**Description**
3/13/20	**Original Document**
3/17/20	**URL's added & Formatting Updates**
3/23/20	**Exemption number applies to 10A not 5A**
3/26/20	**Field description context**
10/7/20	**Added clarification on how to properly format the XML file**

Submitting Distributor Fuel Tax Returns via CVO Upload Using XML Format

The Vermont Department of Motor Vehicles Commercial Vehicles Operations (CVO) unit, through the CVO Online website will accept XML files for uploading and submitting the following returns:

- Distributor Fuel Tax Return (CVO-102)

XML provides a basic syntax that the CVO uses to share information between different kinds of computers, applications, and organizations without needing to pass through many layers of conversion. Participants must have a working knowledge of XML and XML Schemas. The CVO is unable to provide technical assistance in the development or maintenance of software or web applications owned or operated by applicants and participants.

To file your return, please visit CVO Online at https://cvo.mydmv.vermont.gov/_/ and logon. If you have not created a username, you must create one first in order to submit returns on CVO Online. The applicable XML template is available for download when you log in to file your return online.

The upload process will validate the data in the XML schema is in the correct format. If an error is encountered, it will be displayed for review. In order to resolve any errors, you must fix in the XML schema and upload again. After you upload a valid file, CVO online allows a preview of selected columns from the uploaded schedules. After previewing the schedules, you can verify the totals for inventories, receipts and disbursements by fuel type as well as the tax computation. Once reviewed and confirmed, you can complete the filing of your return by submitting.

Please note: The XML schema is read by an automated process that expects a pre-defined XML format. Please do not make any changes to the XML schema or the upload process will fail. In addition, please ensure that your XML file is formatted with each element on its own line. This facilitates error identification in case there are issues identified during validation.

XML Transmission Fields Description

There are many elements in the schema that are not used by CVO. The table below shows a description of each field that is used by CVO. Fields in the schema that do not appear in the tables below should not be included in the Taxpayer's XML submissions.

TransmissionHeader (Transmission Header – Required)			
Field Name	**Required**	**Description**	**Format / Enumeration**
The following must be included to begin the TransmissionHeader. \<Transmission xmlns=http://www.irs.gov/efile xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://www.irs.gov/efile ./MotorFuelsSchema/MotorFuelsTransmission.xsd"\>			
Jurisdiction	Yes	Must be "VT"	VT
TransmissionId	Yes	Must be your FEIN or SSN plus timestamp.	#########YYYYMMDDHHMMSS
Timestamp	Yes	The time stamp at the time of transmission.	YYYY-MM-DDTHH:MM:SSZ
Transmitter	Yes	Taxpayer's State Employer Account Number	Numeric, max length of 20
ProcessType	Yes	Type of file being transmitted. T – Test P – Production	Choose One: T P

MotorFuelsFiling (Filing Information – Required)			
Field Name	**Required**	**Description**	
SubmissionId	Yes	Unique Id for you and your system.	Numeric, max length of 20
MotorFuelsHeader (Return Header – Required)			
Field Name	**Required**	**Description**	
*Vermont CVO Motor Fuel XML does not use a **Sender Code**. You can populate this with any value if your software is requiring the field.*			

Jurisdiction	Yes	Should be "VT"	VT
Timestamp	Yes	The date and time when the return was created.	YYYY-MM-DDTHH:MM:SSZ
TaxPeriodEndDate	Yes	Month or Quarter End Date.	YYYY-MM-DD
AmendedReturnIndicator	No	Designates XML Contains an Amended Return. Check this if submission is an amendment X – Amendment Exists	X
Filer	Yes		
FEIN		Taxpayer's FEIN	#########
SSN		Taxpayer's SSN	#########

MFDistributorReport (Distributor Report)			
Field Name	**Required**	**Description**	**Format / Enumeration**
reportUOM	Yes	Only Gallons is accepted.	Gallons
reportCurrency	Yes	Only USD is accepted.	USD
AmendedReason	No	Taxpayer's reason for amending the return.	Choose One: Replace Corrected
DistributorSchedule	Yes	Distributor Report Schedule Documents	
ScheduleCode	Yes	Distributor Schedule Code 1 – Gallons received; tax paid 2 – Gallons received from licensed distributor; tax paid 3 – Gallons imported directly to customer 4 – Gallons imported directly into tax-free storage 5A – Gallons sold to non-licensed distributors, retailers, or bulk-end users from in-state terminals	Choose One: 1 2 3 4 5A 5AA 6D 7A 10A

		5AA – Gallons received tax-paid and sold to an unlicensed distributor, retailer, bulk user, or user 6D – Gallons sold tax exempt to other licensed distributors/suppliers 7A – Gallons exported; destination state tax paid 10A – Gallons delivered to other tax-exempt entities or non-highway	
ProductCode	Yes	Fuel Code 065 – Gasoline 124 – Gasohol 125 – Aviation Gasoline 142 – Undyed Kerosene 167 – Low Sulfur Diesel #2/Undyed/Blended Biodiesel (B20, B10, B5, B2) B00 – Undyed/Unblended Biodiesel (B100) E00 – Denatured Ethanol	Choose One: 065 124 125 142 167 B00 E00
Mode	Yes	Mode J – Truck R – Rail B – Barge S – Ship PL – Pipeline BA – Book Adjustment RT – Removal from bulk transfer system (other than by truck or rail) for sale or consumption CE – Summary of supplier schedule of receipts, schedule of disbursements;	Choose One: J R B S PL BA RT CE

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		Carrier delivery schedules; Terminal Operator receipts and disbursements	
DocumentNumber	Yes	Identifying number from the manifest issued at the terminal when product was removed over the rack. In the case of pipeline or barge movements, it is the pipeline or barge ticket number. In case of barge, it is the voyage number	Alphanumeric, max length of 20
ReceivedShippedDate	Yes	Enter the date the product was received or shipped	YYYY-MM-DD
CarrierName	Yes	Name of the carrier that transported the product.	Alphanumeric, max length of 50
CarrierFEIN	Yes	FEIN of the carrier that transported the product.	#########
Purchaser/Seller Name	No	Name of the company to whom the product was sold or from whom the product was acquired.	Alphanumeric, max length of 50
Purchaser/Seller FEIN	No	FEIN of the company to whom the product was sold or from whom the product was acquired.	#########
NetGallons	Yes	Net gallons disbursed or received.	Numeric, max length of 18, can be 0
GrossGallons	Yes	Gross gallons disbursed or received.	Numeric, max length of 18, can be 0
BilledGallons	Yes	Billed gallons. Must equal net or gross gallons.	Numeric, max length of 18, can be 0
DiversionNumber	No	Exemption Number – Enter this number if diesel fuel was delivered to a tax-exempt entity and the entity has a valid diesel tax exemption number.	####

		Required if <ScheduleCode> is 10A. 10A entries which do not have valid exemption numbers must be filed as 5A instead.	
Origin	Yes	Origin	
TerminalCode	Yes	Origin Terminal Control Number	A##AA####
FacilityNumber	Yes	Origin Facility Number	Alpha Characters, max length of 20
AddressLine	No	Origin Address	Alphanumeric, max length of 255
City	Yes	Origin City	Alpha Characters, max length of 20
County	No	Origin County	Alpha Character, max length of 20
State	Yes	Origin State	See *U.S. State Enumerations* in the Appendix for acceptable values.
Province	Yes	Origin Province	See *Canada Province Enumerations* in the Appendix for acceptable values.
MexicanState	Yes	Origin State	See *Mexico State Enumerations* in the Appendix for acceptable values.
MFOtherCountryDivision	Yes	Origin Country Division	String, min length 1, max length 3
Country	No	Origin Country	ISOCountryType

Destination	Yes	Destination	
TerminalCode	Yes	Destination Terminal Control Number	A##AA####
FacilityNumber	Yes	Destination Facility Number	Alpha Characters, max length of 20
AddressLine	No	Destination Address	Alphanumeric, max length of 255
City	Yes	Destination City	Alpha Characters, max length of 20
County	No	Destination County	Alpha Character, max length of 20
State	Yes	Destination State	See *U.S. State Enumerations* in the Appendix for acceptable values.

Province	Yes	Destination Province	See *Canada Province Enumerations* in the Appendix for acceptable values.
MexicanState	Yes	Destination State	See *Mexico State Enumerations* in the Appendix for acceptable values.
MFOtherCountryDivision	Yes	Destination Country Division	String, min length 1, max length 3
Country	No	Destination Country	ISOCountryType

Appendix
Product Types

Code	Description
065	Gasoline
124	Gasohol
125	Aviation Gasoline
142	Kerosene, Undyed
167	Low Sulphur Diesel #2, Undyed
B00	Undyed Biodiesel, 100%
E00	Ethanol, 100%

Schedule Codes

Schedule	Description
1	Gallons received; tax paid
2	Gallons received from licensed distributor; tax paid
3	Gallons imported directly to customer
4	Gallons imported directly into tax-free storage
5A	Gallons sold to non-licensed distributors, retailers, or bulk-end users from in-state terminals
5AA	Gallons received tax-paid and sold to an unlicensed distributor, retailer, bulk user, or user
6D	Gallons sold tax exempt to other licensed distributors/suppliers
7A	Gallons exported; destination state tax paid
10A	Gallons delivered to other tax-exempt entities or non-highway

Transportation Mode Codes

Code	Description
B	Barge
BA	Book Adjustment
CE	Gallons imported directly to customer
J	Truck
PL	Pipeline
R	Rail
RT	Removal from bulk transfer system (other than by truck or rail) for sale or consumption
S	Ship

U.S. State Abbreviation Codes

Code	State	Code	State	Code	State
AL	Alabama	AK	Alaska	AZ	Arizona
AR	Arkansas	CA	California	CO	Colorado
CT	Connecticut	DE	Delaware	DC	District of Columbia
FL	Florida	GA	Georgia	GU	Guam
HI	Hawaii	ID	Idaho	IL	Illinois
IN	Indiana	IA	Iowa	KS	Kansas
KY	Kentucky	LA	Louisiana	ME	Maine
MD	Maryland	MA	Massachusetts	MI	Vermont
MN	Minnesota	MS	Mississippi	MO	Missouri
MT	Montana	NE	Nebraska	NV	Nevada
NH	New Hampshire	NJ	New Jersey	NM	New Mexico
NY	New York	NC	North Carolina	ND	North Dakota

Code	State	Code	State	Code	State
OH	Ohio	OK	Oklahoma	OR	Oregon
PA	Pennsylvania	PR	Puerto Rico	RI	Rhode Island
SC	South Carolina	SD	South Dakota	TN	Tennessee
TX	Texas	UT	Utah	VT	Vermont
VI	Virgin Islands	VA	Virginia	WA	Washington
WV	West Virginia	WI	Wisconsin	WY	Wyoming
AS	American Samoa	MH	Marshall Islands	MP	Northern Mariana Islands
AA	APO/FPO Americas	AE	APO/FPO Europe	AP	APO/FPO Pacific

Canada Province Abbreviation Codes

Code	Province	Code	Province	Code	Province
AB	Alberta	BC	British Columbia	MB	Manitoba
NB	New Brunswick	NL	Newfoundland	NT	Northwest Territory
NS	Nova Scotia	NU	Nunavut	ON	Ontario
PE	Prince Edward Island	QC	Quebec	SK	Saskatchewan
YT	Yukon Territory				

Mexico State Abbreviation Codes

Code	State	Code	State	Code	State
AG	Aguascalientes	BC	Baja California	CS	Baja California Sur
CM	Campeche	CS	Chiapas	CH	Chihuahua
CO	Coahuila	CL	Colima	DF	Distrito Federal
DG	Durango	GT	Guanajuato	GR	Guerroro
HG	Hidalgo	JA	Jalisco	MX	Mexico
MI	Michoacán	MO	Morelos	NA	Nayarit

Code	State	Code	State	Code	State
NL	Nuevo Leon	OA	Oaxaca	PU	Puebla
QT	Queretaro	QR	Quintana Roo	SL	San Luis Potosi
SI	Sinaloa	SO	Sonora	TB	Tabasco
TM	Tamaulipas	TL	Tlaxcala	VE	Veracruz
YU	Yucatan	ZA	Zacatecas		

Country Abbreviation Codes

Code	Country	Code	Country	Code	Country
AF	Afghanistan	AX	Akrotiri	AL	Albania
AG	Algeria	AQ	American Samoa	AN	Andorra
AO	Angola	AV	Anguilla	AY	Antarctica
AC	Antigua and Barbuda	AR	Argentina	AM	Armenia
AA	Aruba	AT	Ashmore and Cartier Islands	AS	Australia
AU	Austria	AJ	Azerbaijan	BF	Bahamas
BA	Bahrain	FQ	Baker Island	BG	Bangladesh
BB	Barbados	BO	Belarus	BE	Belgium
BH	Belize	BN	Benin	BD	Bermuda
BT	Bhutan	BL	Bolivia	BK	Bosnia-Herzegovina
BC	Botswana	BV	Bovet Island	BR	Brazil
IO	British Indian Ocean Territory	VI	British Virgin Islands	BX	Brunei
BU	Bulgaria	UV	Burkina Faso	BM	Burma
BY	Burundi	CB	Cambodia	CM	Cameroon
CV	Cape Verde	CJ	Cayman Islands	CT	Central Africa Republic
CD	Chad	CI	Chile	CH	China
KT	Christmas Island	IP	Clipperton Island	CK	Cocos (Keeling) Islands

Code	Country	Code	Country	Code	Country
CO	Colombia	CN	Comoros	CF	Congo (Brazzaville)
CG	Congo (Kinshasa)	CW	Cook Islands	CR	Coral Sea Islands
CS	Costa Rica	IV	Cote D'Ivoire (Ivory Coast)	HR	Croatia
CU	Cuba	UC	Curacao	CY	Cyprus
EZ	Czech Republic	DA	Denmark	DX	Dhekelia
DJ	Djibouti	DO	Dominica	DR	Dominican Republic
TT	East Timor	EC	Ecuador	EG	Egypt
ES	El Salvador	EK	Equatorial Guinea	ER	Eritrea
EN	Estonia	ET	Ethiopia	FK	Falkland Islands (Islas Malvinas)
FO	Faroe Islands	FM	Federated States of Micronesia	FJ	Fiji
FI	Finland	FR	France	FP	French Polynesia
FS	French Southern and Antarctic Lands	GB	Gabon	GA	The Gambia
GG	Georgia	GM	Germany	GH	Ghana
GI	Gibraltar	GR	Greece	GL	Greenland
GJ	Grenada	GQ	Guam	GT	Guatemala
GK	Guernsey	GV	Guinea	PU	Guinea-Bissau
GY	Guyana	HA	Haiti	HM	Heard Island and McDonald Islands
VT	Holy See	HO	Honduras	HK	Hong Kong
HQ	Howland Island	HU	Hungary	IC	Iceland
IN	India	ID	Indonesia	IR	Iran
IZ	Iraq	EI	Ireland	IS	Israel
IT	Italy	JM	Jamaica	JN	Jan Mayen
JA	Japan	DQ	Jarvis Island	JE	Jersey
JQ	Johnston Atoll	JO	Jordan	KZ	Kazakhstan

Code	Country	Code	Country	Code	Country
KE	Kenya	KQ	Kingman Reef	KR	Kiribati
KN	North Korea	KS	South Korea	KV	Kosovo
KU	Kuwait	KG	Kyrgyzstan	LA	Laos
LG	Latvia	LE	Lebanon	LT	Lesotho
LI	Liberia	LY	Libya	LS	Liechtenstein
LH	Lithuania	LU	Luxembourg	MC	Macau
MK	Macedonia	MA	Madagascar	MI	Malawi
MY	Malaysia	MV	Maldives	ML	Mali
MT	Malta	IM	Man, Isle of	RM	Marshall Islands
MR	Mauritania	MP	Mauritius	MF	Mayotte
MQ	Midway Islands	MD	Moldova	MN	Monaco
MG	Mongolia	MJ	Montenegro	MH	Montserrat
MO	Morocco	MZ	Mozambique	WA	Namibia
NR	Nauru	BQ	Navassa Island	NP	Nepal
NL	Netherlands	NC	New Caledonia	NZ	New Zealand
NU	Nicaragua	NG	Niger	NI	Nigeria
NE	Niue	NF	Norfolk Island	CQ	Northern Mariana Islands
NO	Norway	MU	Oman	OC	Other Country
PK	Pakistan	PS	Palau	LQ	Palmyra Atoll
PM	Panama	PP	Papua-New Guinea	PF	Paracel Islands
PA	Paraguay	PE	Peru	RP	Philippines
PC	Pitcairn Islands	PL	Poland	PO	Portugal
RQ	Puerto Rico	QA	Qatar	RO	Romania
RS	Russia	RW	Rwanda	TB	Saint Barthelemy
RN	Saint Martin	WS	Samoa	SM	San Marino

Code	Country	Code	Country	Code	Country
TP	Sao Tome and Principe	SA	Saudi Arabia	SG	Senegal
RI	Serbia	SE	Seychelles	SL	Sierra Leone
SN	Singapore	NN	Sint Maarten	LO	Slovakia
SI	Slovenia	BP	Solomon Islands	SO	Somalia
SF	South Africa	SX	South Georgia and Sandwich Islands	SP	Spain
PG	Spratly Islands	CE	Sri Lanka	SH	St. Helena
SC	St. Kitts and Nevis	ST	St. Lucia Island	SB	St. Pierre and Miquelon
VC	St. Vincent and the Grenadines	SU	Sudan	NS	Suriname
SV	Svalbard	WZ	Swaziland	SW	Sweden
SZ	Switzerland	SY	Syria	TW	Taiwan
TI	Tajikistan	TZ	Tanzania	TH	Thailand
TO	Togo	TL	Tokelau	TN	Tonga
TD	Trinidad and Tobago	TS	Tunisia	TU	Turkey
TX	Turkmenistan	TK	Turks and Caicos Islands	TV	Tuvalu
UG	Uganda	UP	Ukraine	AE	United Arab Emirates
UK	United Kingdom	UY	Uruguay	UZ	Uzbekistan
NH	Vanuatu	VE	Venezuela	VM	Vietnam
VQ	Virgin Islands	WQ	Wake Island	WF	Wallis and Futuna
WI	Western Sahara	YM	Yemen (Aden)	ZA	Zambia
ZI	Zimbabwe				