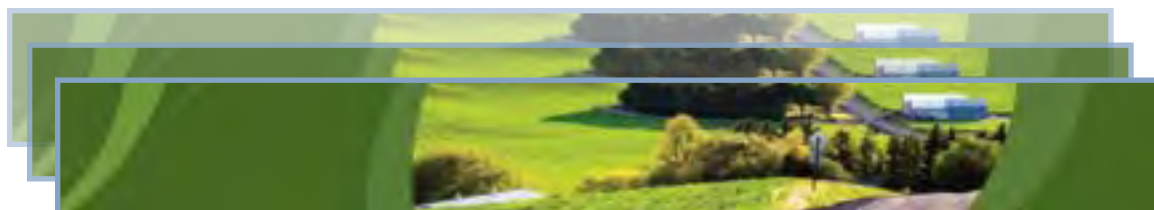


# Submitting RFS EMTS Transactions Using XML



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Compliance Division  
Office of Transportation and Air Quality  
U.S. Environmental Protection Agency

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## IMPORTANT REMINDER:

*Regulated parties are urged to conduct due diligence investigations and exercise caution when conducting Renewable Identification Number (RIN) transactions. Neither EPA nor its systems, including the EPA Moderated Transaction System (EMTS), certify or validate RINs or make any provision for parties who, despite good faith, transfer or receive invalid RINs. As specified in the regulations at 40 CFR 80.1431(b)(2), invalid RINs cannot be used to achieve compliance with the Renewable Volume Obligations of an obligated party or exporter, regardless of the party's good faith belief that the RINs were valid at the time they were acquired. Additionally, the regulations at 40 CFR 80.1460(b)(2) prohibit the creation or transfer to any person of a RIN that is invalid.*

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## How Do I Report Transactions Using XML Files?

This section provides instructions on using the EPA Moderated Transaction System (EMTS) schema to submit data to EMTS. This includes:

- A brief overview of using EPA's exchange network;
- Best practices for preparing and formatting data for EMTS;
- How to submit your file; and
- Detailed instructions for all transaction types.

### Who should read these instructions:

Information Technology and Data Preparers who are responsible for implementing the EMTS schema and submitting XML files to EMTS.

### What you will find in this document:

This document provides an overview of the EMTS schema and detailed instructions on how to report data using the XML file format. This document also includes instructions on how to submit your file using a node on EPA's Exchange Network.

### 1.0 What Are the Steps to Submitting My File?

The following are basic steps to submitting your file to EMTS. Please note that these are general instructions; personal nodes and node clients may behave differently.

1. Create a single XML file which includes both the Exchange Network Header v2.0 document and your EMTS XML file.
2. Compress the XML file. This step may be done automatically by your node client software.
3. Log into your node client or the CDX Exchange Network web client with your CDX credentials, and select the "submit" option.
4. Create a description for the submission, select the EMTS destination node and dataflow, and choose your file to submit.
5. After you submit the file, the node will transmit your submit request to the EMTS node via the Exchange Network.
6. EMTS will receive the submit request, decompress the XML file, and process its contents.

### Exchange Network Node v2.0

The EMTS node is v2.0 compliant. This section includes specifications for v2.0 exchanges.

**NOTE:** You may not submit multiple files with the same name in a given calendar year.

## 2.0 What Is the Purpose of an XML Schema?

An XML schema is the definition that constrains the structure and content of an XML document. It is written in XML schema language as defined by the World Wide Web Consortium (W3C). An XML schema defines:

- The elements and attributes that are expected;
- The allowable data types for each element;
- The hierarchy and order in which elements must appear;
- Which elements are optional and which are required; and
- The maximum number of occurrences allowed for each element.

Like the architectural blueprint that describes the structural design of a house, an XML schema describes the structural design of an XML file. Files submitted to EMTS are accepted or not accepted based on their conformity to the EMTS XML schema.

### 2.1 General Principles Used in Developing EMTS

XML schemas can be created in many different ways; however, there are principles that govern the definition and use of the EMTS schema for reporting transactions. The following approach to developing and managing the EMTS XML schema has been adopted.

- XML element tag names adhere as closely as possible to EPA's XML data standards. Information about EPA's XML data standards can be found at EPA Data Registry Services:  
*[http://iaspub.epa.gov/sor\\_internet/registry/datastds/findadatastandard/epaapproved/](http://iaspub.epa.gov/sor_internet/registry/datastds/findadatastandard/epaapproved/)*.
- XML element tag names are specific to a transaction category where possible in order to minimize ambiguity (e.g., "GenerateTransactionComment" rather than "Comment").
- No two elements share the same tag name. XML elements are defined unambiguously.
- Tag names are understandable to both data preparers and information technology staff.
- The EMTS schema was not designed to minimize submitted file size. See Section 4.2 for best practices on the size and content limits for file submission.
- The EMTS schema contains few restrictions on the content of the submission, and is limited primarily to indicating whether the submission is a valid and well-formed XML file. The schema contains some business rules; however, these are limited to the semantic properties of the file structure. Additional business rules are applied to the content of the XML file after the data have been submitted to EMTS. This allows more flexible management of quality assurance checks and more informative feedback on check results. The submitter will receive feedback on all business checks and technical checks through a feedback report available on the EMTS website. For more information on the EMTS QA approach, see Appendix B, "QA Checks."

- Conforms to EPA Guidelines.

### **3.0 Codes, Identifiers, and Data Types**

The following section provides guidance on how to report certain types of data content.

#### **3.1 How Do I Report Codes?**

If the last word in an XML tag is "code," the element must contain a value from a code list. A complete list of codes can be found on EPA's EMTS website at <http://www.epa.gov/otaq/fuels/renewablefuels/emshtml/emtsdocuments.htm>. Codes are validated by the EMTS QA check process for appropriate use given an organization's business activities. Some code tables may change over time. If codes change, a new version of the schema will be released; the new codes will be published in the EMTS Transaction Instructions and incorporated in the QA Check process.

#### **3.2 How Do I Report Comments and Additional Information?**

If an XML tag contains the word "comment," it is generally an optional element in which you can provide explanations, caveats, or any other information about the data in the schema. In some cases, you may be required to provide a comment based on the reason code you provide.

#### **3.3 How Do I Report Identifiers?**

If an XML tag contains the word "identifier," it must contain the specific alphanumeric identifier assigned by EPA to an organization or facility site. Both Organization and Facility identifiers are assigned by EPA once you have completed registration through the OTAQReg Fuels Programs Registration system. These identifiers should always be included in your submission file when identifying your organization, or if you are identifying the generating source of the renewable fuel. You must always identify your organization as the source of the submission.

##### **3.3.1 Organization Identifiers**

The four-digit numeric public identifier assigned by EPA is used to identify your organization and should be reported for all submission files.

Several transaction types require you to either identify an organization's identification number as a trading partner (sell and buy transactions) or give you the option to identify the originating source of the fuel. In either case, you must identify the trading partner organization or originating source organization using the public identifier.

### 3.4 Data Types

Most data types in the EMTS schema are string, date, year, and number. Each data element will have a length or a precision assigned that is constrained in the schema. Data which are not consistent with the formats defined in the schema will fail schema validation, causing the submission file to fail.

#### 3.4.1 Dates and Years

All date and year tags are handled as xsd:date and xsd:gYear in the schema.

- **Date** – If a tag name contains the word "date," the data element is for a specific day. These should be represented as an eight-digit sequence of numeric characters in a string format of YYYY-MM-DD and should include leading zeros between the representative elements containing only one digit. For example August 7, 2009 is 2009-08-07.
- **Year** – If a tag name contains the word "year," the data element is for a calendar year. This data should be reported as a four-digit sequence of numeric characters in a string format of YYYY, otherwise, if not required, it may be left null.

#### 3.4.2 Reporting Numbers

There are several different reporting formats for numbers. The schema allows for various precisions; however, you are expected to report numeric values as prescribed in the schema for each numeric data type. The following table describes each numeric data type and an example of what to report in EMTS.

**Figure 1: Reporting Formats for Numbers**

Content Type	Reporting Format	Example
Integer (width)	Whole number (no decimal places, preceding zeroes not retained).  <i>Width</i> = Maximum number of digits allowed.	Int (3)  Valid: 2, 15, 930  Invalid: 4000, -1
Decimal (width, scale)	Decimal number with fixed number of decimal places.  <i>Width</i> = Maximum number of digits including those on both sides of the decimal point, and includes the decimal point.  <i>Scale</i> = Number of decimal places; that is, digits to the right of the decimal point.	Dec (5, 1)  Valid: 100.0, 34.6, 0.3, 0.0  Invalid: 99.75, 256.45



- **Precision** – Precision refers to the number of significant digits provided in the number of decimal places for a fixed decimal number. The EMTS schema will enforce numbers be reported in the proper precision.

## **4.0 Constructing the XML File**

The following section explains how to create an EMTS conformant XML document. It includes advice on best practices for reporting your data as well as how to construct your XML document.

### **4.1 Constructing a Valid XML File from an Excel Template**

For users that do not have the technical capabilities to modify their systems to produce valid XML, EMTS will convert XLS, CSV, or TXT files. EPA provides a standard template for the XLS or TXT data. You can output your data into the XLS template then use these data files as inputs. EMTS will output valid EMTS XML files; however EMTS will not check for business content or valid code numbers until the XML has been submitted.

### **4.2 Is There a Limit on the Size of the Submission File?**

There are no business rules that limit the size of the file during transport through the Exchange Network. However, you are strongly encouraged to submit sell transactions prior to the receiving party submitting their corresponding buy transactions, so you may consider categorizing your submissions into two submission types: all sell transactions and all other transactions. During peak submission periods, which are expected to occur in January and February, a substantially larger number of files are expected to be submitted which may delay EMTS's response time. These files will be placed in the system's queue and processed in a first-come, first-serve order.

If your file contains one or more critical errors, the file will not be processed and you will receive a notification indicating that your submission has failed. You must correct the critical errors and resubmit your file. Therefore, limiting the contents of your file to include a smaller number of transactions is a good practice, likely resulting in smaller feedback reports and fewer submission failures. You can also expect better response times submitting smaller files over the Exchange Network and when downloading your feedback reports.

### **4.3 Schema Validation**

The following section describes the various tools that are available and validation rules you should implement prior to submitting your XML document to EMTS. This includes information on how to validate your XML document, the built-in constraints that the schema will enforce, and the cardinality rules that you should avoid when constructing your data.

### **4.3.1 Validating Your File Prior to Submission**

Before submitting your file to the EMTS dataflow, you should validate your XML file against the EMTS\_Schema\_v3.0 xsd file structure. This will ensure that your file is well-formed and valid. You can do this by using one of several tools found at EPA's <http://tools.epacdxnode.net/>.

EMTS contains few validation business rules regarding the content of the submission; however, data types are constrained. You will receive all business logic checks, including invalid reporting codes used through a feedback report available on the EMTS website once the quality assurance checking process has completed.

### **4.4 Submitting Your File**

All file submissions require the user to have an authorized CDX account and access to the EMTS dataflow. All files must utilize EPA's Exchange Network to transport files. EPA's network of nodes makes it possible for users to exchange data with other exchanges, providing their organizations have nodes. However, not all organizations will have nodes.

Once files are pushed into the data flow, CDX will submit the XML document to the EMTS back-end node. Once the EMTS back-end node accepts the XML file it generates submittal identification information and begins processing the data content within the payload. For more information regarding obtaining and installing a node on your server, please see [www.epa.gov/cdx](http://www.epa.gov/cdx).

### **4.5 Quality Assurance and Receiving Feedback**

After you have submitted your file, you will receive an email with information about your submission. If there were errors in processing the data, you will receive information in a feedback report, which indicates critical errors and potential issues. You are expected to correct the problems with your data content or the XML document structure and resubmit the file. After EMTS processes the payload content, the resulting data can be viewed on the EMTS website. In all cases, you will receive notification when the processing of your data is complete; however during peak load periods, the response time may be slow.

## **5.0 Overview of Major Data Blocks**

The following section contains information on the major groupings of data in the EMTS schema. This section describes the basic XML blocks that are used for reporting the various transaction types: generate, separate, sell, buy, retire, lock and unlock. For each transaction type, a table of data elements including the data type, name of the XML tag name, required indicator, and description is provided. In addition, if a critical check is applied to the data, the description and reference number to the check is provided. You can see the complete list of checks in Appendix B, "QA Checks." If a data element is referenced as a complex type, there will be another table that documents the elements for that complex type.

Supporting implementation documents can be found on the following website: <http://www.exchangenetwork.net/exchanges/air/>. The flow configuration document (FCD), data exchange template (DET), and sample XML documents are available for download on the Exchange Network site.

## 5.1 EMTS Root Elements

The elements under the EMTS root must be included in every submission. These XML elements identify the person who prepared the data along with organization identifiers. If different people within your organization are responsible for different transactions, consider submitting separate submission files for each person responsible for the preparation of the data.

**How these data elements are processed:** The root elements identify the person who has prepared the data, and the date on which the file was created by the user. The identity of the organization can be referenced by the public identifier.

The root elements are reported once in the entire submission file; however, you must report at least one associated transaction (such as a generate transaction). The root elements in the submission file will be stored in the EMTS website in association with each transaction submitted in the file.

**Figure 2: EMTS Root Elements**

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	UserLoginText	Yes	The CDX user login of the party responsible for preparing the submission file.	The user specified in the submission file must be actively registered with CDX and have permission to participate in EMTS.	2000
				The user specified in the submission file must have an active association with the organization for which he is submitting data.	2001
				The user specified in the submission file must be authorized to perform the requested transactions on behalf of the organization.	2002
xsd:date	SubmittalCreationDate	Yes	The date that the submission file was created.	The submission date associated with the submission file may not be a date occurring in the future.	2008

(cont.)

**Figure 2: EMTS Root Elements (cont.)**

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	OrganizationIdentifier	Yes	The public identification number for the organization as designated by OTAQReg.	The organization in the submission file must be registered with EPA and be	2005
				The organization's RIN Holding Account must be active.	2006
xsd:string	SubmittalCommentText	No	Comment provided by the user on submission file.		
complex	<b><i>GenerateTransactionDetail</i></b>	<b>No</b>	Information on the RINs being generated.		
complex	<b><i>SeparateTransactionDetail</i></b>	<b>No</b>	Information on RINs being separated.		
complex	<b><i>SellTransactionDetail</i></b>	<b>No</b>	Information on RINs being sold.		
complex	<b><i>BuyTransactionDetail</i></b>	<b>No</b>	Information on RINs being bought.		
complex	<b><i>RetireTransactionDetail</i></b>	<b>No</b>	Information on RINs being retired.		
complex	<b><i>LockTransactionDetail</i></b>	<b>No</b>	Information on RINs being locked.		
complex	<b><i>UnlockTransactionDetail</i></b>	<b>No</b>	Information on RINs being unlocked.		

## 5.2 Generating RINs

The complex type ***GenerateTransactionDetail*** is used to report RINs that have been generated as a result of fuel production. This transaction type requires basic information regarding the production of the fuel, the feedstock used, the QAP service type code, and the co-products that were created from the process. For each generate transaction, you must report at least one feedstock.

**How these data elements are processed:** All data elements that are identified as required must be reported. The fuel, feedstock, and process that you report to EMTS must be one of the fuels, feedstocks, and processes you registered for your organization in the OTAQReg Fuels Programs Registration system. If you report an unregistered code, your submission file will not pass critical QA checks and your file will fail to be processed. In some cases, based on fuel reported and process identified, you will need to report denaturant volume in addition to the batch volume. The equivalence value that you report must also be applicable for the fuel type, process, and biomass indication for feedstock used.

By default, it is assumed that your organization is the producer of the renewable fuel. You need only report the number of the facility where the fuel was produced and the unique identification of the batch number for the fuel in the complex type ***GenerateOriginatingSourceDetail***. If, however, you are an importer and the fuel has been produced at a foreign facility, you will need to identify both the organization identifier and the facility identifier of the foreign producer. These identifiers are required to be provided on records by the foreign producer.

Report the feedstock used in the production of the fuel using the ***FeedstockDetail*** complex type. You must report at least one feedstock, including the volume and unit of measure. In addition, you must affirm that the feedstock meets the definition of renewable biomass. If any co-products result from the process, you must report the co-product code in the ***CoProductDetail*** complex type.

If you need to provide supporting information regarding the generation, such as document identifiers or notes, use the ***GenerateSupportingDocumentDetail*** complex type. Use this complex type to create user-defined information by providing the type of document that contains the information and an identification number or code for the document.

Figures 3, 4, 5, and 6 below show the data elements for ***GenerateTransactionDetail***, ***GenerateOriginatingSourceDetail***, ***FeedstockDetail***, and ***CoProductDetail***.

**Figure 3: Data Elements for *GenerateTransactionDetail***

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:positiveInteger	RINQuantity	Yes	The total number of RINs specified in the transaction.	RIN Quantity must equal the product of Batch Volume and Equivalence Value.	3022
xsd:positiveInteger	BatchVolume	Yes	The volume of renewable fuel associated with a batch number designated by the producing facility.	RIN Quantity must equal the product of Batch Volume and Equivalence Value.	3022
xsd:string	FuelCode	Yes	The renewable fuel code for the RINs being separated as defined in Part M Section 80.1426.	The fuel code reported must be registered with EPA.	3032
				The fuel code reported in the production of fuel must be a valid code that is recognized by EPA.	3034
				The fuel code reported must be compatible with the fuel category used in the production of fuel.	3040

(cont.)

**Figure 3: Data Elements for *GenerateTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
				The fuel code and fuel category reported must be compatible with the process used in the production of fuel.	3041
xsd:string	FuelCategoryCode	Yes	The type of fuel that has been produced.	If "Ethanol" or "Cellulosic Ethanol" RINs are reported in the generate transaction, then denaturant volume must be reported.	3013
				The fuel category code reported in the production of fuel must be a valid code that is recognized by EPA.	3033
xsd:date	ProductionDate	Yes	The date the renewable fuel was produced as designated by the producing facility.	The production date must not occur after the date specified in submittal data.	3011

(cont.)



**Figure 3: Data Elements for *GenerateTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:date	ProductionDate	Yes	The date the renewable fuel was produced as designated by the producing facility.	The production date must not occur after the date specified in submittal data.	3011
				The production date of the fuel must fall within the RIN Year range defined by the RIN Years Allowed parameter.	3028
				Production date must be within the last five business days per 40 CFR 80.1452(b).	3055
xsd:string	ProcessCode	Yes	A code that identifies the process used for producing the renewable fuel.	The process code reported in the production of fuel must be registered with EPA.	3007
				The process code reported in the production of fuel must be a valid code that is recognized by EPA.	3024

(cont.)

**Figure 3: Data Elements for *GenerateTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
Xsd:string	QAPServiceTypeCode	Yes	A code that identifies the level of QAP service for the RINs in the transaction.	QAP Service Type Code must be a valid code that is recognized by EPA.	3064
xsd:positiveInteger	DenaturantVolume	No	The volume of non-renewable fuel added to a volume of ethanol to create the BatchVolume for a given Batch Number of renewable fuel.	If denaturant volume is reported, then "Ethanol" or "Cellulosic Ethanol" must be reported.	3014
				When denaturant gallons are reported for ethanol fuel, the amount specified cannot exceed two percent of the total volume of fuel produced.	3016
xsd:decimal	EquivalenceValue	No	A multiplier applied to Batch Volume to determine the number of RINs that will be generated per gallon of renewable fuel.	The equivalence value reported may not exceed the specified value for the fuel type produced.	3026

(cont.)

**Figure 3: Data Elements for *GenerateTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	ImportFacilityIdentifier	No	The facility identifier, as registered in OTAQReg, of the plant from which the fuel was imported.	If the generate organization differs from the submitting organization then the Import Facility Identifier is required.	3047
				If the import facility is provided, it must be registered with the EPA and active.	3048
				ImportFacilityIdentifier not allowed if not importing fuel.	3049
				If the submitting organization is only a renewable fuel importer, then they must provide an Import Facility Identifier.	3050
				If the Import Facility Identifier is populated, then the submitting organization must be a renewable fuel importer.	3051
				The import facility number specified must be unique for the organization.	3053

(cont.)

**Figure 3: Data Elements for *GenerateTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	TransactionDetailCommentText	No	Comment provided by the user on the transaction.		
complex	<b><i>GenerateSupportingDocumentDetail</i></b>	No	Information for the industry user to create user defined data to report supporting document identifiers.		
complex	<b><i>GenerateOriginatingSourceDetail</i></b>	Yes	Information on the original renewable fuel production.		
complex	<b><i>FeedstockDetail</i></b>	Yes	Information on the types of feedstock used to produce fuel.		
complex	<b><i>CoProductDetail</i></b>	No	Information on the one or more co-products that result from the renewable fuel production process.		

(cont.)

**Figure 4: Data Elements for *GenerateOriginatingSourceDetail***

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	GenerateOrganizationIdentifier	No	The organization identifier, as registered in OTAQReg, for the organization that produced the fuel.	If the generate organization is different than the submitting organization identifier, then the organization must be an importer.	3000
				If the generate organization is provided, then it must be registered with EPA and be active.	3001
				If the generate organization differs from the submitting organization then the generating organization must be a Foreign Producer.	3045
xsd:string	GenerateFacilityIdentifier	Yes	The facility identifier, as registered in OTAQReg, for the facility that produced the fuel.	For generate transactions, the generate facility identifier must be provided.	3002
				The generate facility specified in the submission file must be registered with EPA and be active.	3003

(cont.)

**Figure 4: Data Elements for *GenerateOriginatingSourceDetail* (cont.)**

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
				If generate organization is provided, then generate facility must be actively associated with the generate organization.	3004
				If generate organization is not provided, then the generate facility must be actively associated with the submitting organization.	3005
				The generate facility number specified must be unique for the organization.	3052
xsd:string	BatchNumberText	Yes	The batch number for the renewable fuel as designated by the producing facility.	Batch number must be provided.	3018
				Batch number must be unique for an organization, facility, and RIN year.	3019

(cont.)

**Figure 5: Data Elements for *FeedstockDetail***

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	FeedstockCode	Yes	A code that identifies the feedstock used to produce the renewable fuel associated with the batch number.	The feedstock reported in the production of fuel must be registered with EPA.	3008
				The feedstock code reported in the production of fuel must be a valid code that is recognized by EPA.	3023
				The feedstock reported must be compatible with the fuel code, fuel category, and process used in the production of fuel.	3042
xsd:boolean	RenewableBiomassIndicator	Yes	An indicator whether the feedstock used qualifies as renewable biomass.	If RINs are generated (RIN Quantity greater than or equal to "1"), then at least one of the specified feedstocks must be indicated as "Renewable Biomass."	3030

(cont.)

**Figure 5: Data Elements for *FeedstockDetail* (cont.)**

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:decimal	FeedstockQuantity	Yes	Total quantity of feedstock used in production of the fuel.		
xsd:string	FeedstockMeasure	Yes	The unit of measure for the feedstock volume.	The feedstock measure code reported in the production of fuel must be a valid code that is recognized by EPA.	3027

**Figure 6-6: Data Elements for *CoProductDetail***

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	CoProductCode	No	A code that identifies the co-product created from the renewable fuel process.	The co-product code reported in the production of fuel must be a valid code that is recognized by EPA.	3025

### 5.3 Separating RINs

To identify that RINs have been separated from the fuel, you will report this information using the *SeparateTransactionDetail* complex type.

**How these data elements are processed:** Separating RINs requires that you identify the number of RINs being separated and the volume of fuel from which the RINs are being separated. The preferred method to separate a quantity of RINs from any fuel is to specify the RINQuantity, batch volume, QAP service type code, fuel code, and the year in which the fuel was produced. By default, EMTS will find the oldest batch of



assigned fuel in your inventory and separate the RINs. This ensures that you are separating, on a first-in, first-out (FIFO) basis, the earliest RINs that you own as defined by production date.

If you as a party have been delegated to perform the separate transaction by a small blender (a blender that blends less than 125,000 gallons per year), then you must report both the name and public identifier of the small blender in the ***BlenderOrganizationIdentifier*** and ***BlenderOrganizationName*** data elements.

If you need to provide supporting information regarding the separation, such as document identifiers or notes, use the ***SeparateSupportingDocumentDetail*** complex type. Use this complex type to create user-defined information by providing the type of document that contains the information and an identification number or code for the document. For example, if you wish to report an invoice number, place "invoice" as the text for ***SupportingDocumentText*** and the invoice number for ***SupportingDocumentNumber***.

If you wish to identify a specific batch of fuel to be separated, you can do so by using the ***SeparateOriginatingSourceDetail*** complex type to identify the facility and batch number. EMTS will try to match the specific batch in your RIN Holding Account; however, if you no longer own these RINs or the batch cannot be found, the transaction will fail.

Figure 7 shows the data elements for ***SeparateTransactionDetail***.

**Figure 7: Data Elements for *SeparateTransactionDetail***

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:positiveInteger	RINQuantity	Yes	The total number of RINs specified in the transaction.	The organization must have enough available RINs in its holding account to complete the transaction.	5900
				For assigned RINs that are being separated from a volume of fuel, the ratio of RINs to fuel must be greater than "0" but less than "2.5."	5032
xsd:decimal	BatchVolume	Yes	The volume of renewable fuel for which RINs are being separated.	For assigned RINs that are being separated from a volume of fuel, the ratio of RINs to fuel must be greater than "0" but less than "2.5."	5032
xsd:string	FuelCode	Yes	The renewable fuel code for the RINs being separated as defined in Part M Section 80.1426.	The fuel code reported must be a valid code that is recognized by EPA.	5024

(cont.)

**Figure 7: Data Elements for *SeparateTransactionDetail* (cont.)**

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	QAPServiceTypeCode	Yes	A code that identifies the level of QAP service for the RINs in the transaction.	QAP Service Type Code must be a valid code that is recognized by EPA.	5064
xsd:gYear	RINYear	Yes	The RIN year is the year in which the fuel is produced.	The RIN year cannot be in the future.	5019
				The requested RIN Year must fall within the RIN Year range defined by the RIN Years Allowed parameter.	5028
xsd:string	SeparateReasonCode	Yes	This code identifies the reason for a separate transaction.	The allowable reason code reported by an organization when separating RINS are dependent on their business activities as registered with EPA.	5035
				The reason code reported must be a valid code that is recognized by EPA.	5037

(cont.)

**Figure 7: Data Elements for *SeparateTransactionDetail* (cont.)**

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
				If a Blender Organization ID or Blender Name is reported then separate reason "Upward Delegation" must also be reported.	5040
				If the organization specifies "Delayed RIN Separate" as the reason code, then the fuel code may not be Renewable Fuel (D = 6).	5046
xsd:date	TransactionDate	Yes	The date of the RIN transaction.	The Transaction Date must be within the last 10 business days.	5055
xsd:string	BlenderOrganizationIdentifier	No	The public identification number for the blending organization as designated by OTAQReg.	The blender organization name and blender organization identifier must be specified when identifying "Upstream Delegation for Blending" as the separation reason.	5033

(cont.)

**Figure 7: Data Elements for *SeparateTransactionDetail* (cont.)**

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
				If a blender organization is provided, then it must be registered with EPA and be active.	5034
				If a Blender organization is specified then the organization must have a business activity of small blender.	5036
xsd:string	BlenderOrganizationName	No	Name of the organization that is blending the fuel.	The blender organization name and blender organization identifier must be specified when identifying "Upstream Delegation for Blending" as the separation reason.	5033
xsd:string	TransactionDetailCommentText	No	Comment provided by the user on the transaction.		

(cont.)

**Figure 7: Data Elements for *SeparateTransactionDetail* (cont.)**

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
complex	<b><i>SeparateSupportingDocumentDetail</i></b>	No	Information for the industry user to create user defined data to report supporting document identifiers.		
complex	<b><i>SeparateOriginatingSourceDetail</i></b>	No	Information on the original renewable fuel production.		

#### 5.4 Selling RINs

The complex type ***SellTransactionDetail*** is used to report RINs that are being traded to another organization as a result of a sell transaction. This transaction type requires basic information regarding the quantity of RINs, QAP service type code, fuel code, and year in which the fuel was produced.

**How these data elements are processed:** Selling RINs requires that you identify the number of RINs being sold and the trading partner (or buyer) to whom you are selling the RINs. The preferred method to sell a quantity of RINs is to specify the RINQuantity, batch volume (required if the RINs are assigned), fuel code, QAP service type code, assignment code, and the year in which the fuel was produced. EMTS will find the oldest batch of fuel you acquired that matches these characteristics in your inventory. This ensures that you are selling one or more batches, on a first-in, first-out (FIFO) basis, the earliest RINs that you own as defined by production date. You must provide a reason for why you are selling the RINs. In addition, you must provide either the agreed upon price per RIN or the price per gallon established between you and the buyer.

If you need to provide supporting information regarding the sell of RINs, such as document identifiers or notes, use the ***SellSupportingDocumentDetail*** complex type. Use this complex type to create user-defined information by providing the type of document that contains the information and an identification number or code for the document. For example, if you wish to report an invoice number, place "invoice" as the text for ***SupportingDocumentText*** and the invoice number for ***SupportingDocumentNumber***. If you wish to

make this information available to your trading partner, use the ***PublicSupportingDocumentDetail*** complex type.

If you wish to identify a specific batch of fuel to be sold, you can do so by using the ***SellOriginatingSourceDetail*** complex type to identify the facility and batch number. EMTS will try to match the specific batch in your RIN Holding Account; however, if you no longer own these RINs or the batch cannot be found, the transaction will fail.

Figure 8 shows the data elements for ***SellTransactionDetail***.

**Figure 8: Data Elements for *SellTransactionDetail***

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	TransactionPartnerOrganizationIdentifier	Yes	Identifies the buyer organization for a sell transaction or the selling organization for a buy transaction using the OrganizationIdentifier designated by OTAQReg.	The transaction partner organization must be registered at EPA and be active.	6018
xsd:string	TransactionPartnerOrganizationName	Yes	The name of the organization trading partner.	The transaction partner organization must have enabled business activity that allows a buy.	6022
xsd:positive Integer	RINQuantity	Yes	The total number of RINs specified in the transaction.	The organization must have enough available RINs in its holding account to complete the transaction.	6900
xsd:decimal	BatchVolume	No	The volume of renewable fuel sold in the transaction.	If the assignment code is "1," then batch volume must be specified.	6011

(cont.)

**Figure 8: Data Elements for *SellTransactionDetail* (cont.)**

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
				For assigned RINs that are being sold, the ratio of RINs to fuel must be greater than 0 but less than 2.5.	6032
				Batch Volume must be specified if Gallon Price is specified.	6054
xsd:string	FuelCode	Yes	The renewable fuel code for the RINs being sold as defined in 40 CFR Section 80.1426.	The fuel code reported must be a valid code that is recognized by EPA.	6024
xsd:string	QAPServiceTypeCode	Yes	A code that identifies the level of QAP service for the RINs in the transaction.	QAP Service Type Code must be a valid code that is recognized by EPA.	6064
xsd:string	AssignmentCode	Yes	A code that indicates whether the RIN is transacting as an assigned RIN or a separated RIN.	If the assignment code is "1," then batch volume must be specified.	6011
				The assignment code reported must be a valid code that is recognized by EPA.	6025

(cont.)



**Figure 8: Data Elements for *SellTransactionDetail* (cont.)**

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:gYear	RINYear	Yes	The RIN year is the year in which the fuel is produced.	RIN Year may not be greater than the year associated with the specified Transfer Date.	6019
				The requested RIN Year must fall within the RIN Year range defined by the RIN Years Allowed parameter.	6028
xsd:string	SellReasonCode	Yes	This code identifies the reason for a sell transaction.	The allowable reason code reported by an organization when selling RINS are dependent on their business activities as registered with EPA.	6035
				A "Cancel" trade must match a pending trade.	6041
				"Incorrect Trading Partner" can only be reported for assigned RINs.	6045

(cont.)

**Figure 8: Data Elements for *SellTransactionDetail* (cont.)**

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:decimal	RINPriceAmount	No	Price paid per RIN.	The RIN price or gallon price must be provided.	6036
				The transaction must contain only one price.	6047
xsd:decimal	GallonPriceAmount	No	Price paid per gallon of renewable fuel.	The RIN price or gallon price must be provided.	6036
				The transaction must contain only one price.	6047
xsd:date	TransferDate	No	The date of the RIN transaction.	The transfer date specified may not be in the future.	6020
				Transfer date must be within the last 5 business days per 40 CFR 80.1452(b).	6055
xsd:string	PTDNumber	No	The PTD number associated with the transaction.		

(cont.)

**Figure 8: Data Elements for *SellTransactionDetail* (cont.)**

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	MatchingTransactionIdentifier	No	The EMTS Transaction ID of the pending buy transaction.	If the sell transaction has a matched buy transaction ID, the transaction must be in a pending state.	6016
				If the sell transaction has a matched buy transaction ID, the transaction must match on trade matching criteria.	6017
xsd:string	TransactionDetailCommentText	No	Comment provided by the user on the transaction.	If reason "Standard Trade" or "Cancel" is not provided for a sell transaction then a comment must be provided.	6037
complex	PublicSupportingDocumentDetail	No	Industry user defined data to report supporting document identifiers which are visible to the organization's trading partner.		
complex	<b><i>SellSupportingDocumentDetail</i></b>	No	Information for the industry user to create user defined data to report supporting document identifiers.		
complex	<b><i>SellOriginatingSourceDetail</i></b>	No	Information on the original renewable fuel production.		

## 5.5 Buying RINs

The complex type ***BuyTransactionDetail*** is used to acquire RINs that are being traded from another organization as a result of a sell transaction. This transaction type requires basic information regarding the quantity of RINs, fuel code, and year in which the fuel was produced.

**How these data elements are processed:** Buying RINs requires that you identify the number of RINs being sold and the trading partner (or seller) you are buying RINs from.

One method is to wait for a sell transaction to be sent to you with the specifications for the quantity of RINs, batch volume, fuel code, QAP service type code, assignment code, and the year in which the fuel was produced. You should use these exact specifications when responding to the sell transaction. EMTS will match these specifications to any existing sell transactions that are pending with your trading partner and complete the trade. You may also initiate a buy transaction prior to the seller sending you a notification. If your buy transaction is received by EMTS before the seller has initiated a sell transaction, your request will be queued until a matching sell has been submitted to EMTS by the seller. If the seller does not respond to your buy request within ten business days, the trade will expire. In both cases, a record of this incomplete submission is recorded in EMTS.

You must provide a reason for why you are buying RINs. In addition, you must provide either the agreed upon price per RIN or the price per gallon established between you and the seller.

If you need to provide supporting information regarding the trade, such as document identifiers or notes, use the ***BuySupportingDocumentDetail*** complex type. Use this complex type to create user-defined information by providing the type of document that contains the information and an identification number or code for the document. For example, if you wish to report an invoice number, place "invoice" as the text for ***SupportingDocumentText*** and the invoice number for ***SupportingDocumentNumber***. If you wish to make this information available to your trading partner, use the ***PublicSupportingDocumentDetail*** complex type.

If you wish to identify a specific batch of fuel to be sold, you can do so by using the ***BuyOriginatingSourceDetail*** complex type to identify the facility and batch number. EMTS will try to match the specific batch in the seller's RIN Holding Account; however, if the batch cannot be found, the transaction will fail.

Figure 9 shows the data elements for ***BuyTransactionDetail***.

**Figure 9: Data Elements for *BuyTransactionDetail***

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	TransactionPartnerOrganizationIdentifier	Yes	This identifies the buyer organization for a sell transaction or the selling organization for the buy transaction using either the OrganizationIdentifier designated by OTAQReg.	The transaction partner organization must be registered at EPA and be active.	4018
xsd:string	TransactionPartnerOrganizationName	Yes	The name of the organization trading partner.	The transaction partner organization must have enabled business activity that allows a sell.	4022
xsd:positive Integer	RINQuantity	Yes	The total number of RINs specified in the transaction.		
xsd:decimal	BatchVolume	No	The volume of renewable fuel sold in the transaction.	If the assignment code is "1," then batch volume must be specified.	4011
				For assigned RINs that are being bought, the ratio of RINs to fuel must be greater than 0 but less than 2.5.	4032
				Batch Volume must be specified if Gallon Price is specified.	4054

(cont.)

**Figure 9: Data Elements for *BuyTransactionDetail* (cont.)**

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	FuelCode	Yes	The renewable fuel code for the RINs being sold as defined in 40 CFR Section 80.1426.	Must be a valid code recognized by EPA.	4024
xsd:string	AssignmentCode	Yes	A code that indicates whether the RIN is transacting as an assigned RIN or a separated RIN.	If assignment code is "1," then the batch volume must be specified.	4011
				Must be a valid code recognized by EPA.	4025
xsd:string	QAPServiceTypeCode	Yes	A code that identifies the level of QAP service for the RINs in the transaction.	QAP Service Type Code must be a valid code that is recognized by EPA.	4064
xsd:gYear	RINYear	Yes	The RIN year is the year in which the fuel is produced.	RIN Year may not be greater than the year associated with the specified Transfer date.	4019
				The requested RIN Year must fall within the RIN Year range defined by the RIN Years Allowed parameter.	4028

(cont.)

**Figure 9: Data Elements for *BuyTransactionDetail* (cont.)**

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	BuyReasonCode	Yes	This code identifies the reason for a buy transaction.	The allowable reason code reported by an organization when buying RINS are dependent on their business activities as registered with EPA.	4035
				A cancel trade must match a pending trade.	4041
				"Incorrect Trading Partner" can only be reported for assigned RINs.	4045
xsd:decimal	RINPriceAmount	No	Price paid per RIN.	The RIN price or gallon price must be provided.	4036
				The transaction must contain only one price.	4047
xsd:decimal	GallonPriceAmount	No	Price paid per gallon of renewable fuel.	The RIN price or gallon price must be provided.	4036
				The transaction must contain only one price.	4047

(cont.)

**Figure 9: Data Elements for *BuyTransactionDetail* (cont.)**

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:date	TransferDate	Yes	The date of the RIN transaction.	The date specified may not occur in the future.	4020
				Must be within last 10 business days per 40 CFR 80.1452(b).	4055
xsd:string	PTDNumber	No	The PTD number associated with the transaction.		
xsd:string	MatchingTransactionIdentifier	No	The EMTS Transaction ID of the pending buy transaction.	If the sell transaction has a matched buy transaction ID, the transaction must be in a pending state.	6016
				If the sell transaction has a matched buy transaction ID, the transaction must match on trade matching criteria.	6017
xsd:string	TransactionDetailCommentText	No	Comment provided by the user on the transaction.	If reason "Standard Trade" or "Cancel" is not provided for a buy transaction then a comment must be provided.	4037

(cont.)



**Figure 9: Data Elements for *BuyTransactionDetail* (cont.)**

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
complex	<b><i>PublicSupportingDocumentDetail</i></b>	No	Industry user defined data to report supporting document identifiers which are visible to the organization's trading partner.		
complex	<b><i>BuySupportingDocumentDetail</i></b>	No	Information for the industry user to create user defined data to report supporting document identifiers.		
complex	<b><i>BuyOriginatingSourceDetail</i></b>	No	Information on the original renewable fuel production.		

## 5.6 Retiring RINs

To identify RINs that you wish to retire, in order to meet your RVO, or to record a batch of RINs that are no longer valid due to spillage or other issue, report this information using the ***RetireTransactionDetail*** complex type.

**How these data elements are processed:** Retiring RINs requires that you identify the number of RINs being retired, the fuel code, QAP service type code, assignment code, year in with the fuel was produced, and the compliance year which the RINs are being retired. EMTS will find the oldest batch of fuel in your inventory and transfer ownership of the RINs to an EPA RIN Holding Account. This ensures that you are retiring, on a first-in, first-out (FIFO) basis, the earliest RINs that you own as defined by production date. In addition to the RINs that you identify to retire, you must provide a reason for retirement.

If you are retiring RINs to meet an obligation, you must also provide the level of compliance being met. You may retire RINs to meet an organization's overall obligation, or a specific facility level obligation (refiners only). If you are retiring RINs for a specific facility site, report the public facility identifier for the site.

If you are retiring RINs for non-obligation purposes, do not report the compliance year or compliance level. In both cases, provide a reason for the retirement of the RINs.

If you need to provide supporting information regarding the retire transaction, such as document identifiers or notes, use the ***RetireSupportingDocumentDetail*** complex type. Use this complex type to create user-defined information by providing the type of document that contains the information and an identification number or code for the document. For example, if you wish to report an invoice number, place "invoice" as the text for ***SupportingDocumentText*** and the invoice number for ***SupportingDocumentNumber***.

If you wish to identify a specific batch of fuel to be retired (particularly for spillage or spoilage of fuel batches), you can do so by using the ***RetireOriginatingSourceDetail*** complex type to identify the facility and batch number. EMTS will try to match the specific batch in your RIN Holding Account; however, if you no longer own these RINs, or the batch cannot be found, the transaction will fail.

Figure 10 shows the data elements for ***RetireTransactionDetail***.

**Figure 10: Data Elements for *RetireTransactionDetail***

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:positive Integer	RINQuantity	Yes	The total number of RINs specified in the transaction.	If Batch Volume is provided, then the ratio of RINs to fuel must be greater than "0" but less than "2.5."	7032
				The organization must have enough available RINs in its holding account to complete the transaction.	7900

(cont.)

**Figure 10: Data Elements for *RetireTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:decimal	BatchVolume	No	The volume of renewable fuel, if any, associated with the RINs that are being retired.	If reason code "Reportable Spill," "Contaminated or Spoiled Fuel," "Import Volume Correction," "Renewable Fuel Used in a Boiler or an Ocean-Going Vessel," or "Volume error correction" is provided for a retire transaction then Batch Volume must also be provided.	7040
xsd:string	FuelCode	Yes	The renewable fuel code for the RINs being retired as defined in 40 CFR Section 80.1426.	Must be a valid code recognized by EPA.	7024
xsd:string	QAPServiceTypeCode	Yes	A code that identifies the level of QAP service for the RINs in the transaction.	QAP Service Type Code must be a valid code that is recognized by EPA.	7064
xsd:string	AssignmentCode	Yes	Indicates whether the RIN is transacting as an assigned RIN or a separated RIN.	The assignment code reported must be a valid code recognized by EPA.	7025

(cont.)

**Figure 10: Data Elements for *RetireTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:gYear	RINYear	Yes	The RIN year is the year in which the fuel is produced.	Must fall within RIN Year range as defined by RIN Years Allowed parameter.	7028
				May only equal the Compliance Year or one year prior. Check executed only if reason code is "Demonstrate Annual Compliance."	7041

(cont.)

**Figure 10: Data Elements for *RetireTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	RetireReasonCode	Yes	This code identifies the reason for a retire transaction.	Allowable codes when retiring RINs are dependent on an organization's business activities registered with EPA.	7035
				Must be a valid code recognized by EPA.	7039
				If an organization retires for obligation, it must be registered for a compliance level code of 20 or 50.	7045
				The "Delayed RIN Retire" reason code may only be used with Separated Renewable Fuel (D = 6) RINs.	7046
				The "Remedial action as specified by EPA" reason may only be used 5 times per calendar year.	7057

(cont.)

**Figure 10: Data Elements for *RetireTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:date	TransactionDate	Yes	The date of the RIN transaction.	Must be within the last 5 business days.	7055
				The “Remedial action as specified by EPA” reason code 110 may only be used 5 times per calendar year.	7056
xsd:gYear	ComplianceYear	No	The compliance year for which the transaction is applied.	Required if the reason code "Demonstrate Annual Compliance" is reported.	7016
				If submittal date is on/between Apr 1 and Dec 31, the compliance year must be the current year. If submittal date is on/between Jan 1 and Feb 28, the compliance year must be the previous year. <sup>1</sup>	7017

(cont.)

**Figure 10: Data Elements for *RetireTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	ComplianceLevelCode	No	The compliance basis for the submitting organization: Facility, Aggregated Importer, Aggregated Refiner, Aggregated Exporter, Non-Obligated Party.	If the code is "Refinery by Refinery," the facility identifier must be reported.	7021
				Must be a valid code recognized by EPA.	7042
				The reported code when retiring RINs is dependent on an organization's business activities that are registered with EPA.	7034
				A compliance level code must be provided when retiring for compliance.	7047

(cont.)

**Figure 10: Data Elements for *RetireTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	ComplianceFacilityIdentifier	No	The facility identifier, as registered in OTAQReg, for the facility that has a compliance obligation.	If reported, then the compliance level code must be "Facility Level."	7022
				If reported, an active facility identifier must be registered at EPA.	7023
xsd:string	TransactionDetailComment	No	Comment provided by the user on the transaction.	Required for reason codes: "Reportable Spill" "Contaminated or Spoiled Fuel" "Import Volume Correction" "Invalid RINs" "Volume error correction" "Enforcement Obligation" "Remedial action as specified by EPA" or "Remedial Action – Retire for Compliance"	7037

(cont.)



**Figure 10: Data Elements for *RetireTransactionDetail* (cont.)**

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
complex	<b><i>RetireSupportingDocumentDetail</i></b>	No	Information for the industry user to create user defined data to report supporting document identifiers.		
complex	<b><i>RetireOriginatingSourceDetail</i></b>	No	Information on the original renewable fuel production.		

<sup>1</sup> No RINs may be retired for compliance during the month of March.

## **6.0 What Is the FIFO Process for Finding RINs?**

When you identify a quantity of RINs that you wish to sell, separate, or retire, EMTS will find the closest match of available RINs in your holding account for the specified fuel, RIN year, and assignment code. From these RINs, EMTS will select the oldest batch of RINs based on the fuel production date. If the number of RINs that you have specified in your transaction is smaller than the oldest batch EMTS finds in your account, then that batch will be split into two smaller batches, one of which will be used for the transaction. The batch not used in the transaction will remain in your RIN Holding Account with all the characteristics of the original batch. As a consequence of this action, the number of RIN batches in your account may grow as larger batches split into several smaller batches.

Alternatively, if the quantity requested is larger than one or more of the batches in your account, EMTS will sum as many of the oldest batches together to reach the quantity desired.

If you specify an exact batch of RINs by reporting the originating source of the fuel (organization identifier, facility identifier, and batch number), then EMTS will not use the first-in, first-out method, but look for the specific batch.

## **7.0 How Do I Cancel a Buy or Sell Transaction?**

EMTS has the capability to allow parties to cancel initiated buy and sell transactions if any party deems it appropriate to cancel the transaction(s). A user may cancel transactions they have initiated either through the EMTS website, or they can submit XML files through the node to cancel the transactions. Cancel transactions must be identical (with the exception of the reason code) to the original transaction they are intended to cancel. A cancel transaction must be submitted as a single transaction in a submission file. If a cancel transaction is submitted in an XML file with other transactions (including other cancel transactions), then the entire submission will fail.

## Appendix A: Glossary

### EMTS Glossary

Title	Definition
Agent	An agent acts on behalf of a company or facility. An agent has one user account and can be associated with one or more companies or facilities.
Assigned RIN	A RIN attached to a gallon of renewable fuel that can only be transferred along with a volume of fuel.
Asynchronous	Communication between two parties or systems in which data can be transmitted intermittently rather than in a steady stream.
Audit Trail	The set of data that has been stored in EMTS providing historical details about specific actions.
Authentication	The process to confirm the identity of the user.
Authorization	The process to verify a user's permission to perform some functionality.
Batch	A volume of renewable fuel.
Batch RIN	A RIN number that represents a specific batch of renewable fuel produced or imported.
Blender	Party who blends renewable fuel into gasoline or diesel fuel at or below the levels that allow the separation of RINs.
Business Activities	The characteristics of a company that determine the type of transactions it can do in EMTS.
CDX Central Data Exchange (CDX)	Central Data Exchange. EPA's gateway for receiving environmental information through the Web. Serves as the EPA node on the Exchange Network.

(cont.)

## EMTS Glossary (cont.)

Title	Definition
Check	A discrete unit of logic used to implement a business rule, or other validation of data.
Company	A business entity with one or more users in EMTS.
Data Exchange Standard	Specification identifying content and format of data that will be exchanged between multiple parties or systems.
Dataflow	Within CDX, the identification of how data moves from one specified location to another specified location.
Deficit Carryover	Deficit of RINs from a previous year RVO that is added to a current year RVO as specified in 40 CFR §80.1407.
Delegation (Upward)	The act by which a party that would normally be responsible for RIN management transfers this responsibility to another party. For instance, a blender may delegate this responsibility to a renewable fuel producer. There is a limit of 125,000 gallons per year that a company can delegate upwards as per 40 CFR §80.1440.
Delegation (User)	The act by which a responsible corporate officer of a regulated party authorizes another party to perform transactions on the regulated party's behalf.
EPA Moderated Transaction System (EMTS)	EPA's centralized messaging, screening, and transaction system that moderates RIN transactions.
Facility	An actual or virtual location where renewable fuel is produced or imported.
Fuel Category	The code that identifies the type of fuel for which an organization is generating RINs.
Fuel (D Code)	The code that identifies the category of renewable fuel. There are five different fuel types: Cellulosic Biofuel D = 3, Biomass-based Diesel D = 4, Advanced Biofuel D = 5, Renewable Fuel D = 6 and Cellulosic Diesel D = 7.

(cont.)

## EMTS Glossary (cont.)

Title	Definition
Gallon-RIN	A RIN that represents one gallon of renewable fuel.
Generate Transaction	A transaction that creates a batch RIN. RINs may only be generated when a batch of renewable fuel is produced or imported.
Importer	An entity that imports transportation fuel.
Industry User	An EMTS user represents a regulated party.
Invalid RIN	A RIN described in 40 CFR §80.1431(a).
Logging	Functionality of a software system that stores information on the system for auditing and tracking.
Message	A communication between a registered party and EMTS using EPA's exchange network. It includes all the data needed to process a transaction.
Node	A web server that facilitates the interface between database systems and the Exchange Network. It is a registered party's "point of presence" on the Exchange Network. Occasionally referred to as "network node" or "Exchange Network Node."
Node Client	The software program that provides integration with the Exchange Network Directory Service (ENDS). Within the node client, the user selects a dataflow, enters the dataflow, enters authentication information, and then uses the Exchange Network and CDX services.
Notification	The communication that is returned by EMTS to the sender or receiver of a transaction. Notifications may occur before the message is evaluated in any way other than format checks.
Obligated Party	A party which is subject to a RVO(s) and produces gasoline or diesel, or imports gasoline or diesel as per 40 CFR §80.1406.
Permissions	The ability to perform certain actions within EMTS.

(cont.)

## EMTS Glossary (cont.)

Title	Definition
Quality Assurance Program (QAP)	A voluntary program that improves the efficiency and effectiveness of the RFS program by providing a structured way to assure the valid generation of RINs.
QAP Provider	The organization that provides a level of quality assurance for the RIN owner.
QAP Service Type	The service level of QAP for RINs involved in a transaction. Q-RINs have been reviewed by a QAP Provider in accordance with §80.1469(c). If RINs are not verified, then they are categorized as Unverified
Refiner	A company who refines gasoline or diesel fuel.
Registered Party	Any user of EMTS who has gained access through the registration process with EPA.
RFS Regulated Party	Any party that takes ownership of a RIN.
Renewable Fuel	Transportation, heating oil, or jet fuel that is used to replace or reduce the quantity of fossil fuel present in a fuel mixture used to operate a motor vehicle, and which meets the definition in 40 CFR §80.1401.
Renewable Fuel Exporter	A party that exports renewable fuel and therefore has an RVO as per 40 CFR §80.1430
Renewable Fuel Producer	A party that produces renewable fuel.
Renewable Fuel Standard (RFS)	The rule which sets the percentage of fuel produced which must be renewable, for parties that produce gasoline or diesel, or import gasoline or diesel.
Renewable Identification Number (RIN)	An identifier that uniquely identifies a gallon of renewable fuel, generated by a renewable fuel producer or importer. RINs are assigned to batches of renewable fuel and are transferred to other regulated parties.

(cont.)

## EMTS Glossary (cont.)

Title	Definition
Renewable Volume Obligation (RVO)	The volume of renewable fuel, represented by RINs, that an obligated party must obtain to be in compliance with the RFS.
Retire Transaction	A transaction where a regulated party removes a RIN from trading in EMTS.
RIN Account	An account in EMTS used to store RINs.
RIN Assignment Code	A code that identifies whether or not a RIN is assigned to a gallon of renewable fuel.
RIN Block	A group of sequential RINs identified by a start number and end number. Larger RIN blocks can be split into smaller blocks, each block being contiguous and sequential. RIN blocks cannot contain duplicate RINs.
RIN Credit	Credits that are transacted between renewable fuel producers to refiners, importers exporters, and other obligated parties. RIN credits are identified by unique identification numbers (RINs).
RIN Generation	See Generate Transaction.
RIN Owner	An owner of either assigned and/or separated RINs.
Role	A set of permissions for functions that a person is allowed to perform. A role is assigned to a user (person).
Separate Transaction	A transaction that terminates the assignment of the RIN to a volume of renewable fuel. The resulting RINs are thereafter "separated."
Separated RIN	A RIN which has been separated from a gallon of renewable fuel. RINs may only be separated if a party has met the requirements in §80.1429. A separated RIN can be transferred without an associated volume of fuel.
Small Refiner	A refiner that processes <75,000 bpd crude, or who has <1500 employees and processes <155,000 bpd crude.

(cont.)

## EMTS Glossary (cont.)

Title	Definition
Splash Blending	The act of transferring and blending fuel simultaneously. Either party involved in the transfer can separate the RINs if the requirements in §80.1429 are met. However, both parties must agree on who will separate the RINs.
Stage	The stage of a transaction defines where in the process of data exchange a particular message or evaluation occurs. A stage ends and a new stage begins when a message has been successfully transmitted, queued, checked, processed, routed, and finalized.
Submission	Sending an XML file to EMTS, for the purposes of completing a transaction. "Sending" can potentially occur via a node, a node client, or a web form that takes inputted data and creates an XML file.
Submission Date	The date an XML file is sent to EMTS, for the purpose of completing a transaction.
Trade	A two-part transaction, consisting of a sell transaction initiated by one party and a buy transaction initiated by another party.
Transaction	A transaction describes an operation on a batch RIN or gallon-RIN. A transaction comprises a series of actions related to a specific process. Each transaction is processed in stages and results in the return of a message to the sending party identifying subsequent data on the transaction.
Transaction Date	The date on which a transaction occurs outside of EMTS. This is the date recorded on the Product Transfer Document (PTD).
Transaction Instructions	A document made available to EMTS users that identifies procedures needed to ensure adherence with the data exchange standard.
Transaction Log	The history of all of transactions which have been processed by EMTS.
Transfer	The process of deducting RINs from one RIN account and adding the same RINs to a different RIN account.
User	A person who interacts with EMTS. A person authorized to use EMTS.

(cont.)



## EMTS Glossary (cont.)

Title	Definition
XML	A markup language for documents containing structured information. The XML specifications define a standard way to add markup to documents. Its primary purpose is to facilitate the sharing of structured data across different information systems, particularly over the internet.
XML Document	An XML document is a file containing data organized into a structured document. An XML document is considered "well-formed" if it conforms to all XML syntax rules. An XML document is considered valid if it conforms to all the semantic rules defined by an associated XML schema. An XML document cannot be processed if it is not well-formed. XML documents have the extension .xml.
XML Schema	An XML schema describes the structure of an XML document. An XML schema defines the set of rules to which the XML document must conform in order to be considered "valid" according to the schema. An instance of an XML schema is an XML document and is a file with the extension .xsd.

## Appendix B: QA Checks

The following table shows the checks that EMTS will apply to all data. Checks are categorized by functional area or "Check Group." The check number indicates the type of transaction for which the check applies.

Checks by transaction type are as follows:

1000 – 1999	XSD Validation
2000 – 2999	Submission File
3000 – 3999	Generate RINs
4000 – 4999	Buy RINs
5000 – 5999	Separate RINs
6000 – 6999	Sell RINs
7000 – 7999	Retire RINs
9000 – 9999	Lock RINs
10000 – 10999	Unlock RINs

### EMTS QA Checks

Number	Name	Check Group	Description
1000	XML Validation	XML Validation	The XML document must adhere to EMTS xsd and be well-formed and valid.
1010	Invalid Code	XML Validation	The XML document must contain valid codes.
1020	No XML File Found	XML Validation	XML document must be in the SUBMISSION_FILE table.
2000	User must be Registered with CDX and Active	Submission	The user specified in the submission file must be actively registered with CDX and have permission to participate in EMTS.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
2001	User is associated with the Submitting Organization and Active	Submission	The user specified in the submission file must have an active association with the organization for which he is submitting data.
2002	User Privileges	Submission	The user specified in the submission file must be authorized to perform the requested transactions on behalf of the organization.
2005	Organization must be Registered with EPA and Active	Submission	The organization in the submission file must be registered with EPA and be active.
2006	Organization RIN Holding Account is Enabled	Submission	The organization's RIN Holding Account must be active.
2008	Submittal Date Within Range	Submission	The submission date associated with the submission file may not be a date occurring in the future.
2009	At least one Transaction per Submission	Submission	There must be at least one transaction in the submission file.
2011	Submitter must be Registered with EPA and Active	Submission	The data submitter must be registered with EPA and be active.
2012	Submitter is associated with the Submitting Organization and Active	Submission	The user specified in the submission file header must be authorized to perform the requested transactions on behalf of the organization.
2013	Organization may not submit multiple files with the same name.	Submission	A given organization may not submit multiple files with the same name in a given calendar year.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
2014	Organization must specify a single valid RIN year for submission.	Submission	An organization must specify a single valid RIN year for a submission.
3000	Generate Organization differs from Organization	Generate	If the generate organization is different than the submitting organization identifier or RINPin, then the organization must be a renewable fuel importer.
3001	Generate Organization must be Registered with EPA and Active	Generate	If the generate organization is provided, then it must be registered with EPA and be active.
3002	Generate Facility must be provided	Generate	For generate transactions, the generate facility identifier must be provided.
3004	Generate Facility Association with Generate Organization	Generate	If generate organization is provided, then generate facility must be actively associated with the generate organization.
3005	Generate Facility Association with Organization	Generate	If generate organization is not provided, then the generate facility must be actively associated with the submitting organization.
3010	CoProduct Code Matches Registration	Generate	If the co-product is reported for a fuel, it must be registered with EPA.
3011	Production Date within Range	Generate	The production date must not occur after the date specified in submittal data.
3012	Organization Permissions	Generate	The transactions that can be reported by an organization are dependent on its active business activities as registered with EPA.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
3013	Ethanol Production	Generate	If "Non-cellulosic Ethanol" or "Cellulosic Ethanol" RINs are reported in the generate transaction, then denaturant volume must be reported.
3014	Denaturant Volume	Generate	If denaturant volume is reported, then "Non-cellulosic Ethanol" or "Cellulosic Ethanol" must be reported.
3016	Denaturant Volume within Allowed Range	Generate	When denaturant gallons are reported for ethanol fuel, the amount specified cannot exceed the percent specified in GLOBAL_PARAMETER.PERCENT_DENATURANT of the total volume of fuel produced.
3018	Batch Number must be Provided	Generate	Batch number must be provided.
3019, 3021	Batch Number must be Unique	Generate	Batch number must be unique for an organization, facility, and RIN year.
3022	RIN Quantity must equal the Product of Equivalence Value and Batch Volume	Generate	If Equivalence Value is reported then RIN Quantity must equal the product of Batch Volume and the allowed Equivalence Value.
3023	Feedstock Code must be valid	Generate	The feedstock code reported in the production of fuel must be a valid code that is recognized by EPA.
3024	Process Code must be valid	Generate	The process code reported in the production of fuel must be a valid code that is recognized by EPA.
3025	CoProduct Code must be valid	Generate	The co-product code reported in the production of fuel must be a valid code that is recognized by EPA.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
3026	Equivalence Value Range	Generate	The equivalence value reported must equal the specified value for the fuel category produced.
3027	Feedstock Measure Code must be valid	Generate	The feedstock measure code reported in the production of fuel must be a valid code that is recognized by EPA.
3030	Renewable Biomass	Generate	If RINs are generated (RIN Quantity greater than or equal to "1"), then all specified feedstocks must be indicated as "Renewable Biomass."
3033	Fuel Category Code must be valid	Generate	The fuel category code reported in the production of fuel must be a valid code that is recognized by EPA.
3034	Fuel Code must be valid	Generate	The fuel code reported in the production of fuel must be a valid code that is recognized by EPA.
3040	Fuel Code Compatible with Fuel Category	Generate	The fuel code reported must be compatible with the fuel category used in the production of fuel.
3041	Fuel Code, Fuel Category Compatible with Process	Generate	The fuel code and fuel category reported must be compatible with the process used in fuel production.
3042	Feedstock Compatible with Fuel Code, Fuel Category and Process	Generate	The feedstock reported must be compatible with the fuel code, fuel category, and process used in the production of fuel.
3043	Foreign Producer Cannot be a Small Blender	Generate	If the generate organization differs from the submitting organization then the generating organization must not be a Small Blender.
3044	Foreign Producer must be Bonded	Generate	If the Submission Organization is a Foreign Producer, they must be bonded.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
3045	Foreign Producer Generate Organization	Generate	If the generate organization differs from the submitting organization then the generating organization must be a Foreign Producer.
3047	Import Facility Required	Generate	If the generate organization differs from the submitting organization then the ImportFacilityId is required.
3048	Import Facility must be Registered with the EPA and active	Generate	If the import facility is provided, it must be registered with the EPA and active
3049	Import Facility not allowed	Generate	Import Facility Identifier not allowed if not importing fuel.
3050	Import Facility Required	Generate	If the submitting organization is only a renewable fuel importer, then they must provide an Import Facility Identifier.
3051	Import Facility Not Allowed	Generate	If the Import Facility Identifier is populated, then the submitting organization must be a renewable fuel importer.
3052	Generate Public Facility Number must be unique	Generate	The generate facility number specified must be unique for the organization.
3053	Import Public Facility Number must be unique	Generate	The import facility number specified must be unique for the organization.
3055	Production Date must be within Allowed Range	Generate	Production date must be within the last 5 business days per 40 CFR 80.1452(b).
3056	Pathways must have same QAP Provider	Generate	Each feedstock must belong to a pathway with the same QAP Provider, or all must have none.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
3064	QAP Service Type Code must be valid	Generate	The QAP Service Type code reported must be a valid code that is recognized by EPA.
3066	Pathways must have same QAP Service Type	Generate	Each feedstock must belong to a pathway with the same QAP Service Type Code, or all must have none.
3067	Fuel Pathway Matches Registration	Generate	The Fuel Category Code, Fuel Code, and Process Code reported in the production of fuel must match a registered fuel pathway.
3069	Feedstock Matches Registration	Generate	The Feedstock Code reported in the production of fuel must be part of a registered fuel pathway.
3070	No Registered Feedstock for Specified Pathway and Facility	Generate	There must be at least one Feedstock registered for the specified Facility, Fuel Code, Fuel Category Code, Process Code, and QAP Service Type Code.
3071	Check for suspended pathway	Generate	The Fuel Category Code, Fuel Code, and Process Code reported in the production of fuel cannot be suspended unless QAP Service Type is 30.
3072	Check for suspended pathway	Generate	The Fuel Category Code, Fuel Code, Process Code and Feedstock reported in the production of fuel cannot be suspended unless QAP Service Type is 30.
3075	QAP Service Type Code is required if QAP is live.	Generate	A QAP Service Type Code is required if the QAP program is live.
3076	QAP service type Code must be 30 if QAP is not live.	Generate	When QAP is not live, QAP Service Type Code must be 30.

(cont.)



### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
3900	Sufficient RINs	Generate	Runs reservation step for generate transaction. Needed for Transaction_Status_Log entry.
4001	Generate Organization must be Registered with EPA and Active	Buy	If the generate organization is provided, then it must be registered with EPA and be active.
4003	Generate Facility must be Registered with EPA	Buy	If the generate facility is provided in the submission file then it must be registered with EPA.
4006	Batch Number	Buy	If a batch number is reported, then both the organization and facility identifiers where the fuel was produced must be reported as well.
4007	Generate Facility	Buy	If a generate facility is reported, then the organization where the fuel was produced must also be reported.
4011	Assignment Code of "1"	Buy	If assignment is "1," then the batch volume must be specified.
4012	Organization Permissions	Buy	The transactions that can be reported by an organization are dependent on its active business activities as registered with EPA.
4013	Organization Identifier on Blocked List	Buy	If you have created a list of organizations for which you do not want to own any fuel, should a transaction include the organization as the originating source, the transaction will automatically fail.
4014	Facility Identifier on Blocked List	Buy	If you have created a list of facilities for which you do not want to own any fuel, should a transaction include the organization as the originating source, the transaction will automatically fail.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
4015	Trade Contains Blocked RINs	Buy	If the buy transaction has a matched sell transaction, the RINs reserved for the Sell cannot have been generated by an organization or facility on the submitting organizations blocked list.
4016	Matched Transaction Must Be a Pending Sell	Buy	If the Buy Transaction has a matched Sell transaction ID, the transaction must be in a pending state.
4017	Matched Transaction ID Must Belong to a Matching Sell	Buy	If the Buy Transaction has a matched Sell transaction ID, the transaction must match on trade matching criteria.
4018	Transaction Partner Organization Registered at EPA and Active	Buy	The transaction partner organization must be registered at EPA and be active.
4019	RIN Year and Transfer Date	Buy	RIN Year may not be greater than the year associated with the specified Transfer Date.
4020	Transfer Date Consistent	Buy	The transfer date specified may not occur in the future.
4021	Matching Trade pending RINs count validation	Buy	The user provided matching trade must have the correct number of pending RINs.
4022	Transaction Partner Organization Must Have Correct Business Activity	Buy	The transaction partner organization must have enabled business activity that allows a sell.
4024	Fuel Code must be valid	Buy	The fuel code reported must be a valid code that is recognized by EPA.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
4028	RIN Year must be valid	Buy	The requested RIN Year must fall within the RIN Year range defined by the RIN_EXPIRATION_YEARS parameter.
4032	RIN Quantity Ratio to Batch Volume	Buy	For assigned RINs that are being bought, the ratio of RINs to fuel must be greater than "0" but less than "2.5."
4034	Reason Code must be valid	Buy	The reason code reported in the production of fuel must be a valid code that is recognized by EPA.
4035	Allowable Reason Code	Buy	The allowable reason code reported by an organization when buying RINs are dependent on their business activities as registered with EPA.
4036	RIN Price or Gallon Price Provided	Buy	The RIN price or gallon price must be provided.
4037	Reason Comment	Buy	If reason "Standard Trade" or "Cancel" is not provided for a buy transaction then a comment must be provided.
4041	Cancel Trade	Buy	A Cancel trade must match a pending trade.
4042	Same Buy and Sell Organization	Buy	The buying organization cannot be the same as the selling organization.
4043	One Cancel per Submission	Buy	If a Cancel transaction is reported then no other transaction may be reported in the submission.
4045	Incorrect Trading Partner	Buy	"Incorrect Trading Partner" can only be reported for assigned RINs.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
4046	Advanced Options "Improper Generation"	Buy	Originating source information (generating organization, generating facility, and batch number) must be specified when the Buy Reason is "Improper Generation".
4047	Only one of RIN Price and Gallon Price is allowed	Buy	The user may not provide both a RIN price and a gallon price.
4052	Public Facility Number must be unique	Buy	The facility number specified must be unique for the organization.
4054	Batch Volume Gallon Price	Buy	Batch Volume must be specified if Gallon Price is specified.
4055	Transfer Date must be within Allowed Range	Buy	The Transfer Date must be within the last n days based on TRANSFER_DATE_DAYS_BACK parameter
4064	QAP Service Type Code must be valid	Buy	The QAP Service Type code reported must be a valid code that is recognized by EPA.
4066	RIN Price or Gallon Price Prohibited	Buy	The RIN price or gallon price must not be provided with selected reason code.
4075	QAP Service Type Code is required when final QAP rule is in effect	Buy	A QAP Service Type Code is required when the final QAP rule is in effect.
4076	QAP Service Type Code must be 30 when final QAP rule is not in effect	Buy	QAP Service Type Code must be 30 when the final QAP rule is not in effect.
4800	Reserve Pending Trade	Buy	The transaction specified by the matching transaction identifier must be available to be reserved.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
4900	Sufficient RINs	Buy	Runs reservation step for generate transaction. Needed for Transaction_Status_Log entry.
5001	Generate Organization must be Registered with EPA and Active	Separate	If the generate organization is provided, then it must be registered with EPA and be active.
5003	Generate Facility must be Registered with EPA	Separate	If the generate facility is provided then it must be registered with EPA.
5006	Batch Number	Separate	If a batch number is reported, then both the organization and facility identifiers where the fuel was produced must also be reported.
5007	Generate Facility	Separate	If a generate facility is reported, then the organization where the fuel was produced must be reported as well.
5012	Organization Permissions	Separate	The transactions that can be reported by an organization are dependent on their active business activities as registered with EPA.
5019	RIN Year and Transaction Date	Separate	RIN Year may not be greater than the year associated with the specified Transaction Date.
5020	Transaction Date Consistent	Separate	The transaction date specified may not occur in the future.
5024	Fuel Code must be valid	Separate	The fuel code reported must be a valid code that is recognized by EPA.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
5028	RIN Year must be valid	Separate	The requested RIN Year must fall within the RIN Year range defined by the RIN_EXPIRATION_YEARS parameter.
5032	RIN Quantity Ratio to Batch Volume	Separate	For assigned RINs that are being separated from a volume of fuel, the ratio of RINs to fuel must be greater than "0" but less than "2.5."
5033	Upstream Delegation for Blending	Separate	The blender organization name and blender organization identifier must be specified when identifying "Upstream Delegation for Blending" as the separation reason.
5034	Blender Organization must be Registered with EPA and Active	Separate	If a blender organization is provided, then it must be registered with EPA and be active.
5035	Allowable Reason Code	Separate	The allowable reason code reported by an organization when separating RINs are dependent on their business activities as registered with EPA.
5036	Blender Organization Business Activity	Separate	If a Blender organization is specified then the organization must have a business activity of small blender.
5037	Reason Code must be valid	Separate	The reason code reported must be a valid code that is recognized by EPA.
5038	Sufficient RINs	Separate	The organization must have enough available RINs in its holding account for the specified Fuel and RIN Year to complete the transaction.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
5039	Small Blender Volume	Separate	RIN separated on behalf of a small blender may not exceed the volume in gallons per calendar year as determined by the Small Blender Maximum Volume parameter.
5040	Blender Organization	Separate	If a Blender Organization Identifier or Blender Name is reported then separate reason "Upward Delegation" must also be reported.
5041	Reason Comment	Separate	If reason "Remedial action as specified by EPA" is provided for a buy transaction then a comment must be provided.
5046	Delayed RIN Separation	Separate	If the organization specifies "Delayed RIN Separate" as the reason code, then the fuel code may not be Renewable Fuel (D = 6).
5052	Public Facility Number must be unique	Separate	The facility number specified must be unique for the organization.
5055	Transaction Date must be within Allowed Range	Separate	The Transaction Date must be within the last n business days based on TRANSACTION_DATE_DAYS_BACK_SEPARATED_RINS parameter
5064	QAP Service Type Code must be valid	Separate	The QAP Service Type code reported must be a valid code that is recognized by EPA.
5075	QAP Service Type Code is required when final QAP rule is in effect	Separate	A QAP Service Type Code is required when the final QAP rule is in effect.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
5076	QAP Service Type Code must be 30 when final QAP rule is not in effect	Separate	QAP Service Type Code must be 30 when the final QAP rule is not in effect.
5900	Sufficient RINs (FIFO)	Separate	The organization must have enough available RINs in its holding account to complete the transaction.
5901	Sufficient RINs (Organization)	Separate	The organization must have enough available RINs from the specified organization in its holding account to complete the transaction.
5902	Sufficient RINs (Facility)	Separate	The organization must have enough available RINs from the specified facility in its holding account to complete the transaction.
5903	Sufficient RINs (Batch)	Separate	The organization must have enough available RINs from the specified batch in its holding account to complete the transaction.
6001	Generate Organization must be Registered with EPA	Sell	If the generate organization is provided, then it must be registered with EPA.
6003	Generate Facility must be Registered with EPA	Sell	If the generate facility is provided, then it must be registered with EPA.
6006	Batch Number	Sell	If a batch number is reported, then both the organization and facility identifiers where the fuel was produced must also be reported.
6007	Generate Facility	Sell	If a generate facility is reported, then the organization where the fuel was produced must be reported as well.

(cont.)



### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
6011	Assignment Code of "1"	Sell	If the assignment is "1," then batch volume must be specified.
6012	Organization Permissions	Sell	The transactions that can be reported by an organization are dependent on its active business activities as registered with EPA.
6016	Matched Transaction Must Be a Pending Buy	Sell	If the Sell Transaction has a matched Buy transaction ID, the transaction must be in a pending state.
6017	Matched Transaction ID Must Belong to a Matching Buy	Sell	If the Sell Transaction has a matched Buy transaction ID, the transaction must match on trade matching criteria.
6018	Transaction Partner Organization Registered at EPA and Active	Sell	The transaction partner organization must be registered at EPA and be active.
6019	RIN Year and Transfer Date	Sell	RIN Year may not be greater than the year associated with the specified Transfer Date.
6020	Transfer Date Consistent	Sell	The transfer date specified may not occur in the future.
6022	Transaction Partner Organization Registered is allowed to buy	Sell	The transaction partner organization must be registered at EPA and be active.
6024	Fuel Code must be valid	Sell	The fuel code reported must be a valid code that is recognized by EPA.
6028	RIN Year must be valid	Sell	The requested RIN Year must fall within the RIN_EXPIRATION_YEARS range defined by the RIN_EXPIRATION_YEARS global parameter.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
6032	RIN Quantity Ratio to Batch Volume	Sell	For assigned RINs that are being sold, the ratio of RINs to fuel must be greater than "0" but less than "2.5."
6034	Reason Code must be valid	Sell	The reason code reported in the production of fuel must be a valid code that is recognized by EPA.
6035	Allowable Reason Code	Sell	The allowable reason code reported by an organization when selling RINs are dependent on their business activities as registered with EPA.
6036	RIN Price or Gallon Price Provided	Sell	The RIN price or gallon price must be provided.
6037	Reason Comment	Sell	If reason "Standard Trade" or "Cancel" is not provided for a sell transaction then a comment must be provided.
6038	Sufficient RINs	Sell	The organization must have enough available RINs in its holding account for the specified Fuel, RIN Year, and Assignment Code to complete the transaction.
6040	Trading Partner Blocked RINs	Sell	One or more of your RIN batches are blocked by your trading partner.
6041	Cancel Trade	Sell	A Cancel trade must match a pending trade.
6042	Same Buy and Sell Organization	Sell	The selling organization cannot be the same as the buying organization.
6043	One Cancel per Submission	Sell	If a Cancel transaction is reported then no other transaction may be reported in the submission.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
6044	Improper Generation	Sell	If a Trade due to "Improper Generation" reason is reported then RINs must be sold to the originating organization of those RINs.
6045	Incorrect Trading Partner	Sell	"Incorrect Trading Partner" can only be reported for assigned RINs.
6046	Advanced Options "Improper Generation"	Sell	Originating source information (generating organization, generating facility, and batch number) must be specified when the Sell Reason is "Improper Generation".
6047	Only one of RIN Price and Gallon Price is allowed	Sell	The user may not provide both a RIN price and a gallon price.
6052	Public Facility Number must be unique	Sell	The facility number specified must be unique for the organization.
6054	Batch Volume Gallon Price	Sell	Batch Volume must be specified if Gallon Price is specified.
6055	Transfer Date must be within Allowed Range	Sell	The Transfer Date must be within the last n days based on TRANSFER_DATE_DAYS_BACK parameter
6064	QAP Service Type Code must be valid	Sell	The QAP Service Type Code reported must be a valid code that is recognized by EPA.
6075	QAP Service Type Code is required when final QAP rule is in effect	Sell	A QAP Service Type Code is required when the final QAP rule is in effect.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
6076	QAP Service Type Code must be 30 when final QAP rule is not in effect	Sell	QAP Service Type Code must be 30 when the final QAP rule is not in effect.
6800	Reserve Pending Trade	Sell	The transaction specified by the matching transaction identifier must be available to be reserved.
6900	Sufficient RINs (FIFO)	Sell	The organization must have enough available RINs in its holding account to complete the transaction.
6901	Sufficient RINs (Organization)	Sell	The organization must have enough available RINs from the specified organization in its holding account to complete the transaction.
6902	Sufficient RINs (Facility)	Sell	The organization must have enough available RINs from the specified facility in its holding account to complete the transaction.
6903	Sufficient RINs (Batch)	Sell	The organization must have enough available RINs from the specified batch in its holding account to complete the transaction.
6904	RIN Price or Gallon Price Prohibited	Sell	The RIN price or gallon price must not be provided with selected reason code.
7001	Generate Organization must be Registered with EPA and Active	Retire	If the generate organization is provided, then it must be registered with EPA and be active.
7003	Generate Facility must be Registered with EPA	Retire	If the generate facility is provided then it must be registered with EPA.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
7006	Batch Number	Retire	If a batch number is reported, then both the organization and facility identifiers where the fuel was produced must also be reported.
7007	Generate Facility	Retire	If a generate facility is reported, then the organization where the fuel was produced must also be reported.
7012	Organization Permissions	Retire	The transactions that can be reported by an organization are dependent on their active business activities as registered with EPA.
7016	Compliance Year	Retire	Compliance year is required if the reason code "Demonstrate Annual Compliance" is reported.
7017	Valid Compliance Year	Retire	If the submittal date is on/between April 1 and December 31, then the compliance year must be the current year. If the submittal date is on/between January 1 and February 28, the compliance year must be the previous year.
7019	RIN Year and Transaction Date	Retire	RIN Year may not be greater than the year associated with the specified Transaction Date.
7020	Transaction Date Consistent	Retire	The transaction date specified may not occur in the future.
7021	Reporting Compliance at the Refinery Level	Retire	If the compliance level code reported is "Refinery by Refinery," the facility identifier must be reported.
7022	Refinery Level Compliance	Retire	If a facility identifier is reported for compliance, then the compliance level code must be "Refinery by Refinery."

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
7023	Compliance Facility Registered at EPA and Active	Retire	If a compliance facility identifier is reported, then the facility identifier must be registered at EPA and be active.
7024	Fuel Code must be valid	Retire	The fuel code reported must be a valid code that is recognized by EPA.
7028	RIN Year must be valid	Retire	The requested RIN Year must fall within the RIN Year range defined by the RIN_EXPIRATION_YEARS parameter
7032	RIN Quantity Ratio to Batch Volume	Retire	If Batch Volume is provided, then the ratio of RINs to fuel must be greater than "0" but less than "2.5."
7034	Allowable Compliance Level Code	Retire	The allowable compliance level code reported by an organization when retiring RINs are dependent on their business activities registered with EPA.
7035	Allowable Reason Code	Retire	The allowable reason code reported by an organization when retiring RINs are dependent on their business activities registered with EPA.
7037	Reason Code Comment	Retire	If reason code 10, 20, 50, 60, 70, 110, 120, 130, 140, or 150 is used in a retire transaction then a comment must be provided.
7038	Sufficient RINs	Retire	The organization must have enough available RINs in its holding account for the specified Fuel, RIN Year, and Assignment Code to complete the transaction.
7039	Reason Code must be valid	Retire	The reason code reported must be a valid code that is recognized by EPA.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
7040	Reason Code Batch Volume	Retire	If reason code "Reportable Spill," "Contaminated or Spoiled Fuel," "Import Volume Correction," "Renewable Fuel Used in a Boiler or an Ocean-Going Vessel," or "Volume error correction" is provided for a retire transaction then Batch Volume must also be provided.
7041	Compliance RIN Year	Retire	RIN Year may only equal the Compliance Year or one year prior to the Compliance Year. This check should only be executed if reason code equals "Demonstrate Annual Compliance."
7042	Compliance Level Code must be valid	Retire	The compliance level code reported must be a valid code that is recognized by EPA.
7043	Retire for Annual Compliance	Retire	If retire for reason code "Demonstrate annual compliance" is reported then the RINs must have an assignment code of "2."
7046	Delayed RIN Retire	Retire	The "Delayed RIN Retire" reason code may only be used with Separated Renewable Fuel (D = 6) RINs.
7047	Compliance Level Code Required	Retire	A compliance level code must be provided when retiring for compliance.
7052	Public Facility Number must be unique	Retire	The facility number specified must be unique for the organization.
7055	Transaction Date must be within Allowed Range	Retire	The Transaction Date must be within the last n days based on TRANSACTION_DATE_DAYS_BACK_RETIRED_RINS parameter

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
7056	Transaction Date must be within Allowed Range when using reason 110	Retire	Reason Code 110 must be used within n days based on the RETIRE_REASON_110_DAYS_BACK parameter.
7057	Reason Code 110 only allowed 5 times	Retire	Reason Code 110 may only be used 5 times based on the RETIRE_REASON_110_USES parameter.
7064	QAP Service Type Code must be valid	Retire	The QAP Service Type Code reported must be a valid code that is recognized by EPA.
7075	QAP Service Type Code is required when final QAP rule is in effect	Retire	A QAP Service Type Code is required when the final QAP rule is in effect.
7076	QAP Service Type Code must be 30 when final QAP rule is not in effect	Retire	QAP Service Type Code must be 30 when the final QAP rule is not in effect.
7077	Compliance Year cannot be in the future	Retire	If retiring for compliance, the Compliance Year cannot be in the future.
7078	Compliance Year cannot be before 2010 if Retiring for Compliance as an Aggregated Exporter	Retire	Compliance Year cannot be before 2010 if Retiring for Compliance as an Aggregated Exporter.
7079	RIN Year cannot be greater than Compliance Year if Retiring for Compliance as an Aggregated Exporter	Retire	RIN Year cannot be greater than Compliance Year if Retiring for Compliance as an Aggregated Exporter.

(cont.)



### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
7900	Sufficient RINs (FIFO)	Retire	The organization must have enough available RINs in its holding account to complete the transaction.
7901	Sufficient RINs (Organization)	Retire	The organization must have enough available RINs from the specified organization in its holding account to complete the transaction.
7902	Sufficient RINs (Facility)	Retire	The organization must have enough available RINs from the specified facility in its holding account to complete the transaction.
7903	Sufficient RINs (Batch)	Retire	The organization must have enough available RINs from the specified batch in its holding account to complete the transaction.
9001	Originate Organization must be Registered with EPA	Lock	If the originate organization is provided then it must be registered with EPA.
9003	Originate Facility must be Registered with EPA	Lock	If the originate facility is provided then it must be registered with EPA.
9006	Batch Number	Lock	If a batch number is reported then both the organization and facility identifiers where the fuel was produced must also be reported.
9007	Originate Facility	Lock	If an originate facility is reported then the organization where the fuel was produced must also be reported.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
9024	Fuel Code must be valid	Lock	The fuel code reported must be a valid code that is recognized by EPA.
9028	RIN Year must be valid	Lock	The requested RIN Year must fall within the RIN Year range defined by the RIN_EXPIRATION_YEARS parameter
9064	QAP Service Type Code must be valid	Lock	The QAP Service Type code reported must be a valid code that is recognized by EPA.
9076	QAP Service Type Code must be 30 when final QAP rule is not in effect	Lock	QAP Service Type Code must be 30 when the final QAP rule is not in effect.
9900	Sufficient RINs (FIFO)	Lock	The organization must have available RINs in its holding account to complete the transaction.
9901	Sufficient RINs (Organization)	Lock	The organization must have available RINs from the specified organization in its holding account to complete the transaction.
9902	Sufficient RINs (Facility)	Lock	The organization must have available RINs from the specified facility in its holding account to complete the transaction.
9903	Sufficient RINs (Batch)	Lock	The organization must have available RINs from the specified batch in its holding account to complete the transaction.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
10001	Originate Organization must be Registered with EPA	Unlock	If the originate organization is provided then it must be registered with EPA.
10003	Originate Facility must be Registered with EPA	Unlock	If the originate facility is provided then it must be registered with EPA.
10006	Batch Number	Unlock	If a batch number is reported then both the organization and facility identifiers where the fuel was produced must also be reported.
10007	Originate Facility	Unlock	If a originate facility is reported then the organization where the fuel was produced must also be reported.
10024	Fuel Code must be valid	Unlock	The fuel code reported must be a valid code that is recognized by EPA.
10028	RIN Year must be valid	Unlock	The requested RIN Year must fall within the RIN Year range defined by the RIN_EXPIRATION_YEARS parameter.
10064	QAP Service Type Code must be valid	Unlock	The QAP Service Type Code reported must be a valid code that is recognized by EPA.
10076	QAP Service Type Code must be 30 when final QAP rule is not in effect	Unlock	QAP Service Type Code must be 30 when the final QAP rule is not in effect.

(cont.)

### EMTS QA Checks (cont.)

Number	Name	Check Group	Description
10900	Sufficient RINs (FIFO)	Unlock	The organization must have RINs in its holding account that match the criteria specified to complete the transaction.
10901	Sufficient RINs (Organization)	Unlock	The organization must have available RINs from the specified organization in its holding account to complete the transaction.
10902	Sufficient RINs (Facility)	Unlock	The organization must have available RINs from the specified facility in its holding account to complete the transaction.
10903	Sufficient RINs (Batch)	Unlock	The organization must have available RINs from the specified batch in its holding account to complete the transaction.

## Appendix C: Business Activities by Transaction Type

The following chart shows the types of transactions allowed based on an organization's business activities. One organization may register for multiple business activities.

Transaction Types	Domestic Renewable Fuel Producer	Renewable Fuel Importer	Non-renewable Fuel Importer	Foreign Renewable Fuel Producer (Bonded)	Foreign Renewable Fuel Producer (Unbonded)	Renewable Fuel Exporter	Refiner	Small Refiner*	RIN Owner	Small Blender**	Quality Assurance Provider
Generate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>							
Separate (Receipt of Renewable Fuel)			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>				
Separate (Blending)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Separate (Designation as Transportation Fuel)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Separate (Upstream Delegation for Blending)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Separate (Export)						<input checked="" type="checkbox"/>					
Separate (Use as Heating Oil or Jet Fuel)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Separate (Use in Non-road Engine or Vehicle)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Separate (Designation as Heating Oil or Jet Fuel)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Trade Assigned RINs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Trade Separated RINs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Retire (Reported Spill)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Retire (Contaminated or Spoiled Fuel)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Retire (Import Volume Correction)		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>							
Retire (Demonstrate Annual Compliance)			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
Retire (Invalid RIN)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Retire (Volume Error Correction)	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>							
Retire (Enforcement Obligation)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Retire (Fuel Used in an Ocean-Going Vessel)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Retire (Renewable fuel used or designated to be used in any application that is not transportation fuel, heating oil, or jet fuel)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
*Less than 155,000 gallons per year and has a small refiner exemption											
**May view information about transactions performed on their behalf.											
	<input checked="" type="checkbox"/>	Yes									
		No									

*[This page intentionally left blank.]*

## Appendix D: Sample Transactions

### D-1 Generate Transaction

Generate transactions allow renewable fuel producers to generate RINs for a newly produced batch of fuel. The characteristics of this new batch of fuel are used to identify the RINs for future transactions. Once EMTS has successfully processed a generate transaction, the submitter can see the new RINs in the organization's RIN Holding Account.

In this example, an ethanol Producer is sending information about a batch of RINs and identifies the feedstock used to produce the fuel.

Objective: **Ethanol Producer** generates 5,000 RINs.

Information to deliver:

- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Process Code – The process code which describes how the renewable fuel was made.
- Production Date – The year of production is the RIN year which can be used by buyers and sellers to specify RINs for a trade.
- Fuel Category – Indicates the type of renewable fuel produced.
- Batch Volume – The total volume in gallons of renewable fuel. For ethanol, batch volume includes both the volume in gallons of un-denatured fuel and the volume in gallons of denaturant.
- Denaturant Volume (for non-cellulosic ethanol and cellulosic ethanol fuel only) – The total volume in gallons of denaturant added to the fuel.
- Equivalence Value – A multiplier directly related to the fuel code.
- RIN Quantity – The total number of RINs being generated in this transaction calculated by multiplying the Batch Volume by the Equivalence Value.

Figure D-1 shows how these data would appear in a generate transaction data block.

**Figure D-1: Generate Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
ProcessCode	10	Grandfathered (Dry Mill, Natural Gas Fired)	Yes	Enter a valid process code.
ProductionDate	2014-01-07		Yes	Enter the date in YYYY-MM-DD format.
FuelCategory	10	Non-cellulosic Ethanol	Yes	Enter a valid fuel type.
BatchVolume	5000		Yes	Enter the volume of fuel in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
DenaturantVolume	238		No	Enter the volume in gallons of denaturant added to the renewable fuel.
EquivalenceValue	1.0		Yes	Enter a valid equivalence value from Section 5 of this document. This is a multiplier directly related to fuel code.
RINQuantity	5000		Yes	Enter the total number of RINs. This must be a whole number.
TransactionDetailComment			No	Provide any additional information regarding this transaction.

### **D-1.1 Reporting the Originating Source**

Every generate transaction requires information regarding the source of the fuel. For each generate transaction, the following are required:

- Generate Organization Identifier – The public identifier of the organization that produced the fuel associated with the RINs being generated.
- Generate Facility Identifier – The public facility identifier for the plant that produced the renewable fuel associated with the RINs being generated.
- Batch Number Text – An internal tracking number assigned by the organization responsible for producing the fuel associated with the RINs being generated.

Figure D-2 shows how the originating source data would appear in a generate transaction.



**Figure D-2: Generate Originating Source Data Elements**

Data Element	Value	Reference	Required	Instructions
GenerateOrganizationIdentifier	1111	Ethanol Producers	Yes	Provide the public organization identifier for the producer of the fuel as registered with EPA.
GenerateFacilityIdentifier	77777	Cornish Plant	Yes	Provide the public facility identifier for the plant that produced the renewable fuel.
BatchNumberText	300		Yes	Enter the batch number associated with the batch at fuel production.

### **D-1.2 Feedstocks**

The generate transaction requires that additional information be provided regarding the kind of feedstocks used to produce the fuel, the volume of each feedstock, and whether those feedstocks are renewable biomass. In this example, two different feedstocks were used and information must be provided for both. For each feedstock, the following are required:

- Feedstock Code – The Feedstock Code categorizes the type of material used to produce the renewable fuel.
- Renewable Biomass Indicator – Enter "true" if the feedstock meets the definition of renewable biomass as per §80.1401.
- Feedstock Volume – The total volume of the feedstock.
- Feedstock Measure Code – The unit of measure for the feedstock volume.

Figure D-3 shows how these data would appear for two feedstocks for a batch of RINs.

**Figure D-3: Feedstock Data Elements**

Data Element	Value	Reference	Required	Instructions
FeedstockCode	10	Starch -- Corn	Yes	Enter a valid feedstock code. Enter as many feedstocks as applicable.
RenewableBiomassIndicator	true	Yes	Yes	Enter "true" if the feedstock qualifies as renewable biomass.
FeedstockVolume	46.6		Yes	Enter the total volume of the feedstock used in production of the fuel.
FeedstockMeasureCode	60	Ton	Yes	Enter a valid unit of measure code.
FeedstockCode	310	Starch – Annual Covercrops	Yes	Enter a valid feedstock code found. Enter as many feedstocks as applicable.
RenewableBiomassIndicator	true	Yes	Yes	Enter "true" if the feedstock qualifies as renewable biomass.
FeedstockVolume	15.5		Yes	Enter the total volume of the feedstock used in production of the fuel.
FeedstockMeasureCode	60	Ton	Yes	Enter a valid unit of measure code.

### D-1.3 Reporting Co-product

If fuel production results in the creation of a co-product, this information must be reported in the generate transaction. For each co-product, provide:

- Co-product Code – Code that categorizes the type of co-product.

Figure D-4 shows how co-product data would appear in a generate transaction.

**Figure D-4: Co-product Data Elements**

Data Element	Value	Reference	Required	Instructions
CoProductCode	10	Wet Distiller Grains	No	Enter a valid co-product code. Enter as many co-products as applicable.

### D-2 Separate Transaction

RINs are separated on a first-in-first-out basis in EMTS, unless additional information on the RIN batch is provided. EMTS searches the organization's RIN holdings for RINs that match the fuel type and assignment code specified and selects the quantity of RINs from the earliest acquired dates available. After EMTS has processed

the separate transaction, the organization's RIN holdings will display an assignment code of "2" or "separated" for these RINs.

In this example, a Refiner is separating 16,000 RINs from 16,000 gallons of fuel.

Objective: **Petroleum Refiner** separates 16,000 assigned RINs.

Required Information:

- RIN Quantity – The total number of RINs being separated in this transaction.
- Batch Volume – The total volume of renewable fuel.
- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Separate Reason Code – Code that explains why the fuel is being separated.
- Transaction Date - The date on which the separate transaction occurred outside of EMTS.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.

Figure D-5 shows how these data would appear in the separate transaction data block.

**Figure D-5: Separate Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
RINQuantity	16000		Yes	Enter the total number of RINs. This must be a whole number.
BatchVolume	16000		Yes	Enter the volume of fuel in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
SeparateReasonCode	10	Receipt of renewable fuel by obligated party	Yes	Enter a valid separate reason code.
TransactionDate	2014-01-01		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the transaction occurred.
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.
TransactionDetailComment			No	Provide any additional information regarding this transaction.

### D-3 Sell Transactions

When a user submits a sell transaction, information on the buying organization must be identified. EMTS will check to make sure that the selling organization has the necessary RINs to complete the requested transaction and will then place these RINs in a "pending" status until it receives the buyer's matching transaction.

In this example, an Ethanol Producer is selling 1,000 gallons of fuel with 1,000 assigned RINs to a Blender.

Objective: **Renewable Fuel Producer** sells 1,000 gallons of fuel and 1,000 RINs

Required Information:

- Trading Partner Organization Identifier – The public identification number for the buying organization obtained through EPA.
- Trading Partner Organization Name – The name of the buying organization.
- RIN Quantity – The total number of RINs being sold in this transaction.
- Batch Volume – The volume of renewable fuel associated with the RINs.
- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Assignment Code – Identifies if the RINs are assigned or separated.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.
- Sell Reason Code – Code that explains why these RINs are being sold.
- Gallon Price Amount – The price at which the RINs and fuel were sold.
- Transfer Date – The date on which the RINs were transferred outside of EMTS.

Figure D-6 shows how these data would appear in the sell transaction data block.

**Figure D-6: Sell Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
TransactionPartnerOrganization Identifier	2222	Big Bob's Blending	Yes	Enter the organization identifier of the buying party. This is the organization number obtained through EPA.
TransactionPartnerOrganization Name	Big Bob's		Yes	Enter the name of the buying party.
RINQuantity	1000		Yes	Enter the total number of RINs. This must be a whole number.
BatchVolume	1000		Yes	Enter volume of fuel in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
AssignmentCode	1	Assigned to Fuel	Yes	Enter "1" if the RINs are assigned and "2" if they are separated.
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.
Sell Reason Code	10	Standard Trade	Yes	Enter a valid sell reason code.
GallonPriceAmount	2.50		Yes	Enter the price per gallon of renewable fuel in USD.
TransferDate	2014-01-15		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the RINs were transferred outside of EMTS.
PTDNumber	8960		No	Enter the PTD number associated with the transaction.
TransactionDetailComment			No	Provide any additional information regarding this transaction.

### **D-3.1 Supporting Document Information**

The user may wish to provide additional documentation numbers associated with the buy or sell transaction. The supporting document data block allows the user to create user-defined document names to report these numbers. In the example below, the user reported an invoice number for the sell.

Figure D-7 shows how data would appear in the supporting document information.

**Figure D-7: Supporting Document Detail**

Data Element	Value	Reference	Required	Instructions
SupportingDocumentText	Invoice		No	Enter the type of document to which the document number applies.
SupportingDocumentNumber	1001		No	Enter the identification number for the supporting document.

#### **D-4 Buy Transactions**

When a user submits a basic buy transaction, EMTS will match key data elements to the corresponding sell transaction. EMTS will match on trading partner information, assignment code, QAP service type, RIN quantity, and fuel type. If these fields do not match, the trade will fail.

In this example, a Blender is buying 1,000 gallons of fuel with 1,000 assigned RINs from a Producer.

Objective: **Renewable Fuel Blender** buys 1,000 gallons of fuel and 1,000 RINs.

Required Information:

- Trading Partner Organization Identifier – The public identification number for the selling organization obtained through EPA.
- Trading Partner Organization Name – The name of the selling organization.
- RIN Quantity – The total number of RINs being sold in this transaction.
- Batch Volume – The total volume of renewable fuel associated with the RINs.
- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Assignment Code – Identifies if the RINs are assigned or separated.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.
- Buy Reason Code – Code that explains why these RINs are being bought.
- Gallon Price Amount – The price at which the RINs and fuel were bought.
- Transfer Date – The date on which the transfer of RINs occurred outside of EMTS.

Figure D-8 shows how these data would appear in the buy transaction data block.

**Figure D-8: Buy Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
TransactionPartnerOrganization Identifier	1111	Ethanol Producers	Yes	Enter the organization identifier of the selling party. This is the organization number obtained through EPA.
TransactionPartnerOrganization Name	Ethanol Producers		Yes	Enter the name of the selling party.
RINQuantity	1000		Yes	Enter the total number of RINs. This must be a whole number.
BatchVolume	1000		Yes	Enter the volume in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
AssignmentCode	1	Assigned to Fuel	Yes	Enter "1" if the RINs are assigned and "2" if they are separated.
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.
BuyReasonCode	10	Standard Trade	Yes	Enter a valid buy reason code.
GallonPriceAmount	2.50		Yes	Enter the price per gallon of renewable fuel in USD.
TransferDate	2014-01-15		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the RINs were transferred outside of EMTS.
PTDNumber	8960		No	Enter the PTD number associated with the transaction.
TransactionDetailComment			No	Provide any additional information regarding this transaction.



## D-5 Retire Transactions

### D-5.1 Retire for Other

Retire transactions must include a reason for the retirement of a RIN batch.

In this example, a Producer is retiring 1,000 RINs because of spillage.

Objective: **Renewable Fuel Producer** retires 1,000 gallons of fuel for spillage.

Required Information:

- RIN Quantity – The total number of RINs being retired in this transaction.
- Batch Volume – The total volume of renewable fuel.
- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Assignment Code – Identifies if the RINs are assigned or separated.
- Transaction Date – The date on which the spill occurred.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.
- Retire Reason Code – Code that explains why the fuel is being retired.

Figure D-9 shows how these data would appear in the retire transaction data block.

**Figure D-9: Retire Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
RINQuantity	1000		Yes	Enter the total number of RINs. This must be a whole number.
Batch Volume	1000		Yes	Enter the volume in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
AssignmentCode	1	Assigned to Fuel	Yes	Enter "1" if the RINs are assigned and "2" if they are separated.
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.
RetireReasonCode	10	Spillage	Yes	Enter a valid retire reason code.
TransactionDate	2014-01-01		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the transaction occurred.
TransactionDetailComment		Spill occurred while fuel was in transit.	No	Provide any additional information regarding this transaction.

A transaction comment is not required for all retire transactions. However, with certain reason codes such as retire for spillage, a comment must be provided explaining the use of that reason code. Additional information about the originating source of the RINs may also be provided, but is not required. To specify the batch, indicate:

- Generate Organization Identifier – The public identifier of the organization that produced the fuel associated with the RINs being sold.
- Generate Facility Identifier – The public facility identifier for the plant that produced the renewable fuel associated with the RINs being sold.
- Batch Number Text – An internal tracking number assigned by the organization responsible for producing the fuel associated with the RINs being sold.

Figure D-10 shows how these data would appear in the originating source information for a batch of RINs.

**Figure D-10: Retire Originating Source Data Elements**

Data Element	Value	Reference	Required	Instructions
GenerateOrganizationIdentifier	1111	Ethanol Producers	Yes	Provide the public organization identifier for the producer of the fuel as registered with EPA.
GenerateFacilityIdentifier	77777	Cornish Plant	No	Provide the public facility identifier for the plant that produced the renewable fuel.
BatchNumber	300		No	Enter the batch number associated with the batch at fuel production.

### **D-5.2 Retire for Compliance, Aggregated Refiner**

To fulfill its Renewable Volume Obligation (RVO) for a particular year, an organization must retire RINs to EPA's RIN Holding Account. The submitter for the organization must indicate the compliance year, the compliance level code, and the reason code for the retire transaction. Upon completion of this transaction, EPA will be the holder of the RINs.

In this example, a Refiner is retiring 1,000 RINs for compliance.

Objective: **Aggregated Refiner** retires 1,000 RINs for compliance.

Required Information:

- RIN Quantity – The total number of RINs being retired in this transaction.
- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Assignment Code – Identifies if the RINs are assigned or separated. RINs must be separated when retiring for compliance.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.
- Retire Reason Code – Code that indicates the RINs are retired for compliance.
- Transaction Date – The date on which the RINs were retired for compliance.
- Compliance Year – The year in which the RINs are being used for compliance.
- Compliance Level Code – The compliance basis for the submitting organization.

Figure D-11 shows how these data would appear in the retire transaction data block.

**Figure D-11: Retire Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
RINQuantity	1000		Yes	Enter the total number of RINs. This must be a whole number.
BatchVolume			No	Enter the volume gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
AssignmentCode	2	Separated	Yes	Enter "1" if the RINs are assigned and "2" if they are separated.
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.
RetireReasonCode	90	Demonstrate annual compliance	Yes	Enter a valid retire reason code.
TransactionDate	2014-01-01		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the transaction occurred.
ComplianceYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RINs are being used for compliance.
ComplianceLevelCode	20	Aggregated refiner	Yes	Enter a valid compliance level code.
ComplianceFacilityIdentifier			No	Provide the public facility identifier of the facility that is retiring RINs for compliance.
TransactionDetailComment			No	Provide any additional information regarding this transaction.

### D-5.3 Retire for Compliance, Facility Level

When an organization wants to report compliance at the facility level, the user must submit a retire transaction indicating a facility level reason code and the facility for which RINs are being retired.

In this example, a Refiner is retiring 1,000 RINs for compliance at the facility level.

Objective: **Petroleum Refiner** retires 1,000 RINs for compliance at the facility level.

#### Required Information:

- RIN Quantity – The total number of RINs being retired in this transaction.
- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Assignment Code – Identifies if the RINs are assigned or separated.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.
- Retire Reason Code – Code that indicates the RINs are being used for compliance.
- Transaction Date – The date on which the RINs were retired for compliance.
- Compliance Year – The year in which the RINs are being used for compliance.
- Compliance Level Code – The compliance basis for the submitting organization.
- Compliance Facility Identifier – The public facility identifier of the facility that is retiring RINs for compliance.

Figure D-12 shows how these data would appear in the retire transaction data block.

**Figure D-12: Retire Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
RINQuantity	1000		Yes	Enter the total number of RINs. This must be a whole number.
BatchVolume			No	Enter the volume in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
AssignmentCode	2	Separated	Yes	Enter "1" if the RINs are assigned and "2" if they are separated.
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.
RetireReasonCode	90	Demonstrate annual compliance	Yes	Enter a valid retire reason code.
TransactionDate	2014-01-01		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the transaction occurred.
ComplianceYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RINs are being used for compliance.
ComplianceLevelCode	50	Facility Level	Yes	Enter a valid compliance level code.
ComplianceFacilityIdentifier	22222	Rex's Small Refinery	Yes	Provide the public facility identifier of the facility that is retiring RINs for compliance.
TransactionDetailComment			No	Provide any additional information regarding this transaction.

## D-6 Advanced Options

### D-6.1 Batch Specific Transactions

"Advanced Options" will be available to users who wish to submit separate, buy, sell, or retire transactions for a specific batch of RINs. These transactions require the user to provide a greater level of detail than the basic transaction as shown in this document. RINs can be specified by organization only, organization and facility, or by organization, facility, and batch.

#### D-6.1.1 Batch Specific Sell Transaction

When a trade occurs involving a specific batch of RINs, the buying and selling organizations report the additional information in the Originating Source data block, providing specifics on the organization and facility that produced the fuel and the batch number.

In this example, a Producer is selling 8,000 RINs from a specific batch to a Refiner.

Objective: **Renewable Fuel Producer** sells 8,000 separated RINs from a specific generating facility.

Required Information:

- Trading Partner Organization Identifier – The identification number for the buying organization obtained through EPA.
- Trading Partner Organization Name – The name of the buying organization.
- RIN Quantity – The total number of RINs being retired in this transaction.
- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Assignment Code – Identifies if the RINs are assigned or separated.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.
- Sell Reason Code – Code that explains why these RINs are being sold.
- RIN Price Amount – The price at which the RINs were sold.
- Transfer Date – The date on which the sell transaction occurred outside of EMTS.

Figure D-13 shows how these data would appear in the sell transaction data block for a specified batch of RINs.

**Figure D-13: Batch Specific Sell Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
TransactionPartnerOrganization Identifier	3333	Ralph's Refiner	Yes	Enter the organization identifier of the buying party. This is the organization number obtained through EPA.
TransactionPartnerOrganization Name	Ralph's		Yes	Enter the name of the buying party.
RINQuantity	8000		Yes	Enter the total number of RINs. This must be a whole number.
BatchVolume			No	Enter the volume in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
AssignmentCode	2	Separated	Yes	Enter "1" if the RINs are assigned and "2" if they are separated.
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.
SellReasonCode	10	Standard Trade	Yes	Enter a valid sell reason code.
RINPriceAmount	0.18		Yes	Enter the price per RIN in USD.
TransferDate	2014-01-15		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the transfer occurred.
PTDNumber	2495		No	Enter the PTD number associated with the transaction.
TransactionDetailComment			No	Provide any additional information regarding this transaction.



A batch specific transaction requires additional information about the originating source of the RINs. To specify the batch, include:

- Generate Organization Identifier – The public identifier of the organization that produced the fuel associated with the RINs being sold.
- Generate Facility Identifier – The public facility identifier for the plant that produced the renewable fuel associated with the RINs being sold.
- Batch Number Text – An internal tracking number assigned by the organization responsible for producing the fuel associated with the RINs being sold.

Figure D-14 shows how these data would appear in the originating source information for a batch of RINs.

**Figure D-14: Sell Originating Source Detail**

Data Element	Value	Reference	Required	Instructions
GenerateOrganizationIdentifier	1111	Ethanol Producer	Yes	Provide the public organization identifier for the producer of the fuel as registered with EPA.
GenerateFacilityIdentifier	77777	Cornish Plant	No	Provide the public facility identifier for the plant that produced the renewable fuel.
BatchNumberText	301		No	Enter the batch number associated with the batch at fuel production.

### D-6.1.2 Batch Specific Buy Transaction

Users submitting a buy transaction for specific RINs must identify the same information as the selling organization as these fields will be used by EMTS to match the transactions. If any of these fields identifying the RINs are incorrect, then the transaction will not be matched with its corresponding sell transaction and the trade will not be processed.

Figure D-23 shows the basic structure of a batch specific buy transaction. In this example, a Refiner is buying 8,000 RINs from a specific batch from a Producer.

Objective: **Petroleum Refiner** buys 8,000 separated RINs from a specific generating facility.

Required Information:

- Trading Partner Organization Identifier – The identification number for the selling organization obtained through EPA.
- Trading Partner Organization Name – The name of the selling organization.
- RIN Quantity – The total number of RINs being retired in this transaction.

- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Assignment Code – Identifies if the RINs are assigned or separated.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.
- Buy Reason Code – Code that explains why these RINs are being bought.
- RIN Price Amount – The price at which the RINs were bought.
- Transfer Date – The date on which the buy transaction occurred outside of EMTS.

Figure D-15 shows how these data would appear in the buy transaction data block for a specified batch of RINs.

**Figure D-15: Batch Specific Buy Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
TransactionPartnerOrganization Identifier	1111	Ethanol Producers	Yes	Enter the organization identifier of the selling party. This is the organization number obtained through EPA.
TransactionPartnerOrganization Name	Ethanol Producers		Yes	Enter the name of the selling party.
RINQuantity	8000		Yes	Enter the total number of RINs. This must be a whole number.
BatchVolume			No	Enter the volume of fuel in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
AssignmentCode	2	Separated	Yes	Enter "1" if the RINs are assigned and "2" if they are separated.

(cont.)

**Figure D-15: Batch Specific Buy Transaction Data Elements (cont.)**

Data Element	Value	Reference	Required	Instructions
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.
BuyReasonCode	10	Standard Trade	Yes	Enter a valid buy reason code.
RINPriceAmount	0.18		Yes	Enter the price per RIN in USD.
TransferDate	2014-01-15		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the transfer occurred.
PTDNumber	2495		No	Enter the PTD number associated with the transaction.
TransactionDetailComment			No	Provide any additional information regarding this transaction.

Batch specific transactions require additional information about the originating source of the RINs. To specify the batch, include:

- Generate Organization Identifier – The public identifier of the organization that produced the fuel associated with the RINs being sold.
- Generate Facility Identifier – The public facility identifier for the plant that produced the renewable fuel associated with the RINs being sold.
- Batch Number Text – An internal tracking number assigned by the organization responsible for producing the fuel associated with the RINs being sold.

Figure D-16 shows how these data would appear in the originating source information for a batch of RINs.

**Figure D-16: Originating Source Detail**

Data Element	Value	Reference	Required	Instructions
GenerateOrganizationIdentifier	1111	Ethanol Producers	Yes	Provide the public organization identifier for the producer of the fuel as registered with EPA.
GenerateFacilityIdentifier	77777	Cornish Plant	No	Provide the public facility identifier for the plant that produced the renewable fuel.
BatchNumberText	301		No	Enter the batch number associated with the batch at fuel production.

## D-6.2 Non-One-to-One Ratio

Within the advanced options, it is also possible for organizations to separate, buy, and sell fuel and RINs at a non-one-to-one ratio. Organizations may separate or sell up to two-and-a-half times as many RINs as the associated fuel volume in a single transaction.

### D-6.2.1 Separate Fuel and RINs in a Non-One-to-One Ratio

As an advanced option, users may choose to separate a quantity of RINs that exceeds the volume of renewable fuel. The quantity of RINs may not be more than two-and-a-half times the volume of fuel. The user will need to specify an assignment code of "1" to indicate that these RINs are assigned to fuel at the time of the transaction.

In this example, a Blender is separating 2,500 RINs from 1,000 gallons of renewable fuel.

Objective: **Renewable Fuel Blender** separates 2,500 RINs from 1,000 gallons of fuel.

Required Information:

- RIN Quantity – The total number of RINs being retired in this transaction.
- Batch Volume – The total volume of renewable fuel.
- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Separate Reason Code – Code that explains why the fuel is being separated.
- Transaction Date – The date on which the RINs were separated.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.

Figure D-17 shows how these data would appear in the separate transaction data block.

**Figure D-17: Non-One-to-One Separate Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
RINQuantity	2500		Yes	Enter the total number of RINs. This must be a whole number.
BatchVolume	1000		Yes	Enter the volume in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
SeparateReasonCode	10	Receipt of renewable fuel by obligated party	Yes	Enter a valid separate reason code.
TransactionDate	2014-01-01		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the transaction occurred.
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.
TransactionDetailComment			No	Provide any additional information regarding this transaction.

#### **D-6.2.2 Sell Fuel and RINs in a Non-One-to-One Ratio**

Users may submit a sell transaction in a non-one-to-one ratio of fuel to RINs. The ratio will be indicated by entering the appropriate Batch Volume and RIN Quantity. If the organization intends to sell RINs of multiple fuel types, then the user will need to submit one transaction for each fuel type.

In this example, a producer is selling 10,000 RINs and 5,000 gallons of renewable fuel to a Refiner.

Objective: **Producer** sells 5,000 gallons of fuel and 10,000 RINs.

Required Information:

- Trading Partner Organization Identifier – The identification number for the buying organization obtained through EPA.
- Trading Partner Organization Name – The name of the buying organization.
- RIN Quantity – The total number of RINs being retired in this transaction.
- Batch Volume – The total volume of renewable fuel.

- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).
- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Assignment Code – Identifies if the RINs are assigned or separated.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.
- Sell Reason Code – Code that explains why these RINs are being sold.
- Gallon Price Amount – The price at which the RINs and fuel were sold.
- Transfer Date – The date on which the sell transaction occurred outside of EMTS.

Figure D-18 shows these data would appear in the sell transaction data block.

**Figure D-18: Non-One-to-One Sell Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
TransactionPartnerOrganization Identifier	3333	Ralph's Refiner	Yes	Enter the organization identifier of the buying party. This is the organization number obtained through EPA.
TransactionPartnerOrganization Name	Ralph's		Yes	Enter the name of the buying organization.
RINQuantity	10000		Yes	Enter the total number of RINs. This must be a whole number.
BatchVolume	5000		Yes	Enter the volume in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
AssignmentCode	1	Assigned to Fuel	Yes	Enter "1" if the RINs are assigned and "2" if they are separated.

(cont.)

**Figure D-18: Non-One-to-One Sell Transaction Data Elements (cont.)**

Data Element	Value	Reference	Required	Instructions
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.
SellReasonCode	10	Standard Trade	Yes	Enter a valid sell reason code.
GallonPriceAmount	2.75		Yes	Enter the price per gallon of renewable fuel in USD.
TransferDate	2014-01-15		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the transfer occurred.
PTDNumber	3462		No	Enter the PTD number associated with the transaction.
TransactionDetailComment			No	Provide any additional information regarding this transaction.

### D-6.2.3 Buy Fuel and RINs in a Non-One-to-One Ratio

Users may submit a buy transaction in a non-one-to-one ratio of fuel to RINs. The ratio will be indicated by entering the appropriate Batch Volume and RIN Quantity. These values must match the values in the corresponding sell transaction in order to be processed. If the organization intends to buy RINs of multiple fuel types, then the user will need to submit one transaction for each fuel type.

In this example, a Refiner is buying 10,000 RINs and 5,000 gallons of renewable fuel from a Producer.

Objective: **Petroleum Refiner** buys 5,000 gallons and 10,000 RINs.

Required Information:

- Trading Partner Organization Identifier – The identification number for the selling organization obtained through EPA.
- Trading Partner Organization Name – The name of the selling organization.
- RIN Quantity – The total number of RINs being retired in this transaction.
- Batch Volume – The total volume of renewable fuel.
- Fuel Code – Indicates the category of fuel to which the renewable fuel belongs: Cellulosic Biofuel (D = 3), Biomass-based Diesel (D = 4), Advanced Biofuel (D = 5), Renewable Fuel (D = 6), or Cellulosic Diesel (D = 7).

- QAP Service Type Code – Indicates level of QAP service for RINs generated: RINs generated for a pathway that has been verified by a registered QAP Provider are Q-RINs (10). If RINs are not verified, then they are categorized as Unverified (30).
- Assignment Code – Identifies if the RINs are assigned or separated.
- RIN Year – The year in which the RIN was generated reflecting the year of the production date.
- Buy Reason Code – Code that explains why these RINs are being bought.
- Gallon Price Amount – The price at which the RINs and fuel were bought.
- Transfer Date – The date on which the buy transaction occurred outside of EMTS.

Figure D-19 shows how these data would appear in the submission file.

**Figure D-19: Non-One-to-One Buy Transaction Data Elements**

Data Element	Value	Reference	Required	Instructions
TransactionPartnerOrganization Identifier	1111	Ethanol Producers	Yes	Enter the organization identifier of the selling party. This is the organization number obtained through EPA.
TransactionPartnerOrganization Name	Ethanol Producers		Yes	Enter the name of the selling party.
RINQuantity	10000		Yes	Enter the total number of RINs. This must be a whole number.
BatchVolume	5000		Yes	Enter the volume in gallons of fuel in the batch. It must be a whole number less than 99,999,999.
FuelCode	6	Renewable Fuel	Yes	Enter a valid fuel code.
QAP Service Type Code	30	Unverified	Yes	Enter a valid QAP Service Type Code
AssignmentCode	1	Assigned to Fuel	Yes	Enter "1" if the RINs are assigned and "2" if they are separated.
RINYear	2014		Yes	Enter the year in YYYY format. This is the year in which the RIN was generated and can be derived from the production date.

(cont.)



**Figure D-19: Non-One-to-One Buy Transaction Data Elements (cont.)**

Data Element	Value	Reference	Required	Instructions
BuyReasonCode	10	Standard Trade	Yes	Enter a valid buy reason code.
GallonPriceAmount	2.75		Yes	Enter the price per gallon of renewable fuel in USD.
TransferDate	2014-01-15		Yes	Enter the date in YYYY-MM-DD format. This is the date on which the transfer occurred.
PTDNumber	3462		No	Enter the PTD number associated with the transaction.
TransactionDetailComment			No	Provide any additional information regarding this transaction.

## Appendix E: Cross-reference Tables

The following tables show cross-reference codes for reporting transactions to EMTS. Business activities Small Blender (90) and Quality Assurance Provider (100) cannot perform any transactions, and thus are not included in any of the cross-reference tables.

The Business Activity by Separate Reason Code table shows which reasons can be reported for a separate transaction for a specific organization's business activity.

**Figure E-1: Business Activity by Separate Reason Code**

Business Activity Code	Description	Separate Reason Code	Description
10	Domestic Renewable Fuel Producer	20	Blending to produce a transportation fuel
10	Domestic Renewable Fuel Producer	30	Designation of renewable fuel as transportation fuel
10	Domestic Renewable Fuel Producer	40	Upstream Delegation for Blending
10	Domestic Renewable Fuel Producer	60	Use as Home Heating Oil or Jet Fuel
10	Domestic Renewable Fuel Producer	70	Use in a non-road engine or vehicle
10	Domestic Renewable Fuel Producer	80	Designation of Renewable Fuel as Home Heating Oil or Jet Fuel
10	Domestic Renewable Fuel Producer	90	Delayed RIN Separation
30	Renewable Fuel Importer	20	Blending to produce a transportation fuel
30	Renewable Fuel Importer	30	Designation of renewable fuel as transportation fuel
30	Renewable Fuel Importer	40	Upstream Delegation for Blending
30	Renewable Fuel Importer	60	Use as Home Heating Oil or Jet Fuel
30	Renewable Fuel Importer	70	Use in a non-road engine or vehicle
30	Renewable Fuel Importer	80	Designation of Renewable Fuel as Heating Oil or Jet Fuel
30	Renewable Fuel Importer	90	Delayed RIN Separation
40	Non-renewable Fuel Importer	10	Receipt of renewable fuel by obligated party

(cont.)

**Figure E-1: Business Activity by Separate Reason Code (cont.)**

Business Activity Code	Description	Separate Reason Code	Description
40	Non-renewable Fuel Importer	20	Blending to produce a transportation fuel
40	Non-renewable Fuel Importer	30	Designation of renewable fuel as transportation fuel
40	Non-renewable Fuel Importer	40	Upstream Delegation for Blending
40	Non-renewable Fuel Importer	60	Use as Heating Oil or Jet Fuel
40	Non-renewable Fuel Importer	70	Use in a non-road engine or vehicle
40	Non-renewable Fuel Importer	80	Designation of Renewable Fuel as Heating Oil or Jet Fuel
50	Renewable Fuel Exporter	20	Blending to produce a transportation fuel
50	Renewable Fuel Exporter	30	Designation of renewable fuel as transportation fuel
50	Renewable Fuel Exporter	40	Upstream Delegation for Blending
50	Renewable Fuel Exporter	50	Export of Renewable Fuel
50	Renewable Fuel Exporter	60	Use as Heating Oil or Jet Fuel
50	Renewable Fuel Exporter	70	Use in a non-road engine or vehicle
50	Renewable Fuel Exporter	80	Designation of Renewable Fuel as Heating Oil or Jet Fuel
60	Refiner	10	Receipt of renewable fuel by obligated party
60	Refiner	20	Blending to produce a transportation fuel
60	Refiner	30	Designation of renewable fuel as transportation fuel
60	Refiner	40	Upstream Delegation for Blending
60	Refiner	60	Use as Heating Oil or Jet Fuel
60	Refiner	70	Use in a non-road engine or vehicle
60	Refiner	80	Designation of Renewable Fuel as Heating Oil or Jet Fuel
70	Small Refiner	20	Blending to produce a transportation fuel

(cont.)

**Figure E-1: Business Activity by Separate Reason Code (cont.)**

Business Activity Code	Description	Separate Reason Code	Description
70	Small Refiner	30	Designation of renewable fuel as transportation fuel
70	Small Refiner	40	Upstream Delegation for Blending
70	Small Refiner	60	Use as Heating Oil or Jet Fuel
70	Small Refiner	70	Use in a non-road engine or vehicle
70	Small Refiner	80	Designation of Renewable Fuel as Heating Oil or Jet Fuel
80	RIN Owner	20	Blending to produce a transportation fuel
80	RIN Owner	30	Designation of renewable fuel as transportation fuel
80	RIN Owner	40	Upstream Delegation for Blending
80	RIN Owner	60	Use as Heating Oil or Jet Fuel
80	RIN Owner	70	Use in a non-road engine or vehicle
80	RIN Owner	80	Designation of Renewable Fuel as Heating Oil or Jet Fuel

The Business Activity by Buy Reason Code table shows which reasons can be reported for a buy transaction for a specific organization's business activity.

**Figure E-2: Business Activity by Buy Reason Code**

Business Activity Code	Description	Buy Reason Code	Description
10	Domestic Renewable Fuel Producer	10	Standard Trade
10	Domestic Renewable Fuel Producer	30	Incorrect Trading Partner
10	Domestic Renewable Fuel Producer	40	Remedial Action Specified by EPA
10	Domestic Renewable Fuel Producer	50	Deny
10	Domestic Renewable Fuel Producer	60	Cancel
10	Domestic Renewable Fuel Producer	80	Required True-Up
10	Domestic Renewable Fuel Producer	100	Tolling Agreement
10	Domestic Renewable Fuel Producer	110	Intra-Company Transfer
20	Foreign Renewable Fuel Producer	10	Standard Trade
20	Foreign Renewable Fuel Producer	30	Incorrect Trading Partner
20	Foreign Renewable Fuel Producer	40	Remedial Action Specified by EPA
20	Foreign Renewable Fuel Producer	50	Deny
20	Foreign Renewable Fuel Producer	60	Cancel
20	Foreign Renewable Fuel Producer	80	Required True-Up
20	Foreign Renewable Fuel Producer	100	Tolling Agreement
20	Foreign Renewable Fuel Producer	110	Intra-Company Transfer
30	Renewable Fuel Importer	50	Deny
30	Renewable Fuel Importer	60	Cancel
30	Renewable Fuel Importer	80	Required True-Up
30	Renewable Fuel Importer	100	Tolling Agreement
30	Renewable Fuel Importer	110	Intra-Company Transfer
40	Non-renewable Fuel Importer	10	Standard Trade
40	Non-renewable Fuel Importer	30	Incorrect Trading Partner
40	Non-renewable Fuel Importer	40	Remedial Action Specified by EPA
40	Non-renewable Fuel Importer	50	Deny
40	Non-renewable Fuel Importer	60	Cancel

(cont.)

**Figure E-2: Business Activity by Buy Reason Code (cont.)**

Business Activity Code	Description	Buy Reason Code	Description
40	Non-renewable Fuel Importer	80	Required True-Up
40	Non-renewable Fuel Importer	100	Tolling Agreement
40	Non-renewable Fuel Importer	110	Intra-Company Transfer
50	Renewable Fuel Exporter	10	Standard Trade
50	Renewable Fuel Exporter	30	Incorrect Trading Partner
50	Renewable Fuel Exporter	40	Remedial Action Specified by EPA
50	Renewable Fuel Exporter	50	Deny
50	Renewable Fuel Exporter	60	Cancel
50	Renewable Fuel Exporter	80	Required True-Up
50	Renewable Fuel Exporter	100	Tolling Agreement
50	Renewable Fuel Exporter	110	Intra-Company Transfer
60	Refiner	10	Standard Trade
60	Refiner	30	Incorrect Trading Partner
60	Refiner	40	Remedial Action Specified by EPA
60	Refiner	50	Deny
60	Refiner	60	Cancel
60	Refiner	80	Required True-Up
60	Refiner	100	Tolling Agreement
60	Refiner	110	Intra-Company Transfer
70	Small Refiner	10	Standard Trade
70	Small Refiner	30	Incorrect Trading Partner
70	Small Refiner	40	Remedial Action Specified by EPA
70	Small Refiner	50	Deny
70	Small Refiner	60	Cancel
70	Small Refiner	80	Required True-Up
70	Small Refiner	100	Tolling Agreement

(cont.)

**Figure E-2: Business Activity by Buy Reason Code (cont.)**

Business Activity Code	Description	Buy Reason Code	Description
70	Small Refiner	110	Intra-Company Transfer
80	RIN Owner	10	Standard Trade
80	RIN Owner	30	Incorrect Trading Partner
80	RIN Owner	40	Remedial Action Specified by EPA
80	RIN Owner	50	Deny
80	RIN Owner	60	Cancel
80	RIN Owner	80	Required True-Up
80	RIN Owner	100	Tolling Agreement
80	RIN Owner	110	Intra-Company Transfer

The Business Activity by Sell Reason Code table shows which reasons can be reported for a sell transaction for a specific organization's business activity.

**Figure E-3: Business Activity by Sell Reason Code**

Business Activity Code	Description	Sell Reason Code	Description
10	Domestic Renewable Fuel Producer	10	Standard Trade
10	Domestic Renewable Fuel Producer	30	Incorrect Trading Partner
10	Domestic Renewable Fuel Producer	40	Remedial Action Specified by EPA
10	Domestic Renewable Fuel Producer	50	Deny
10	Domestic Renewable Fuel Producer	60	Cancel
10	Domestic Renewable Fuel Producer	80	Required True-Up
10	Domestic Renewable Fuel Producer	100	Tolling Agreement
10	Domestic Renewable Fuel Producer	110	Intra-Company Transfer
20	Foreign Renewable Fuel Producer	10	Standard Trade
20	Foreign Renewable Fuel Producer	30	Incorrect Trading Partner
20	Foreign Renewable Fuel Producer	40	Remedial Action Specified by EPA
20	Foreign Renewable Fuel Producer	50	Deny
20	Foreign Renewable Fuel Producer	60	Cancel
20	Foreign Renewable Fuel Producer	80	Required True-Up
20	Foreign Renewable Fuel Producer	100	Tolling Agreement
20	Foreign Renewable Fuel Producer	110	Intra-Company Transfer
30	Renewable Fuel Importer	50	Deny
30	Renewable Fuel Importer	60	Cancel
30	Renewable Fuel Importer	80	Required True-Up
30	Renewable Fuel Importer	100	Tolling Agreement
30	Renewable Fuel Importer	110	Intra-Company Transfer
40	Non-renewable Fuel Importer	10	Standard Trade
40	Non-renewable Fuel Importer	30	Incorrect Trading Partner
40	Non-renewable Fuel Importer	40	Remedial Action Specified by EPA
40	Non-renewable Fuel Importer	50	Deny
40	Non-renewable Fuel Importer	60	Cancel

(cont.)



**Figure E-3: Business Activity by Sell Reason Code (cont.)**

Business Activity Code	Description	Sell Reason Code	Description
40	Non-renewable Fuel Importer	80	Required True-Up
40	Non-renewable Fuel Importer	100	Tolling Agreement
40	Non-renewable Fuel Importer	110	Intra-Company Transfer
50	Renewable Fuel Exporter	10	Standard Trade
50	Renewable Fuel Exporter	30	Incorrect Trading Partner
50	Renewable Fuel Exporter	40	Remedial Action Specified by EPA
50	Renewable Fuel Exporter	50	Deny
50	Renewable Fuel Exporter	60	Cancel
50	Renewable Fuel Exporter	80	Required True-Up
50	Renewable Fuel Exporter	100	Tolling Agreement
50	Renewable Fuel Exporter	110	Intra-Company Transfer
60	Refiner	10	Standard Trade
60	Refiner	30	Incorrect Trading Partner
60	Refiner	40	Remedial Action Specified by EPA
60	Refiner	50	Deny
60	Refiner	60	Cancel
60	Refiner	80	Required True-Up
60	Refiner	100	Tolling Agreement
60	Refiner	110	Intra-Company Transfer
70	Small Refiner	10	Standard Trade
70	Small Refiner	30	Incorrect Trading Partner
70	Small Refiner	40	Remedial Action Specified by EPA
70	Small Refiner	50	Deny
70	Small Refiner	60	Cancel
70	Small Refiner	80	Required True-Up
70	Small Refiner	100	Tolling Agreement

(cont.)

**Figure E-3: Business Activity by Sell Reason Code (cont.)**

Business Activity Code	Description	Sell Reason Code	Description
70	Small Refiner	110	Intra-Company Transfer
80	RIN Owner	10	Standard Trade
80	RIN Owner	30	Incorrect Trading Partner
80	RIN Owner	40	Remedial Action Specified by EPA
80	RIN Owner	50	Deny
80	RIN Owner	60	Cancel
80	RIN Owner	80	Required True-Up
80	RIN Owner	100	Tolling Agreement
80	RIN Owner	110	Intra-Company Transfer

The Business Activity by Retire Reason Code table shows which reasons can be reported for a retire transaction for a specific organization's business activity.

**Figure E-4: Business Activity by Retire Reason Code**

Business Activity Code	Description	Retire Reason Code	Description
10	Domestic Renewable Fuel Producer	10	Reportable spill
10	Domestic Renewable Fuel Producer	20	Contaminated or spoiled fuel
10	Domestic Renewable Fuel Producer	40	Renewable Fuel Used in an Ocean-going Vessel
10	Domestic Renewable Fuel Producer	50	Invalid RIN
10	Domestic Renewable Fuel Producer	60	Volume error correction
10	Domestic Renewable Fuel Producer	70	Enforcement Obligation
10	Domestic Renewable Fuel Producer	90	Renewable fuel used or designated to be used in any application that is not transportation fuel, heating oil, or jet fuel.
10	Domestic Renewable Fuel Producer	100	Delayed RIN Retire

(cont.)

**Figure E-4: Business Activity by Retire Reason Code (cont.)**

Business Activity Code	Description	Retire Reason Code	Description
20	Foreign Renewable Fuel Producer (Bonded)	10	Reportable spill
20	Foreign Renewable Fuel Producer (Bonded)	20	Contaminated or spoiled fuel
20	Foreign Renewable Fuel Producer (Bonded)	30	Import volume correction
20	Foreign Renewable Fuel Producer (Bonded)	40	Renewable Fuel Used in an Ocean-going Vessel
20	Foreign Renewable Fuel Producer (Bonded)	50	Invalid RIN
20	Foreign Renewable Fuel Producer (Bonded)	60	Volume error correction
20	Foreign Renewable Fuel Producer (Bonded)	70	Enforcement Obligation
20	Foreign Renewable Fuel Producer (Bonded)	90	Renewable fuel used or designated to be used in any application that is not transportation fuel, heating oil, or jet fuel.
30	Renewable Fuel Importer	10	Reportable spill
30	Renewable Fuel Importer	20	Contaminated or spoiled fuel
30	Renewable Fuel Importer	30	Import volume correction
30	Renewable Fuel Importer	40	Renewable Fuel Used in an Ocean-going Vessel
30	Renewable Fuel Importer	50	Invalid RIN
30	Renewable Fuel Importer	70	Enforcement Obligation
30	Renewable Fuel Importer	90	Renewable fuel used or designated to be used in any application that is not transportation fuel, heating oil, or jet fuel.
30	Renewable Fuel Importer	100	Delayed RIN Retire

(cont.)

**Figure E-4: Business Activity by Retire Reason Code (cont.)**

Business Activity Code	Description	Retire Reason Code	Description
40	Non-renewable Fuel Importer	10	Reportable spill
40	Non-renewable Fuel Importer	20	Contaminated or spoiled fuel
40	Non-renewable Fuel Importer	40	Renewable Fuel Used in an Ocean-going Vessel
40	Non-renewable Fuel Importer	50	Invalid RIN
40	Non-renewable Fuel Importer	70	Enforcement Obligation
40	Non-renewable Fuel Importer	80	Demonstrate annual compliance
40	Non-renewable Fuel Importer	90	Renewable fuel used or designated to be used in any application that is not transportation fuel, heating oil, or jet fuel.
50	Renewable Fuel Exporter	10	Reportable spill
50	Renewable Fuel Exporter	20	Contaminated or spoiled fuel
50	Renewable Fuel Exporter	40	Renewable Fuel Used in an Ocean-going Vessel
50	Renewable Fuel Exporter	50	Invalid RIN
50	Renewable Fuel Exporter	70	Enforcement Obligation
50	Renewable Fuel Exporter	80	Demonstrate annual compliance
50	Renewable Fuel Exporter	90	Renewable fuel used or designated to be used in any application that is not transportation fuel, heating oil, or jet fuel.
60	Refiner	10	Reportable spill
60	Refiner	20	Contaminated or spoiled fuel
60	Refiner	40	Renewable Fuel Used in an Ocean-going Vessel
60	Refiner	50	Invalid RIN

(cont.)

**Figure E-4: Business Activity by Retire Reason Code (cont.)**

Business Activity Code	Description	Retire Reason Code	Description
60	Refiner	70	Enforcement Obligation
60	Refiner	80	Demonstrate annual compliance
60	Refiner	90	Renewable fuel used or designated to be used in any application that is not transportation fuel, heating oil, or jet fuel.
70	Small Refiner	10	Reportable spill
70	Small Refiner	20	Contaminated or spoiled fuel
70	Small Refiner	40	Renewable Fuel Used in an Ocean-going Vessel
70	Small Refiner	50	Invalid RIN
70	Small Refiner	70	Enforcement Obligation
70	Small Refiner	90	Renewable fuel used or designated to be used in any application that is not transportation fuel, heating oil, or jet fuel.
80	RIN Owner	10	Reportable spill
80	RIN Owner	20	Contaminated or spoiled fuel
80	RIN Owner	40	Renewable Fuel Used in an Ocean-going Vessel
80	RIN Owner	50	Invalid RIN
80	RIN Owner	70	Enforcement Obligation
80	RIN Owner	90	Renewable fuel used or designated to be used in any application that is not transportation fuel, heating oil, or jet fuel.

The Business Activity by Compliance Level Code table shows which compliance levels can be reported for a retire transaction for a specific organization's business activity.

**Figure E-5: Business Activity by Compliance Level Code**

Business Activity Code	Description	Compliance Level Code	Description
10	Domestic Renewable Fuel Producer	40	Non-Obligated Party
20	Foreign Renewable Fuel Producer	40	Non-Obligated Party
30	Renewable Fuel Importer	40	Non-Obligated Party
40	Non-renewable Fuel Importer	10	Aggregated Importer
50	Renewable Fuel Exporter	30	Exporter
60	Refiner	20	Aggregated Refiner
60	Refiner	50	Facility Level
70	Small Refiner	40	Non-Obligated Party
80	RIN Owner	40	Non-Obligated Party

For a list of valid combinations of fuel categories, processes, and feedstocks that can be reported for a fuel code (D code), please refer to the "Reporting Codes and Fuel Pathways" document.