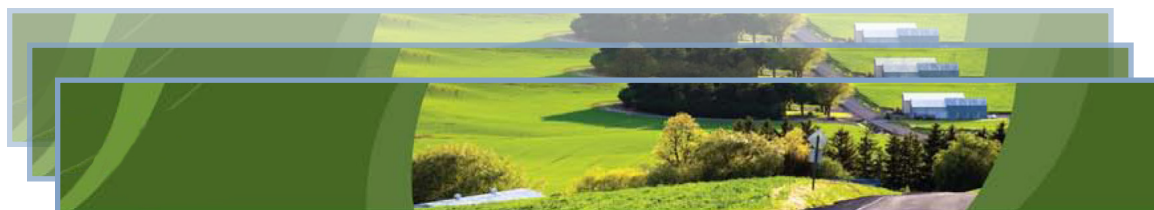


Submitting RFS EMTS Transactions Using XML



Submitting RFS EMTS Transactions Using XML

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

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.

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 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 <https://www.epa.gov/fuels-registration-reporting-and-compliance-help/reporting-codes-and-fuel-pathways-epa-moderated>. 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 <https://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*.

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).

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 active.	2005
				The organization's RIN Holding Account must be active.	2006
xsd:string	SubmittalCommentText	No	Comment provided by the user on submission file.		
complex	<i>GenerateTransactionDetail</i>	No	Information on the RINs being generated.		
complex	<i>SeparateTransactionDetail</i>	No	Information on RINs being separated.		
complex	<i>SellTransactionDetail</i>	No	Information on RINs being sold.		
complex	<i>BuyTransactionDetail</i>	No	Information on RINs being bought.		
complex	<i>RetireTransactionDetail</i>	No	Information on RINs being retired.		
complex	<i>LockTransactionDetail</i>	No	Information on RINs being locked.		
complex	<i>UnlockTransactionDetail</i>	No	Information on RINs being unlocked.		
complex	<i>BiogasGenerateTransactionDetail</i>	No	Information on the biogas tokens being generated		
complex	<i>BiogasBuyTransactionDetail</i>	No	Information on the biogas tokens being bought		
complex	<i>BiogasSellTransactionDetail</i>	No	Information on the biogas tokens being sold		

Figure 2: EMTS Root Elements (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
Complex	<i>BiogasRetireTransactionDetail</i>	No	Information on the biogas tokens being retired		

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. If the feedstock is a biointermediate, you must also report the identifiers of the company and facility where the biointermediate was produced. 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.

If you are reporting a generate transaction that has been authorized for remedial action by EPA, report the value 'true' in the ***RemedialActionIndicator*** data element. Otherwise, this data element can be ignored.

Figures 3, 4, 5, 6, and 7 below show the data elements for ***GenerateTransactionDetail***, ***GenerateOriginatingSourceDetail***, ***FeedstockDetail***, ***BiogasGenerateDetail***, 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
				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 a valid code that is recognized by EPA.	3024
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

(cont.)

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

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
				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
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

(cont.)

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

Data Elements				QA Checks	
Data Type	Name	Data Type	Name	Data Type	Name
				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
xsd:string	TransactionDetailCommentText	No	Comment provided by the user on the transaction.		
complex	<i>GenerateSupportingDocumentDetail</i>	No	Information for the industry user to create user defined data to report supporting document identifiers.		
complex	<i>GenerateOriginatingSourceDetail</i>	Yes	Information on the original renewable fuel production.		
complex	<i>FeedstockDetail</i>	Yes, if no GenerateBiogasDetail reported	Information on the types of non-biogas feedstock used to produce fuel.		

(cont.)

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

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
complex	<i>GenerateBiogasDetail</i>	Yes, if no FeedstockDetail Reported.	Information on the Biogas Feedstock used to produce fuel.		
complex	<i>CoProductDetail</i>	No	Information on the one or more co-products that result from the renewable fuel production process.		
xsd:boolean	<i>RemedialActionIndicator</i>	No	An indicator of whether the generate transaction is for a remedial action.		

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

(cont.)

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

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
				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
				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

(cont.)

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

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
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

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 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
				A generate transaction cannot contain more than one feedstock that is a biointermediate.	3082
				A QAP Service Type of 30 (Unverified) is not allowed if the transaction contains a biointermediate feedstock.	3083
				The production processes for a biointermediate feedstock must be verified by the same QAP provider that verified the renewable fuel pathway.	3086

(cont.)

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

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
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
xsd:decimal	FeedstockQuantity	Yes	Total quantity of feedstock used in production of the fuel.		
xsd:string	FeedstockMeasureCode	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
xsd:string	BiointermediteOrganizationIdentifier	No	The organization identifier, as registered in OTAQReg, for the organization that produced the biointermediate feedstock.	The biointermediate company and facility are required for a biointermediate feedstock.	3080
				The biointermediate company and facility are not allowed unless the feedstock is a biointermediate.	3081
				The biointermediate company or facility does not have an active registration, or the facility does not belong to the company.	3084
				The generate facility must have an active relationship with the biointermediate production facility for the feedstock.	3085

(cont.)

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

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	BiointermediateFacilityIdentifier	No	The facility identifier, as registered in OTAGReg, for the facility that produced the biointermediate feedstock.	The biointermediate company and facility are required for a biointermediate feedstock.	3080
				The biointermediate company and facility are not allowed unless the feedstock is a biointermediate	3081
				The biointermediate company or facility does not have an active registration, or the facility does not belong to the company.	3084
				The generate facility must have an active relationship with the biointermediate production facility for the feedstock.	3085
Xsd:string	FeedstockDetailCommentText	No	A comment about the feedstock.		

Figure 6: Data Elements for *GenerateBiogasDetail*

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.		

(cont.)

Figure 6: Data Elements for *GenerateBiogasDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	TokenTypeCode	Yes	A code that identifies the type of token.	If the Generate Transaction has a Biogas Pathway, Token Type Code and Token Quantity must be reported	3100
				Token Type must be consistent with Fuel Code (D-Code)	3101
xsd:nonNegativeInteger	TokenQuantity	Yes	The total number of tokens specified in the transaction.	Token Quantity must be consistent with RIN Quantity RIN Quantity must be \leq (Token Quantity x 0.9004 / 0.077) rounded to the closest integer	3102
				Facility must have enough available biogas tokens to complete the transaction	3138
xsd:nonNegativeInteger	BiogasFeedstockVolumeSCF	Yes	The volume, in SCF, of biogas feedstock used to generate the batch of renewable fuel.		
xsd:boolean	TreatedBiogasIndicator	No	An indicator of whether the biogas feedstock used to generate the batch has been treated.	Treated Biogas Indicator must be reported if fuel is LNG or CNG	3103
xsd:decimal	TreatedBiogasVolumeMMBtuHHV	No	The volume, in mmBtu HHV, of treated biogas.	Treated Biogas Volume must be reported if the biogas feedstock has been treated	3104

(cont.)

Figure 6: Data Elements for *GenerateBiogasDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	InjectionPointFrsId	No	The FRS identifier for the location where the RNG was injected into the pipeline.	Injection Point FRS ID must be reported if fuel is RNG	3105
				Injection Point must be registered for the facility	3106
xsd:boolean	RenewableBiomassIndicator	Yes	An indicator of whether the feedstock used qualifies as a renewable biomass.		
xsd:string	FeedstockDetailCommentText	No	Comment provided by the user on the feedstock.		
Complex	RetireOriginatingSourceDetail	No	Information on the original renewable fuel production.		

Figure 7: Data Elements for *CoProductDetail*

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	CoProductCode	Yes	A code that identifies the co-product created for the renewable fuel process.		
xsd:string	CoProductDetailCommentType	No	Comment provided by the user on the co-product.		

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.

Figures 8 and 9 show the data elements for ***SeparateTransactionDetail*** and ***RNGPipelineDetail***.

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

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:boolean	<i>RNGFuelIndicator</i>	No	An indicator of whether the batches being separated are for pipeline RNG		
complex	<i>RNGPipelineDetail</i>	No	Information on the RNG Pipeline for separating RINs.		
complex	<i>SeparateSupportingDocumentDetail</i>	No	Information for the industry user to create user defined data to report supporting document identifiers.		
complex	<i>SeparateOriginatingSourceDetail</i>	No	Information on the original renewable fuel production.		

Figure 9: Data Elements for RNGPipelineDetail

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	<i>DispensingStationFrslid</i>	Yes	The FRS identifier for the location where the CNG or LNG derived from RNG was dispensed.	Dispensing Station FRS ID must be reported for an RNG Batch	5102
xsd:decimal	<i>CNGVolumeMMBtuLHV</i>	No	The volume, in mmBtu LHV, of the CNG derived from RNG that was dispensed.		
xsd:decimal	<i>LNGVolumeMMBtuLHV</i>	No	The volume, in mmBtu LHV, of the LNG derived from RNG that was dispensed.		

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 sale 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 10 shows the data elements for ***SellTransactionDetail***.

Figure 10: Data Elements for *SellTransactionDetail*

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	TransactionPartner Organization Identifier	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	TransactionPartner OrganizationName	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" or "3," then batch volume must be specified.	6011
				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

(cont.)

Figure 10: Data Elements for *SellTransactionDetail* (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.	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" or "3," then batch volume must be specified.	6011
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 10: Data Elements for *SellTransactionDetail* (cont.)

Data Element				QA Check	
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.		
xsd:string	BillofLading	No	The Bill Of Lading associated with the transaction.		
xsd:string	Invoice	No	The Invoice 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

(cont.)

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

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
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	<i>SellSupportingDocumentDetail</i>	No	Information for the industry user to create user defined data to report supporting document identifiers.		
complex	<i>SellOriginatingSourceDetail</i>	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, the year in which the fuel was produced, reason code, and either the agreed upon price per RIN or the price per gallon. 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 11 shows the data elements for **BuyTransactionDetail**.

Figure 11: Data Elements for BuyTransactionDetail

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	TransactionPartnerOrganization Identifier	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	TransactionPartnerOrganization Name	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.		

(cont.)

Figure 11: Data Elements for *BuyTransactionDetail* (cont.)

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:decimal	BatchVolume	No	The volume of renewable fuel sold in the transaction.	If the assignment code is "1" or "3," 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
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" or "3," then the batch volume must be specified.	4011
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

(cont.)

Figure 11: Data Elements for *BuyTransactionDetail* (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.	4019
				The requested RIN Year must fall within the RIN Year range defined by the RIN Years Allowed parameter.	4028
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

(cont.)

Figure 11: Data Elements for *BuyTransactionDetail* (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.	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
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	BillofLading	No	The Bill Of Lading associated with the transaction.		
xsd:string	Invoice	No	The Invoice associated with the transaction.		

(cont.)

Figure 11: Data Elements for *BuyTransactionDetail* (cont.)

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	MatchingTransactionIdentifier	No	The EMTS Transaction ID of the pending sell transaction.	If the buy transaction has a matched sell transaction ID, the transaction must be in a pending state.	4016
				If the buy transaction has a matched sell transaction ID, the transaction must match on trade matching criteria.	4017
xsd:string	TransactionDetailCommentText	No	Comment provided by the user on the transaction.	A comment is required for transactions with a Buy Reason Code of “Remedial Action – Incorrect Trading Partner (30),” “Deny Trade (50),” or “Remedial Action – Duplicate Trade (80).”	4037
complex	<i>PublicSupportingDocumentDetail</i>	No	Industry user defined data to report supporting document identifiers which are visible to the organization’s trading partner.		

(cont.)

Figure 11: Data Elements for *BuyTransactionDetail* (cont.)

Data Element				QA Checks	
Data Type	Name	Required	Description	Description	Number
complex	<i>BuySupportingDocumentDetail</i>	No	Information for the industry user to create user defined data to report supporting document identifiers.		
complex	<i>BuyOriginatingSourceDetail</i>	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 which 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 12 shows the data elements for ***RetireTransactionDetail***.

Figure 12: 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
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

(cont.)

Figure 12: Data Elements for *RetireTransactionDetail* (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.	7064
xsd:string	AssignmentCode	Yes	Indicates whether the RIN is transacting as an assigned RIN or a separated RIN.		
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
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
				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 12: 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. ¹	7017
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 12: 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
complex	<i>RetireSupportingDocumentDetail</i>	No	Information for the industry user to create user defined data to report supporting document identifiers.		
complex	<i>RetireOriginatingSourceDetail</i>	No	Information on the original renewable fuel production.		

¹ No RINs may be retired for compliance during the month of March.

5.7 Generate Biogas Tokens

Figure 13: Data Elements for *GenerateBiogasTransactionDetail*

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	<i>TokenTypeCode</i>	Yes	A code that identifies the type of token.	Token Type Code must be valid	21034
				The fuel (D-code) associated with the Token Type Code must be included in an actively registered biogas association record for this facility.	21087
xsd:date	<i>ProductionDate</i>	Yes	The date the renewable fuel was produced as a designated by the producing facility.	Production Date must be after Submission Date	21011
				Submission Date must be within the allowed date range	21055
xsd:decimal	<i>BiogasBatchVolumeHHV</i>	Yes	The volume, in mmBtu HHV, of biogas associated with a batch number designated by the producing facility.		
xsd:nonNegativeInteger	<i>BiogasBatchVolumeSCF</i>	Yes	The volume, in SCF, of biogas associated with a batch number designated by the producing facility.		
xsd:nonNegativeInteger	<i>TokenQuantity</i>	Yes	The total number of tokens specified in the transaction.	Token Quantity must be equal to the rounded value of Batch Volume mmBTU HHV	21032

(cont.)

Figure 13: Data Elements for *GenerateBiogasTransactionDetail* (cont.)

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
xsd:string	<i>QAPServiceTypeCode</i>	Yes	Indicates what level of QAP certification is desired for the RINs involved in the transaction.	QAP Service Type Code must be valid	21064
xsd:string	<i>QapProviderOrganizationIdentifier</i>	No	The OTAQReg identifier for the organization providing QAP data on the RINs.	QAP Company ID must be reported if QAP Service Code indicates facility is QAP'd	22100
				The QAP Provider must have active relationship with the biogas production facility for the token type.	21101
				The Token Type reported in the production of biogas cannot be suspended unless QAP Service Type is 30.	21102
xsd:string	<i>TransactionDetailCommentText</i>	No	Comment provided by the user on the transaction.		

(cont.)

Figure 13: Data Elements for *GenerateBiogasTransactionDetail* (cont.)

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
complex	<i>GenerateOriginatingSourceDetail</i>	Yes	Identifies the user defined information regarding supporting document identifiers for a transaction.	Generate Organization must be the same as the Submitting Organization	21000
				Generate Organization must be registered as a Biogas Producer	21012
				Facility must be Active and associated with the Generate Organization	21004
				Public Facility Number must be unique	21052
				Facility must be registered for at least one biogas source	21088
				Batch Number must be reported and unique for production year (search in batch table)	21019

(cont.)

Figure 13: Data Elements for *GenerateBiogasTransactionDetail* (cont.)

Data Elements				QA Checks	
Data Type	Name	Required	Description	Description	Number
				Batch Number must be reported and unique for production year (search in unsubmitted transactions)	21021
complex	<i>BiogasFeedstockDetail</i>	No	Identifies the feedstock used to create the renewable fuel.		

Figure 14: Data Elements for *BiogasFeedstockDetail*

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	<i>BiogasFeedstockCode</i>	Yes	A code that identifies the feedstock used in the production of the biogas batch.	Biogas feedstock code must be actively registered for this facility	20169
				Biogas Feedstock must not be reported for a landfill facility.	21089
				At least one Biogas Feedstock must be reported for a digester facility.	21078

(cont.)

Figure 14: Data Elements for *BiogasFeedstockDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:decimal	<i>BiogasFeedstockQuantity</i>	Yes	Total amount of feedstock used in the production of biogas.		
xsd:string	<i>BiogasFeedstockMeasureCode</i>	Yes	The unit of measure associated with the volume of feedstock used in the production of biogas.	Feedstock Measure Code must be valid.	21027
xsd:Boolean	<i>RenewableBiomassIndicator</i>	Yes	An indicator of whether the feedstock used qualifies as renewable biomass.	Feedstock must be a renewable biomass.	21030
xsd:string	<i>FeedstockDetailCommentText</i>	No	Comment provided by the user on the feedstock.		

5.8 Buy Biogas Tokens

Figure 15: Data Elements for *BiogasBuyTransactionDetail*

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	<i>BuyFacilityIdentifier</i>	Yes	The facility identifier, as registered in OTAQReg, for the facility that buys biogas or other products.	Buy Facility must be actively associated with the Buy Organization	22004
				Buy Public Facility Number must be unique	22052

(cont.)

Figure 15: Data Elements for *BiogasBuyTransactionDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
				Buy (submitting) Organization must be a Renewable Fuel Producer or a Renewable Fuel Importer	22012
xsd:string	<i>TransactionPartnerOrganizationIdentifier</i>	Yes	Identifies the selling organization for the buy transaction using the OrganizationIdentifier designated by OTAQReg.	Trading Partner Organization must be registered at EPA and Active	22018
xsd:string	<i>TransactionPartnerOrganizationName</i>	Yes	Name of the organization trading partner.		
xsd:string	<i>TransactionPartnerFacilityIdentifier</i>	Yes	Identifies the selling facility for the buy transaction using the FacilityIdentifier designated by OTAQReg.	Trading Partner Facility must be an Unbonded Foreign Renewable Fuel Producer with a pathway for fuel and usage if Buyer is an Importer	22092

(cont.)

Figure 15: Data Elements for *BiogasBuyTransactionDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
				Buy Facility must have an active association with Trading Partner Facility for fuel and usage if Buyer is a Renewable Fuel Producer	22087
				Trading Partner Facility must be actively associated with an organization	22091
xsd:nonNegativeInteger	<i>TokenQuantity</i>	Yes	The total number of tokens specified in the transaction.	Matching Trade must have the same number of Tokens	22021
				Token Quantity must be equal to the rounded value of Batch Volume (mmBTU HHV)	22032
xsd:decimal	<i>BiogasBatchVolumeHHV</i>	Yes	The volume, in mmBtu HHV, of biogas associated with a batch number designated by the producing facility.		

(cont.)

Figure 15: Data Elements for *BiogasBuyTransactionDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:nonNegativeInteger	<i>BiogasBatchVolumeSCF</i>	Yes	The volume, in SCF, of biogas associated with a batch number designated by the producing facility.		
xsd:string	<i>TokenTypeCode</i>	Yes	A code that identifies the type of token.	Token Type Code must be a valid code	22024
xsd:string	<i>BiogasUsageCode</i>	Yes	A code that identifies the usage of the biogas in a batch.	Biogas Usage must be a valid reason	22090
xsd:string	<i>QAPServiceTypeCode</i>	No	A code that indicates what level of QAP certification is desired for the RINS involved in the transaction.	QAP Service Type Code must be a valid code	22064
				The Token Type reported in the production of biogas cannot be suspended unless QAP Service Type is 30.	21102
xsd:string	<i>QapProviderOrganizationIdentifier</i>	No	The OTAQReg identifier for the organization providing QAP data on the RINS.	QAP Provider ID must be reported if QAP Service Code indicates Facility is QAP'd	22100
xsd:string	<i>BuyReasonCode</i>	Yes	This code identifies the reason for the buy transaction.	Buy Reason Code must be valid	22034

(cont.)

Figure 15: Data Elements for *BiogasBuyTransactionDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:date	<i>TransferDate</i>	Yes	The date the tokens change hands. Normally the date they are received by the purchaser.	Transfer Date must be within the allowed range	22055
				Transfer Date must not be a future date	22020
xsd:string	<i>PTDNumber</i>	No	The PTD number associated with the transaction		
xsd:string	<i>BillofLading</i>	No	The Bill of Lading associated with the transaction		
xsd:string	<i>Invoice</i>	No	The Invoice associated with the transaction		
xsd:string	<i>MatchingTransactionIdentifier</i>	No	The EMTS transaction identification number that matches the submitted buy transaction.	Matched Transaction must be a Pending Sell Transaction	22016
				Matched Transaction ID Must Belong to a Matching Biogas Sell Transaction	22017
xsd:string	<i>TransactionDetailCommentText</i>	No	Comment provided by the user on the transaction.		

(cont.)

Figure 15: Data Elements for *BiogasBuyTransactionDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
complex	<i>BuyOriginatingSourceDetail</i>	No	Identifies the user defined information regarding supporting document identifiers for a transaction.		

5.9 Sell Biogas Tokens

Figure 16: Data Elements for *BiogasSellTransactionDetail*

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	<i>SellFacilityIdentifier</i>	Yes		Sell Organization must be a biogas producer or a foreign unbonded renewable fuel producer	23012
				Sell Facility Number must be unique	23052
				Sell Facility must be actively associated with the Selling Organization	23004
				Token Type Code must be Valid	23024

(cont.)

Figure 16: Data Elements for *BiogasSellTransactionDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
				Sell Facility must have active association with Trading Partner Facility for fuel and Usage if the seller is the biogas producer.	23087
				Sell Facility must have pathway for fuel and usage if seller is a renewable fuel producer.	23088
xsd:string	<i>TransactionPartnerOrganizationIdentifier</i>	Yes	Identifies the buyer organization for the sell transaction using the OrganizationIdentifier designated by OTAQReg.	Transaction Partner Organization must be Registered at EPA and Active	23091
				Transaction Partner Organization must be Registered at EPA and Active	23018
xsd:string	<i>TransactionPartnerOrganizationName</i>	Yes	The name of the organization trading partner.		
xsd:string	<i>TransactionPartnerFacilityIdentifier</i>	Yes	Identifies the buying facility for the sell transaction using the FacilityIdentifier designated by OTAQReg.	Trading Partner Facility must be a renewable fuel importer if seller is a renewable fuel producer	23092
xsd:nonNegativeInteger	<i>TokenQuantity</i>	Yes	The total number of tokens specified in the transaction.	Token Quantity must be equal to the rounded value of Batch Volume mmBTU HHV	23032
				Must have sufficient Biogas Tokens	23038

(cont.)

Figure 16: Data Elements for *BiogasSellTransactionDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:decimal	<i>BiogasBatchVolumeHHV</i>	Yes	The volume, in mmBtu HHV, of biogas associated with a batch number designated by the producing facility.		
xsd:nonNegativeInteger	<i>BiogasBatchVolumeSCF</i>	Yes	The volume, in SCF, of biogas associated with a batch number designated by the producing facility.		
xsd:string	<i>TokenTypeCode</i>	Yes	A code that identifies the type of token.		
xsd:string	<i>BiogasUsageCode</i>	Yes	A code that identifies the usage of the biogas in a batch.	Biogas Usage must be Valid	23090
xsd:string	<i>QAPServiceTypeCode</i>	Yes	A code that indicates what level of QAP certification is desired for the RINS involved in the transaction.	QAP Service Type Code must be valid.	23064
xsd:string	<i>QapProviderOrganizationIdentifier</i>	No	The OTAQReg identifier for the organization providing QAP data on the RINS.	QAP Company ID must be reported if the QAP Service Code indicates that the facility is QAP certified.	23100

(cont.)

Figure 16: Data Elements for *BiogasSellTransactionDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:string	<i>SellReasonCode</i>	Yes	This code identifies the reason for a sell transaction.	Sell Reason Code must be valid.	23034
xsd:date	<i>TransferDate</i>	Yes	The date the tokens change hands. Normally the date they are received by the purchaser.	Transfer Date must not be future date.	23020
				Transfer Date must be within Allowed Range	23055
xsd:string	<i>PTDNumber</i>	No	The PTD number associated with the transaction.		
xsd:string	<i>BillOfLading</i>	No	The Bill of Lading associated with the transaction.		
xsd:string	<i>Invoice</i>	No	The Invoice associated with the transaction.		
xsd:string	<i>MatchingTransactionIdentifier</i>	No	The EMTS transaction identification number that matches the submitted buy transaction.	Matched Transaction Must Be Pending Buy Transaction	23016
				Matched Transaction ID must belong to a matching Biogas Buy Transaction ID	23017
xsd:string	<i>TransactionDetailCommentText</i>	No	Comment provided by the user on the transaction.		

(cont.)

Figure 16: Data Elements for *BiogasSellTransactionDetail* (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
complex	<i>SellOriginatingSourceDetail</i>	No	Identifies the user defined information regarding supporting document identifiers for a transaction.		

5.10 Retire Biogas Tokens

Figure 17: Data Elements for *BiogasRetireTransactionDetail*

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
Xsd:string	<i>RetireFacilityIdentifier</i>	Yes	The facility identifier, as registered in OTAQReg, for the facility that retires biogas or other products.	Organization must be registered as a biogas producer renewable fuel producer, or renewable fuel importer to retire tokens.	24012
				The biogas retire facility must be actively associated with the biogas retire organization.	24004
				The biogas retire facility number specified must be unique for the organization.	24052
xsd:nonNegativeInteger	<i>TokenQuantity</i>	Yes	The total number of tokens specified in the transaction.	If Batch Volume mmBTU HHV is reported, the Token Quantity must equal the rounded value of Batch Volume mmBTU HHV.	24032
				The facility must have enough available biogas tokens in its holding account to complete the transaction.	24038

(cont.)

Figure 17: Data Elements for BiogasRetireTransactionDetail (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:decimal	<i>BiogasBatchVolumeHHV</i>	Yes	The volume, in mmBtu HHV, of biogas associated with a batch number designated by the producing facility.	Batch Volume must be reported for selected Reason Code	24040
xsd:nonNegativeInteger	<i>BiogasBatchVolumeSCF</i>	Yes	The volume, in SCF, of biogas associated with a batch number designated by the producing facility.	Batch Volume must be reported for selected Reason Code	24040
xsd:string	<i>TokenTypeCode</i>	Yes	A code that identifies the type of token.	The Token Type Code reported must be a valid code that is recognized by EPA.	24024
xsd:string	<i>QAPServiceTypeCode</i>	Yes	Indicates what level of QAP certification is desired for the RINs involved in the transaction.	The QAP Service Type Code reported must be a valid code that is recognized by EPA.	24064
xsd:string	<i>QapProviderOrganizationIdentifier</i>	No	The OTAQReg identifier for the organization providing QAP data on the RINs.	A QAP Provider must be reported for this facility if the QAP Service Type is 10, otherwise it should not be reported.	24100
xsd:string	<i>RetireReasonCode</i>	Yes	This code identifies the reason for a retire transaction.	The reason code reported for the retirement of biogas tokens must be a valid code that is recognized by EPA.	24034

(cont.)

Figure 17: Data Elements for BiogasRetireTransactionDetail (cont.)

Data Element				QA Check	
Data Type	Name	Required	Description	Description	Number
xsd:date	TransactionDate	Yes	The date of the RIN transaction.	The transaction date specified may not occur in the future.	24020
				Transaction Date must be within Allowed Range	24055
xsd:string	<i>TransactionDetailCommentText</i>	No	Comment provided by the user on the transaction.	Comment must be reported for selected Reason Code	24037
complex	<i>RetireOriginatingSourceDetail</i>	No	Information on the original renewable fuel production.	If the biogas generate organization is provided then it must be registered with EPA as a biogas producer.	24101
				If the biogas generate facility is provided then it must be actively associated with the biogas generate organization.	24104
				If a biogas batch number is reported then both the organization and facility identifiers where the biogas was produced must also be reported.	24106
				If a biogas generate facility is reported then the organization where the biogas feedstock was produced must be reported as well.	24107

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 volume 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.
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.

(cont.)

EMTS Glossary (cont.)

Title	Definition
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.
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).

(cont.)

EMTS Glossary (cont.)

Title	Definition
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.
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.

(cont.)

EMTS Glossary (cont.)

Title	Definition
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.
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 a RIN is assigned to a volume of renewable fuel: 1 - RIN is assigned to a renewable fuel that is not RNG 2 - RIN is separated 3 - RIN is assigned to a volume of RNG
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.
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(cont.)

EMTS Glossary (cont.)

Title	Definition
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 volume 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.
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).
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(cont.)

EMTS Glossary (cont.)

Title	Definition
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.
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
21000-21999	Generate Biogas Tokens
22000- 22999	Buy Biogas Tokens
23000-23999	Sell Biogas Tokens
24000-24999	Retire Biogas Tokens

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.

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."
3032	Fuel Code must be registered	Generate	The fuel code reported must be registered with EPA.
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
3044	Foreign Producer must be Bonded	Generate	If the Submission Organization is a Foreign Producer, they must be bonded.
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).

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
3077	Remedial Generate Transaction must be authorized.	Generate	A remedial generate transaction must have a corresponding remedial generate authorization.
3080	Biointermediate Company and facility required.	Generate	The biointermediate company and facility are required for a biointermediate feedstock.
3081	Biointermediate Company and Facility not allowed.	Generate	The biointermediate company and facility are not allowed unless the feedstock is a biointermediate.
3082	Only one biointermediate feedstock allowed.	Generate	A generate transaction cannot contain more than one feedstock that is a biointermediate.
3083	QAP service type 30 not allowed.	Generate	A QAP Service Type of 30 (Unverified) is not allowed if the transaction contains a biointermediate feedstock.
3084	Biointermediate facility not active or not associated with activebiointermediate company.	Generate	The biointermediate company or facility does not have an active registration, or the facility does not belong to the company.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
3085	Biointermediate facility must have active relationship with the generate facility for the feedstock.	Generate	The generate facility must have an active relationship with the biointermediate production facility for the feedstock.
3086	Biointermediate feedstock process must be verified.	Generate	The production processes for a biointermediate feedstock must be verified by the same QAP provider that verified the renewable fuel pathway.
3900	Sufficient RINs	Generate	Runs reservation step for generate transaction. Needed for Transaction_Status_Log entry.
3100	Token Type and Quantity must be reported for a biogas feedstock pathway, otherwise not.	Generate	Token Type and Quantity must be reported if and only if the Fuel Category Code is part of a biogas pathway.
3101	Token Type must be consistent with Fuel Code (D-Code)	Generate	Token Type must be consistent with Fuel Code (D-Code)
3102	Token Quantity must be consistent with RIN Quantity.	Generate	The Token Quantity is inconsistent with the RIN Quantity. The RIN Quantity cannot exceed the Token Quantity multiplied by (0.9004 divided by 0.077) rounded to the nearest integer.
3103	Treated Biogas Indicator must be reported if fuel is LNG or CNG, otherwise not.	Generate	Treated Biogas Indicator must be reported if and only if the Fuel Category is LNG or CNG.
3104	Volume Treated Biogas must be reported if the biogas feedstock has been treated, otherwise not.	Generate	Volume Treated Biogas must be reported if and only if the biogas feedstock has been treated.
3105	Injection Point must be reported if fuel is RNG, otherwise not.	Generate	Injection Point must be reported if and only if the Fuel Category is RNG.

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
3106	Injection Point must be registered for the generate facility.	Generate	If reported, the Injection Point FRS ID must be registered for the generate facility.
3138	Sufficient Biogas Tokens	Generate	The facility must have enough available biogas tokens in its holding account for the specified Token Type, QAP Service Type, and QAP Provider to complete the transaction.
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" or "3"	Buy	If assignment is "1" or "3," 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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
4077	Price must be greater than 0 when Buy Reason Code is 11 or 12.	Buy	A price other than \$0.00 must be reported for a buy transaction with a reason of "Spot Trade" (11) or "Term Contract" (12).
4078	Price Unit must be Price Per RIN when Buy reason Code is 11 or 12.	Buy	The price of a buy transaction with a reason of "Spot Trade" (11) or "Term Contract" (12) must be reported in per RIN units.
4079	Buy Reason Code cannot be 10 for separated RINS on or after 01/01/2020	Buy	The reason "Standard Trade" (10) must not be reported for a buy transaction if Transfer Date is on or after 01/01/2020 and the RIN Assignment Code is Separated.
4080	Buy Reason Code cannot be 11, 12, or 13 for RINs transferred before 01/01/2020 or for RINs that are Assigned	Buy	The reason "Spot" (11), "Term Contract" (12), or "Consignment" (13) must not be reported for a buy transaction if the Transfer Date is prior to 01/01/2020 or the RIN Assignment Code is Assigned.
4800	Reserve Pending Trade	Buy	The transaction specified by the matching transaction identifier must be available to be reserved.
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.
5100	Organization Permissions	Separate	Organization must have an RNG RIN Separator business activity if RNG Fuel Indicator is true.
5101	Separate Reason Code must be valid	Separate	Separate Reason Code must be equal to 110 if RNG Fuel Indicator is true, otherwise it must be a valid code not equal to 110.
5102	Dispensing Station must be reported for an RNG Batch, otherwise not	Separate	The Dispensing Station FRS ID must be reported if and only if the RNG Fuel Indicator is true.
5103	Dispensing Station must be registered for the company	Separate	If reported, the Dispensing Station FRS ID must be registered for the company.
5104	Either CNG or LNG Volume must be for RNG Batch; otherwise not.	Separate	CNG Volume MMBTU LHV or LNG Volume MMBTU LHV (but not both) must be reported if and only if RNG Fuel Indicator is true, otherwise neither should be reported.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
5901	Sufficient RINs (Organization)	Separate	The organization must have enough available RINs from the specified organization 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.
6011	Assignment Code of "1" or "3"	Sell	If the assignment is "1" or "3," 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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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	A comment is required for transactions with a Sell Reason Code of "Remedial Action – Incorrect Trading Partner (30)," "Deny Trade (50)," or "Remedial Action – Duplicate Trade (80)."
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.
6077	Price must be greater than 0 when Sell Reason Code is 11 or 12.	Sell	A price other than \$0.00 must be reported for a sell transaction with a reason of "Spot Trade" (11) or "Term Contract" (12).
6078	Price Unit must be Price Per RIN when Sell Reason Code is 11 or 12.	Sell	The price of a sell transaction with a reason of "Spot Trade" (11) or "Term Contract" (12) must be reported in per RIN units.
6079	Sell Reason Code cannot be 10 for separated RINS on or after 01/01/2020	Sell	The reason "Standard Trade" (10) must not be reported for a sell transaction if Transfer Date is on or after 01/01/2020 and the RIN Assignment Code is Separated.
6080	Sell Reason Code cannot be 11, 12, or 13 for RINS transferred before 01/01/2020 or for RINS that are Assigned	Sell	The reason "Spot" (11), "Term Contract" (12), or "Consignment" (13) must not be reported for a sell transaction if the Transfer Date is prior to 01/01/2020 or the RIN Assignment Code is Assigned.

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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."
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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.

(cont.)

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
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

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
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.
9077	Fuel Code must be specified.	Lock	Fuel Code must be specified.
9078	QAP service type Code must be specified.	Lock	QAP service type Code must be specified.
9079	Assignment Code must be specified.	Lock	Assignment Code must be specified.
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.

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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.
10077	Fuel Code must be specified.	Unlock	Fuel Code must be specified.

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
10078	QAP service type Code must be specified.	Unlock	QAP service type Code must be specified.
10079	Assignment Code must be specified.	Unlock	Assignment Code must be specified.
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.
21000	Biogas Generate Organization differs from Submitting Organization	Biogas Generate	Biogas generate organization must be same as submitting organization.
21004	Biogas Generate Facility Association with Organization	Biogas Generate	The biogas generate facility must be actively associated with the generate organization.
21011	Production Date within Range	Biogas Generate	The production date must not occur after the date specified in submittal date.
21012	Organization Permissions	Biogas Generate	Organization must be registered as a biogas producer.

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
21019	Batch Number must be unique for facility and production year	Biogas Generate	Same batch number for same facility and production year must not exist in inventory
21021	Batch Number must be unique for company and production year	Biogas Generate	Same batch number for same company and production year must not exist in submission file
21027	Biogas Feedstock Measure Code must be valid	Biogas Generate	The biogas feedstock measure code reported in the production of fuel must be a valid code that is recognized by EPA.
21030	Renewable Biomass	Biogas Generate	All specified feedstocks must be indicated as 'Renewable Biomass'.
21032	Token Quantity must be equal to the Batch Volume MMBTU HHV	Biogas Generate	The number of tokens in the batch must equal the batch volume (MMBTU HHV).
21034	Token Type Code must be valid	Biogas Generate	The Token Type Code reported must be a valid code that is recognized by EPA
21052	Biogas Generate Public Facility Number must be unique	Biogas Generate	The biogas generate facility number specified must be unique for the organization.
21055	Production Date must be within Allowed Range	Biogas Generate	The Production Date must be within the last n days based on PRODUCTION_DATE_DAYS_BACK parameter.
21064	QAP Service Type Code must be valid	Biogas Generate	The QAP Service Type Code reported must be a valid code that is recognized by EPA.

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
21069	Biogas Feedstock Code matches registration	Biogas Generate	Biogas feedstock code must be actively registered for this facility.
21078	Biogas Feedstock must be reported	Biogas Generate	At least one biogas feedstock record must be reported for a digester facility.
21087	Facility must have active association with fuel producer for fuel	Biogas Generate	Fuel (D-code) associated with this token type must be included in an active biogas association record registered for this facility.
21088	Facility must be registered for Biogas Source.	Biogas Generate	Facility must be registered for at least one biogas source.
21089	Biogas Feedstock must not be reported	Biogas Generate	Biogas feedstock record must not be reported a landfill.
22004	Biogas Buy Facility Association with Organization	Biogas Buy	The biogas buyer facility must be actively associated with the buyer organization.
22012	Organization Permissions	Biogas Buy	Organization must be registered as a renewable fuel producer or a renewable fuel importer
22016	Matched Transaction Must Be Pending Biogas Sell	Biogas Buy	If the Biogas Buy Transaction has a matched Biogas Sell transaction ID, the transaction must be in a pending state.
22017	Matched Transaction ID Must Belong to a Matching Biogas Sell	Biogas Buy	If the Biogas Sell Transaction has a matched Biogas Buy transaction ID, the transaction must match on trade matching criteria.

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
22018	Trading Partner Organization Registered at EPA and Active	Biogas Buy	The trading partner organization must be registered at EPA and be active.
22020	Transfer Date within Range	Biogas Buy	The transfer date must not occur after the date specified in submittal date.
22021	Matching Trade pending biogas token count validation	Biogas Buy	The user provided matching trade must have the correct number of pending biogas tokens.
22024	Token Type Code must be valid	Biogas Buy	The Token Type Code reported must be a valid code that is recognized by EPA.
22032	Token Quantity must be equal to the Batch Volume MMBTU HHV	Biogas Buy	The number of tokens in the batch must equal the batch volume (MMBTU HHV).
22034	Buy Reason Code must be valid	Biogas Buy	The reason code reported for the sale of biogas must be a valid code that is recognized by EPA.
22052	Biogas Buy Public Facility Number must be unique	Biogas Buy	The biogas buyer facility number specified must be unique for the organization.
22055	Transfer Date must be within Allowed Range	Biogas Buy	The Transfer Date must be within the last n days based on BIOGAS_TRANSFER_DATE_DAYS_BACK parameter.
22064	QAP Service Type Code must be valid	Biogas Buy	The QAP Service Type Code reported must be a valid code that is recognized by EPA.

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
22087	Biogas Buy Facility must have active association with Trading Partner Facility for fuel and usage if buyer is a renewable fuel producer.	Biogas Buy	Biogas Buy company and facility must have an active association with the trading partner company and facility for biogas usage and fuel (D-code) associated with token type if buyer is a renewable fuel producer.
22090	Biogas Usage must be valid	Biogas Buy	The Biogas Usage code reported must be a valid code that is recognized by EPA
22091	Trading Partner Facility must be actively associated with Organization	Biogas Buy	The trading partner facility must be actively associated with the trading partner organization.
22092	Trading Partner Facility must be an unbonded foreign renewable fuel producer with a pathway for fuel and usage if buyer is an importer.	Biogas Buy	Biogas trading partner facility must have a registered biogas pathway for biogas usage and fuel (D-code) associated with token type if buyer is a renewable fuel importer.
22100	QAP Company ID must be reported if QAP Service Code indicates facility is QAP'd, otherwise not	Biogas Buy	A QAP Provider must be reported if and only if the QAP Service Type Code is 10.
23004	Biogas Sell Facility Association with Organization	Biogas Sell	The biogas seller facility must be actively associated with the seller organization.
23012	Organization Permissions	Biogas Sell	Organization must be registered as a biogas producer or a foreign unbonded renewable fuel producer

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
23016	Matched Transaction Must Be Pending Biogas Buy	Biogas Sell	If the Biogas Sell Transaction has a matched Biogas Buy transaction ID, the transaction must be in a pending state.
23017	Matched Transaction ID Must Belong to a Matching Biogas Buy	Biogas Sell	If the Biogas Sell Transaction has a matched Biogas Buy transaction ID, the transaction must match on trade matching criteria.
23018	Trading Partner Organization Registered at EPA and Active	Biogas Sell	The trading partner organization must be registered at EPA and be active.
23020	Transfer Date within Range	Biogas Sell	The transfer date must not occur after the date specified in submittal date.
23024	Token Type Code must be valid	Biogas Sell	The Token Type Code reported must be a valid code that is recognized by EPA.
23032	Token Quantity must be equal to the Batch Volume MMBTU HHV	Biogas Sell	The number of tokens in the batch must equal the batch volume (MMBTU HHV).
23034	Sell Reason Code must be valid	Biogas Sell	The reason code reported for the sale of biogas must be a valid code that is recognized by EPA.
23038	Sufficient Biogas Tokens	Biogas Sell	The selling facility must have enough available biogas tokens in its holding account for the specified Token Type, QAP Service Type, and QAP Provider to complete the transaction.
23052	Biogas Sell Public Facility Number must be unique	Biogas Sell	The biogas seller facility number specified must be unique for the organization.

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EMTS QA Checks (cont.)

Number	Name	Check Group	Description
23055	Transfer Date must be within Allowed Range	Biogas Sell	The Transfer Date must be within the last n days based on BIOGAS_TRANSFER_DATE_DAYS_BACK parameter.
23064	QAP Service Type Code must be valid	Biogas Sell	The QAP Service Type Code reported must be a valid code that is recognized by EPA.
23087	Sell Facility must have active association with Trading Partner Facility for fuel and usage if the seller is a biogas producer	Biogas Sell	Sell company and facility must have an active association with the trading partner company and facility for biogas usage and fuel (D-code) associated with token type if the seller is a biogas producer
23088	Sell Facility must have pathway for fuel and usage if seller is a renewable fuel producer.	Biogas Sell	Sell facility must have a registered biogas pathway for biogas usage and fuel (D-code) associated with token type if buyer is a renewable fuel importer.
23090	Biogas Usage must be valid	Biogas Sell	The Biogas Usage code reported must be a valid code that is recognized by EPA.
23091	Trading Partner Facility must be actively associated with Organization	Biogas Sell	The trading partner facility must be actively associated with the trading partner organization.
23092	Trading Partner must be a renewable fuel importer if seller is a renewable fuel producer.	Biogas Sell	Trading Partner must be a renewable fuel importer if seller is a renewable fuel producer.
23100	QAP Company ID must be reported if QAP Service Code indicates facility is QAP'd, otherwise not	Biogas Sell	A QAP Provider must be reported if and only if the QAP Service Type Code is 10.

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
24004	Biogas Retire Facility Association with Organization	Biogas Retire	The biogas retire facility must be actively associated with the biogas retire organization.
24012	Organization Permissions	Biogas Retire	Organization must be registered as a biogas producer renewable fuel producer, or renewable fuel importer to retire tokens.
24020	Transaction Date Consistent	Biogas Retire	The transaction date specified may not occur in the future.
24024	Token Type Code must be valid	Biogas Retire	The Token Type Code reported must be a valid code that is recognized by EPA.
24032	Reason Code Batch Volume	Biogas Retire	If Batch Volume mmBTU HHV is reported, the Token Quantity must equal the rounded value of Batch Volume mmBTU HHV.
24034	Reason Code must be valid	Biogas Retire	The reason code reported for the retirement of biogas tokens must be a valid code that is recognized by EPA.
24037	Comment Required for Reason Code	Biogas Retire	Comment must be reported for selected Reason Code
24038	Sufficient Biogas Tokens	Biogas Retire	The facility must have enough available biogas tokens in its holding account to complete the transaction.
24040	Batch Volumes Required for Reason Code	Biogas Retire	Batch Volume must be reported for selected Reason Code
24052	Public Facility Number must be unique	Biogas Retire	The biogas retire facility number specified must be unique for the organization.

EMTS QA Checks (cont.)

Number	Name	Check Group	Description
24055	Transaction Date must be within Allowed Range	Biogas Retire	The Transaction Date must be within the last n days based on TRANSACTION_DATE_DAYS_BACK_RETIRED_BIOGAS parameter
24064	QAP Service Type Code must be valid	Biogas Retire	The QAP Service Type Code reported must be a valid code that is recognized by EPA.
24100	QAP Provider Consistent with QA Service Type	Biogas Retire	A QAP Provider must be reported if and only if the QAP Service Type Code is 10.
24101	Biogas Generate Organization must be Registered with EPA as Biogas Producer	Biogas Retire	If the biogas generate organization is provided then it must be registered with EPA as a biogas producer.
24104	Biogas Generate Facility Association with Generate Organization	Biogas Retire	If the biogas generate facility is provided then it must be actively associated with the biogas generate organization
24106	Biogas Batch Number Requires Biogas Generate Organization and Facility	Biogas Retire	If a biogas batch number is reported then both the organization and facility identifiers where the biogas was produced must also be reported.
24107	Biogas Generate Facility Requires Biogas Generate Organization	Biogas Retire	If a biogas generate facility is reported then the organization where the biogas feedstock was produced must be reported as well.