DELIVERED VIA EMAIL   October 28, 2014

Mr. Bryon Bunker
Environmental Protection Agency
Director, Compliance and Innovative Strategies Division
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Dear Mr. Bunker:

The RFG Survey Association, Inc. (RFGSA) is a not-for-profit Association of refiners, importers and blenders of reformulated gasoline (RFG) and reformulated gasoline blendstock for oxygenate blending (RBOB). The Association is requesting your approval of the RFGSA's 2015 E15 Compliance Survey Program.

The Association working closely with the Agency, obligated parties and their representatives has developed a retail E15 sampling and testing program to meet the E15 partial fuel wavier condition and the regulatory requirements found in 40 C.F.R. § 80.1502.

On behalf of it's participating companies the Association is hereby submitting the 2015 E15 Compliance Survey Program as required in the partial fuel wavier and 40 C.F.R. § 80.1502. The proposed survey design includes a comprehensive survey program designed to achieve the objectives established in the regulations and the retail survey requirement under the partial fuel wavier conditions. Attached please find the 2015 E15 Compliance Survey Design Plan (Attachment 1) and a listing of participating companies registered to participate in the survey (Attachment 2). Regular updates to the registered participants are available on the RFGSA website (www.rfgsa.org) upon login.

The Association is requesting your approval of the plan.

If you have any questions, please do not hesitate to call me.

Sincerely,

Cc:
Robert Anderson – EPA
Jeff Kodish – EPA
J. Pollock – SWRI
Attachments (2)
2015E15_SD

Attachment 1

E15 Compliance Survey Plan

Proposal

2015

October 27, 2014

Prepared for:

RFG Survey Association
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2015 Study Plan for the E15 Survey Program

Study Plan for an E15 Survey Program

Goals

E15 may be lawfully sold only after the manufacturer has registered E15 and met the conditions of the partial waivers. The conditions of the partial wavier include: E15 pump labeling, tracking of E15 through the supply chain through product transfer documentation, and the implementation of retail survey program to monitor E15 content and labeling compliance. Collectively, these required items are to be documented/ addressed in a "Misfueling Mitigation Plan" submitted to EPA for approval by each obligated party under the regulations.

The primary purpose of the survey is to mitigate mis-fueling of and to ensure proper label identification and blending of the ethanol product. The E15 retail survey requirement is described in 40 CFR Part 80 §1502, there are two options under which parties involved in making, distributing and selling E15 can conduct ongoing surveys to monitor compliance with the composition and signage for E15. The two options are:

> Survey Option 1 – This is a geographically focused option. It allows an individual, group of gasoline and ethanol producers, importers or oxygenate blenders to conduct local or regional surveys to their level of distribution.

> Survey Option 2 – This option allows responsible parties to conduct a nationwide survey to reflect when producers decide to sell product in more parts of the country.

The EPA provided these options to allow flexibility in the survey program to match the anticipated gradual introduction of E15. The current survey program adopts Survey Option 1 for a geographically focused survey plan targeting areas with higher potential for the distribution and sale of E15.

Sampling for the E15 program under these options have these goals:

- Provide a framework for representative samples of retail fuel outlets in the United States with emphasis on retail stations registered/identified as Site Blenders. [1] Site Blenders are one of the obligated parties (refiners/importer, ethanol producers, blenders and site blenders) required to participate/fund the E15 retail survey to sell E15. As of October 15, 2014, there are an estimated 83 registered site blenders in the program. This number is expected to increase over time. There are no refiners involved in the program. If refiners enter the program, the sampling program will adapt to this market condition.
- Provide a representative sampling of retail fuel outlets.

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[1] A site blender is a retail location with blender pumps capable of blending multiple grades of gasoline blendstock with various ethanol concentrations (E10, E15...E85) or alternatively a site blender could also be a retail location where splash blending occurs (tank blending of gasoline and additional ethanol) to create a final Ethanol blended fuel (i.e. E15).

- Statistical power designed to detect % outside the parameters for E15 and signage compliance.
- Provide a sample of non-E15 fuel that verifies the ethanol concentration of non-E15 fuel. This will determine that E15 fuel has not been mis-fueled in the non-E15 fuel supply.
- Monitor compliance with applicable RVP standards during the high ozone season for E15

The Plan

Overview of Sampling Plan

The Industry requested to commence the E15 retail-sampling program. E15 is emerging in smaller regional geographic areas. Although the survey provides nationwide E15 sampling coverage, it remains geographically focused under Survey Option 1. The survey monitors these areas closely to evaluate the E15 product emergence into commerce. The focus of the survey is primarily in areas where E15 is known to be in commerce (E15 site blenders). Sampling is to be conducted outside of these areas to monitor and flag E15 emergence.

The E15 Survey program has identified these small geographic areas where E15 is likely to enter into commerce. The distribution of the product is, so far, confined to small areas through individual site blender pumps (site blenders). The number of site blenders offering E15 is small. The survey requires the registration of these site blenders prior to E15 entering into commerce.[2] The E15 Survey program uses this requirement to assist in the sample design as well as monthly updates from the different RFGSA monitoring programs – Reformulated Gas, Ultra-low Sulfur Diesel and E15 monitoring programs. The sample design will follow this logic. First the nation will be divided into three sampling strata. The strata are referred to as Densely Populated Survey Areas, Transportation Corridor Survey Areas and Remaining Survey Areas. Each of these sampling strata is further divided into smaller sampling areas or clusters. Each survey period a sample of clusters are selected at random and then retail outlets are selected at random within a cluster. The full sample design follows these steps:

1) Strata definitions – The three strata are the Densely Populated Survey Areas (DPA), Transportation Corridor Survey Areas (TCA) and Remaining Survey Areas (RSA). They are:
   a. DPA – The Densely Populated Survey Areas are the clusters with known site blenders or known stations selling E15.
   b. TCA – The Transportation Corridor Survey Areas are based on the Interstate Highways outside of the major urban areas. The corridor consists of the Interstate and a two-mile swath on each side of the highway.

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[2] For purposes of this survey plan, registration refers to an act by a responsible party, as define in 40 CFR 80.1502, signing on to participate in the E15 Compliance Survey program. This does not refer to the separate action of registering a fuel or fuel additive under 40 CFR Part 79.

       c. RSA – All remaining clusters are assigned to the Remaining Survey Area stratum.
2) Cluster definitions – There are two cluster definitions to be used.
       a. DPA and RSA strata cluster definitions – Groupings of contiguous counties were constructed such that travel from one end of the grouping to other could be made in a half day. The groupings were further divided by 3-digit ZIP Codes within the groupings. All counties and 3-digit ZIP Codes within the 50 United States, the District of Columbia, Puerto Rico and the U.S. Virgin Islands accounted for.
       b. TCA strata – TCA clusters were identified by 150 mile or less segments along the Interstate Highway System.
3) Assigning clusters to the DPA stratum
       a. Addresses of known individual site blenders or stations known to sell E15 are used to identify clusters with at least one site blender/ E15 station.
       b. These clusters are assigned to the DPA substrata.

By design, these clusters include all of the United States including the continental United States, Alaska, Hawaii, the District of Columbia, Puerto Rico and the U.S. Virgin Islands.

4) Stations will be selected using a two-stage process. First, a cluster will be selected, and then stations will be selected within a cluster. The process is slightly different for the DPA, TCA and RSA strata. The main differences in the sampling process are described here and elaborated on in the sampling plan section.   The total number of samples for 2014 will be 5,000. The samples will be allocated using a 50%, 25%, and 25% split for the DPA, TCA and RSA strata. This targets the DPA stratum, the stratum with the greatest potential for encountering stations with E15 for sale.

       a. DPA – The DPA stratum will be subdivided into 9 substrata based on states. A random sample of clusters will be selected each quarter. The stratification ensures a large geographic dispersion in the sample. The sampling plan will accomplish the following goals – every *registered* site blended will be selected each quarter, every *non*-registered site blender will be selected with certainty at least once per year, and the total number of samples to be collected will be capped at 650 each quarter.

       To ensure that each site blender is selected at least once during a calendar year, each site blender will be assigned at random to a quarter of the year. In that quarter, the clusters with the assigned site blender will be selected with certainty as will that station. At least 66 clusters will be selected each quarter. A site blender location will be selected within each cluster, and a random sample of 4 or 5 additional stations will be selected without replacement from that cluster at random based on the RFGSA database of stations. The cluster defines the surrounding area for each site blender, and it assures a random and representative sample of the site blenders neighboring stations. The number of additional stations will

be adjusted to limit the number of expected samples to be selected from the stations to 600 per quarter.

Three different scenarios can occur within each cluster, and the sampling plan for the site blender and 5 other stations within a cluster will use the following priority:

- A site blender or station known to be selling E15 fuel –Site blender or station known to be selling E15 fuel – Within a cluster, a site blender or station (either registered or not) that is known to be selling E15 will be selected with certainty every quarter. (As of 10/15/2014 – there are approximately 83 registered site blenders known to be selling E15. If there is more than one site blender in this category, one will be selected at random, and the others will be placed back into the sample pool for the remaining selections. Five additional stations will be selected per cluster.
- Known registered site blender that may not be selling E15 fuel – A known registered site blender without definite knowledge of selling E15 will be selected with certainty at least once per year. There are 347 site blender locations. If there is more than one site blender in this category, one will selected at random, and the others will be placed back into the sample pool for the remaining selections. Five additional stations will be selected per cluster.
- No registered site blender – In cluster without a registered site blender, six stations will be selected at random. Each cluster should have at least one site blender, but sometimes stations close permanently or temporarily before the sampling plan will undergo a quarterly update.

b. TCA – The TCA stratum will be subdivided into 3 substrata based on the number of stations within the cluster. The stratification used is an equal aggregate size strata method. The clusters are ordered by size. An equal number of clusters will be selected within each substratum. Approximately 50 clusters will be selected with about 17 clusters per substrata. Six stations at random will be selected per cluster from the RFGSA database of fuel stations.

c. RSA – The RSA stratum will be subdivided into 3 substrata on the number of square miles per station within the cluster. This station density will be using in equal aggregate size strata method. An equal number of clusters per substrata will be selected. Approximately 50 clusters with 17 per substrata will be selected. Six stations will be selected at random within each cluster from the RFGSA database of fuel stations. Stations found to be selling E15 will be identified and switched into the DPA stratum for the next quarter.

d. Late registration of Site Blenders – The registration of site blenders will be ongoing, and it is expected that site blenders will be registered after the quarterly update and sample selection and prior to the field execution of the E15 sample. Each quarter will reserve up to 4% of the sample (50 samples) to visit the site blenders not identified and in the quarterly

update. These unused samples (in cases where late registrations do not occur) will be available for use in subsequent quarters.

The Annual number of samples is summarized here:

Stratum	Target	Maximum
DPA	2,400	2,416
TCA	1,200	1,212
RSA	1,200	1,212
Late Registration of Site Blenders	200	200
Total	5,000	5,040

Based on these definitions, the country is divided among the three strata. The next table provides the division of outlets, population, geography and the defined clusters between the strata.

Strata	Number of Clusters	Population	Total Outlets	Square Miles	Site-blenders
Densely Populated Areas	461	13,703,420	12,686	324,530	347
Transportation Corridor Areas	300	--	19,913	--	0
Remaining Survey Areas	2,134	295,595,845	90,397	2,957,906[3]	0

The E15 Survey program uses a proprietary national database of fuel outlets developed and maintained by New Image Marketing. The database is constructed using fleet and consumer credit card data, findings from commissioned market surveys, member and participant company data and Internet searches. The database is updated on an ongoing basis along with periodic complete reviews of the database. The last complete review was completed in September 2013.

Number of Surveys

There will be 4 quarterly surveys each calendar year. For 2015, there will be 4 quarterly surveys. The first survey will cover January 1, 2015 through March 31, 2015; the second survey will cover April 1, 2015 through June 30, 2015; the third quarterly survey will cover July 1, 2015 through September 30, 2015; and the fourth quarter will cover October 1, 2015 through the December 31, 2015. Retail outlets will be selected at random for each survey series. At least one specimen will be selected from each outlet with as many as three based on the variety of product offered. This process is described in the Field Protocol section.

Stratification and Sampling Plan within Strata

The sampling areas are subdivided into smaller primary sampling units. The E15 primary sampling units consist of the clusters described previously. Clusters within a stratum are selected probabilistically. The sampling plan for cluster differs by stratum.

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[3] Does not include Puerto Rico

Densely Populated Areas (DPAs)

The DPA stratum consists of all clusters with a registered site blender. As of October 15, 2014, there are 347 site blender locations in the database for the E15 program. Not all of the locations in database have begun selling E15 fuel. Site blenders are required to participate/register for the (a) survey. The main statistics are:

- 347 separate retail entities
- 461 Clusters
- 18 states – The following table

State	Number of Site Blenders
AR	2
CO	1
IA	66
IL	12
IN	1
KS	17
MI	8
MN	83
MO	7
NC	2
ND	40
NE	14
NV	1
OH	2
OK	1
SD	62
TX	1
WI	27
Total	347

- Sub-stratification -- To assure geographic dispersion and a strong focus on the states with a concentration of registered site blenders, the DPA stratum will be further stratified into 9 substrata. The first two strata consolidated the states mostly by region and to have similar number of site blenders. The larger states are each their own stratum. Every year, the definition and number of sub-strata will be reviewed and possibly revised. The strata are defined as follows.

Stratum	States included in Strata	Number of Clusters	Number of Registered Site Blenders	Total Number of Stations in Stratum
1	CO,NC,NV,TX,NE	41	20	1979
2	IL,IN,MI,OH	59	24	2519
3	SD	16	62	664

4	ND	13	40	430
5	MN	21	83	2147
6	AR, MO	24	8	995
7	KS	27	17	900
8	WI	2	27	1516
9	IA	28	66	1469
		231	347	12619

- Sampling within cluster -- For each cluster, the site blender plus 5 other stations will be selected using priority scheme described previously.
- Intended Quarterly DPA Sampling Plan
  - o 66 Clusters per quarter
  - o 400 Stations – 120 site blenders
  - o 5-6 stations per cluster
  - o Approximately 600 samples per quarter.
  - o 1.5 samples per Site Blender station.

Transportation Corridor Areas

The sampling plan divides the Transportation Corridors Survey Areas by state and contiguous counties within the state. These divisions are referred to as clusters. Each cluster was designed to not exceed 150 miles and also keep the lengths as even as possible within a state. In some cases, a stretch of highway may be joined with the highway in the neighboring state. The number of stations per cluster ranges from 2 to 457.

These clusters will be further stratified into 3 substrata based on the number of stations within the cluster. The stratification used is an equal aggregate method. The clusters are ordered by size. The first stratum is defined by the top 32 clusters such that the number of stations is one-third of the total stations, the next stratum are clusters with next third of the stations, and the last stratum has the last third of all the stations[4]. Each survey period 17 clusters are selected from each substratum. From each cluster 6 stations are selected.

The Transportation Corridor Survey Area substrata are defined in the next table.

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[4] This approach to stratification is similar to sampling with probability proportional to size. The fewest number of clusters with the greatest size will assigned to the first stratum, the next fewest number of clusters to the second stratum, and the third stratum will have the most clusters but the smallest in size. If we are to pick a fixed number of clusters, then the largest clusters. These properties have been explored in an auditing/ compliance setting. See, Roshwalb, Wright and Godfrey (1987) *Auditing: A Journal of Practice and Theory,* 54-70.

Table: Transportation Corridor Survey Area Substrata Definitions

Substrata	Number of Clusters	Numbers of Stations	Range on Number of Stations in the Cluster	
			Low	High
1	32	7454	161	457
2	70	7646	78	160
3	198	7546	2	78

The intended sampling plan for the Transportation Corridor Area stratum is summarized as follows:

- Stratify the corridor surrounding the Interstate Highway system.
- Use all remaining constructed TCA clusters
- Select
  - 50 clusters per quarter
  - 300 stations
  - Approximately 6 stations per cluster
  - 300 samples
    - Assumes no E15 stations should be found
    - If found, additional samples will be selected

Remaining Survey Areas

The Remaining Survey Areas consist of the areas outside of the DPAs and the Transportation Corridor Survey areas. They range from counties with fairly high population densities to the extreme remote areas. Contiguous counties within the same state and similar population density are grouped together and then subdivided by 3-digit ZIP codes. As with the clustering within DPAs, this will control the data collection costs within clusters, but it still provides geographic dispersion in the Remaining Survey Areas. These are the selection clusters. Some counties are merged with neighboring counties of different state. The groupings were chosen to have counties of similar population densities, to have clear transportation routes within the grouping of counties. The number of stations in a cluster ranges from 1 to 1178.

The clusters are stratified into 3 substrata based on the number of square miles per station within the cluster. The stratification used is an equal aggregate method. The clusters are ordered by station density. There are 90,397 stations in the Remaining Survey Areas. The first stratum is defined by the top 573 clusters such that the number of stations is approximately one-third of the total stations, the next stratum are clusters with next third of the stations, and the last stratum has the last third of all the stations. Each survey period, 17 clusters are selected from each substratum. From each cluster, 6 stations are selected.

The Remaining Survey Area substrata are defined in the next table.

<p align="center">**Table: Remaining Survey Area Substrata Definitions**</p>

Substrata	Number of Clusters	Numbers of Stations	Range on Number of Station Density[5]	
			Low	High
1	573	30027	1	6.8
2	500	30173	6.8	543.6
3	1097	30197	543.6	157121.0

The Remainder Survey Area stratum consists of all clusters not assigned to the DPA and TCA strata.

The intended sampling plan for the RSA stratum consists of the following:
- Use all remaining clusters constructed for the United States, District of Columbia, Puerto Rico and the U.S. Virgin Islands not assigned to the DPA stratum.
- Sample each quarter
  - o 50 clusters
  - o 300 stations across clusters
  - o Approximately 6 stations per cluster
  - o 300 samples
    - ▪ Assumes no E15 stations will be found
    - ▪ If found, additional samples will be selected

Sample Sizes

Sample size in a compliance program is based on needed precision of estimates and desired power of statistical tests to accomplish the program's goals.
The study's sampling plan sample size will have three components:

- ➢ Base sample – Stations selected to meet program goals
- ➢ Non-compliance sample – Stations found to be non-compliant in last month's testing
- ➢ Unavailability sample – Additional stations included to account for stations found to be unavailable due to temporary or permanent closures.

Sample Size Calculation

In 40 CFR Part § 80.1502, the sample size is guided by statistical principles to assure a sufficient and representative sample.   The sample size needs to be sufficient to test the proportion of stations in or out of compliance. This is often referred to as an α-level test of the population proportion against a one-sided test that true proportion is greater than a fixed proportion. The sample size number is calculated using the formula specified below. It also includes adjustment factor for unavailable sample and another adjustment factor for non-compliant stations. The formula is

$$n = \left\{ \left[\left(Z_\alpha + Z_\beta \right) \right]^2 \Big/ 4 * [arc\sin(\sqrt{\phi_1}) - arc\sin(\sqrt{\phi_0})]^2 \right\} * St_n * F_a * F_b * Su_n \ .^{[6]}$$

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[5] Station density is the number of square miles per retail outlet in the cluster. Lower numbers indicate more stations per square mile.
[6] For a reference to the sample size calculation formula, see Desu, M.M. and Raghavarao, D., *Sample Size Methodology*, Academic Press, 1990, p. 15.

Where:

n   = number of samples in a year-long survey series for E15.

Z_α = upper percentile point from the normal distribution to achieve a one-tailed 95% confidence level (5% α-level). Thus, Z_α. equals 1.645.

Z_β = upper percentile point to achieve 95% power. Thus, Z_β equals 1.645.

ϕ_1 = the proportion of stations needed to be non-compliant to determine that fuel is non-compliant. There are two compliance goals – product and signage. The parameter is assumed to be 5% or greater, i.e., 5% or more of the stations, within a stratum such that the region is considered non-compliant.

ϕ_o = the maximum underlying acceptable proportion for stations to be non-compliant in a sample. Actual non-compliance rate is expected to be very low, but we will assume a conservative non-compliance rate of 3%.

St_n = number of sampling strata. For a national study, the number of strata is 3.

F_a = adjustment factor for the number of extra samples required to compensate for collected samples that cannot be included in the survey (oversampling), based on the rate of oversampling required during the previous four surveys. For 2014, the value was calculated to be 1.13503. This will be the value used in 2015. This number will be reviewed annually and recalculated based on the number of locations visited and the number able to collect samples. This value will never be below 1.1.

F_b = adjustment factor for the number of samples required to resample each retail stations with test results indicating non-compliance. This will be based on the historical rate of resampling. In no case shall the value of F_b be smaller than 1.1. The value calculated for 2014 was 1.00958. The E15 Survey Program will use 1.1 in 2014.

SU_n = number of surveys per year. For purposes of this survey program, SU_n equals 4.

The magnitude of the sample size from the formula is contingent on ϕ_o, the underlying expected proportion of non-compliant stations, and its distance from ϕ_1, the greatest value the proportion can be non-compliant. The underlying proportion of non-compliant stations ϕ_o is based on the stability of the fuel supply and the quality of communication about signage requirements to stations in a stratum. The stratified design provides some guidance for an initial assessment of ϕ_o. The TCA and RSA strata should, in theory, be free of any non-compliance, i.e. $\phi_o = 0$. The DPA has a potential of non-compliance. For the purpose of

sample design, we will assume a conservative value for the non-compliance rate ϕ_o to be 3.0%.

In cases where there may be relatively few stations, and the sample size needs to account for the effect of a finite population. The adjustment to the sample size based on the finite population is *n'*,

$$n' = {n}\Big/{\left(1 + \frac{n}{N}\right)}.$$

Using this formula with ϕ_o=1.5%, ϕ_1= 5%, N=120,000 stations, and the factors listed above, the sample size is calculated to be 4,496, confirming the annual size of 5,000.

Handling Newly Registered Stations

Each quarter, the sampling plan will be updated approximately 6 weeks prior to the fielding the quarterly E15 survey. The update process includes:

- Registration of Site Blenders – Clusters with newly registered site blenders will be identified and placed in the DPA stratum. The DPA sub-strata will be redefined and/or additional substrata included. The TCA and RSA clusters and substrata will be adjusted based on the clusters assigned to the DPA stratum.
- Identification of the stations selling E15 – Clusters with E15 stations identified in the survey will be re-assigned to the DPA stratum if their current stratum is not DPA. This will allow for product entering commerce from refiners or non-retail blenders.
- Newly Registered Site Blenders after the Update – Site blender registration will be ongoing, and site blenders will be registered after the quarterly update of the sampling plan but prior to the field execution of the E15 sample. Each quarter will reserve up to 4% of the sample (50 samples) from the oversample. Due to the small number of registered stations, the expected rates of non-compliance in the TCA and RSA strata should be almost nonexistent. This assumption will be reviewed quarterly. The newly registered samples will be selected with certainty (100%) before they are included in the DPA sample the next quarter.

Summer Months' Modification

During the summer months, E15 is unlikely to be offered for sale at retail stations due to fuel blending volatility limits and distribution issues[7]. The survey requirements are to be relaxed and mitigated during the high ozone season from June 1 to Sept. 15. Past survey results show that E15 (ethanol volumes > 10.5%) have been found in the market areas where <u>no</u> E15 should be present. Based on these circumstances, a modification to the sampling plan has been proposed for the summer months. This modification will be implemented prior to June 1, 2014 once the EPA has been advised and consulted,

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[7] In late 2014, the first non-site blender, E-15 locations, began selling E15. The Association will monitor these types of locations to determine if E15 is available during the summer months for commerce and advise EPA.

and they have provided acceptance about whether or not the market conditions warrant its adoption.

The sampling plan was developed based on quarterly requirements with the sample spread evenly over the months in a quarter. The results indicate that suspension of production during the summer months will not stop E15 violations entirely. Violations, and in particular, ethanol concentration violations, in the TCA and RSA areas clearly indicate this.   Regardless of production rate, continuing concentration and labeling violations indicate the necessity for continued monitoring during the summer months.

The summer 2013 modification suggested using standards from compliance sampling. The Department Housing and Urban Development and their Office of the Inspector General put forth sample size guidelines are based on accounting and audit industry standards for audit and test compliance according Financial Accounting Standards.[8] The following table provides sample sizes to meet attribute importance, confidence levels and tolerable rates.

Compliance Sample Size Table

Attribute Importance	Confidence Level	Tolerable rate	Minimum Sample Size
Low	90%	5%	50
Low	90%	10%	25
High	95%	5%	65
High	95%	10%	35

Compliance sample size guidance table from HUD, Office of the Inspector General

The summer modification assigns high attribute importance and low tolerance to the DPA stratum where most violations occur, and low attribute importance and high tolerance for the TCA and RSA strata where isolated violations occur. The DPA stratum has a sample plan for each month reflecting the possible risk of E15 violations, and a quarterly sampling plan for the TCA and RSA strata acknowledging their low violation rates. Based on the premise of the E15 program sampling plan, the DPA is assumed to have high attribute importance. The DPA sample size remains 75 per month, but the TCA and RSA samples are spread over the summer.

Area	Current Monthly Target	Summer 2015 Monthly Target Option 2
DPA	200	75
TCA	100	20*
RSA	100	20*
	400	115**

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[8] Experience from accounting and auditing has relevance because the incidence of errors in an accounting is also very low with very few violations and non-compliance. The industry has established statistical sampling rules for their environment that can be applied to E15 violation monitoring.

'**' Sample sizes do not include station revisits from the prior quarters' observed potential violations. The quarter PNC retest estimate is 30.

Field Protocol for Selection of Specimens at the Station

A Field Collector will be sent to specified stations. Their responsibility will be to select fuel specimens. At the time the station is selected, the mix of fuel product and grades at the station are unknown until the Field Collector arrives at the station. A station may have several fuel products such as E10 and E15. There may be all three grades of E10 and only one of E15. As E15 is more widely distributed, and the percentage of pre-2001 automobiles decreases, the fuel products and grades carried by stations may change. The instructions given to a Field Collector must be flexible enough to handle different scenarios of fuel products and grade mix for the current market and how it evolves going forward at the individual station. The field protocol described here will provide specific instructions to the Field Collector for each station, and it eliminates the need for the Field Collector to make decisions on their own to choose specimens. If they did, it could possibly bias the survey results.

There are many possible combinations of fuel products and product mix that can occur at each station. A Field Collector could go to a station and find three grade levels of E15. The protocol needs to be prepared to inform the Field Collector which grades to choose. Up to 3 samples may be procured at a location depending on the products present/available at the site.

Directions for the Field Collector will be transmitted through a pick chart – a grid identifying the stations and potential field scenarios. This will be sent to each field collector. It will be generated at the time of sample selection. The pick chart will identify what specimens to collect based on what the Field Collector finds once they arrive at the station. Underlying the pick chart is random assignment process. This will ensure that the Field Collector does not have discretion to choose the specimen type. The pick charts were developed such that:

- • E15 fuel has precedent over other fuel products.
  - o If E15 is present at station, it will be collected.
  - o The grade chosen will be selected in proportion to the mix of grade within the state.
- • E10 fuel has precedent over E0.
  - o If E10 is present, it will be collected.
  - o If more than one grade of E10 is present, it will be selected in proportion to mix of grade within the state.
- • At most cases 2 specimens of E15, E10 or E0 will be selected (See exception below – Site Blender Sampling).

The Field Collector will be required to complete a Pick Chart provided for each selected station. The Pick chart will have the location and identifying information for each station

(Brand name, address and map coordinates). The Field Collector will mark each product category sold at the station. The highest priority E15 and E10 specimens will be collected. The following example Pick Chart has priority order for Grades of PU, MU and RU. This order is rotated at random when the charts are printed for each station. This changes order of specimen grade from station to station and visit to visit at the same station. The order will be generated based such that the first specimen noted to be selected will match the grade mix within the station's state.

For each product sampled, the Field Collector will photograph the subject label/dispenser. The Field Collector will also note the field site documents to account for the presence of other properly labeled E15 dispensers/discrepancies.

Site Blender Sampling

Initially, for Site Blender locations (only), the sampling field protocol will be modified. The modification will evaluate a blend pump and dispensed ethanol volume concentration for E15 (Pre/Post flush procedure). The procedure will be as follows.

- 2 samples will be procured per selected E15 labeled dispenser.
- E15 labeled product –1) Flush 0.50 gallons from E15 Hose into flush/swap can; 2) Post-flush second sample - .21 gallons dispensed into sample can #1.
- If E10 product is available – 1 sample will be procured according to the standard gasoline sampling protocol into sample can #2

The Grade Ratios for each state is provided below.

State	Regular		Mid-grade		Premium		Total	
	Volume (000's g/day)	Percent	Volume (000's g/day)	Percent	Volume (000's g/day)	Percent	Volume (000's g/day)	Annualized
Alabama	5,166	90%	108	2%	446	8%	5,720	2,087,691
Alaska	630	91%	7	1%	52	8%	689	251,376
Arizona	6,262	88%	135	2%	705	10%	7,101	2,591,938
Arkansas	3,484	92%	90	2%	218	6%	3,792	1,384,153
California	31,225	80%	1,132	3%	6,490	17%	38,847	14,179,228
Colorado	4,698	83%	183	3%	794	14%	5,674	2,071,083
Connecticut	3,393	87%	60	2%	449	12%	3,903	1,424,449
Delaware	844	85%	17	2%	138	14%	999	364,489
District of Columbia	143	76%	10	5%	36	19%	188	68,766
Florida	17,012	87%	403	2%	2,106	11%	19,521	7,125,165
Georgia	10,142	87%	329	3%	1,143	10%	11,614	4,239,220
Hawaii	932	78%	64	5%	198	17%	1,193	435,555
Idaho	1,696	88%	22	1%	199	10%	1,917	699,669
Illinois	11,304	89%	348	3%	1,118	9%	12,769	4,660,758
Indiana	7,192	92%	148	2%	452	6%	7,792	2,843,934
Iowa	2,023	59%	1,249	36%	182	5%	3,454	1,260,747
Kansas	3,186	77%	735	18%	221	5%	4,142	1,511,794
Kentucky	4,711	92%	93	2%	300	6%	5,103	1,862,668
Louisiana	6,247	92%	84	1%	446	7%	6,777	2,473,605
Maine	1,902	94%	20	1%	93	5%	2,015	735,512
Maryland	4,963	85%	124	2%	744	13%	5,830	2,128,096
Massachusetts	5,513	88%	143	2%	620	10%	6,276	2,290,886
Michigan	10,929	94%	104	1%	636	5%	11,669	4,259,258
Minnesota	5,256	83%	700	11%	361	6%	6,316	2,305,450
Mississippi	4,146	91%	72	2%	317	7%	4,535	1,655,093
Missouri	6,671	89%	410	5%	432	6%	7,514	2,742,464
Montana	1,499	80%	97	5%	269	14%	1,864	680,506
Nebraska	1,323	63%	671	32%	119	6%	2,112	771,026
Nevada	2,358	83%	77	3%	415	15%	2,850	1,040,177
New Hampshire	1,501	92%	19	1%	120	7%	1,639	598,381
New Jersey	9,396	87%	184	2%	1,217	11%	10,797	3,940,869
New Mexico	2,155	88%	67	3%	231	9%	2,454	895,528
New York	12,407	86%	304	2%	1,710	12%	14,421	5,263,483
North Carolina	9,870	90%	198	2%	946	9%	11,014	4,020,074
North Dakota	825	69%	296	25%	71	6%	1,192	434,934
Oaklahoma	11,697	92%	207	2%	797	6%	12,701	4,635,756
Ohio	5,175	91%	173	3%	349	6%	5,697	2,079,223
Oregon	3,625	90%	41	1%	357	9%	4,023	1,468,359
Pennsylvania	7,721	90%	177	2%	719	8%	8,617	3,145,278
Rhode Island	1,155	88%	33	2%	131	10%	1,318	480,997
South Carolina	5,956	89%	168	3%	571	9%	6,695	2,443,566
South Dakota	879	74%	237	20%	67	6%	1,183	431,868
Tennessee	7,343	89%	171	2%	713	9%	8,227	3,002,673
Texas	32,043	90%	562	2%	3,056	9%	35,660	13,015,900
Utah	2,522	82%	45	1%	515	17%	3,082	1,125,076
Vermont	844	92%	11	1%	61	7%	916	334,340
Virginia	8,166	87%	194	2%	1,047	11%	9,407	3,433,665
Washington	6,405	86%	128	2%	952	13%	7,486	2,732,281
West Virginia	1,736	93%	37	2%	89	5%	1,861	679,302
Wisconsin	6,337	89%	314	4%	460	6%	7,110	2,595,260
Wyoming	826	84%	28	3%	128	13%	982	358,467
United States	303,431	87%	11,225	3%	34,001	10%	348,657	127,259,878

Prime Supplier Sales Volume (000's gallons)- EIA website report -published 05/21/14

The Field Collector will be trained to collect the specimens of the first products marked for Samples 1 and 2 on the Pick Chart (one E15 and one E10 or E0 product, or a single product if E15 is not available at the station). The following figure illustrates a station with 5 products – E15 Regular and Premium and E10 Regular, Midgrade and Premium. Based on the priority selection rule, specimens of E15 Premium and E10 Premium will be collected. The pick chart can be modified to include other fuel types including E85 and ultra-low sulfur diesel, if it is necessary to include these in the future.

STATION PICK CHART

Sample	Ethanol Content	Grade	Check all items sold at the station	Instructions
1	15%	PU	✓	Collect the first product checked in this section.
		MU		
		RU	✓	
2	10%	PU	✓	Collect the first product checked in this section.
		MU	✓	
		RU	✓	
	0%	PU		NOTE: If E15 is not sold at the station, you will only be collecting 1 sample.
		MU		
		RU		

The approach for constructing the Pick Charts will produce samples with the following properties:

- Choice of fuel products is determined at the station using an objective process.
- Provides feedback on both the E15 and E10 products
- Provides feedback on E0 if present with only one other ethanol blend
- Provides feedback on mislabeling if multiple ethanol blends are available.
- Estimates of fuel and labeling compliance for E15 will be representative and projectable.
- Estimates of labeling non-compliance for E0 and E10 mislabeling (say it is E0 or E10, but tests as E15) will indicate that it occurs.

Another table will be necessary to record the presence and information included in signage about the fuel products. This will be used to determine signage compliance.

Samples Collection and Testing

Sample specimen collection and analytical testing will be performed in accordance with all Federal regulations and E15 program requirements.

Reporting

In the case of any retail outlet from which a sample of gasoline was collected during a survey is determined to have an ethanol content that does not match the fuel dispenser label or determined to have a E15 labeled fuel (during the high ozone season, June 1-

Sept 15) whose RVP does not comply with §80.27(a)(2), that retail outlet shall be included in the subsequent survey.

The chart below summarizes the potential non-compliance reporting (PNC's) for the survey program.

Plan Document PNC Chart Summary

5/30/2013

D 5599 Test Result - EtOH, vol%	Pump Label	
	NON-FLEX - E15 (11-15%)	Other Label
<1%	PNC	-
1-8%	PNC	-
9% - 10%	PNC	✓
11% - 15%	✓	PNC
More than 15%	PNC	PNC

✓ =Compliant Fuel

RVP Testing:	All E15 labeled samples collected between June 1 and Sept 15 are tested for RVP. PNC based on 40CFR 80.27(a)(2).
Refusals:	All refusals are flagged as PNC.

Sensitivity of E15 Survey Program

The E15 Survey Program audits for:

- Inconsistent content in conventional blended oxygenated fuel. The sensitivity of the program can be measured by the probability of detecting inconsistent ethanol volume fuel.

- Non-existent or inaccurate signage for E15

- Compliance with applicable RVP standards during the high ozone season for E15

   Detecting Proper/ Low Ethanol Value Fuel within a Stratum

The next table shows the probability of detecting in consistently produced ethanol volume fuel for the market. The analysis is based on 15%vol expectation. In this analysis, an allowable range is between 14%vol and 16%vol. This analysis indicates the relative power of this test. It is calculated under three scenarios:

- A sample size of 800 – Approximately the size of a stratum
- A sample size of 10 – Approximately the size of a single cluster
- A sample size of 1 -- Equivalent to a single station.

The next table shows that the probability of detecting noncompliance is very high. The lowest probability of detecting noncompliance for a region for samples with content below 14 or above 16 is at 99.95%. The lowest probability of detecting noncompliance for a cluster is

at 72.61%, and the probability of detection quickly moves towards 100% as the degree of noncompliance increases. Finally, the lowest probability of non detection is 57.54% for a single station. The analysis shows that for a single station, if there is exact compliance (Fuel mix is exactly 15.00), then the probability of detecting noncompliance is 5.73% or around the 5% level of confidence expected, in effect, the expected α-level for the test.

Fuel Mix at Station (EtOH%)	Sample Size			Fuel Mix at Station (EtOH%)	Sample Size		
	Region n=800	Cluster n=10	Station n=1		Region n=800	Cluster n=10	Station n=1
	Probability to Detect Noncompliance				Probability to Detect Noncompliance		
6.00	1.0000	1.0000	1.0000	15.10	0.0000	0.0000	0.0618
9.00	1.0000	1.0000	1.0000	15.20	0.0000	0.0000	0.0754
11.00	1.0000	1.0000	1.0000	15.30	0.0000	0.0000	0.0984
12.00	1.0000	1.0000	1.0000	15.40	0.0000	0.0000	0.1309
13.00	1.0000	1.0000	0.9999	15.50	0.0000	0.0000	0.1731
13.25	1.0000	1.0000	0.9714	15.60	0.0000	0.0000	0.2247
13.50	1.0000	1.0000	0.9230	15.70	0.0000	0.0000	0.2848
13.60	1.0000	1.0000	0.8291	15.80	0.0000	0.0000	0.3522
13.70	1.0000	1.0000	0.7765	15.90	0.0000	0.0099	0.4248
13.80	1.0000	1.0000	0.6481	16.00	0.5000	0.5000	0.5001
13.90	1.0000	0.9901	0.5754	16.10	1.0000	0.9901	0.5754
14.00	0.5000	0.5000	0.5001	16.20	1.0000	1.0000	0.6481
14.10	0.0000	0.0099	0.4248	16.40	1.0000	1.0000	0.7765
14.20	0.0000	0.0000	0.3522	16.50	1.0000	1.0000	0.8291
14.30	0.0000	0.0000	0.2848	16.75	1.0000	1.0000	0.9230
14.40	0.0000	0.0000	0.2247	17.00	1.0000	1.0000	0.9714
14.50	0.0000	0.0000	0.1731	18.00	1.0000	1.0000	0.9999
14.60	0.0000	0.0000	0.1309	19.00	1.0000	1.0000	1.0000
14.70	0.0000	0.0000	0.0984	20.00	1.0000	1.0000	1.0000
14.80	0.0000	0.0000	0.0754	25.00	1.0000	1.0000	1.0000
14.90	0.0000	0.0000	0.0618	30.00	1.0000	1.0000	1.0000
15.00	0.0000	0.0000	0.0573	35.00	1.0000	1.0000	1.0000
Used a historical standard deviation of 0.52							

This analysis shows that this approach is sensitive to changes in the underlying assumptions.

Detecting Compliance with Signage Requirements

The next table shows the probability of concluding and detecting non-compliance with signage requirements. In the sample size calculation, we used 97.5% compliance rate as the minimum acceptable level of compliance. The next table show the sensitivity of the test when the actual rate goes from 99% and less. The probability of detection is calculated under three scenarios:

- A sample size of 300
- A sample size of 150

- A sample size of 1

The probabilities for 1 observation are just the probability of seeing improper signage in the one station if Actual Signage Compliance Rate is as given. The analysis shows for a sample size of 800, the probability of detection non-compliance is nearly 70% for a border-line compliance rate of 97%, almost 91% for a 96% compliance rate, etc. In all, the compliance testing approach is very sensitive in detecting non-compliance.

Actual Signage Compliance Rate	Sample Size		
	300	150	1
99.0%	0.0045	0.0324	0.0100
98.0%	0.2681	0.3309	0.0200
97.0%	0.6942	0.6402	0.0300
96.0%	0.9076	0.8257	0.0400
95.0%	0.9765	0.9200	0.0500
94.0%	0.9947	0.9645	0.0600
93.0%	0.9989	0.9846	0.0700
92.0%	0.9998	0.9935	0.0800
91.0%	1.0000	0.9973	0.0900
90.0%	1.0000	0.9989	0.1000
89.0%	1.0000	0.9996	0.1100
88.0%	1.0000	0.9998	0.1200
87.0%	1.0000	0.9999	0.1300
86.0%	1.0000	1.0000	0.1400
85.0%	1.0000	1.0000	0.1500
84.0%	1.0000	1.0000	0.1600
83.0%	1.0000	1.0000	0.1700
82.0%	1.0000	1.0000	0.1800
81.0%	1.0000	1.0000	0.1900
80.0%	1.0000	1.0000	0.2000

Sensitivity of the Sampling Programs for RVP Testing

RVP will be tested in the E15 program during the High Ozone Period, June 1 - September 15. Under the assumption of a 0.30 standard deviation, the E15 program will achieve desired precision requirements of confidence level of 95% within ± 0.10 for sample sizes between 10 and 25. The following table shows achieved sample sizes. Since the introduction of E15 is expected to be gradual. This affects the actual confidence interval. The following table provides a sense of the actual confidence intervals for different size regions. Sample sizes as small as 10 achieve the confidence intervals levels if the population is very small, say under 40 stations. A sample size of 15 and higher achieves the precision with actual confidence intervals at least 95% even for larger populations.

Confidence Level for Sample Size Relative to Population						
Sample Size	Sample as Proportion of Population					
	0%	5%	10%	20%	30%	40%
10	92.7%	93.0%	93.3%	94.0%	94.8%	95.7%
15	95.1%	95.4%	95.7%	96.3%	96.9%	97.6%
20	96.6%	96.8%	97.1%	97.6%	98.1%	98.6%
25	97.6%	97.8%	98.0%	98.4%	98.8%	99.2%
50	99.5%	99.6%	99.7%	99.8%	99.9%	99.9%
100	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
150	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
200	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
250	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

In addition to the confidence interval, a sample size of 10 achieves at least a power of 80% -- the probability of identifying RVP greater than the allowable maximum. The following table shows the power of this test for an actual RVP 1 unit above the maximum allowable. The power of the test for a sample size is 85.4% for a large population and 91.3% for a small population. Sample sizes of 15 or higher achieves a 90% power.

Power of Test for 1 Unit Increase in RVP						
Sample Size	Sample as Proportion of Population					
	0%	5%	10%	20%	30%	40%
10	85.4%	86.0%	86.7%	88.1%	89.6%	91.3%
15	90.2%	90.7%	91.3%	92.6%	93.9%	95.2%
20	93.2%	93.7%	94.2%	95.2%	96.3%	97.3%
25	95.2%	95.6%	96.1%	96.9%	97.7%	98.4%
50	99.1%	99.2%	99.4%	99.6%	99.8%	99.9%
100	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
150	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
200	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
250	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

This analysis shows that testing for RVP under E15 meets the precision requirements, and the tests are sufficiently powerful.

Appendix 1:

Table of Distribution of Stations by E15 DPA, TCA and RSA Strata

State		Number of Stations	Percent Stations in State within Stratum		
			DPA	TCA	RSA
ALASKA	AK	210	0.0%	5.7%	94.3%
ALABAMA	AL	3,267	0.1%	36.4%	63.5%
ARKANSAS	AR	1,658	17.2%	25.4%	57.4%
ARIZONA	AZ	1,887	0.0%	18.8%	81.2%
CALIFORNIA	CA	8,049	0.0%	3.5%	96.5%
COLORADO	CO	1,894	3.1%	16.9%	80.0%
CONNECTICUT	CT	1,303	0.0%	29.7%	70.3%
DISTRICT OF COLUM	DC	99	0.0%	0.0%	100.0%
DELAWARE	DE	299	0.0%	0.0%	100.0%
FLORIDA	FL	6,827	0.0%	14.3%	85.7%
GEORGIA	GA	5,386	0.0%	14.9%	85.1%
HAWAII	HI	302	0.0%	45.7%	54.3%
IOWA	IA	1,851	79.4%	7.4%	13.2%
IDAHO	ID	765	0.0%	42.5%	57.5%
ILLINOIS	IL	4,053	22.9%	12.0%	65.1%
INDIANA	IN	2,829	5.8%	10.0%	84.2%
KANSAS	KS	1,453	62.0%	10.1%	27.9%
KENTUCKY	KY	2,154	0.0%	15.0%	84.9%
LOUISIANA	LA	2,531	0.0%	31.1%	68.9%
MASSACHUSETTS	MA	2,179	0.0%	8.8%	91.2%
MARYLAND	MD	1,744	0.0%	0.0%	100.0%
MAINE	ME	807	0.0%	34.1%	65.9%
MICHIGAN	MI	4,095	27.5%	8.6%	63.9%
MINNESOTA	MN	2,416	88.9%	0.9%	10.3%
MISSOURI	MO	2,894	24.5%	9.4%	66.1%
MISSISSIPPI	MS	1,896	0.0%	34.2%	65.8%
MONTANA	MT	603	10.1%	42.1%	47.8%
NORTH CAROLINA	NC	4,859	10.7%	13.7%	75.5%
NORTH DAKOTA	ND	530	81.1%	0.0%	18.9%
NEBRASKA	NE	1,066	46.4%	17.6%	35.9%
NEW HAMPSHIRE	NH	705	0.0%	6.8%	93.2%
NEW JERSEY	NJ	2,609	0.0%	1.1%	98.9%
NEW MEXICO	NM	971	0.0%	45.8%	54.2%
NEVADA	NV	860	46.5%	14.3%	39.2%
NEW YORK	NY	4,863	0.0%	22.9%	77.1%
OHIO	OH	4,395	6.8%	15.2%	78.0%
OKLAHOMA	OK	2,323	17.0%	21.0%	62.0%
OREGON	OR	1,065	0.0%	26.1%	73.9%
PENNSYLVANIA	PA	4,227	0.0%	19.9%	80.1%
PUERTO RICO	PR	434	0.0%	0.0%	100.0%
RHODE ISLAND	RI	340	0.0%	0.0%	100.0%
SOUTH CAROLINA	SC	2,702	0.0%	31.9%	68.1%
SOUTH DAKOTA	SD	663	100.0%	0.0%	0.0%
TENNESSEE	TN	3,515	0.1%	27.3%	72.6%
TEXAS	TX	12,037	0.9%	12.0%	87.1%
UTAH	UT	1,012	0.0%	21.3%	78.7%
VIRGINIA	VA	3,479	0.0%	23.5%	76.5%
VIRGIN ISLANDS	VI	37	0.0%	0.0%	100.0%
VERMONT	VT	497	0.0%	40.4%	59.6%
WASHINGTON	WA	2,292	0.0%	18.3%	81.7%
WISCONSIN	WI	2,770	54.7%	4.4%	40.9%
WEST VIRGINIA	WV	979	0.0%	41.1%	58.9%
WYOMING	WY	387	0.0%	51.2%	48.8%
		123,068	10.3%	16.2%	73.5%

Attachment 2
RFG SURVEY ASSOCIATION INC.
2015 E15 COMPLIANCE SURVEY PROGRAM
List of Participating Companies as of October 28, 2014

Producers/Importers		Site Blenders/Non-Site Blenders - Registered
Abengoa Bioenergy	Morgan Stanley Capital Group, Inc.	American Freedom Energy LLC
Absolute Energy, LLC	Murphy Oil USA, Inc	Aspinwall Coop
Adkins Energy LLC	Nebraska Corn Processing, LLC	BAUER'S CUSTOM HITCHES
Al-Corn Clean Fuel	NuGen Energy	Baxter Oil Co., Inc
Archer Daniels Midland Company	Patriot Renewable Fuels, LLC	Chronister Oil
Badger State Ethanol, LLC*	Pennsylvania Grain Processing, LLC	Chuck Spaeth Ford Inc
Big River Resources, LLC	Plymouth Energy LLC	Community Co-Op Oil Assn
Blue Flint Ethanol	Poet Biorefining - Cloverdale	Cresco Fuels Inc
BP	POET Biorefining - Coon Rapids, IA	ECI Coop
BUSHMILLS ETHANOL, INC.	POET Biorefining - Corning	Farm Service Coop
Carbon Green BioEnergy, LLC	POET Biorefining - Fostoria	Farmers Cooperative Co.
Cardinal Ethanol, LLC	Poet Biorefining - Jewell	First Cooperative Association
Cargill, Incorporated	POET Biorefining - Lake Crystal	Fleming's Auto Service
Central Indiana Ethanol	POET Biorefining - Macon	Fuel Express
Central MN Ethanol Co-op	POET Biorefining - Portland	Fuel Time
Chief Ethanol Fuels, Inc	Poet Biorefining - Preston	GA Consulting
Chippewa Valley Ethanol Co., LLLP	POET Biorefining -- Chancellor	Glenns 1-Stop
Commonwealth Agri-Energy, LLC	Poet Biorefining Ashton	Good & Quick
Conestoga Energy Partners, LLC	Poet Biorefining Emmetsburg	Grab n Go
Corn, LP	POET Biorefining Hanlontown	Hennen's Auto Service
Cornhusker Energy Lexington, LLC	POET Biorefining- Big Stone	K & H Cooperative Oil Co
Dakota Ethanol, LLC	Poet Biorefining- Bingham Lake	Kaposia Convenience Center
Denco II	POET Biorefining-Albert Lea	Lakes Area Cooperative
E Energy Adams, LLC	POET Biorefining-Alexandria	Leiszler Oil Company
East Kansas Agri-Energy, LLC	POET Biorefining-Gowrie	Linn Coop Oil Company
Front Range Energy, LLC	POET Biorefining-Groton	MAPCO Express, Inc*
Glacial Lakes Corn Processors	POET Biorefining-Hudson	Marcus Junction
Golden Grain Energy, LLC	POET Biorefining-Leipsic	Marshall Cretin
Granite Falls Energy, LLC	POET Biorefining-North Manchester	Midway Service, Inc.
Green Plains Renewable Energy Inc.	POET Research Center	Murphy USA
Guardian Energy, LLC	POET-biorefining -Caro	NCP Fuel Services, LLC (dba Anew Travel Center)
Guardian Lima, LLC	Prairie Ethanol	Osmond Farm Supply Center Inc.
Heartland Corn Products	Quad County Corn Processors	Penn Minnoco
Homeland Energy Solutions, LLC	Red River Energy, LLC	Petro Serve USA
Husker Ag, LLC	Redfield Energy, LLC	Popkes Car Care, Inc
Illinois River Energy	Rolyumpus US Commodities Group LLC	Protec Fuel Management
Iroquois Bio Energy Company	Show Me Ethanol, LLC	Red Lake County Cooperative Inc
KAAPA Ethanol, L.L.C.	Siouxland Energy & Livestock Cooperative	Rochelle Travel Plaza Inc
Kansas Ethanol, LLC	Siouxland Ethanol LLC	Sperry One Stop Shop
Lincolnland Agri-Energy, LLC	The Andersons, Inc.	STAR Energy
Lincolnway Energy, LLC	Trenton Agri Products	Stern Oil Co. Inc.
LSCP, LLLP	Western New York Energy, LLC	Three Rivers FS
Marion Ethanol LLC	Western Plains Energy, LLC	Tripp Oil
Marquis Energy, LLC	White Energy	Uncle Neal's Country Convenience Stores
Mid-Missouri Energy, LLC		Victor Oil Company
Missouri Ethanol, LLC dba POET Biorefining - Laddonia		W & H Cooperative Oil Company
		Walt's
		Waukon Feed Ranch
		Zarco USA

* Also Site Blender		*non-Site Blender Registered