RFG SURVEY ASSOCIATION

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Independent Fuels Compliance Since 1995

DELIVERED VIA EMAIL

May 4, 2012

Mr. Bryon Bunker
Environmental Protection Agency
Acting 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 2012 E15 Compliance Survey Program.

The Association working closely with the Agency, obligated parties and their representatives has developed a nationwide 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 2012 E15 Compliance Survey Program as required in the partial fuel wavier and 40 C.F.R. § 80.1502. The proposed 2012 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 2012 E15 Compliance Survey Design Plan (Attachment 1) and a listing of participating companies registered to participate in the survey as of April 20, 2012 (Attachment 2). The RFGSA will be provide EPA with regular updates (currently monthly) of Attachment 2 and each registrant's contact/program information.

The Association is requesting your approval of the plan to facilitate its implementation ASAP.

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

Sincerely,

Cc:
Robert Anderson – EPA
Jeff Kodish – EPA
S. Deviney – SWRI
Attachments (2)
2012E15_SD

E15 Compliance Survey Plan

Proposal

May 4, 2012

Prepared for:

RFG Survey Association
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Study Plan for an 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 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 option 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 the second option for a national survey plan.

For 2012, the 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.
- Provide a representative sampling of retail fuel outlets.
- 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.

[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).

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

The Plan

Overview of Sampling Plan

The Industry has requested to commence the E15 retail-sampling program, on a nationwide basis beginning in May 2012. Although the survey will provide nationwide E15 sampling coverage, it is likely that E15 will emerge in small geographic areas. Initially the survey will monitor these areas closely to evaluate the E15 product emergence into commerce.

The E15 Survey program has identified these small geographic areas where E15 is likely to enter into commerce. The distribution of the product will most likely be confined to small areas through individual site blender pumps (site blenders). Initially the number of site blenders offering E15 will be very small. The survey will require the registration of these site blenders prior to E15 entering into commerce.[2] The E15 Survey program will use this requirement to assist in the sample design. 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 flows 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.
    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.
    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

[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.

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 are used to identify clusters with at least one site blender.
   b. Clusters with a site blender are assigned to the DPA substrata. If new site blenders are identified, these will be added to the respective DPA.

   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
   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 817 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 100 clusters will be selected each quarter. A site blender location will be selected within each cluster, and a random sample of 6 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 817 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:
      i. Registered site blender known to be selling E15 fuel – Within a cluster, a registered site blender that is known to be selling E15 will be selected with certainty. (As of 5/01/12 – there are 3 registered site blender locations IA(1), WI(2). 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. Six additional stations will be selected per cluster.

ii. Registered Site blender that may not be selling E15 fuel (i.e. due to market conditions or in advance preparation to sell E15) – A registered site blender without definite knowledge of selling E15 will be selected with certainty. 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. Additional stations will be selected per cluster to have at least 7 selections per cluster

iii. 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. If additional site blenders are identified during field sampling process the database will be updated and sampling will occur based on protocols stated above.

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 substrata. Approximately 135 clusters will be selected with about 45 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 150 clusters with 50 per substrata will be selected. Eight stations will be selected at random within each cluster from the RFGSA database of fuel stations.

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 (100 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 sampling quarters.

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 Size		
Strata	**Number of Clusters**	**2008 Population**	**Total Outlets**	**Square Miles**
Densely Populated Areas	244	13,703,420	7,732	324,530
Transportation Corridor Areas	275	--	22,284	--

Remaining Survey Areas	2,433	295,595,845	115,226	2,957,906[3]

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 2010.

Number of Surveys

There will be 4 quarterly surveys each calendar year. For 2012, there will be 3 quarterly surveys. The first survey will cover May 1, 2012 through June 30, 2012; the second survey will cover July 1, 2012 through September 30, 2012; and the third quarterly survey will cover October 1, 2012 through December 31, 2012. 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.

Densely Populated Areas (DPAs)

The DPA stratum consists of all clusters with a registered site blender. As of April 10, 2012, there are 379 site blender locations in the database for the E15 program. Only a limited number of the locations in database have indicated plans to begin selling E15 fuel during the first quarterly survey period (May 1-June 30, 2012). Site blenders are required to participate/register for the (a) survey prior to introducing E15 into commerce. The main statistics are:

- 379 separate retail entities
- 224 Clusters
- 17 states – The following table

State	Number of Site Blenders
CO	1
IA	46
IL	4

[3] Does not include Puerto Rico

State	Number of Site Blenders
IN	2
KS	18
MI	8
MN	84
MO	9
NC	2
ND	74
NE	16
NV	1
OH	2
OK	1
PA	1
SD	85
TX	1
WI	24
Total	379

- 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	30	22	1459
2	IL,IN,MI,OH,PA	39	18	173
3	SD	22	85	532
4	ND	22	74	380
5	MN	35	84	1288
6	MO	13	8	672
7	KS	21	18	547
8	WI	21	24	680
9	IA	40	46	441

- Sampling within cluster -- For each cluster, the site blender plus 6 other stations will be selected using priority scheme described previously.
- Intended Quarterly DPA Sampling Plan
    - 100 Clusters per quarter
    - 725 Stations – 120 site blenders
    - 7 stations per cluster

- Approximately 817 samples per quarter.
- 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 1 to 576.

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 35 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 18 clusters are selected from each substratum. From each cluster 8 to 9 stations are selected.

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

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	35	7935	87	576
2	69	7494	8	189
3	171	7327	1	89

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
  - 105 clusters per quarter
  - 842 stations
  - Approximately 8 stations per cluster
  - 842 samples
    - Assumes no E15 stations should be found
    - If found, additional samples will be selected

[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.

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 576.

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 115,226 stations in the Remaining Survey Areas. The first stratum is defined by the top 141 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, 50 clusters are selected from each substratum. From each cluster, 7-8 stations are selected.

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

Table: Remaining Survey Area Substrata Definitions

Substrata	Number of Clusters	Numbers of Stations	Range on Number of Station Density[5]	
			Low	High
1	141	37,816	3	23
2	571	37,989	23	50
3	1,721	37,936	50	41,000

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
    - 150 clusters
    - 841 stations across clusters
    - Approximately 8 stations per cluster
    - 841 samples
        - Assumes no E15 stations will be found
        - If found, additional samples will be selected

[5] Station density is the number of square miles per retail outlet in the cluster. Lower numbers indicate more stations per square mile.

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

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

Where:

n = number of samples in a year-long survey series for E15. Minimum annual sample size 7500 samples.

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%.

[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.

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 the initial year, the E15 Survey Program will use 1.15. 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 noncompliance. 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 E15 Survey Program will use 1.15 in the first year.

SU_n = number of surveys per year. For purposes of this survey program, SU_n equals 4. For 2012, SU_n equals 3 since the program is starting during the 2nd quarter.

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 for 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'*,

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

The annual necessary sample sizes using are found in the following table. Under ϕ_o = 3%, the annual sample size is just under 5,000. In the initial year, the sample size will be 10,000 (2500 samples per quarter), or approximately equivalent to an underlying non-compliance rate of 3.5%.

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Non-Compliance Rate ϕ_o	Sample Size
1.0%	831
1.5%	1,237
2.0%	1,867
2.5%	2,932

3.0%	4,934
3.5%	9,371

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.
- 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 (100 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.

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.
  - If E15 is present at station, it will be collected.
  - The grade chosen will be selected in proportion to the mix of grade within the state.
- E10 fuel has precedent over E0.
  - If E10 is present (states in most all cases require labels), it will be collected.
  - 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.

- Up to 3 samples will be procured per selected E15 labeled dispenser.
- E15 labeled product – 2 samples will be procured from the selected E15 nozzle The 3 step sampling/flush procedure is as follows: 1) pre-flush sample .21 gallons dispensed in sample can #1; 2) Flush additional .54 gallons from into flush/swap can; 3) Post-flush second sample - .21 gallons dispensed into sample can #2.
- If E10 product is available – 1 sample will be procured

The Grade Ratios for each state is provided below.

2008 Grade Ratios by State*								
	Regular Unleaded		Mid-grade Unleaded		Premium Unleaded		Total	Annualized
State	Volume (000's g/day)	Percent	Volume (000's g/day)	Percent	Volume (000's g/day)	Percent	Volume (000's g/day)	365
Alabama	5542	90%	162	3%	423	7%	6,127	2,236,282
Alaska	666	94%	27	4%	18	3%	711	259,661
Arizona	5,901	88%	157	2%	634	9%	6,693	2,442,763
Arkansas	3447	91%	146	4%	182	5%	3,776	1,378,094
California	33,255	82%	1,825	4%	5,687	14%	40,767	14,880,065
Colorado	4,583	83%	343	6%	600	11%	5,526	2,017,063
Connecticut	3,715	87%	95	2%	437	10%	4,247	1,550,082
Delaware	1,068	90%	28	2%	91	8%	1,187	433,146
District of Columbia	148	71%	19	9%	42	20%	208	75,993
Florida	18,223	85%	973	5%	2,170	10%	21,366	7,798,663
Georgia	10,707	87%	502	4%	1,088	9%	12,297	4,488,296
Hawaii	2,120	87%	112	5%	207	8%	2,439	890,381
Idaho	1,551	90%	32	2%	147	8%	1,729	631,195
Illinois	11,511	84%	1,125	8%	1,100	8%	13,736	5,013,567
Indiana	6,828	84%	900	11%	407	5%	8,134	2,968,874
Iowa	1,841	52%	1,583	45%	111	3%	3,535	1,290,348
Kansas	3,084	78%	692	18%	167	4%	3,943	1,439,159
Kentucky	5,065	92%	160	3%	287	5%	5,512	2,011,880
Louisiana	6,144	91%	154	2%	455	7%	6,752	2,464,517
Maine	1,757	94%	28	1%	82	4%	1,867	681,455
Maryland	5,451	84%	261	4%	796	12%	6,507	2,375,092
Massachusetts	6,580	89%	223	3%	622	8%	7,425	2,710,125
Michigan	10,769	90%	587	5%	557	5%	11,913	4,348,282
Minnesota	4,950	81%	840	14%	324	5%	6,114	2,231,537
Mississippi	4,196	91%	115	2%	303	7%	4,613	1,683,891
Missouri	6,957	88%	576	7%	362	5%	7,895	2,881,712
Montana	1,480	86%	74	4%	161	9%	1,714	625,647
Nebraska	1,189	58%	805	39%	72	3%	2,065	753,871
Nevada	2,120	82%	104	4%	347	13%	2,570	938,196
New Hampshire	1,449	91%	38	2%	98	6%	1,585	578,416
New Jersey	9,845	86%	310	3%	1,343	12%	11,498	4,196,734
New Mexico	2,273	89%	63	2%	213	8%	2,549	930,239
New York	12,876	86%	467	3%	1,673	11%	15,017	5,481,059
North Carolina	9,888	90%	216	2%	838	8%	10,942	3,993,721
North Dakota	644	73%	218	25%	25	3%	888	324,047
Oaklahoma	5,390	94%	76	1%	258	5%	5,724	2,089,151
Ohio	12,353	92%	462	3%	670	5%	13,484	4,921,697
Oregon	3,703	91%	69	2%	303	7%	4,075	1,487,521
Pennsylvania	12,158	91%	271	2%	986	7%	13,414	4,896,147
Rhode Island	1,252	89%	42	3%	108	8%	1,402	511,694
South Carolina	5,979	90%	195	3%	494	7%	6,668	2,433,674
South Dakota	825	74%	257	23%	40	4%	1,122	409,530
Tennessee	7,359	88%	253	3%	713	9%	8,325	3,038,698
Texas	32,161	91%	924	3%	2,395	7%	35,479	12,949,981
Utah	2,314	82%	103	4%	411	15%	2,827	1,031,965
Virginia	8,686	86%	360	4%	1,040	10%	10,087	3,681,573
Washington	6,353	87%	242	3%	747	10%	7,342	2,679,648
West Virginia	1,804	93%	49	3%	82	4%	1,935	706,385
Wisconsin	5,337	80%	975	15%	339	5%	6,652	2,427,907
Wyoming	809	88%	10	1%	101	11%	920	335,800
United States	314,030	87%	18,229	5%	30,709	8%	362,968	132,483,320

** Gasoline (thousand gallons):DOE/EIA, Petroleum Marketing Annual 2008, Table 45*

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:
		MU		If E15 is not sold at the station, you will only be collecting 1 sample.
		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 (says E0 or E10, but tests as E15) will indicate when 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.

EtOH vol%	Label	
	E10 or No Label	E15
<9	PNC	PNC
>=9 and <=10	✓	PNC
>10 and <=15	PNC	✓
>15	PNC	PNC
RVP Testing		
All E15 labeled samples collected between June 1 and Sept 15 are tested for RVP. PNC determined based on 40 CFR 80.27 (a)(2).		

✓ = Compliant Fuel

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.

	Sample Size				Sample Size		
Fuel Mix at Station (EtOH%)	Region n=800	Cluster n=10	Station n=1	Fuel Mix at Station (EtOH%)	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
DPA, Interstate Corridor and Remainder Strata

State		Number of Stations	Percent of Stations within Strata		
			DPA	Interstate	Remainder
Alaska	AK	257	0.0%	5.4%	94.6%
Alabama	AL	3,590	0.8%	34.9%	64.3%
Arkansas	AR	2,030	0.0%	26.9%	73.1%
Arizona	AZ	2,185	51.7%	18.0%	30.3%
California	CA	10,089	73.5%	3.5%	23.1%
Colorado	CO	2,159	43.4%	19.0%	37.6%
Connecticut	CT	1,558	54.2%	27.7%	18.1%
District of Columbia	DC	112	100.0%	0.0%	0.0%
Delaware	DE	379	45.1%	0.0%	54.9%
Florida	FL	7,867	47.1%	14.2%	38.8%
Georgia	GA	6,401	50.1%	14.4%	35.5%
Hawaii	HI	311	0.0%	46.3%	53.7%
Iowa	IA	2,214	0.0%	24.8%	75.2%
Idaho	ID	896	0.0%	42.5%	57.5%
Illinois	IL	4,605	58.0%	15.8%	26.2%
Indiana	IN	3,043	46.9%	10.8%	42.3%
Kansas	KS	1,740	18.0%	23.6%	58.4%
Kentucky	KY	2,577	27.2%	14.4%	58.3%
Louisiana	LA	2,867	17.1%	32.1%	50.8%
Massachusetts	MA	2,731	78.6%	8.5%	12.9%
Maryland	MD	1,963	84.8%	4.6%	10.5%
Maine	ME	1,024	0.0%	31.4%	68.6%
Michigan	MI	4,518	48.4%	13.6%	38.0%
Minnesota	MN	2,965	46.0%	8.3%	45.7%
Missouri	MO	3,392	41.5%	12.7%	45.8%
Mississippi	MS	1,900	0.0%	32.8%	67.2%
Montana	MT	780	0.0%	41.9%	58.1%
North Carolina	NC	5,404	33.1%	16.0%	51.0%
North Dakota	ND	630	0.0%	32.7%	67.3%
Nebraska	NE	1,288	0.0%	26.6%	73.4%
New Hampshire	NH	850	69.8%	6.9%	23.3%
New Jersey	NJ	3,452	93.3%	0.8%	5.9%
New Mexico	NM	1,254	0.0%	40.8%	59.2%
Nevada	NV	920	68.2%	14.5%	17.4%
New York	NY	5,932	50.5%	20.8%	28.7%
Ohio	OH	4,657	52.1%	17.8%	30.1%
Oklahoma	OK	2,563	0.0%	31.7%	68.3%
Oregon	OR	1,151	35.4%	26.0%	38.7%
Pennsylvania	PA	4,895	41.2%	20.2%	38.6%
Puerto Rico	PR	454	13.7%	0.0%	86.3%
Rhode Island	RI	413	100.0%	0.0%	0.0%
South Carolina	SC	2,877	7.3%	32.0%	60.7%
South Dakota	SD	761	0.0%	35.1%	64.9%
Tennessee	TN	3,729	23.2%	27.9%	49.0%
Texas	TX	14,281	53.2%	12.3%	34.5%
Utah	UT	1,164	52.8%	20.7%	26.5%
Virginia	VA	3,954	39.7%	23.4%	36.9%
U.S. Virgin Islands	VI	30	0.0%	0.0%	100.0%
Vermont	VT	576	0.0%	41.1%	58.9%
Washington	WA	2,470	56.8%	17.7%	25.5%
Wisconsin	WI	3,105	27.4%	13.9%	58.7%
West Virginia	WV	1,171	2.9%	38.9%	58.2%
Wyoming	WY	479	0.0%	50.5%	49.5%
Nation		142,613	41.8%	17.8%	40.4%

Appendix 2:

Table of Densely Populated Areas
2010 Counts[7]

	DPA Name	DPA ID	Number of Stations	Number of Diesel Outlets
1	NEW YORK-NEWARK-BRIDGEPORT, NY-NJ-CT-PA	408	6,497	2,591
2	LOS ANGELES-LONG BEACH-RIVERSIDE, CA	347	4,287	1,471
3	DALLAS-FORT WORTH, TX	206	3,423	1,705
4	HOUSTON-BAYTOWN-HUNTSVILLE, TX	288	3,310	1,862
5	ATLANTA-SANDY SPRINGS-GAINESVILLE, GA-AL	122	3,234	1,440
6	CHICAGO-NAPERVILLE-MICHIGAN CITY, IL-IN-WI	176	2,863	1,086
7	WASHINGTON-BALTIMORE-NORTHERN VIRGINIA, DC-MD-VA-WV	548	2,645	1,179
8	BOSTON-WORCESTER-MANCHESTER, MA-NH	148	2,457	933
9	DETROIT-WARREN-FLINT, MI	220	2,185	985
10	PHILADELPHIA-CAMDEN-VINELAND, PA-NJ-DE-MD	428	1,873	787
11	SAN JOSE-SAN FRANCISCO-OAKLAND, CA	488	1,715	542
12	MIAMI-FORT LAUDERDALE-MIAMI BEACH FL	33100	1,671	565
13	MINNEAPOLIS-ST. PAUL-ST. CLOUD, MN-WI	378	1,434	724
14	SEATTLE-TACOMA-OLYMPIA, WA	500	1,278	561
15	CHARLOTTE-GASTONIA-SALISBURY, NC-SC	172	1,176	643
16	ST. LOUIS-ST. CHARLES-FARMINGTON, MO-IL	476	1,142	524
17	PHOENIZ-MESA-SCOTTSDALE, AZ	38060	1,130	555
18	TAMPA-ST. PETERSBURG-CLEARWATER, FL	45300	1,086	373
19	CLEVELAND-AKRON-ELYRIA, OH	184	1,002	381
20	ORLANDO-THE VILLAGES, FL	422	945	389
21	DENVER-AURORA-BOULDER, CO	216	938	425
22	PITTSBURGH-NEW CASTLE, PA	430	933	332
23	CINCINNATI-MIDDLETOWN-WILMINGTON, OH-KY-IN	178	908	399
24	KANSAS CITY-OVERLAND PARK-KANSAS CITY, MO-KS	312	884	362
25	SAN ANTONIO, TX	41700	868	452
26	NASHVILLE-DAVIDSON--MURFREESBORO--COLUMBIA, TN	400	864	389
27	INDIANAPOLIS-ANDERSON-COLUMBUS, IN	294	823	371
28	RALEIGH-DURHAM-CARY, NC	450	795	425
29	SAN DIEGO-CARLSBAD-SAN MARCOS, CA	41740	767	304
30	COLUMBUS-MARION-CHILLICOTHE, OH	198	755	328
31	VIRGINIA BEACH-NORFOLK-NEWPORT NERS, VA-NC	47260	710	289
32	MILWAUKEE-RACINE-WAUKESHA, WI	376	705	350
33	PROVIDENCE-NEW BEDFORD-FALL RIVER, RI-MA	39300	696	236
34	SACRAMENTO--ARDEN-ARCADE--TRUCKEE, CA-NV	472	660	268
35	LOUISVILLE-JEFFERSON COUNTY--ELIZABETHTOWN--SCOTTSBURG,	350	645	343
36	SALT LAKE CITY-OGDEN-CLEARFIELD, UT	482	615	308
37	LAS VEGAS-PARADISE-PAHRUMP, NV	332	610	222
38	PORTLAND-VANCOUVER-BEAVERTON, OR-WA	38900	532	230
39	NEW ORLEANS-METAIRIE-BOGALUSA, LA	406	489	236
40	San Juan-Caquas-Fajardo, PR	490	62	59

[7] Based on 2010 database updated in September 2010.

Attachment 2

RFG SURVEY ASSOCIATION INC.
2012 E15 COMPLIANCE SURVEY PROGRAM

Schedule of participating Companies as of April 20, 2012

Abengoa Bioenergy	POET Biorefining
Absolute Energy, LLC	Poet Biorefining
Adkins Energy LLC	POET Biorefining
Al-Corn Clean Fuel	POET Biorefining
Archer Daniels Midland Company	POET Biorefining
Badger State Ethanol, LLC	Poet Biorefining - Cloverdale
Big River Resources, LLC	POET Biorefining - Coon Rapids, IA
Carbon Green BioEnergy, LLC	POET Biorefining - Corning
Cardinal Ethanol, LLC	POET Biorefining - Fostoria
Central Indiana Ethanol	Poet Biorefining - Jewell
Chief Ethanol Fuels, Inc.	POET Biorefining - Lake Crystal
Chippewa Valley Ethanol Co., LLLP	POET Biorefining - Macon
Commonwealth Agri-Energy, LLC	POET Biorefining - Portland
Conestoga Energy Partners, LLC	Poet Biorefining - Preston
Corn, LP	POET Biorefining -- Chancellor
Denco II	Poet Biorefining Ashton
E Energy Adams, LLC	Poet Biorefining Emmetsburg
East Kansas Agri-Energy, LLC	POET Biorefining Hanlontown
Glacial Lakes Corn Processors	POET Biorefining- Big Stone
Granite Falls Energy, LLC	Poet Biorefining- Bingham Lake
Green Plains Renewable Energy Inc.	POET Biorefining-Hudson
Guardian Energy, LLC	POET Biorefining-Leipsic
Guardian Lima, LLC	POET Research Center
Heartland Corn Products	POET-Biorefining -Caro
Homeland Energy Solutions, LLC	Popkes Car Care, Inc.
Illinois River Energy	Prairie Ethanol
KAAPA Ethanol, L.L.C.	Red River Energy, LLC
LSCP, LLLP	Redfield Energy, LLC
Marion Ethanol LLC	Show Me Ethanol, LLC
Marquis Energy, LLC	Siouxland Energy & Livestock Cooperative
Missouri Ethanol, LLC dba POET Biorefining - Laddonia	Siouxland Ethanol LLC
	The Andersons, Inc.
Murphy Oil USA, Inc.	Trenton Agri Products
Patriot Renewable Fuels, LLC	Western New York Energy, LLC
Platinum Ethanol	Western Plains Energy, LLC
Plymouth Energy LLC	White Energy