Audit Protocol for the State of Arizona Department of Weights & Measures Motor Fuels and Petroleum Products Arizona CBG and AZRBOB

(Revised 13/17/04)

Audit Information
Facility Name:
Date(s) of Audit:
Auditor's Name(s):
Period Under Review:

Audit Goals
1) Insure that data and information reported to the State is accurate and valid.
2) Insure that data representing fuel quality and quantity is prepared in a manner consistent with the Regulations under Article 7 of the Arizona Administrative Code.
3) Insure that data submitted to State is representative and defensible.
4) Insure compliance with requirements outlined in statute and regulation.

Audit Scope
As it applies to the registered facility for the period under audit, to verify the Registered Supplier has complied with the Regulations under Article 7 of the Arizona Administrative Code. The audit is done in order to determine if the following major issues are being reported to the Arizona Department of Weights and Measures correctly: Volumes Fuel Quality Predictive Model Analysis

Audit Guidelines
IN THE AUDIT OF REGISTERED SUPPLIERS, THIRD-PARTY TERMINALS AND PIPELINES, THESE PROCEDURES SHOULD BE USED AS A GUIDE. THE AUDITOR SHOULD USE PROFESSIONAL JUDGEMENT IN DETERMINING THE APPLICABILITY OF EACH PROCEDURE LISTED. THESE PROCEDURES MAY REQUIRE MODIFICATION BASED ON THE FACTUAL CIRCUMSTANCES ENCOUNTERED DURING THE AUDIT. DEVIATIONS FROM THESE MINIMUM PROCEDURES REQUIRE APPROVAL FROM THE ARIZONA DEPARTMENT OF WEIGHTS AND MEASURES.

These Protocols are effective only on the day they were printed. Changes may occur at any time.

Audit Protocol

750 – Registrations related to CBG and AZRBOB	Yes	No	N/A
A. Has the audit candidate registered with the State as one of the types of companies that may bring CBG and/or AZRBOB into the State?			
A.1. Refiner			
A.2. Importer			
A.3. Oxygenate Blender			
A.4.a. Pipeline			
A.4.b. Third-Party Terminal			
B. Is the registration information accurate and complete? Does it contain:			
B.1. Name, Address, Contact Name and Telephone Number			
B.2. For each separate facility, the Facility Name, Physical Location, Contact Name, Telephone Number and Type of Facility			
B.3. For each separate facility and for each importer:			
B.3.a. For all locations where the records are stored, the offsite Facility Name, Location Contact Name and Telephone Number and			
B.3.b. The Name, Address, Contact Name and Telephone Number of the Independent Laboratory			
B.4. The EPA registration number			
B.5. A statement of consent that the Department may collect samples and access records as provided in R20-2-716			
C. Has the company made any changes that would require it to update the registration since last audit?			
Have those changes been submitted to the Director within 10 days of the change?			

751 – Arizona CBG Requirements	Yes	No	N/A
A. Does the CBG meet the Performance Standard Limits in Appendix 6 to this protocol?			
B. Does the CBG meet the Performance Standard Limits in Appendix 7 to this protocol?			
	Type 1	Type 2	PM
C.1. What types of election did this facility use during the audit period?			
		Average	Per Gal
C.2. For each fuel property or performance standard the facility has chosen:			
	Yes	No	N/A
If they have chosen to comply with the averaging standard, are they in compliance with R20-2-760?			
		Type 2	PM
D.1. Which winter election did the facility choose between November 2 and March 31?			
		Average	Per Gal
D.2. For each fuel property or performance standard the facility has chosen:			
	Yes	No	N/A
Verify over the election period, that only the specified type of gasoline was shipped.			
	PM	Federal	Both
E. Is the facility certifying the gasoline shipped to Arizona using the PM or the Federal Complex Model or both?			
	Yes	No	N/A
F.1. Is the facility providing the state with Predictive Model Notifications?			
F.2.a Has the facility either chosen to:			
submit a complete copy of the documentation submitted to the executive officer of CARB, or			
F.2.b. Was the Director notified using the proper form?			
F.2.b.i. Did the notifications include the PM specifications, along with whether the specification limit was flat or averaging?			
F.2.b.ii. Did the notifications include the values for the percentage change of NOx and THC?			
F.3. Was the Director notified prior to the beginning of transport?			

751 – Arizona CBG Requirements	Yes	No	N/A
F.4.a. Does the facility have any outstanding requirements to provide offsets for fuel properties under R20-2-751(I)?			
F.4.b. If the registered supplier averages, did they elect any other compliance option, other than PM averaging if outstanding requirements to provide offsets for fuel parameters exit?			
F.4.c. Did the registered supplier sell or supply a previously assigned designated alternative limit for a fuel property to provide offsets under R20-2-751(I)?			
F.4.d. Was the Predictive Model Designation in place until another complying PM Designation was delivered to the Director?			
G.1.a. Do the PM Model specifications meet the criteria for approval in the PM Model (NOx and THC)?			
G.1.c. Are the actual fuel property values below those of the PM limits?			
G.1.d.i. If the registered supplier used averaging limits, does the gasoline exceed the applicable PM average limit for any fuel property value and no designated alternative limit for the fuel parameter is established?			
G.1.d.ii.a. If the registered supplier used averaging limits, did the gasoline exceed the designated alternative limit for the fuel property?			
G.1.d.ii.b. If the designated alternative limit is exceeded, is the exceedence fully offset in accordance to 751(I)?			
H. Was the PM gasoline formulation certified using a winter oxygen content of between 2.0 and 2.7 weight % in the hand blend?			
I. If the registered supplier elects to comply with the averaging standards:			
I.1. Has the registered supplier offset each exceeded average standard within 90 days before or after the beginning of transfer of a batch?			
I.2. Has the registered supplier offset an exceedance of the VOC Emission Reduction Percentage any time during the period May 1 to September 15 of the same calendar year?			

751 – Arizona CBG Requirements	Yes	No	N/A
I.3. Has the registered supplier offset an exceedance of the NOx Emission Reduction Percentage any time during the period May 1 to September 15 of the same calendar year?			
I.4. Has the registered supplier offset an exceedance of the NOx Emission Reduction Percentage any time during the winter period, September 15, 1999 to April 30, 2000 of the same time period?			
J.1. Is the registered supplier involved in a "Probationary Period?"			
J.2 Has the registered supplier produced CBG or AZRBOB under an averaging compliance election during the probationary period?			
J.2.a. Have they submitted a compliance plan to the director?			
J.2.b Has the plan been approved?			
J.2.c. What is the current status of the plan?			
J.2.d. Has the registered supplier achieved compliance?			

752 – General Requirements for Registered Suppliers	Yes	No	N/A
A. Did the registered supplier provide information to the State regarding all batches of gasoline shipped into Arizona?			
Do those batches comply with the standards of Article 7			
B. Are the certificates signed?			
Do the certifications include the following information?			
Shipment volumes			
Fuel Properties			
Performance Standards			
Have the reports been submitted to the State by the 15th day of the month following transport to the area?			
Has the registered supplier reported a batch that was not shipped?			
How did they correct the erroneous report?			
C.1. Has the registered supplier kept data relating to the certifications for 5 years?			
D. Have the registered supplier shipped gasoline into the covered area by means other than a pipeline?			
Did they notify the Director prior to the beginning of the transport?			
E. Has the registered supplier elected to submit to the department a QA/QC program?			
When was it submitted?			
When was it approved?			
F.1. Has the registered supplier elected to do independent sampling and testing?			

752 – General Requirements for Registered Suppliers	Yes	No	N/A
	100%	10%	N/A
If yes, have they elected option 1 (100% testing) or option 2 (10% testing)?			
	Yes	No	N/A
Is the independent lab using the proper test methods in R20-2-759?			
If option one, is the independent lab doing 100% Sampling and analysis?			
If option two, are they doing 100% sampling and 10% testing?			
F.2.a. Is the lab independent as defined by 752(F)(2)(c)			
F.2.b. For the designated laboratory: Name			
Address			
Contact			
F.3.a Is the following information being recorded by the independent lab:			
Batch Number			
Volume of the Batch			
Identification of the Tank Number			
Date and time the batch became CBG and AZRBOB			
Date and time the batch was sampled			
Grade of the batch			
Date and time the blending process began and ended unless exempt under 752(G)			
Is the facility using Computer Controlled In-Line Blending?			
F.3.b. Is the sample retained for at least 45 days at the independent lab?			
F.3.c. Has the independent laboratory submitted reports to the Director?			
G. Is the facility covered by an EPA approved In-Line Blending Waiver.			
Is the facility in compliance with 40 CFR 80.65(f)?			
Has the registered supplier submitted the EPA In-Line Blending Attest Audit report to the Director?			
H.1. Compare the refinery laboratory and the independent laboratory results for the same batch and determine if any property difference is in excess of the allowable differences listed in Appendix 3 to this document.			
H.2 Were the proper parameter values used in reporting to the State?			

753 – General Requirements for Pipelines and 3rd-party Terminals	Yes	No	N/A
A.1. Does the pipeline or 3rd party terminal have documents noting that a supplier is registered with the Department?			
A.2. Does the pipeline or 3rd party terminal have documentation from each supplier for each batch of gasoline as to the type of gasoline shipped (CBG or AZRBOB)?			
Does the product shipped by the supplier meet the requirements set out in 751(A) and (B)?			
B. Has the pipeline or 3rd party terminal collected a sample of each incoming batch?			
Has that batch been retained for at least 30 days?			
C. Does the pipeline have a conduct a quality testing program for Arizona CBG and/or AZRBOB at a frequency of not less than 1 sample from 1 batch completing shipment per supplier per day at each input location?			
D. Does the pipeline provide DWM with a report summarizing the laboratory results required in C (above) within 10 days after the end of the month?			
E. If any batch does not meet the standards in 751(A) or (B), but is within reproducibility, has the pipeline notified the director by fax with 48 hours?			
F. If any batch does not meet the standards in 751(A) or (B), including reproducibility, has the pipeline notified the director by fax with 24 hours?			
Has the pipeline or 3rd party terminal held the batch until it meets the requirements in 751(A) or (B)?			
G. Has the pipeline or third party terminal developed a QA/QC program?			
Does the QA/QC program include a description of the laboratory testing protocol used to verify CBG and/or AZRBOB?			

Does the QA/QC program include a description of how the pipeline or 3rd-party terminal meets the standards of R20-2-751(A) or (B)?			
Has the QA/QC program been submitted to the Director at least 3 months before the facility transports CBG or AZRBOB into Area A?			
Has the QA/QC program been approved?			

754 – Downstream Blending Exceptions for Transmix	Yes	No	N/A
A. Has the pipeline mixed the transmix into CBG or AZRBOB at a rate not to exceed ¼ of 1 volume %?			
Has the pipeline documented these blends?			
Have the records been kept for at least 2 years?			
B. Has the transmix blend been measured by either Meters or Tank Gauges?			
If by meters, are they calibrated at least twice a year?			

755 – Additional Requirements for AZRBOB and Downstream Oxygenate Blending	Yes	No	N/A
A.1.a. Has the registered supplier added the type and amount of oxygenate to a representative sample of the AZRBOB?			
Are the fuel properties being determined using the methods required in R20-2-759?			
Has more than one oxygenate been designated?			
If yes, has the smallest designated volume been added to the AZRBOB to determine fuel properties and compliance?			
A.1.b. Is the oxygenate representative of the oxygenate the registered supplier reasonably expects will be subsequently added to the final blend?			
A.2. Has the volume been calculated by adding the minimum designated amount of the oxygenate having the smallest volume?			
B.1.a. Has the AZRBOB been transferred to a registered oxygenate blender?			
If not, has the transferee taken all reasonably prudent steps to assure that the AZRBOB is transferred to a registered oxygen blender?			
B.2 Has the AZRBOB been transferred from a “final distribution facility” with the proper type and amount of oxygenate added?			
C.1. Has the AZRBOB been blended with other products?			
If yes, is that product “Oxygenate” of the type and amount specified by the registered supplier?			
C.2. Is that product “AZRBOB” for which the same oxygenate type and amount is specified by the registered supplier?			

755 – Additional Requirements for AZRBOB and Downstream Oxygenate Blending	Yes	No	N/A
D. Does the AZRBOB QA Sampling and Testing program meet the requirements of 40 CFR 80.69(a)(7)? Specifically:			
69(a)(7)(i)(A) Are all samples collected subsequent to the addition of oxygenate and prior to combining the resulting gasoline with any other gasoline?			
69(a)(7)(i)(A)(2) If the truck splash blending method is used, is the sample collected subsequent to any delivery of the gasoline?			
69(a)(7)(i)(B)(1)If the sampling is done in a storage tank, is the sampling done at the rate of one sample for every 400,000 bbls of AZRBOB produced or one sample every month, whichever is more frequent?			
69(a)(7)(i)(B)(2) If the sampling is done in delivery trucks using computer controlled in-line blending equipment, is the sampling done at a rate of one sample for every 200,000 bbls of AZRBOB produced or one sample every three months, whichever is more frequent?			
69(a)(7)(i)(B)(3) If the sampling is done in delivery trucks without the use of computer controlled in-line blending equipment, is the sampling done at a rate of one sample for every 50,000 bbls of AZRBOB produced or one sample every month, whichever is more frequent?			
69(a)(7)(ii)(A) If the sampling indicates a non compliant batch, has the registered supplier taken immediate steps to stop the sale of that gasoline?			
69(a)(7)(ii)(B) Has the registered supplier taken steps to determine the cause of the non-compliance?			
69(a)(7)(ii)(C) If the sampling indicates a non compliant batch, has the frequency of sampling increased to the following rates:			
69(a)(7)(ii)(C)(1) In a storage tank to one sample for every 200,000 bbls produced or one sample every two weeks?			
69(a)(7)(ii)(C)(2) In a delivery truck using computer controlled in-line blending equipment to one sample for every 100,000 bbls produced or one sample every two months?			
69(a)(7)(ii)(C)(3) In a delivery truck with using computer controlled in-line blending equipment to one sample for every 25,000 bbls produced or one sample every two weeks?			

755 – Additional Requirements for AZRBOB and Downstream Oxygenate Blending	Yes	No	N/A
69(a)(7)(ii)(D) Has the increased frequency of sampling been sustained until 10 consecutive samples and tests indicate that the gasoline complies with the applicable standards?			
69(a)(7)(ii)(D) Has the frequency of sampling then been returned to the normal frequency?			
E.1. Has the oxygenate blender added the correct type and amount of oxygenate required by the accompanying documentation?			
E.2. If the AZRBOB is blended in a tank, has the oxygenate blender sampled and analyzed a representative sample using the methodology required in R20-2-759?			
E.3. If the AZRBOB is blended in a truck, does the oxygenate blender conduct a QA sampling and testing which meets the requirements of 40 CFR 80.69(e)(2), specifically:			
69(e)(2)(i) Are all samples collected subsequent to the addition of oxygenate and prior to combining the resulting gasoline with any other gasoline? If the truck splash blending method is used, is the sample collected subsequent to any delivery of the gasoline?			
69(e)(2)(i)(A) If the sampling is done using computer controlled in-line blending equipment, is the sampling done at a rate of one sample for every 500 occasions AZRBOB and oxygenate are loaded into a truck or one sample every three months, whichever is more frequent?			
69(e)(2)(i)(B) If the sampling is done without the use of computer controlled in-line blending equipment, is the sampling done at a rate of one sample for every 100 occasions AZRBOB and oxygenate are loaded into a truck or one sample every month, whichever is more frequent?			
69(e)(2)(v)(A) If the sampling indicates a non compliant batch, has the registered supplier taken immediate steps to stop the sale of that gasoline?			
69(e)(2)(v)(B) Has the registered supplier taken steps to determine the cause of the non-compliance?			
69(e)(2)(v)(C) If the sampling indicates a non compliant batch, has the frequency of sampling increased to the following rates:			

755 – Additional Requirements for AZRBOB and Downstream Oxygenate Blending	Yes	No	N/A
69(e)(2)(v)(C)(1) If using computer controlled in-line blending equipment to one sample for every 250 occasions AZRBOB and Oxygenate are loaded into a truck or one sample every six weeks?			
69(e)(2)(v)(C)(2) If without using computer controlled in-line blending equipment to one sample for every 50 occasions AZRBOB and Oxygenate are loaded into a truck or one sample every two weeks?			
69(e)(2)(v)(D) Has the increased frequency of sampling been sustained until 10 consecutive samples and tests indicate that the gasoline complies with the applicable standards?			
69(e)(2)(v)(D) Has the frequency of sampling then been returned to the normal frequency?			
E.4.a Does the oxygenate blender produce CBG by blending oxygenate with AZRBOB in a pipeline using computer controlled in-line blending?			
E.4.a.1 Has the oxygenate blender obtained a flow proportional composite sample after the addition of the oxygenate and before combining the resulting CBG with any other CBG?			
E.4.a.2 Has the oxygenate blender determined the oxygen content of the CBG by analyzing the composite sample within 24 hours using the methodology specified in R20-2-759?			
E.4.a.2 Has the volume of the CBG batch been determined?			
E.4.b.1 Have any of the test results for the CBG indicate that it is non-conforming as regards oxygen?			
If yes, did the oxygenate blender notify the pipeline to downgrade the CBG to conventional gasoline or transmix upon arrival in Arizona?			
E.4.b.ii. Did the oxygenate blender determine the cause of the non-compliance?			
E.4.b.iii. Did the oxygenate blender begin to collect spot samples every 2 hours during each in-line blend of AZRBOB and oxygenate?			
Were those samples analyzed with 12 hours of collection?			
Did this increased frequency of sampling and testing continue until the			

755 – Additional Requirements for AZRBOB and Downstream Oxygenate Blending	Yes	No	N/A
cause of the non compliance was determined and corrected?			
E.4.b.iv. Did the oxygenate blender notify the Director in writing within 1 business day of the non-compliance?			
E.5.a. Does the oxygenate blender have records for at least 5 years regarding the following:			
Sample date			
Identity of the blend or product sampled			
Container or vessel sampled			
Final blend or shipment volume			
Oxygen content as determined in accordance with R20-2-759?			
E.5.b Was all CBG produced by combining AZRBOB and oxygenate tested using the procedures specified in R20-2-759?			
E.6 Did the oxygenate blender notify the Director by fax prior to the beginning of transport of CBG or AZRBOB into the CBG covered area by means other than a pipeline?			
E.7. Has the oxygenate blender conducted the laboratory analysis in its own laboratory?			
If yes, have they developed a QA/QC program?			
Has that program been approved by the Director?			
If not, does the oxygenate blender have an independent testing program complying with the requirements of R20-2-752(F)?			
Did they analyze 10% of the samples?			
E.8. Has the oxygenate blender designated an independent laboratory?			
Is that laboratory conducting all of the laboratory sampling?			

756 Downstream Blending of Arizona CBG with Non-oxygenate Blendstocks	Yes	No	N/A
A. Has the facility combined CBG with any non-oxygenate blendstock?			
If yes, is that blendstock vapor recovery condensate?			
A.1. Does the blendstock added to the CBG meet all of the CBG standards?			
B. Does the facility have a prior approval from the Director to blend the CBG and the non-oxygenate blendstock?			

757 – Product Transfer Documentation; Records Retention	Yes	No	N/A
A. Does the transferor of the CBG or AZRBOB provide to the transferee documents including the following information?			
Name of the transferor			
Address of the transferor			
Name of the transferee			
Address of the transferee			
Volume of the CBG or AZRBOB being transferred			
Location of the CBG or AZRBOB at the time of the transfer			
Date of the transfer			
A product transfer document number			
Proper identification of the gasoline as CBG or AZRBOB			
The minimum octane rating			
Applicable Federal Complex Model VOC and NOx reduction percentage standards to which the CBG or AZRBOB conforms			
For oxygenated CBG during the period November 1 through March 31, the type and quantity of oxygenate contained in the CBG and			

757 – Product Transfer Documentation; Records Retention	Yes	No	N/A
If the product is AZRBOB for further oxygenate blending, the following information is required:			
Designation of the product as AZRBOB			
The statement: "AZRBOB does not comply with the standards for Arizona CBG without the addition of oxygenate."			
Designation of the AZRBOB as suitable for blending with:			
Any oxygenate			
Ether only			
A specified oxygenate type or types and amount or amounts			
Designation of the oxygenate type or types and amounts or amounts which the AZRBOB requires to meet the fuel properties or performance standards claimed by the registered supplier and the applicable volume percent oxygenate and weight percent oxygen content specifications			
Instructions to the transferee that the AZRBOB may not be combined with any other AZRBOB unless it has the same requirements for oxygenate type or types and amount or amounts?			
B. Does the facility comply with A (above) by use of product codes?			
If yes, has the code manual been distributed by the pipeline to the transferees?			
Does the manual set forth all the required information for CBG and AZRBOB?			
E.1. Has the facility retained the product transfer document for 60 months?			
E.2. Does the facility have the previous 30 days PTD's on site.			

758 – Adoption of Fuel Certification Models	Yes	No	N/A
A.1. Does the facility use the California Predictive Model adopted by CARB on 4/20/95?			
A.2. Does the facility use the Federal Complex Model at 40 CFR 80.45 dated 1/1/99?			

759 – Testing Methodologies	Yes	No	N/A
A. Does the facility analyze CBG or AZRBOB using the methods specified in 13 CCR 2263 as of 1/1/97? (Appendix 4 to this protocol)			
C. Prior to transport into the CBG covered area, does the facility analyze CBG or AZRBOB for oxygenate using ASTM D-4815-94a and RVP using D-4814-99?			
Does the facility analyze CBG or AZRBOB for oxygenate using methods listed in ASTM D-4815-94A and RVP using ASTM D-5191-99?			
Does the facility use the ASTM RVP Correlation equation in calculating the RVP value reported to DWM?			
D. Does the facility analyze Type 1 CBG using the methods specified in 40 CFR 80.46(a) through (g), provided that these are the only test methods used by that Registered Supplier to certify CBG or AZRBOB at that facility? (Appendix 5 to this protocol)			
	Type 1	Type 2	AZRBOB
List the test methods used: RVP			
Sulfur			
Benzene			
Olefins			
Oxygen			

T50			
T90			
Aromatics			
ETOH			
MTBE			

760 – Compliance Surveys	Yes	No	N/A
A. Did the facility elect to certify that the CBG or AZRBOB meets any averaging standard?			
Has the registered supplier submit a survey program plan to the director?			
A.1. Does the plan consist of 4 VOC and NOx surveys between May 1 and September 15 of each year and			
A.2. Does the plan comply with section C (below)?			
B. Has the Director issued an order to comply on a per gallon basis due to failure to conduct the survey?			
C.1. Does the survey consist of ALL samples collected during any consecutive 7 day period?			
C.2. Is the survey representative of all CBG dispensed in the covered area?			
C.3. Were the samples analyzed for olefins, sulfur, aromatics, E200, E300?			
Was RVP analyzed from May 1 to September 15?			
Were the methods specified in R20-2-759 used to determine the properties			

of the CBG?			
C.4. Were the results of the survey based on the analysis of the samples collected?			
C.6. Did the laboratory that analyzed the survey sample participate in a correlation program with the Director?			
D.1. Were the VOC and NOx emission reduction percentages based on the fuel properties for that sample?			
Were the values for VOC and NOx reduction percentages determined using the formulas in 40 CFR 80.45?			
D.2. Did the VOC survey fail, based on the comparison of the VOC reduction percentage to the VOC reduction percentage listed in Table 1, Column A?			
D.3. Did the NOx survey fail, based on the comparison of the NOx reduction percentage to the NOx reduction percentage listed in Table 1, Column A?			
760 – Compliance Surveys	*Yes*	*No*	*N/A*
E.1. Were the NOx emission reduction percentages based on the fuel properties for that sample series?			
Were the values for NOx reduction percentages determined using the formulas in 40 CFR 80.45?			
E.2. Did the NOx survey fail, based on the comparison of the NOx reduction percentage to the NOx reduction percentage listed in the Federal Complex Model, Table 1, Column A?			
F.1. Was the survey designed and conducted by a person independent of the registered supplier?			
F.1.a. Was the surveyor an employee of any registered supplier?			
F.1.b. Did the surveyor have an interest or obligation in or to any registered supplier?			
F.1.c. Did the registered supplier have any obligation to or interest in the surveyor?			

F.2. Was the survey designed to include enough samples to ensure that the average levels of the fuel parameter properties are determined with a 95% confidence level and an error of the following:			
RVP – 0.1 psi			
Oxygen - 0.1 Wt %			
Aromatics and Olefins – 0.5 Vol %			
T50 and T 90 – 5 °F			
Sulfur - 10 ppm			
F.3.a. Does the survey require the surveyor not to inform anyone in advance of the date or location of any survey, except as provided in section G of this part?			
F.3.b. Does the survey require the surveyor to provide a duplicate of any sample taken during the survey within 30 days if requested by the Director?			
F.3.c. Does the survey require the surveyor to permit a Department official to monitor the conduct of the survey at any time?			
F.4. Has the report of the survey been submitted to the Director within 30 days following the completion of the survey?			
760 – Compliance Surveys	*Yes*	*No*	*N/A*
F.4. Does the survey include:			
a. The name of the person conducting the survey?			
b. An attestation by an officer of the surveying company that the survey was conducted according to the survey program plan and that the survey results are accurate?			
c. The identification of the registered supplier?			
d. The identification of the area from which the gasoline samples were selected?			
e. The dates on which the survey was conducted?			
f. The address of each facility at which a gasoline sample was collected and the date of collection?			
g. The results of the analyses of samples for oxygenate type and weight			

percent, aromatic and olefin content, E200, E300, RVP and the calculated VOC and NOx emissions reduction percentage?			
h. The name and address of each laboratory where the gasoline samples were analyzed?			
i. A description of the methodology used to select the location for samples collected and the number of samples collected?			
j. A justification of any samples that were excluded from the survey?			
k. The average VOC and NOx emissions reduction percentage?			
G. Was the survey commenced on a date selected by the Director?			
H.1. Did the person seeking program plan approval submit the plan to the Director no later than January 1 to cover the survey period of May 1 through March 31 of each year?			
H.2. Was the survey program plan signed by a corporate officer of the registered supplier?			
If the survey was a comprehensive survey program, was the program plan signed by an officer of the organization coordinating the survey program?			
760 – Compliance Surveys	*Yes*	*No*	*N/A*
I. Was the registered supplier's contract with the surveyor in place by April 1 so as to carry out the entire survey plan for the next summer and winter season?			
Was the Director given a copy of the contract by April 15?			
Was the Director given proof that the money necessary to carry out the plan has either been paid to the surveyor or placed in an escrow account?			
If the money is in an escrow account, was a copy of the escrow agreement given to the director?			

Audit Findings
Review the actions taken to complete each step of this protocol. Summarize your conclusions.
Review and discuss any unresolved compliance issues with appropriate facility personnel. Make notes of responses and explanations.
Make a list of these exceptions and discuss with other team members.
Evaluate the data used to substantiate the audit results.

Appendix 1

Table 1 – Type 1 Gasoline Standards

TYPE 1 Gasoline RFG PHASE II	Non-averaging Option	Averaging Option		
Fuel Property **	Per gal min	Average	Min (per gal)	Max (per gal)
VOC red – May 1 to Sept.15	>=27.5	>=29.0	>=25.0	N/A
NOx red – May 1 to Sept.15	>=5.5	>=6.8	N/A	N/A
NOx red – Sept. 16, 1999 to Apr. 30, 2000	>=0.0	>=1.5	N/A	N/A
NOx red – Sept. 16, 1999 to Apr. 30	>=0.0	N/A	N/A	N/A
Oxy, ETOH – Nov. 1 to Mar. 31	10 vol% ETOH	N/A	10 vol% ETOH	4.0
Oxy, ETOH – Apr. 1 to Oct. 31	2.0	2.1	1.5	4.0
Oxy, non ETOH – Nov. 1 to Mar. 31	2.7	N/A	2.7	3.5 *
Oxy, non ETOH – Apr. 1 to Oct. 31	2.0	2.1	1.5	2.7

* Maximum oxygen content must comply with EPA oxy waivers
** Dates represent compliance for service stations & fleet owners

Appendix 2

Table 2 – Type 2 Gasoline Standards

TYPE 2 Gasoline CARB OR PM GASOLINE	Averaging Option			Non-averaging Option
Fuel Property	Max (per gal)	Averaging Standard	Units of Standard	Flat Std * (per gal min)
Sulfur	80	30	ppm	40
Olefins	10.0	4.0	vol%	6.0
T90	330	290	F	300
T50	220	200	F	210
Aromatics	30.0	22.0	vol%	25.0
Oxy, ETOH – Nov. 1 to Mar. 31	10 vol% ETOH	-	vol%	10 vol% ETOH
Oxy, ETOH – Apr. 1 to Oct. 31	2.7	-	wt%	2.7 ***
Oxy, non ETOH – Nov. 1 to Mar. 31	3.5 **	-	wt%	3.5 **
Oxy, non ETOH - Apr. 1 to Oct. 31	2.7	-	wt%	2.7 ***

* Instead of using the averaging or Flat Standards, Registered Suppliers may opt to

comply using the Maximum Standards and R20-2-752(F), (G) and (H) for the PM.

** Maximum Oxygen content shall comply with the EPA oxygenate waiver requirements.

*** The gasoline produced in accordance with the Non-averaging Option must comply with a per gallon minimum oxygen content of 1.8 Wt % between April 1 and October 31.

**** From and after October 31, 2000, registered supplies shall certify all CBG using ETOH as the oxygenate during the period of November 2 through March 31. Alternative oxygenates may be used if approved by the director.

Appendix 3

Allowable Differences between Independent Laboratory Results and Facility Laboratory Results

Fuel Property	Range	Unit of Measure
Sulfur content	25	Ppm by weight
Aromatics	2.7	% by volume
Olefins	2.5	% by volume
Ethanol	0.4	% by volume
Methanol	0.2	% by volume
MTBE	0.6	% by volume
ETBE	0.6	% by volume
TAME	0.6	% by volume
t-Butanol content	0.6	% by volume
RVP	0.3	Psi
T50	5	Degrees F
T90	5	Degrees F
E200	2.5	% by volume
E300	3.5	% by volume
API gravity	0.3	API

Appendix 4
Laboratory Methods under 13 CCR 2263

Fuel Property	Method
RVP	D-323 or 13 CCR 2297
Sulfur	D-2622 or D-5453
Benzene	D-5580
Olefins	D-1319
Oxygen	D-4815
T50	D-86
T90	D-86
Aromatics	D-5580
Ethanol	D-4815
MTBE	D-4815

* CARB required D-6550 after December 31, 2001. However, this is NOT an approved test method for Arizona CBG or AZRBOB.

Appendix 5
Laboratory Methods under 40 CFR 80.46(a) to (g)

Fuel Property	Method
Sulfur (gasoline)	D-2622
Sulfur (butane)	D-3246
Olefins	D-1319
RVP	40 CFR 80 Appendix E *
Distillation	D-86
Benzene	D-3606
Aromatics	GCMS **
Oxygen	GC-OFID ***
Ethanol	D-4815
MTBE	D-4815

* D-5191

** 40 CFR 80.46(f) or D-5769
*** 40 CFR 80.46(g) or D-5599

Appendix 6
R20-2-751(A) Fuel Property/Performance Standard Limits (1)

Fuel Property	Limits
Sulfur	500 PPM by weight (max)
Aromatics	50% by volume (max)
Olefins	25% by volume(max)
E200	70-30% volume
E300	100-70% volume
RVP (maximum)	
Oct 1- March 31	9.0 pounds per sq in (psi)
April	10.0 psi
May	9.0 psi
June 1 – Sept 30	7.0 psi
Oxygen and Oxygenates	
Minimum content	
Nov 1 – March 31	10% ETOH by volume

If ARS 41-2124(E)	2.7 oxygen by weight (other than ETOH
Maximum content	
ETOH	4.0% by weight
Other oxygenates	3.5 by weight *
VOC Emissions Reduction	
May 1 – Sept 15	>= 25.0

(1) The dates in this appendix are service station owners and fleet owners compliance dates.

* Other oxygenates must comply with the requirements of ARS 41-2123

Appendix 7
R20-2-751(B) Wintertime Requirements (Nov 2 to Mar 31) (1)

Fuel Property	Limits
Sulfur	80 ppm by weight (max)
Aromatics	30% by volume (max)
Olefins	10% by volume(max)
T90	330 F (max)
T50	220 F (max)
RVP (maximum)	9.0 pounds per sq in (psi)
Oxygen (ETOH) **	
Minimum content	10% ETOH by volume
Maximum content	4.0% by weight *

(1) The dates in this appendix are service station owners and fleet owners compliance dates.

* Other oxygenates must comply with the requirements of ARS 41-2123

** Alternative oxygenates may be used if approved by the Director under ARS 41-2123(D)