INFORMATION COLLECTION REQUEST (ICR) Part A of the Supporting Statement (May 2011)

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a) Title: Regulation of Fuels and Fuel Additives: Detergent Gasoline (40 CFR Part 80, Subpart G) (Renewal)
EPA ICR No. 1655.07, OMB Control No. 2060-0275

1(b) Abstract

Gasoline combustion results in the formation of engine deposits. The accumulation of deposits, particularly in the orifices of fuel injectors and on intake valves, typically results in increased emissions and reduced engine performance. As fuel injectors replaced carburetors in the 1980's, a number of vehicle manufacturers experienced problems with deposit formation. Detergent additives, which had been available for years to control deposits in carbureted vehicles, were improved to accommodate the new technology. However, their use was voluntary and there were no regulatory standards by which to gauge their effectiveness. Congress recognized the importance of effective detergent additives in minimizing vehicle emissions, and added Section 211(1) in the Clean Air Act Amendments of 1990. It required gasoline to contain detergent additives, effective January 1, 1995, and provided the Environmental Protection Agency (EPA) with the authority to establish specifications for such additives. The regulations at 40 CFR 80 - Subpart G implemented certification requirements for detergents and imposed a variety of recordkeeping and reporting requirements for certain parties involved with detergents, gasoline, or post-refinery component (any gasoline blending stock or any oxygenate that is blended with gasoline subsequent to the gasoline refining process (PRC)). All gasolines must contain certified detergents, with the exception of research, racing, and aviation gasolines.

The EPA maintains a list of certified gasoline detergents at http://www.epa.gov/otaq/additive.htm . As of November 2010 there were 324 certified detergents and 19 detergent manufacturers. Most of the certification activity occurred during the early years of the program. In 2009 only 2 detergents were certified. During January-November 2010, 1 detergent was certified.

There are approximately 250 refiners and importers of gasoline, 1,350 blenders of detergent into gasoline or PRC, 8,000 carriers of gasoline or PRC, 200,000 gasoline retail outlets, and 100,000 fleet facilities which handle gasoline. The estimated total annual burden for respondents for this collection is 220,181 hours and \$18,854,168, including \$335,040 in annualized capital or O&M costs. The estimated total annual Agency burden is 200 hours and \$16,000 in labor costs.

2. NEED FOR AND USE OF THE COLLECTION

2(a) Need/Authority for the Collection

Motor vehicles comprise the major source of air pollution in most urban areas, and account for about half of the toxic air emissions in the United States. Gasoline detergents help to minimize emissions. Detergents are typically added to gasoline as it is loaded into tank trucks at terminals. Section 211(l) of the Clean Air Act (Act) requires that all gasoline contain effective detergent additives. Section 114 of the Act provides EPA with the authority to impose recordkeeping and reporting requirements if necessary for enforcement of statutory requirements. The recordkeeping and reporting requirements for this program, at 40 CFR 80 -Subpart G, are necessary in order for EPA to certify detergents, to demonstrate that certified detergents are effective, to assure that gasoline contains certified detergents at the minimum concentration (also known as the lowest additive concentration (LAC) necessary to be effective, and to deter violations. There is no standard test procedure for testing qualitatively and quantitatively for specific detergents in gasoline, thus necessitating reliance on recordkeeping and reporting as detergents, gasoline, and PRC pass through the distribution system. Blenders of detergent into gasoline or PRC are required to maintain records that demonstrate that the LAC is met, on average, each month at each automated blending facility, and by batch at non-automated facilities. These records are known as volumetric additive reconciliation (VAR) records. There is economic incentive to violate because uncertified detergents are typically less expensive, and blending a certified detergent at less than the minimum specified concentration will also save money.

A detergent manufacturer has a variety of options under which it may certify a detergent. The primary option is "National Generic Certification," which allows the detergent to be used in any gasoline. We estimate that over 99% of detergents have been certified under this option. Other options include limiting a detergent to a Petroleum Administrative Defense District (PADD Certification), a specific gasoline pool (Fuel-specific Certification), or California gasoline (CARB-based Certification), under California's detergent certification rule. All the options may be found at 40 CFR 80.163.

2(b) Practical Utility/Users of the Data

The list of certified detergents is publicly available. The fuel, additive, and motor vehicle industries are well aware that gasoline must contain certified detergents. The list is monitored by the additive manufacturers in order to maintain an awareness of competitors. Manufacturers and distributors of gasoline, and blenders of detergent into gasoline, monitor the list to ensure that gasoline contains certified detergents and that the documentation accompanying gasoline indicates such.

Most of the data submitted by the detergent manufacturers are confidential. Thus access is restricted to authorized EPA personnel and authorized contractors. Review of the data is necessary to determine if the detergent manufacturer has met the certification requirements for a specific detergent and can be certified by EPA. The documentation accompanying the detergent, with the LAC and any use restrictions, is used by the detergent blender to ensure proper additization. Product transfer documents (PTDs) are monitored by transferors and transferees to ensure that they are handling legal detergents and gasolines. VARs are necessary for detergent blenders to demonstrate that they have additized properly.

As mentioned above, there is not a method of analyzing gasoline for the proper level of a certified detergent. Thus, the records required by this rule, particularly the VAR and certification records, are essential in EPA's monitoring for compliance.

3. NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

3(a) Non duplication

The records required here are not available elsewhere. In many instances the records are already produced as a customary business practice.

3(b) Public Notice

In compliance with the Paperwork Reduction Act, EPA solicited comments for a 60-day period prior to submission of the ICR to OMB. Notice was published in the Federal Register (76 <u>FR</u> 9013, February 16, 2011). No comments were received.

3(c) Consultations

EPA consulted with the following people regarding this collection:

Dennis Dishong Senior Consultant Product Compliance Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092-2298

Nathaly J. Murillo Product Coordinator Innospec Fuel Specialties 200 Executive Drive Newark, DE 19702

Certification by the detergent manufacturers, and the development of VAR and QA) records by blenders of detergent into gasoline or PRC, account for the regulatory burden. The

other burdens discussed above are minor or customary business practices upon which the regulations did not impose significant additional burdens. As this program has matured, nearly all of the applications for detergent certification now rely on previous vehicle testing. We estimate only one application annually is based on new testing.

Consultations with detergent manufacturers indicate that they have become quite familiar with submitting applications based on previous testing, with burden estimates ranging from one to four hours for preparation and submittal of the application. For an application based on new testing, however, there have been broad ranges of estimates, from 16 hours to 2000 hours. We believe that, as with the previous ICR, a reasonable average continues to be 60 hours for a detergent certification.

Past consultations with detergent blenders that use automated blending equipment (the vast majority of blenders) also indicates a range of estimated VAR/QA burden, from about 30 to 260 hours per year per facility. This is to be expected since there is a wide range in the size of these facilities and a wide range in the degree of sophistication utilized in implementing the VAR requirements and voluntary QA procedures. The estimate for a detergent blender that does not use automated equipment is 500 hours per year. A major reason for the difference in burden between automated and non-automated equipment is the VAR period, which may be up to 30 days for automated equipment, but is by batch for non-automated equipment and calculated manually.

3(d) Effects of Less Frequent Collection

Certification of an additive is one-time, with the exception of an annual fuel-property report in the case of a fuel-specific certification. (As of January 2011, there were no fuel-specific certifications, and no indication that any would be forthcoming.) VAR records and PTDs are ongoing and necessary for enforcement. The generation and transfer of PTDs are customary business practices. Researchers using gasoline without a certified detergent are required to submit a brief annual report on their activities. EPA believes that the annual reporting requirements are reasonable and that a less frequent collection would hamper enforcement. Thus, less frequent collection is not a practicable alternative.

3(e) General Guidelines

All Office of Management and Budget (OMB) guidelines are met.

3(f) Confidentiality

Most of the information reported to EPA is business confidential and is governed by the Freedom of Information Act regulations for EPA at 40 CFR 2.

3(g) Sensitive Questions

There is no sensitive information requested.

4. THE RESPONDENTS AND THE INFORMATION COLLECTED

4(a) Respondents/SIC/NAICS Codes

The respondents are related to the following major group Standard Industrialization Classification (SIC) codes:

- 5172 Petroleum Products
- 2911 Petroleum Refining

The respondents are related to the following major group NAICS codes:

- 324110 Petroleum Refineries
- 324199 All Other Petroleum and Coal Products Manufacturing

325110 - Petrochemical Manufacturing

325199 - All Other Basic Organic Chemical Manufacturing 424710 - Petroleum Bulk Stations and Terminals

424720 - Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)

- 4(b) Information Requested
- (i) Data Items

REPORTING REQUIREMENTS

Detergent Manufacturers

For each detergent, the detergent manufacturer (includes an importer or a party which is not the manufacturer but is requesting certification as a detergent for a product manufactured by another party) is required to: (1) submit a certification letter to EPA containing a variety of information concerning the certification testing and options for which certification is requested (80.161(b)(3), 80.163(c)(1) (iii), 80.164(a));

(2) submit certification test data, and/or the acceptance criteria a supplier must meet for detergent reactant materials, upon EPA request (80.165, 80.162(b)(1));

(3) submit a detailed description of the detergent's composition to EPA pursuant to the registration requirements for fuel additives at 40 CFR 79, addressing specific compositional descriptions identified in 40 CFR 80 and the LAC for each certification option (80.161(b)(1)(i), (ii),(ii),(A), 80.162);

(4) ship a sample of the detergent and certain information concerning the sample to EPA, and if requested by EPA, ship an additional sample (80.161(b)(2), 80.167(d));

(5) notify EPA in writing, with supporting data, if there is a change in the LAC for which the additive is effective (80.161(b)(1)(ii)(C));

(6) notify, in writing, gasoline manufacturers (includes importers), detergent blenders, and all others who purchase the detergent, of the LAC and any use restrictions (80.161(c));

(7) submit certain information annually for each fuel-specific certification option (80.164(c)(3));

(8) notify customers if a fuel-specific certification is no longer valid (80.164(c)(3)(iii));

(9) if, upon receipt from EPA of a notice of intent of detergent disqualification, wishing to respond, submit written comments in an attempt to demonstrate compliance (80.161(e)(3), (4); and

(10) submit a list of customers to EPA if EPA should issue a final decision to disqualify a certified detergent (80.161(e)(6)).

Detergent Blenders

A blender of detergent into gasoline or PRC:

(1) is required to notify EPA in writing if it intends to use a detergent at lower than its LAC, and, if requested by EPA, must submit the data supporting the use of the lower concentration (80.161(d)(1), (2), (3));

(2) who has certified under a fuel-specific option, is required to supply, upon request, EPA with a sample of the test fuel or with blendstocks with which to formulate the test fuel (80.167(d)); and

(3) is required to generate VAR records (80.170), and, upon request, to provide EPA with VAR records and supporting documentation (80.170(g)).

Transferors and Transferees

A transferor of gasoline, detergent, or PRC, including any gasoline refiner, importer, reseller, distributor, carrier, retailer, wholesale purchaser-consumer (WPC), oxygenate blender, detergent manufacturer, distributor, carrier, or blender, shall:

(1) generate or obtain documentation for each shipment and provide this documentation (product transfer document (PTD)) to the transferee (with exception of delivery of detergent-additized gasoline to motorists and small volumes to fleets) identifying the product, its detergent status if gasoline or PRC, and certain additional information (80.171); and

(2) as a defense against liability, along with transferees, may establish quality assurance (QA) procedures that involve the development of records in addition to those required by the rules (80.169).

Researchers

A party conducting research on gasoline that does not contain a certified detergent is required to notify EPA annually, in writing (80.173(a)(3)).

Racing Gasoline/Aviation Gasoline

Parties handling racing gasoline or aviation gasoline are required to generate or transfer PTDs indicating that these products are limited to those uses (80.173(b)(1)). Pump stands for racing gasoline or aviation gasoline must be appropriately labeled if located at a facility that dispenses gasoline to motor vehicles (80.173(b)(2)).

RECORDKEEPING REQUIREMENTS

Most records are required to be kept for five years, with exceptions for certain small businesses and California gasoline (80.164(c)(4), 80.169(c)(8), 80.170(g), 80.171(d)). This retention period is necessary in order to provide EPA with adequate time for inspection, is consistent with the relevant civil statute of limitations, and is consistent with the retention period for PTDs under the reformulated gasoline/anti-dumping rules at 40 CFR 80 - Subpart D (except for retailers in anti-dumping areas). There is no regulatory burden because businesses retain such records as a customary business practice.

Detergent Manufacturers

For each detergent, the detergent manufacturer is required to maintain records for:

(1) the acceptance criteria for suppliers of detergent reactive materials (80.162(b)(1));

(2) the test data for fuel parameters supporting a fuel-specific certification (80.164(c)(1));

(3) the fuel composition survey results, and documentation on test methods and statistical procedures, used to support a fuel-specific certification (80.164(c)(4));

(4) the certification test (80.165); and

(5) in order to have an affirmative defense for a potential violation of the certification program controls and prohibitions, the fourier transform infrared spectroscopy (FTIR) and related data for each detergent batch (80.169(c)(4)(i)(C),(D)).

Detergent Blenders

A blender of detergent into gasoline or PRC is required to maintain the VAR records on the use of the detergent (80.170). Gasoline or PRC additized in California is exempt, provided the records required by California are maintained (80.173(c)).

Transferors and Transferees

Transferors and transferees of gasoline, detergent, or PRC:

(1) are required to maintain the PTDs for each shipment (80.171); and

(2) as a defense against liability, may establish QA procedures that involve retaining records in addition to those required to be retained by the rules (80.169).

Researchers

A party conducting research on gasoline that does not contain a certified detergent is required to maintain documentation demonstrating that the gasoline has been used only for research (80.173(a)(1)).

Racing Gasoline/Aviation Gasoline

Parties handling racing gasoline or aviation gasoline are required to maintain the PTDs for each shipment (80.173(b)(1)).

(ii) Respondent Activities

The following are required:

- (1) Read and comprehend the regulatory requirements.
- (2) Train personnel to meet the requirements, employing new technology and procedures as necessary.
- (3) Develop the information that is not already available.
- (4) Gather and organize the information.
- (5) Review the information and, if necessary, take corrective action such that it can be concluded that the regulatory requirements have been met.
- (6) Report the information to EPA and/or retain the information in storage, as specified in the regulations.

5. THE INFORMATION COLLECTED–AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT

5(a) Agency Activities

The following are required:

- (1) Develop a thorough understanding of the regulatory requirements.
- (2) Develop the skills necessary to convey the requirements to the respondents and others such that it can be comprehended easily.
- (3) Respond to inquiries on the requirements.
- (4) Provide access to the regulations and the list of certified detergents.
- (5) Review the reported information.
- (6) Contact the respondent when the information has not been submitted properly and discuss how the deficiency can be corrected.
- (7) Store the information.
- (8) Enter the information into the database.
- (9) Upon concluding that all requirements have been met, issue a letter to the manufacturer indicating that the detergent has been certified, and update the list of certified detergents.
- (10) Maintain rigorous security for the protection of confidential business information.
- (11) Maintain computer hardware and software.
- (12) Monitor compliance via on-site inspections.

5(b) Collection Methodology and Management

The EPA has not issued forms. The respondents may submit and store the information in the format of their choice, including electronically. Because most of the information reported to EPA is confidential, it is housed in an office with an advanced security system. The computers on which the data are handled have no linkage outside this office.

5(c) Small Entity Flexibility

The reporting requirements have been made as simple as practical in order to minimize the burden on all parties, large and small. For small businesses subject to this rule, the vast majority are merely transporters or retailers of gasoline. Their only burden is the transfer and storage of PTDs, which is a customary business practice. Transfers of small volumes of additized gasoline to WPCs and other ultimate consumers are exempt from the PTD requirements (80.171(c)).

5(d) Collection Schedule

Reporting only required on occasion.

6. ESTIMATING THE BURDEN AND THE COST OF THE COLLECTION

6(a) and (b) Estimating Respondent Burden and Costs

Estimating the burden is straightforward. Capital/start-up costs were incurred by industry in 1995. Third party activity, the transmittal or storage of PTDs, is a customary business practice. Operating and maintenance (O&M) costs are in three categories. First, the on-road engine testing to demonstrate that the detergent meets the deposit-control standards is performed at contractor facilities. The cost of this testing is about \$200,000. As discussed above, this testing is being performed for only one new certified detergent each year, with the other certifications based on previous testing. The second O&M cost is for copying and postage for the estimated three submissions annually for detergent certification and one submission annually for research notification. At an estimated \$10 per submission, the annual cost is \$40. The third O&M cost is for the storage of the VAR records at the 1300 automated detergent blending facilities and 50 non-automated detergent blending facilities. The estimated annual cost per facility is \$100, for a total of \$135,000.

Thus, the total annual O&M cost is \$200,000 + \$40 + \$135,000 = \$335,040.

Three labor categories are involved: managerial (includes legal and professional review), technical, and clerical. According to the Bureau of Labor Statistics, May 2008 National Industry-Specific Occupational Employment and Wage Estimates, mean wages were:

WagesManagerial\$60.42 per hourTechnical\$60.05 per hourClerical\$17.34 per hour

Doubling for company overhead and employing a 2% annual inflation factor to bring the rates to the year 2010, and, for convenience, rounding up to the nearest dollar, gives the following rates that will be used in this ICR:

Total Employer CostManagerial\$126 per hourTechnical\$125 per hourClerical\$ 36 per hour

Worksheet 1: Detergent Manufacturer Submissions for Certification

Our review of the submissions indicates a fairly wide range of burden. Many submissions are minor changes to existing certified detergents and are able to rely on previously submitted data. We estimate that they require about four hours to prepare. About one out of 10 undergoes the complete development cycle with estimates of 16 to 2000 hours of burden. Thus, we continue to believe that the average burden per detergent is estimated at about 60 hours, with the hours and costs allocated as follows (we estimate three submissions annually (19 manufacturers) for the next three years):

<u>Activity</u>	<u>Management</u>	<u>Technical</u>	<u>Clerical</u>
Read	2 hours/\$252	4 hours/\$500	1 hour/\$36
Train	2 hours/\$252	2 hours/\$250	1 hour/\$36
Develop			
data	2 hours/\$252	20 hours/\$2500	1 hour/\$36
Organize			
data	2 hours/\$252	4 hours/\$500	1 hour/\$36
Review	2 hours/\$252	10 hours/\$1250	1 hour/\$36
Report or			
retain	<u>2 hours/</u> \$252	<u>1 hour/\$125</u>	<u>2 hours/\$72</u>
TOTALS	12 hours/\$1512	41 hours/\$5125	7 hours/\$252

GRAND

TOTAL 60 hours/\$6889

Worksheet 2: VAR and QA by Detergent Blenders with Automated Equipment

As noted above, respondents indicated a fairly wide range of burden, from 30 to 260 hours per year per blending facility, for the 1300 facilities nationwide. The VAR period may be as long as 30 days, but can be shorter due to changes in detergents, maintenance downtime, etc. We believe that a reasonable average burden is 150 hours per year per facility, representing 15 VAR periods, for a total of 1300 x 15 = 19,500 responses annually. Thus, the estimated hours and costs per VAR period are:

Activity	<u>Management</u>	Technical	<u>Clerical</u>
Read	0.1 hour/\$12.60	0.8 hour/\$100.00	0.4 hour/\$14.40
Train	0.1 hour/\$12.60	0.8 hour/\$100.00	0.4 hour/\$14.40
Develop			
data	0.1 hour/\$12.60	1.4 hour/\$175.00	1.33 hour/\$47.88
Organize			
data	0.1 hour/\$12.60	0.8 hour/\$100.00	1.33 hour/\$47.88
Review	0.1 hour/\$12.60	0.8 hour/\$100.00	0.73 hour/\$26.28
Retain	<u>0.1 hour/\$12.60</u>	<u>0.2 hour/\$25.00</u>	<u>0.4 hour/\$14.40</u>
TOTALS	0.6 hour/\$75.60	4.8 hours/\$600.00	4.6 hours/\$165.24

GRAND TOTAL 10 hours/\$840.84

Worksheet 3: VAR and QA by Detergent Blenders with Non-automated Equipment

There appears to be little blending occurring with non-automated equipment. However, since it is done manually, and the VAR is done per batch, we estimate 500 hours per year for such blenders. It is estimated that a blender of this type will do about a thousand batches per year, or a burden of 0.5 hour per batch. Using the same labor mix as Worksheet 2 gives a per batch cost of \$42.04. We estimate that there are 50 blenders in this category, for a total of 50,000 responses annually.

Worksheet 4: Notification by Researchers

We estimate that we will receive one letter annually from researchers notifying us that a gasoline without a certified detergent will be used for research purposes. Assuming a management official spent one-half hour on each letter and a clerical person also spent one-half hour, gives a burden of one hour and \$81 per letter.

6(c) Estimating Agency Burden and Cost

The Agency activities described in section 5(a) are handled by engineers and scientists at the GS-13 level (\$80 per hour, including 160% overhead, as per OMB policy). It is estimated that 200 hours are spent annually, for a cost to the government of \$16,000. The program is running smoothly and, as noted above, the number of requests for certification has decreased from the previous ICR. Lease, computer, and security costs are covered in the ICR for the Fuel and Fuel Additive Registration requirements at 40 CFR 79 (EPA ICR Number 309.11, OMB Control Number 2060-1050), with which this program is closely integrated.

6(d) and (e) Estimating the Respondent Universe and Total Burden and Costs, and Bottom Line Burden and Costs

The following worksheet is based on the above discussions.

Worksheet 5: Annual Industry Burden

Activity	<u>Responses</u>	Hours/Cost	Total Hours/Cost
Detergent			
Certification	3	60/\$6889.00	180/\$20,667
(3 respondents)			
Automated			
VAR/QA	19,500	10/\$840.84	195,000/\$16,396,380
(1300 respondents)			
Non-automated			
VAR/QA	50,000	0.5/\$42.04	25,000/\$2,102,000
(50 respondents)			
Researcher			
Letters	<u>1</u>	<u>1.0/\$81.00</u>	<u>1/\$81.00</u>
(1 respondents)			
TOTALS	69,504		220,181/\$18,519,128

Thus, the net annual burden to industry is 220,181 hours (3.17 hours per response). Labor costs are \$18,519,128, and O&M costs are \$335,040, for a total cost of \$18,854,168.

6(f) Reasons for Change in Burden

The previous clearance consisted of 69,518 responses, 220,608 hours, and \$15,212,386 in total costs. The changes are due to an update in labor costs.

6(g) Burden Statements

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 3 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2007-0595, which is available for online viewing at www.regulations.gov, or in person viewing at the Air and Radiation Docket in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Avenue, NW, Washington, D.C. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202)-566-1742. An electronic version of the public docket is available at www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OAR-2007-0595 and OMB Control Number 2060-0275 in any correspondence.