# Supporting Statement for Information Collection Request Certification and In-use Testing of Motor Vehicles: Revisions to Reduce Emissions of Greenhouse Gases EPA ICR 0783.56

September, 2009

Compliance and Innovative Strategies Division Office of Transportation and Air Quality Office of Air and Radiation U.S. Environmental Protection Agency

### Supporting Statement Part A

### Section 1: Identification Of The Information Collection

### 1(a) Title And Number Of The Information Collection

Certification and In-use Testing of Motor Vehicles: Revisions to Reduce Emissions of Greenhouse Gasses; EPA ICR number 0783.56, OMB control number 2060-0104.

### 1(b) Short Characterization/Abstract

The Environmental Protection Agency and the National Highway Traffic and Safety Administration are jointly proposing Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards changes designed to decrease emissions of greenhouse gasses (GHG). This ICR deals with EPA's portion of the proposal, which concerns EPA's motor vehicle certification and in-use testing programs, covered by the ICR 0783 series (OMB Control Number 2060-0104). This ICR addresses the new paperwork burdens on these programs, which include the cost of upgrading information systems to comply with new reporting requirements, and new testing requirements. Other economic impacts, such as the industry's costs of complying with the new standards, are discussed in the cost analysis portions of the preamble to the proposed regulations.

Some of the elements of this ICR were previously discussed in the draft ICR (ICR 2300.01) for the proposed Mandatory Reporting of Greenhouse Gases rule (74 FR 16448; April 10, 2009). Those portions of that proposal that dealt with reporting GHG for light-duty vehicles, medium-duty passenger vehicles, and chassis-certified highway heavy-duty vehicles are superseded by the provisions of the current proposal, and will be considered as a part of this ICR rather than the final version of ICR 2300.01.

At OMB's request, EPA previously disaggregated the 0783 certification ICR into separate Emissions (also called Certification) and Fuel Economy ICs (Information Collections) (as well as DR/VERR defect reporting, IUVP in-use testing, and highway motorcycle ICs). Because of overlapping fuel economy and emissions testing and data collection, this accounting raised issues that have been commented upon in previous ICRs. Because the proposed regulations center on new GHG emissions standards, the burdens in this ICR have been allocated to the emissions and IUVP ICs, even though the proposal includes changes to EPA's fuel economy regulations and the emissions reporting is done in a CAFE-compatible format.

These changes would start taking effect with 2012 model year vehicles through model year 2016. Starting with model year 2012, manufacturers will be required to meet new greenhouse gasses emissions limits. These limits will be enforced through the certification program. Averaging, banking, and trading analogous to existing EPA and NHTSA programs will likewise be available. Light-duty vehicles (cars), light-duty-trucks, and medium-duty passenger vehicles seeking certificates of authority to sell vehicles in the United States will be required to submit C02 test results in support of certification

applications, and all certified vehicles will be subject to the requirements of the In-Use Vehicle Testing Program, including addition of the highway fuel economy test to the existing IUVP city emissions test.

ICRs normally have a three year time horizon. As this ICR is intended to have an effective date in time for model year 2012, the annualized impacts of the proposal fall within the time horizon of this ICR, although not all of them would begin immediately. An example is the AC/CO2 Idle Test for those claiming the relevant credit, which would begin in model year 2014.

The proposed rule has three major information collection cost components. First, there are new CO2 emissions standards and new compliance standards for nitrous oxide (N2O) and methane (CH4) emissions. The CO2 and CH4 standards will require no new testing, only the reporting of data available from the existing required EPA city and highway tests in a new format, whereas the N2O standard may require the addition of new analyzer equipment for some manufacturers. The vehicle fleet-wide average CO2 emission standard is based on CO2 emissions-footprint curves, whereby each vehicle has a different CO2 emissions compliance target depending on its footprint value. The proposed standard allows for credits based on demonstrated improvements in vehicle air conditioner systems, including both efficiency and refrigerant leakage improvement, which are not captured by the EPA tests. The efficiency improvement showing would require Idle Tests that would be conducted on portions of the production volume of the manufacturer's fleet beginning in model year 2014. The ICR includes an estimate of the number of such tests expected and associated costs.

Second, the manufacturer's in-use vehicle program (IUVP) will add a highway test to the current FTP test requirements, so that the information will be available to test in-use compliance with the new standards. This proposal will also require that the selected vehicles will be tested for compliance with the N2O standard, entailing possible associated capital costs to install N2O analyzers.

Third, there will be new reporting and recordkeeping burdens. The largest of these will be startup costs for reprogramming computer systems to report the new information EPA requires in the necessary formats; this having been accomplished, reporting will be done within the existing Verify information system and the incremental burdens on respondents are expected to be minor. New reporting elements include a GHG compliance plan, analogous to the pre-model year report already supplied to NHTSA; and averaging, banking and trading accounting, analogous to ABT in the current Tier 2 program, but with some unique, optional credit provisions. EPA's processing of this information is conducted by the Compliance and Innovative Strategies Division and the Assessment and Standards Division of the Office of Transportation and Air Quality, Office of Air and Radiation.

Application materials, including test results, are typically submitted in electronic format for inclusion in EPA's computerized Verify database. Additional descriptive information can be submitted on optical disc. Subject to confidentiality claims, this information is made available to interested parties upon request. Fuel economy ratings and

emission test information are available on the internet.

Approximately 53 passenger car and light truck manufacturers (allowing for interand intra-corporate relationships and including independent commercial importers and alternative fuels vehicle converters) submit applications each year to certify their products. Approximately 33 of these represent the major manufacturers; those who fall within the definition of small entities are excluded from this rulemaking, except for a once-per-year declaration of small business status. Beginning in calendar year 2012 (or earlier for capital and startup costs), the proposed changes will impose a cost (high estimate) of about \$3,655,000 annually plus 39,940 labor hours on the regulated manufacturers.

Additional details on the coverage of this ICR are given in Section 2(b), below.

### Section 2: Need For And Use of the Collection

### 2(a) Need/Authority For The Collection

Under Title II of the Clean Air Act (42 U.S.C. 7521 et seq.), EPA is charged with issuing certificates of conformity for motor vehicle designs that comply with applicable emission standards set under section 202(a)(1) of the Act, such as those for CO2, N2O, and CH4 in the proposed regulation. (This authority was recently clarified in the Supreme Court's decision State of Massachusetts v. EPA, 127 S. Ct. 1438 (2007)). A manufacturer must have a certificate before vehicles may be legally introduced into commerce. To insure compliance with the Act, EPA reviews product information and manufacturer test results; EPA also tests some vehicles to confirm manufacturer results. Information is also shared with other agencies: the Internal Revenue Service for "gas guzzler" taxes and NHTSA for CAFE and GHG requirements. Other elements of the legal and regulatory background relating to the need and authority for the proposal are discussed in the preamble to the proposed regulations.

Under Section 206(a) of the Clean Air Act (42 U.S.C. 7525) "... The Administrator shall test ... any new motor vehicle ... submitted by a manufacturer ... If such vehicle ... conforms ... the Administrator shall issue a certificate of conformity." While EPA has delegated a substantial portion of the process of calculating and reporting emissions and fuel economy results to the manufacturers, the test results upon which labels are based are subject to EPA confirmatory testing. Such confirmation testing makes sure that results from different manufacturers can be accurately used for comparison.

The regulations dealing with LDV and LDT emission control can be found in 40 CFR Parts 85 and 86. The regulations dealing with reporting fuel economy information are in 40 CFR Part 600. The regulations are not attached to this statement due to their length and technical nature.

### 2(b) Practical Utility/Users of the Data

The information collection under the rule would be used to determine whether the

new GHG requirements have been complied with by means of the certification and in-use testing programs.

### Section 3: Nonduplication, Consultations, and Other Collection Criteria

### 3(a) Nonduplication

The information collection, reporting, and storage provisions of the proposed rule rely exclusively on EPA's existing certification and in-use programs and on EPA's fuel economy reporting system that is used by NHTSA in developing and administering CAFE standards. As discussed at length in the preamble to the proposal, this is a joint rulemaking by NHTSA and EPA, a format which has a maximum degree of coordination between the two similar programs addressing GHG. Nonetheless, NHTSA is regulating fuel economy, whereas EPA is regulating GHG emissions. The statutory mandates for the two agencies are different, and this results in a certain degree of difference in two programs that share a great deal in approach and structure.

Because of its specialized nature and the fact that product plans and emission performance information must be submitted to EPA prior to the start of production, this information is not available from any source other than the manufacturer.

### 3(b) Public Notice Prior to ICR Submission to OMB

The preamble to the proposed rule will provide the public notice of and the opportunity to comment on this ICR.

### 3(c) Consultations

The proposed regulations, including the cost analysis that is reflected in this ICR, were developed based on experience with similar regulations developed in the past in close consultation with the affected industry. Prior to publication of the rule EPA met extensively with individual manufacturers, groups of manufacturers, industrial trade associations, and industry professional organizations. Their comments have been reflected in the burden estimates discussed below. EPA wishes to thank them and their colleagues for their assistance in preparing this report.

### 3(d) Effects of Less Frequent Collection

As required by the Clean Air Act (42 USC 7525(a)), emission and fuel economy information is submitted on a yearly basis coinciding with the manufacturer's "model year." EPA allows applicants to define their own "model year", thus granting some flexibility in this regard. Major product changes typically occur at the start of a model year. For these reasons, a collection frequency longer than a model year is not possible. However, when a vehicle design is "carried over" to a subsequent model year, the amount of new information required is substantially reduced. Some information is also to be submitted during the model year, including model-level GHG testing results, analogous to model-level fuel economy results, which are necessary because certification data does not

allow for fleet total GHG emissions and fuel economy calculations. Likewise, existing regulations require an end-of-year report, with final production numbers, and the new requirements would be conformed to this existing requirement as well.

### 3(e) General Guidelines

Manufacturers are required to keep some records for periods longer than three years This requirement stems from the statutory requirement that manufacturers warrant some items for periods longer than 3 years.

This information collection activity complies with the remaining guidelines in 5 CFR 1320.5. The proposal makes no changes in the reporting and recordkeeping provisions that impact any of the guidelines for information collections as approved in the existing approved collection.

### 3(f) Confidentiality

Information submitted by manufacturers is held as confidential until the specific vehicle to which it pertains is available for purchase. After vehicles are available, most information associated with the manufacturer's application is available to the public. Under section 208 of the Clean Air Act (42 USC 7542(c)) all information, other than trade secret processes or methods, must be publicly available. Proprietary information is granted confidentiality in accordance with the Freedom of Information Act, EPA regulations at 40 CFR Part 2, and class determinations issued by EPA's Office of General Counsel.

### 3(g) Sensitive Questions

No sensitive questions are asked in this information collection. This collection complies with the Privacy Act and OMB Circular A-108.

### Section 4: Respondents and Information Requested

### 4(a) Respondents/NASIC Codes

The respondents are potentially involved in the industries shown in the following table:

Category	NAICS Codes A	Examples of Potentially Regulated Entities		
Industry	336111	Motor vehicle manufacturers.		
	336112			
Industry	335312	Alternative fuel vehicle converters		
-	336312			
	336322			
	336399			
	454312			
	485310			
Industry	811111			
	811112			
	811198	Commercial Importers of Vehicles and Vehicle		
	541514	Components <sup>B</sup>		

<sup>&</sup>lt;sup>A</sup> North American Industry Classification System (NAICS)

### 4(b) Information Requested

### (i) Data items

The information and reporting burden associated with this rule occurs within the context of EPA's motor vehicle certification program and the manufacturers' in-use testing program (IUVP). Current regulations require manufacturers to submit emissions information to EPA in conjunction with these programs. Manufacturers must submit an application for emission certification prior to production. The application describes the major aspects of the proposed product line, technical details of the emission control systems, and the results of tests to indicate compliance with the emissions limitations. The application and supporting test results are reviewed and, if appropriate, a certificate of conformity is issued. Subsequently, low- and high-mileage vehicles in use are tested for emissions by manufacturers and the results of those tests reported to EPA.

New data items can be summarized as follows; additional detail within these headings is discussed below:

Before the beginning of each model year:

- Declaration of small-business status by small manufacturers.
- GHG compliance plan.

### At the time of certification:

• CO2 and CH4 emissions test results for each test group being certified.

<sup>&</sup>lt;sup>B</sup> We are currently unaware of any independent commercial importers (ICIs) or alternative fuel converters that are not small businesses; as the proposal would exclude small businesses these ICIs and converters would not be regulated at this time.

- Engineering evaluation indicating that common calibration approaches will be utilized at high altitude.
- N2O test results or compliance showing for each test group.

### During the model year, after certification:

- CO2 emissions test results for model types. (The models for which results are reported is considered to be coextensive with those already reported for CAFE fuel economy purposes.)
- AC / CO2 idle test for models representing percentages of the applicant's production volume, starting in 2014.

### After the model year:

- End of model year GHG emissions report for CO2, including the final fleet average standard, all values required to calculate the fleet average standard, the actual fleet average CO2 that was achieved, all values required to calculate the actual fleet average, the number of credits generated or debits incurred, all the values required to calculate the credits or debits, and the resulting balance of credits or debits.
- Report of credit transactions.

### During in-use testing:

 Results of the highway fuel economy test (HFET) along with the already-reported FTP results for each tested vehicle.

Under the NHTSA and EPA proposal the fleet average CO2 standards that apply to a manufacturer's car and truck fleets would be based on the applicable footprint-based curves. At the end of each model year, when production of the model year is complete, a production-weighted fleet average would be calculated for each averaging set (cars and trucks). Under this approach, a manufacturer's car and/or truck fleet that achieves a fleet average CO2 level better than the standard would generate credits. Conversely, if the fleet average CO2 level does not meet the standard the fleet would generate debits (also referred to as a deficit or negative credits). Manufacturer would have several options for using those credits, including credit carry-back, credit carry-forward, credit transfers, and credit trading. These provisions exist in the MY 2011 CAFE program, and similar provisions are part of EPA's Tier 2 program for light duty vehicle criteria pollutant emissions, as well as many other mobile source standards issued by EPA under the CAA. EPA and NHTSA are proposing that the manufacturer would be able to carry-back credits to offset any deficit that had accrued in a prior model year and was subsequently carried over to the current model year. EPCA restricts the carry-back of CAFE credits to three years and EPA is proposing the same limitation, in keeping with the goal of harmonizing both sets of proposed standards

Manufacturers would submit a compliance plan to EPA prior to the beginning of the

model year and prior to the certification of any test group. This plan would include the manufacturer's estimate of its footprint-based standard along with a demonstration of compliance with the standard based on projected model-level CO2 emissions and production estimates. Manufacturers would submit the same information to NHTSA in the pre-model year report required for CAFE compliance. However, the GHG compliance plan could also include additional information relevant only to the EPA program. For example, manufacturers seeking to take advantage of air conditioning or other credit flexibilities would include these in their compliance demonstration. Similarly, the compliance demonstration would need to include a credible plan for addressing deficits accrued in prior model years. EPA would review the compliance plan for technical viability and incorporate this item in its certification preview discussions with manufacturers.

EPA is proposing to retain the current Tier 2 test group structure for cars and light trucks in the certification requirements for CO2. At the time of certification, manufacturers would use the CO2 emission level from the Tier 2 Emission Data Vehicle as a surrogate to represent all of the models in the test group. Following certification the further testing that is already required for CAFE purposes would serve to generate the data for compliance with the fleet average CO2 standard. EPA's issuance of a certificate would be conditioned upon the manufacturer's subsequent model-level testing and attainment of the actual fleet average.

EPA is proposing to retain its current high altitude regulations. Thus, manufacturers would not normally be required to submit vehicle CO2 test data for high altitude. Instead, they would submit an engineering evaluation indicating that common calibration approaches will be utilized at high altitude.

The N2O and CH4 standards are not fleet average standards but emissions caps in terms of grams per 100 miles. Both will require new data elements, but only the N2O data elements will require any new testing, and that only at the time of certification and IUVP testing.

Deterioration determination is a major burden of the application process with respect to existing emissions standards. Any addition to this burden will be avoided by using assigned DFs (deterioration factors) except in the case of new technologies, where in some cases a manufacturer might have to develop and submit appropriate model-level deterioration factors. As the incidence of this eventuality is speculative, EPA will look at the program after it has been implemented and adjust the ICR later as appropriate.

In general, implementation of the averaging, banking, and trading (ABT) program, including the calculation of credits and deficits, would be accomplished via existing reporting mechanisms. EPA's existing regulations define how a manufacturer calculates their fleet average miles per gallon for CAFE compliance purposes, and EPA is proposing to modify these regulations to also require the parallel calculation of fleet average CO2 levels for car and light truck compliance categories. These regulations already require an end-of-year report for each model year, submitted to EPA, which details the test results and calculations that determine each manufacturer's CAFE levels. The proposal would require that this report also include fleet average CO2 levels. In addition to requiring reporting of the actual fleet average achieved, this end-of-year report would also contain the calculations and data determining the manufacturer's

applicable fleet average standard for that model year. Like our existing Tier 2 program, the report would be required to contain the fleet average standard, all values required to calculate the fleet average standard, the actual fleet average CO2 that was achieved, all values required to calculate the actual fleet average, the number of credits generated or debits incurred, all the values required to calculate the credits or debits, and the resulting balance of credits or debits.

Because of the multitude of credit programs that are available, the end-of-year report will be required to have more data and a more defined and specific structure than it does today. Although requiring "all the data required" to calculate a given value should be inclusive, the proposed report would contain some requirements specific to certain types of credits.

For advanced technology credits that apply to vehicles like electric vehicles and plug-in hybrid electric vehicles, manufacturers would be required to identify the number and type of these vehicles and the effect of these credits on their fleet average. The same would be true for credits due to flexible-fuel and alternative-fuel vehicles, although for 2016 and later flexible-fuel credits manufacturers would also have to provide their demonstration of the actual use of the alternative fuel in-use and the resulting calculations of CO2 values for such vehicles. For air conditioning leakage credits manufacturers would have to include a summary of their use of such credits that would include which air conditioning systems were subject to such credits, information regarding the vehicle models which were equipped with credit-earning air conditioning systems, the production volume of these air conditioning systems, the leakage score of each air conditioning system generating credits, and the resulting calculation of leakage credits. Air conditioning efficiency reporting will be similar to the leakage reporting, requiring information regarding the vehicle models which were equipped with more efficient air conditioning systems, the production volume of these air conditioning systems, the efficiency score of each air conditioning system generating credits, and the resulting calculation of efficiency credits. Beginning in model year 2014, manufacturers choosing to generate efficiency credits would need to perform an A/C CO2 Idle Test in order to qualify for the credits. Similar reporting requirements would also apply to the variety of possible off-cycle credit options, where manufacturers would have to report the applicable technology, the amount of credit per unit, the production volume of the technology, and the total credits from that technology.

Finally, to the extent that there are any credit transactions, the manufacturer would have to detail in the end-of-year report documentation on all credit transactions that the manufacturer has engaged in. Information for each transaction would include: the name of the credit provider, the name of the credit recipient, the date the transfer occurred, the quantity of credits transferred, and the model year in which the credits were earned. Failure by the manufacturer to submit the annual report in the specified time period would be considered to be a violation of section 203(a) (1) of the Clean Air Act.

### (ii) Respondent Activities

While there is no "typical" respondent, all manufacturers must describe their product and supply test data and other information to verify compliance, including the test data and reports added by this proposal. After certification, additional fuel economy tests are conducted and the results reported to EPA for base engines within the test group. After

the end of the model year a calculated fleet average greenhouse gasses emissions will be calculated and reported and credits, debits, and trades described. As now, high mileage and low mileage in-use vehicles are procured by manufacturers and tested for emissions, including the testing added by this proposal. EPA also conducts a limited number of "confirmatory tests" to monitor manufacturer results, and this will continue as before with inclusion of testing for GHG. This requires test vehicles to be shipped to EPA's laboratory. Manufacturers must also retain records. These tasks are repeated for each model year, although typically previous data and information can be "carried over" when no significant changes have occurred. If, during the course of a model year a product change is made (a "running change"), EPA must be notified. Under some circumstances additional test data may be required. Manufacturer activities also include the post-certification, end of model year, and IUVP actions discussed in Section 4(b)(i).

## <u>Section 5: The Information Collected—Agency Activities, Collection Methodology, and Information Management</u>

### 5(a) Agency Activities

The test data used by EPA to determine compliance with GHG and other emissions and fuel economy standards are derived from vehicle testing done by vehicle manufacturers who report their own test data to EPA, and at EPA's National Vehicle and Fuel Emissions Laboratory in Ann Arbor, Michigan. Each year, EPA provides fuel economy data to the Department of Energy (DOE), NHTSA, and the Internal Revenue Service (IRS) so that they can administer their fuel economy-related programs. DOE publishes the annual fuel economy label values in the annual Fuel Economy Guide and on the fuel economy web site at http://www.fueleconomy.gov. NHTSA receives the manufacturers' fleet average fuel economy from EPA, and determines if manufacturers are complying with the CAFE standards. EPA provides IRS with the fuel economy data for vehicles that may be subject to the Gas Guzzler tax penalty. The IRS is responsible for collecting those taxes from manufacturers.

### 5(b) Collection Methodology and Management

EPA currently makes extensive use of computers in collecting information from vehicle manufacturers. Essentially all routine information (test results and vehicle descriptions in applications for certification and subsequent model tests, IUVP data, end of year reports, ABT reports, deterioration determinations, etc.) is electronically transmitted directly from the manufacturers through the Verify system. Remaining information, including diagrams and narrative descriptions of vehicles, is submitted on optical disc. The rule makes no changes in this reporting system, only changing the format and content of some of the information reported within it.

All information received by EPA is subject to review. Data submitted electronically are automatically screened; test results that are close to emission and fuel economy standards are reviewed in more detail. Narrative descriptions of the proposed product line are checked to verify that the appropriate vehicles have been tested. (The emission and

fuel economy programs rely on a combination of "worst case" and representative data to accomplish their goals.) Except for projected sales and a very limited amount of proprietary product information (typically catalyst formulations), all information is available to the public as soon as the vehicle is offered for sale. Emission and fuel economy data are available on the internet; other information is available upon request under the Freedom of Information Act.

### 5(c) Small Entity Flexibility

As discussed in the preamble to the proposed regulation, the respondent class for this rule has been defined to exclude those manufacturers who would fall within the definition of small business entities, except for a once-per-year declaration of small business status. In addition, the proposal allows a separate averaging fleet with a less stringent GHG standard as a phase-in provision for model years 2012 to 2015 for manufacturers with fewer than 400,000 vehicles. This is a compliance rather than paperwork burden savings.

EPA has other special procedures that might apply to small-volume light-duty vehicle and light-duty truck manufacturers not otherwise excluded by the small-business exclusion. Small-volume manufactures are defined as those whose total sales are less than 10,000 units per year. These special procedures allow the small-volume manufacturer to submit a simplified application for certification with respect to durability demonstrations, and these manufacturers also have reduced requirements under the IUVP program. In addition, engine families with small numbers of vehicles are eligible for reduced certification fees. Finally, by the very nature of their size, small volume manufacturers typically have very limited product lines. This characteristic both reduces the amount of information which must be submitted and also simplifies the process of selecting the correct test vehicle(s).

### 5(d) Collection Schedule

See the description in Part 4(b)(i). Information must be submitted for each "model year" that a manufacturer intends to build (or import) vehicles. For emissions purposes, a "model year" is statutorily defined as the annual production period of a manufacturer, as decided by the Administrator, that includes January 1 of that calendar year; or that calendar year if the manufacturer does not have an annual production period. During the model year, the results of such additional fuel economy and greenhouse gasses tests as the manufacturer conducts are also reported to EPA. After the end of the model year fleet-wide greenhouse gasses emissions are calculated and reported. If a product is unchanged between model years, much of the information can be "carried over." The collection frequency and burden are determined to a large extent by the manufacturer's marketing and production plans. However, as required by law, some submission is required for each model year's production.

### Section 6: Estimating the Burden and Cost of the Collection

The following estimates of increased burden use baselines and methodologies developed in the process of continuing updates of the 0783 ICR series, including the last renewal (ICR 0783.54, OMB 2060-0104, approved August 31, 2009), the prior disaggregation of that ICR into five ICs, the cold hydrocarbon emissions standards rule (ICR 0783.52), and the fuel-economy labeling rule (ICR 0783.51). The reasoning behind estimates of increased burden from the current baseline are given below and summarized in Section 6(f).

### 6(a) Estimating Respondent Burden

The respondent burden increase for the Light-Duty Vehicle Emissions Information Collection reflects new labor hours associated with conducting new tests and new reporting. The new air conditioning Idle Test will normally be conducted as an add-on to existing FTP/HFET emissions testing; therefore, there are no new vehicle preparation costs but primarily a time extension to the test; this was estimated as 3.5 to 7 hours added to the 30 hour baseline per test (low and high estimates, respectively) applied to the manufacturer portion of the model-level baseline, further reduced to reflect the number of manufacturers who seek the credit, and the number of air conditioner configurations needing to be tested (yielding an additional 107 to 409 tests). The requirement goes into effect in model year 2012, the first model year manufacturers choosing to generate efficiency credits need to perform the idle test to qualify for credits. The Idle Test is also reflected in a small capital cost increment (see below).

The new reporting and recordkeeping costs are informed by a similar analysis that was done for the Tier 2 rulemaking (ICR 0783.40). Most of these added burdens on respondents are low after information system updates are in place. In this ICR the estimate has six emission certification program components for each of 33 manufacturers: submission of a GHG compliance plan at the beginning of the model year, or a declaration of small business status; submitting new information with the certification application or new FE tests; the end-of-year report on compliance with greenhouse gasses limits; the development of information on the generation, use, and balance of green house gasses emissions credits and debits; the filing of credit transit reports; and secretarial labor associated with the incremental burden on record retention. These total to 14,366 to 20,808 hours per year across the industry for the low and high estimates, including a small IUVP program reporting component burden.

The respondent burden increase for the manufacturers' in-use testing program (IUVP) primarily comes from the addition of the highway test to the FTP test. The FTP and HFET tests are normally conducted together during certification as they would now during in-use testing, and therefore are deemed to involve no additional procurement, coast-down or vehicle preparation expenses. The baseline is assumed to require 30 labor hours per test pair; approximately 9 of these hours are allocated to the highway test for this analysis. This is applied to the 662 low-mileage and 1146 baseline high-mileage tests conducted per year according to EPA's most current data for model years 2001 (high mileage) and 2004 (low mileage). This totals to an increase of 16,272 hours for all of the manufacturers participating in the IUVP.

All labor hours associated with startup costs for installing (updating) information technology systems to incorporate the new information to be reported are associated with capital/startup costs, so they are included under that heading, following EPA guidance (EPA ICR Handbook, Rev. 11/05, p. A-31).

### 6(b) Estimating Respondent Costs

### (i) Estimating labor costs

Information technology specialists for analysis and coding and label redesign are priced at \$100 per hour. Labor costs for testing follow the testing labor cost assumptions of ICR 0783.47 and 0783.51 and average out to \$55 per hour. For labor costs associated with reporting and recordkeeping, rates for engineering managers (SOC 11-9041), mechanical engineers (SOC 17-2141), and secretaries (except legal, medical, and executive; SOC 43-6014) are from the May 2008 BLS National Industry-Specific Occupational Employment and Wage Estimates (http://www.bls.gov/oes/2008/may/naics4\_336100.htm, accessed August 3, 2009). With a 160% overhead multiplier, these are \$87.30, \$60.37, and \$31.62, respectively.

### (ii) Estimating Operations and Maintenance Costs

Operation and Maintenance costs include the non-labor costs associated with conducting the new tests that are anticipated for model year 2011 and after. For the Emissions IC, the Idle Test is estimated to involve \$210 to \$420 per test (low and high estimates); these are applied to the an estimate of the number of such tests the major manufacturers who choose to apply for the credit will need to do to represent their production volume in model year 2014 and after, for an industry total of \$41,297 to \$171,570 per year. After the initial year, there would presumably be a number of carryovers, so this is a conservative estimate for the years after model year 2012.

For the IUVP IC, the addition of highway testing is estimated to add \$558 per test; applied to the 662 low-mileage and 1146 high-mileage tests in the baseline this comes to an O&M cost increase of \$1,008,864 per year.

### (iii) Start-up Capital Costs

"Startup" costs are one-time costs to implement the new requirements in the proposal that are applicable to model year 2012 vehicles being certified or in-use tested by the respondent manufacturers. These startup burdens fall into three categories.

First are information technology costs involving familiarization with the new data reporting requirements and installation of reformatted management information systems to carry out and report the necessary data and calculations. All these burdens are add-ons to well established reporting requirements: manufacturers already submit similar data to EPA. This part of the estimate costs new analysis and coding for 33 manufacturers. Our initial assumption is that these costs are de minimis for the IUVP program as the addition of the highway test results can easily be added to the IUVP reporting template, and that for the Emissions IC the costs will be

on the order of those needed to update systems for the recent fuel economy labeling rule plus a component of those needed to update the adding, banking and trading reporting of the Tier 2 rule. Both components primarily involve fees for information processing specialists, but as they are capital costs they are not assigned any hour burdens. Allocated over ten years and discounted at 7% these costs estimates total \$476,088 to \$501,123 (low and high estimates) industry-wide.

Second are startup costs associated with N2O testing. Vehicle emissions regulations do not currently require testing for N2O, and most test facilities do not have equipment for its measurement. Manufacturers and IUVP test facilities without this capability would need to acquire and install appropriate measurement equipment. However, EPA is proposing four N2O measurement methods, all of which are commercially available today. EPA expects that most manufacturers would use photo-acoustic measurement equipment, which the Agency estimates would result in a one-time cost of about \$50,000-\$60,000 for each test cell that would need to be upgraded. In addition, some of the contracting laboratories that do IUVP testing may also need to install N2O analyzers, and this adds an estimated discounted and annualized capital cost of \$21,357 to \$85,427 to the IUVP IC. Testing facilities and procedures vary widely, and this is reflected in the wide range of high and low items for this item (from a depreciated annual capital cost of \$255,000 to \$1,495,000 for the emissions and IUVP programs together).

Third are capital costs associated with the new testing facility requirements for both the certification and IUVP ICs. Because manufacturers vary widely in their existing testing facilities, their excess capacities, their work shift arrangements and availabilities, the real estate cost and land availabilities for hypothetical expansions, and their contractual arrangements with other testing facilities, CISD has for many year now used the approximation that a facility capable of performing 750 FTP/HFET tests per year costs \$4,000,000 and allocated this cost to each testing increment. This cost is then allocated over ten years and discounted at 7%. This methodology is considered conservative, because it assumes no excess capacity. This is particularly true for the added facility costs associated with the added testing time for the new Idle Test which we estimate to add \$16,533 to \$242,074 per year in capital costs for the industry as a whole.

For the added facility costs associated with new IUVP highway testing, we estimate \$151,034 per year for the industry as a whole.

### 6(c) Estimating Agency Burden

The certification and IUVP programs are administered by EPA's Certification and Compliance Division and Laboratory Operations Division. Approximately 26 full time employee equivalents are directly involved in the combined emission and fuel economy programs; their cost is approximately \$2.9 million, including benefits but not overhead. EPA also participates in a program whereby the agency contracts with an organization that provides qualified persons to perform duties for the agency that are not performed by EPA employees. The cost associated with these persons who work directly on the combined emission and fuel economy program for the two divisions is approximately \$0.5 million, including overhead. Overhead percentage for the entire division is approximately 60 (i.e., the baseline labor costs are multiplied by 1.6), yielding an estimated total agency cost of \$5.44 million.

Implementation of the new GHG rule will be carried out by existing staff and by information technology contracts for the Verify information system. The one-time startup cost estimate, including overhead, for implementing the new rule totals \$1,366,000. As the Agency has not yet determined the allocation of this work between contract and EPA labor, the startup hours burden is not available for this draft ICR. This estimate includes costs associated with developing formats and collecting information within the Verify system for the new reporting elements summarized in 4(b)(i). Annualized over ten years with 7% depreciation this cost burden comes to \$181,765. Ongoing agency burden added by the rule for maintaining and managing the database after startup is estimated at 12% of the startup costs, or \$163,920, corresponding to approximately 2,145 hours. Combined labor and annual startup costs therefore total 2,145 hours (startup hours not annualized) and \$345,685. Other ongoing database management, oversight, and certification activities are part of the fuel economy and emissions program Agency baseline. All EPA labor estimates are based on Office of Personnel Management draft annual pay rates effective January, 2008, with a 1.6 multiplier for overhead based on EPA's latest fees cost allocation study (1.37 indirect program cost overhead times 1.16 overall EPA overhead). This estimate does not include Agency burdens incurred prior to the effective date of the rule, such as costs of developing the rule and preliminary consultations with manufacturers on database issues.

### 6(d) Estimating the Respondent Universe and Total Burden and Costs

From the above discussion the following total burden and cost estimates can be calculated. (Due to the diverse nature of the motor vehicle industry, there is no typical or average respondent. Respondents can be large manufacturers with many products such as General Motors; they can also be small importers of a few vehicles per year.)

### 6(e) Bottom Line Burden Hours and Cost

### (i) Respondent Tally

RESPONDENTS	33
BURDEN HOURS	39,940
LABOR COST	\$1,345,453
OPERATING COST	\$1,473,627
CAPITALIZED COST	\$2,181,587

A more detailed summary can be seen in the tables below.

### TOTAL ANNUAL COST AND HOURS INCREASE

### **COST BURDEN**

	Min	Max
Emissions IC		
Startup: Capital one- time IT/Paperwork (annualized 10yrs/7%)	\$702,468	\$1,910,660
New Facilities: Ongoing Capital (annualized 10yrs/7%)	\$16,592	\$34,466
Capital Subtotal	\$719,060	\$1,945,126
New Testing (O&M)	\$41,297	\$171,570
New Reporting & Recordkeeping	\$153,325	\$279,178
Total	\$913,681	\$2,395,874
IUVP IC		
Startup: one-time IT/Paperwork and O&M (annualized 10yrs/7%)	\$21,357	\$85,427
New Facilities: Ongoing Capital, annualized 10 yrs/7%)	\$151,034	\$151,034
Capital Subtotal	\$172,391	\$236,461
New Testing (O&M)	\$1,008,864	\$1,008,864
New Reporting & Recordkeeping	\$9,142	\$14,015
Total	\$1,190,397	\$1,259,340
TOTAL CAPITAL TOTAL O&M TOTAL LDV & IUVP	\$891,451 \$1,212,627 \$2,104,078	\$2,181,587 \$1,473,627 \$3,655,214
TOTAL LABOR COST	\$1,214,727	\$1,345,453

### **HOUR BURDEN**

LDV/LDT Emissions IC		
Startup: Capital one- time IT/Paperwork (annualized 10yrs/7%)	0	0
New Facilities: Ongoing Capital (annualized 10yrs/7%)	0	0
New Testing	688	2,860
New Reporting & Recordkeeping	13,995	20,331
Total	14,683	23,191

IUVP IC	0	0
Startup: one-time		
IT/Paperwork and		
O&M (annualized		
10yrs/7%)	0	0
New Facilities:		
Ongoing Capital,		
annualized 10 yrs/7%)	0	0
New Testing (Labor &		
O&M)	16,272	16,272
New Reporting &		
Recordkeeping	371	477
Total	16,643	16,749

TOTAL LDV & IUVP 31,326 39,940

### (ii) Agency Tally

EMPLOYEES 26 STARTUP \$163,920 LABOR HOURS 2145

### 6(f) Reasons for change in burden

The burden change is from new capital and operations and maintenance costs and labor hours associated with implementing the new programs detailed in this draft ICR

### 6(g) Burden Statement

The table in Section 6(e) presents the total estimated burden for the proposed rule: approximately 39,940 hours per year, with total annual capitalized and O&M costs estimated at \$3,655,214. These estimates represent the high end of a high-low range that was used for many of the cost elements. The annual costs and hours for information collection activities by a given manufacturer under any of the options in this proposed rule depend upon

manufacturer-specific variables, such as the number of different test groups and the number of vehicles tested. The estimated number of likely respondent manufacturers is 33. The responses will be submitted annually and occasionally as a part of the existing EPA certification and IUVP programs.

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-2007-0491, which is available for online viewing at www.regulations.gov, or in person viewing at the Air and Radiation Docket and Information Center 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 and Information Center 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-2007-0491 and OMB Control Number 2060-0104 in any correspondence.

### CERTIFICATION TEST VOLUME (O&M COSTS AND HOURS FOR RUNNING THE TESTS)

**Test Costs: Low Estimate** 

Test Cycle	Cost Per Test	Hours Per Test		
FTP/HWY	\$1,860	30		
FTP	\$1,302	21		
HWY	\$558	9		
AC Idle	\$210	3.5		
MDPV prep	\$9,839	30		

**Test Costs: High Estimate** 

Test Cycle	Cost Per Test	<b>Hours Per Test</b>	
FTP/HWY	\$1,860	30	
FTP	\$1,302	21	
HWY	\$558	9	
AC Idle	\$420	7	
MDPV prep	\$43,046	30	

		Baseline Model							
		Year Number of	<b>Baseline Model</b>		Increase In Number of Tests		Increase in Hours		
Te	st Cycle	FE Tests	Year Test Cost	Min Tests	Min Cost Increase	Max Tests	Max Cost Increase	Min	Max
FT	ΓP/HWY	1250	\$2,325,000.00	0	\$0	0	\$0	0	0
MD	PV prep	0	\$0.00	37	\$671,208	49	\$888,897	1,110	1,470
HW	/Y MDPV	11	\$14,322.00	48	\$26,784	60	\$33,480	432	540
AC	Idle Test	0	\$0.00	1250	\$262,500	1250	\$525,000	4,375	8,750
	·	Total Cost =	\$2,339,322.00	Min Increase =	\$960,492	Max Increase =	\$1,447,377	5,917	10,760
		Total Cost =	\$2,339,322.00	Min Increase =	\$960,492	Max Increase =	\$1,447,377	5,917	10,760