

Supporting Statement
for
Information Collection Request

Information Requirements for Locomotives and Locomotive Engines
(Renewal)

EPA ICR # 1800.07; OMB Control Number 2060-0392

42 USC 7521 § 206
42 USC 7521 § 213(d)
40 CFR Part 92
40 CFR Part 1033
40 CFR Part 1065
40 CFR Part 1068

November 2012

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

1. Identification of the Information Collection

1(a) Title and Number of the Information Collection

Information Requirements for Locomotive and Locomotive Engines (Renewal), EPA ICR Number 1800.07, OMB Number 2060-0392.

1(b) Short Characterization

This supporting statement is for the renewal of an existing ICR. Under Title II of the Clean Air Act (42 U.S.C. 7521 et seq.; CAA), EPA is charged with issuing certificates of conformity for locomotives and locomotive engines that comply with applicable emission standards. Such a certificate must be issued before locomotives and locomotive engines may be legally introduced into commerce. To apply for a certificate of conformity, manufacturers and remanufacturers of locomotives and locomotive engines are required to submit descriptions of their planned production, including detailed descriptions of emission control systems and test data. This information is organized by "engine family" groups expected to have similar emission characteristics and is submitted every year, at the beginning of the model year. There are also recordkeeping requirements.

Those locomotive and locomotive engine manufacturers and remanufacturers electing to participate in the Averaging, Banking, and Trading (ABT) program are also required to submit information regarding the calculation, actual generation, and usage of credits in quarterly reports, and an end-of-the-year report. These reports are used for certification and enforcement purposes. Participants must also maintain records for eight years regarding the engine families included in the program.

The CAA also mandates EPA verify that manufacturers have successfully translated their certified prototype engines into mass produced engines, and that these engines comply with emission standards throughout their useful lives. Under the Production-line Testing (PLT) Program, manufacturers are required to test a sample of engines as they leave the assembly line. The Installation Audit Program requires remanufacturers to audit the installation of a sample of remanufactured engines. These self-audit programs (collectively referred to as the "PLT Program") allow manufacturers and remanufacturers to monitor compliance with statistical certainty and minimize the cost of correcting errors through early detection. Under the In-use Testing Program (In-use), manufacturers and remanufacturers are required to test locomotives after a number of years of use to verify compliance with emission standards throughout their useful lives.

This information is collected by the Diesel Engine Compliance Center (DECC), Compliance Division (CD), Office of Transportation and Air Quality, Office of Air and Radiation, U.S. Environmental Protection Agency (EPA). Besides CD, this information could be used by the Office of Enforcement and Compliance Assurance (OECA) and the Department of Justice for enforcement purposes. Non-confidential portions of the applications are also

disclosed in EPA's website. This information is used by trade associations, environmental groups, and the public. The information is usually submitted in an electronic format, and it is stored in CD's databases.

It has been estimated that a total of 16 locomotive and locomotive engine manufacturers and remanufacturers will respond to this collection with an approximate cost of \$2,862,117.

2. Need for and Use of the Collection

2(a) Need/Authority for the Collection

EPA's emission certification programs are statutorily mandated; the agency does not have discretion to cease these functions. Under Section 206(a) of the CAA (42 USC 7521):

"The Administrator shall test, or require to be tested in such manner as he deems appropriate, any new motor vehicle or new motor vehicle engine submitted by a manufacturer to determine whether such vehicle or engine conforms with the regulations prescribed under §202 of this Act. If such vehicle or engine conforms to such regulations, the Administrator shall issue a certificate of conformity upon such terms, and for such period (not in excess of one year) as he may prescribe."

This provision is extended to Nonroad engines and vehicles pursuant to §213(d) of the CAA. Locomotive emissions regulations are codified at:

- 40 CFR Part 1033 – emission standards and certification requirements for new locomotives manufactured or remanufactured after to July 7, 2008
- 40 CFR Part 92 – emission standards, certification and general compliance provisions for locomotives manufactured or remanufactured prior to July 7, 2008, and for certain locomotives and locomotive engines up until model year 2012.
- 40 CFR Part 1065 – exhaust emission test procedures
- 40 CFR Part 1068 – general compliance provisions

Section 206(b)(1) of the CAA authorizes EPA to require testing of new vehicles and engines to verify compliance. The requirements of the Locomotive Production Line Testing Program are codified at and Part 1033, Subpart D.

Section 207(b) of the Acts mandates the establishment of methods and testing procedures to ascertain whether certified engines in actual use in fact comply with applicable emission standards throughout their useful lives. The In-use Testing Program procedures for locomotives are codified at 40 CFR 1033, Subpart E.

EPA also conducts, under 40 CFR 1033 Subpart H, an Averaging, Banking, and Trading (ABT) Program. This voluntary program is one of many regulatory features designed to enhance

the compliance flexibility for and reduce the burden on the affected engine manufacturers, without compromising the expected emissions benefit derived from these emissions standards.

2(b) Practical Utility/Users of the Data

EPA uses the information requested under this collection to verify and support a three stage compliance assurance system envisioned in the CAA. First, certification information is needed to verify that the proper prototype engines have been selected to represent each locomotive family (group of locomotives expected to have similar emission characteristics), and that the necessary testing has been performed to assure that each locomotive family complies with emission standards. Based on this information, EPA issues a certificate of conformity. However, prototypes are often hand-built and not typical of assembly line engines.

Second, information collected under the PLT program is used to verify that manufacturers and remanufacturers have successfully translated their prototypes into mass-produced engines. Engines are taken directly from the assembly line and tested.

Lastly, in-use testing is designed to determine if locomotives maintained in accordance with the manufacturer's or remanufacturer's instructions still emit at acceptable levels after a number of years of actual use. If a family of locomotives is found not to comply, manufacturers are required to recall the family.

The ABT program allows manufacturers to generate emission credits. Under averaging, a manufacturer could certify one or more engine families within its product line at levels above the emission standard, provided the increased emissions are offset by emission reductions from one or more families certified below the standard. The average emissions (weighted by horsepower and production) from all the manufacturer's engine families involved in the program in a given model year must be at or below the emission standard. The banking program allows manufacturers to bank credits generated in one model year for use in averaging or trading in subsequent model years. The trading program allows credit transactions between manufacturers.

The information will be received and used by DECC. In instances of noncompliance, the information may be used by EPA's enforcement office and the Department of Justice. Non-confidential portions of the information submitted to DECC are available to and used by importers, environmental groups, members of the public and state and local government organizations.

3. Non-duplication, Consultations, and Other Collection Criteria

3(a) Non-duplication

The information requested under this ICR is required by statute. Because of its specialized (and sometimes confidential) nature, and the fact that most of it must be submitted to

EPA before locomotives and locomotive engines can be sold, the information collected is not available from any other source. Furthermore, some of the data requested under the ABT program, such as actual sales volumes, are claimed as confidential business information (CBI) by manufacturers, and as such, EPA can only obtain these data if submitted by the manufacturers. Participation in the ABT program is voluntary.

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

An announcement of the public comment period for this ICR renewal was published in the Federal Register (77 FR 69450) on November 19, 2012. This document may be accessed through the Federal Register's website at <https://federalregister.gov/a/2012-28087>. In addition, all documents associated with this ICR renewal are accessible on www.regulations.gov, under Docket # EPA-HQ-OAR-2007-1184. No comments were received in response to this ICR renewal.

3(c) Consultations

EPA consulted less than ten past respondents regarding this information collection burden.

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3(d) Effects of Less Frequent Collection

The CAA states that emission certification must be done on a yearly basis (CAA 206(a)(1)), coinciding with the industry's "model year." Major product changes typically occur at the start of a model year. For these reasons, a collection frequency of less than a model year is not possible. However, when an engine design is "carried over" to a subsequent model year, the amount of new information required is substantially reduced. This applies to both manufacturers and remanufacturers.

Entities electing to engage in emission credit trades or transfers must submit quarterly reports of their holdings or receipts when their credits are gain or lost. The number of credits generated or lost is proportional to the number of engines produced; therefore, it is best for

manufacturers trading credits to update their credit calculations every quarter when they update their internal production volume reports. This ensures that the manufacturer holds valid credits and warns manufacturers in advance of the need to acquire credits. Manufacturers must not have a negative credit balance at the end of the year.

Production-line testing (PLT) reports must also be submitted on a quarterly basis for similar reasons. Manufacturers are required to test up to one percent of their production at random to ensure that mass produced locomotives and locomotive engines comply with emission requirements. (Remanufacturers are required to conduct PLT testing only if EPA believes that a problem might exist.) If a problem is found, manufacturers must correct it and might need to recall locomotives or locomotive engines that have already been sold. By conducting this quality control testing on a quarterly basis, manufacturers learn about any problems early and are, therefore, able to minimize costs.

In-use testing reports must be submitted once per year, within three months of the completion of the required testing. Manufacturers and remanufacturers are only required to test one engine or locomotive family per year. Providing this information to EPA at a less frequent interval would compromise the Agency's ability to expeditiously evaluate the emissions results and determine, in a timely manner, whether in-use locomotives conform to emission standards. Any delay in making such a determination reduces the universe of locomotives which will be reached by the recall because both engine scrappage and owners' unwillingness to participate in recalls increase with the age of the locomotive.

3(e) General Guidelines

According to 40 CFR 1033.250 (c), 1033.735(b), and 1033.325(b), certification, ABT and PLT related records must be maintained for eight years. However, respondents may "store these records in any format and on any media, as long as [they] can promptly provide to us organized, written records in English if we ask for them and all the information is retained." These recordkeeping requirements stem mainly from the statutory requirement to warrant some items for long periods of time and because locomotives have extremely long useful lives. In addition, the manufacturers must comply with requirements to recall vehicles and engines failing to meet emission standards during their useful lives.

Manufacturers are required to submit confidential business information such as sales projections and certain sensitive technical descriptions (please see Section 4(b)(i) for reference). This information is kept confidential 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. Also, non-proprietary information submitted by manufacturers is held as confidential until the specific locomotive or locomotive engine to which it pertains is available for purchase.

No other general guideline is exceeded by this information collection.

3(f) Confidentiality

Manufacturers and remanufacturers are allowed to assert a claim of confidentiality over information provided to EPA. Confidentiality is provided in accordance with the Freedom of Information Act and EPA regulations at 40 CFR Part 2. For further detail, refer to Section 3(e).

3(g) Sensitive Questions

No sensitive questions are asked in this information collection.

4. Respondents and Information Requested

4(a) Respondents/North American Industry Classification System (NAICS) Codes

Respondents are manufacturers of Nonroad equipment and engines within the following North American Industry Classification System (NAICS) codes:

| | |
|--------|--------------------------------------|
| 333618 | Other Engine Equipment Manufacturing |
| 336510 | Railroad Rolling Stock manufacturing |
| 482111 | Line-haul Railroads |

4(b) Information Requested

40 CFR 1033.925 provides a summary of the locomotive reporting and recordkeeping requirements.

To obtain a certificate of conformity, all manufacturers and remanufacturers must describe their products and supply test data to verify compliance. This information is organized by "engine family" groups expected to have similar emission characteristics. The burden associated with certifying a given engine family is usually reduced after the first production year (model year), because certification data and information from previous years can be "carried over" if no significant changes have occurred. For instance, an engine family certified in model year 2012 can be certified in the 2013 model year by "carrying over" data submitted as part of the 2012 application if no significant changes have occurred to the engine family between model years. Manufacturers and remanufacturers must also retain records.

To participate in the ABT program, manufacturers and remanufacturers submit calculations of the amount of credits they generate or need to certify each locomotive family,

based on each family's emission limit and sales volume. Participation in the program is voluntary.

Information requested under the PLT and in-use testing programs consist mainly of test results and a description of the locomotives tested and the conditions under which the tests took place. This information is essential to determine if locomotives and locomotive engines are in fact complying with emission standards at different stages. Whereas the certification test information indicates whether a specific engine prototype is capable of meeting emission standards, PLT data is used to determine if mass-produced engines also comply. In-use data verifies that correctly maintained engines also meet the standards when they reach 50 to 75 percent of their useful lives.

(i) Data Items

This section contains lists of the data items requested under each program. Although most of them must be reported to EPA, some of the data items are only required to be kept in records and submitted upon request. All applications and reports must now be submitted electronically through VERIFY, EPA's vehicle and engine compliance information system. More information about VERIFY can be found at <http://epa.gov/otaq/verify/index.htm>.

Per 1033.255, EPA may deny an application, revoke, suspend or void a certificate for a locomotive or engine family for which the manufacturer or remanufacturer:

- Refuses to comply with reporting requirements,
- Submits false or incomplete information,
- Submits inaccurate test data,
- Fails to update an application to include all locomotives being produced,
- Fails to supply information requested by the agency, among other reasons.

A. Certification

An application for certification must be submitted for each engine family that respondents wish to introduce into the United States' commerce. Manufacturers and remanufacturers must keep certification-related records for eight years, except routine emission records. Routine emission records must be kept for only one year [Section 1033.250 (c)]. Manufacturers may amend their certification applications, even after it was approved, by submitting a "running change." Running changes allow manufacturers to inform EPA of changes to a certified engine, or to add an engine model to an already certified engine family. Running changes are submitted using the same electronic format used to apply for a certificate of conformity.

The required items for the certification application are:

- Statement of compliance.
- Identification and description of the basic engine design including, but not limited

to, the engine family specifications.

- A description of the locomotive design, or of the basic locomotive design on which the engine or remanufactured system will be used, as applicable.
- A list of distinguishable configurations (models) to be included in the family.
- An explanation of how the emission control system operates, including, among others, a detailed description of:
 - All emission control system components.
 - Each auxiliary emission control device (AECD).
- A description of the test locomotive or engine.
- Special or alternate test procedures, if applicable.
- A description of the operating cycle and the period of operation necessary to accumulate service hours on the test locomotive or engine and stabilize emission levels.
- A description of all adjustable operating parameters.
- Projected U.S. production information for each configuration.
- A description of the test equipment and fuel proposed to be used.
- All test data obtained by the manufacturer or remanufacturer on each test engine or locomotive.
- Intended useful life.
- Deterioration factors.
- At the Administrator's request, the manufacturer or remanufacturer must supply such additional information as may be required to evaluate the application.
- If, after a review, EPA determines additional testing is required, the manufacturer or remanufacturer must provide required test data within 30 days or cease production of the affected locomotives or engines.

Recordkeeping requirements associated with certification records are:

- Identification and description of all locomotives or locomotive engines for which testing is required.
- Description of emission control systems.
- Description of test procedures.
- Description of all certification applications filed.
- Individual Records:

- A brief history of all test engines.
- A descriptions of any modifications made to the test engine.
- A complete record of all emission tests performed.
- Record and description of all maintenance and other servicing performed.
- Record and description of each test performed to diagnose engine or emission control system performance.
- A brief description of any significant events affecting the vehicle.
- Copies of all instructions or explanations regarding the use, repair, adjustment, maintenance, or testing of such locomotive or engine, relevant to the control of crankcase, or exhaust emissions issued by the manufacturer or remanufacturer, for use by other manufacturers or remanufacturers, assembly plants, distributors, dealers, owners and operators. Any material not translated into the English language need not be submitted unless specifically requested by the Administrator.

Information required for running changes:

- Notification of changes made to the application and request to amend the application.
- A full description of the change to be made.
- Engineering evaluations or data showing that engines as modified or added will comply with all applicable emission standards.
- A determination whether the original test fleet selection is still appropriate, and proposed new test fleet selections, if applicable.
- Upon request, test data on the engine changed or added.
- Supporting documentation, test data and engineering evaluations as appropriate to demonstrate that all affected engines will still meet applicable emission standards.
- Manufacturers or remanufacturers requesting a hearing on EPA's denial or revocation of a certificate of conformity must file their request within 30 days of EPA's decision. The request must be in writing, and must set forth their objections to EPA's decision and data to support the objections.

B. Average, Banking, and Trading

Respondents participating in AB&T must declare their wish to participate in the application for certification. Credits are generated when an engine family emits below the

applicable standard or a “Family Emissions Limit” (FEL) chosen by the manufacturer. Those credits can then be used to meet emissions requirements for families that emit above the standard or FEL, as long as the manufacturer carries an overall positive or zero credit balance.

Since all new locomotives and locomotive engines are required to meet both the line-haul and switch duty-cycle standards, manufacturers and remanufacturers can participate in separate line-haul and switch ABT programs. They cannot, however, use credits generated under one program to satisfy the requirements of the other. Credits can only be generated for NO_x and PM. Only manufacturers and remanufacturers of new locomotives and new locomotive engines manufactured or remanufactured in the 1999 model year or later can participate. Records must be kept for eight years [Section1033.735(b)].

Information Items Required under the ABT Program:

- A declaration of intent to include this specific engine family in one or both of the ABT programs. Separate declarations are needed for each program and each pollutant.
- Family emission limits.
- Detailed calculations of projected emission credits based on quarterly production projections for each participating family and for each pollutant, using the applicable equation and the applicable values. If negative credits are generated, the source for offsetting the deficit and where the quarterly projected credits will be applied should be listed.
- A statement that the locomotives or locomotive engines for which certification is requested will not, to the best of the manufacturer’s or remanufacturer’s belief, cause the manufacturer or remanufacturer to have a negative credit balance at the end of the year.
- End-of-year reports including a summary of credit activity, all information included in quarterly reports (to be submitted within 120 days of the end of the calendar year).
- Quarterly reports (applicable to those holding or receiving transfers only and to be submitted within 90 days of the end of the calendar quarter) including:
 - Source/recipients of credits, copies of trading contracts, details of pollutants, etc.; and
 - Details of the engine family, sales, etc.
- A statement accompanying all end-of-year and quarterly reports certifying the accuracy and authenticity of the reports.

Recordkeeping Requirements under the ABT Program:

- For Manufacturers and Remanufacturers of Locomotive Engines
 - EPA engine family and configuration
 - Engine identification number
 - Engine build date and model year
 - Power rating
 - Purchaser and destination
 - Assembly plant
- For Manufacturers and Remanufacturers of Engine Families
 - EPA engine family and model year
 - Family emission limit
 - Rated horse power for each configuration
 - Projected and actual production/sales volume for the calendar year
 - Useful life
- For families participating in trading, the following records must be kept quarterly
 - Model year and engine family
 - Actual quarterly and cumulative applicable production/sales volume
 - Value required to calculate credits
 - Resulting type and number of credits generated/required
 - How and where credit surpluses are dispersed
 - How and through what means credit deficits are met

C. Audit Programs: Manufacturer Production-Line Testing (PLT) Program and Remanufacturer Installation Audit Program

Only manufacturers of freshly manufactured locomotive engines are subject to PLT testing requirements. Remanufacturers, however, must conduct audits under 1033.335. However, if EPA has reason to believe that there are problems with a remanufacturer's production, the Agency can extend PLT testing requirement to that remanufacturer.

Under PLT, each calendar quarter, manufacturers must conduct testing on a sample of locomotives or locomotive engines taken directly from the assembly line. The required sample size for an engine family (as long as there are no failures), is the lesser of 5 tests per year or one percent of the projected annual production [1033.310(b)]. Two additional tests must be

performed for each failed test. Respondents may request a reduction in sample size for carry-over families that have successfully completed PLT in the two previous years. Some engine families may not have production in some quarters or the sample size may be reached before the end of the year, so some respondents may submit less than four reports per engine family per year.

Per 1033.320(e), within 45 days of the end of each quarter, manufacturers must report the information listed below. Records, also listed below, must be kept for eight years after completion of all testing [1033.325(b)]. Under 1033.325(d), EPA may require manufacturers and remanufacturers to submit or retain additional information not specifically listed here.

Information Items requested under the PLT Program:

- The location and description of the test facilities where testing was conducted.
- Total production and sample size for each engine family.
- Applicable standards and/or FELs.
- A description of the test locomotives or locomotive engines.
- For each test conducted:
 - Description of the test locomotive or locomotive engine, including engine family and configuration, year, make, built date, engine ID number, etc.;
 - Location(s) where service accumulation was conducted and description of accumulation procedure and schedule, if applicable;
 - Test number, date, test procedure used, initial test results before and after rounding, final test results, etc.;
 - Complete description of any adjustment, modification, repair, preparation, maintenance, and testing which was performed on the test locomotive or locomotive engine; and
 - Any other information the Administrator may request.
- For each failed locomotive or locomotive engine, a description of the remedy and test results for all retests.
- The date of the end of the locomotive or locomotive engine manufacturer's model year production for each engine family tested.
- A statement of compliance, found at 1033.320(e)(7) signed and endorsement by an authorized representative of the manufacturer or remanufacturer.

- Upon request, manufacturers must also submit:
 - Projected production for each configuration within each engine family for which certification has been requested and/or approved; and/or
 - Number of locomotives or engines, by configuration and assembly plant, scheduled for production.

Recordkeeping requirements for the PLT Program:

- A description of all testing equipment used and each test cell that can be used to perform PLT.
- For each PLT conducted:
 - ○ The date, time, and location of each test or audit.
 - ○ The method by which the green engine factor was calculated or the number of hours of service accumulated on the test locomotive or locomotive engine when the test began and ended.
 - ○ The names of all supervisory personnel involved in the conduct of the production line test or audit.
 - ○ A record and description of any adjustment, repair, preparation or modification performed on test locomotives or locomotive engines, giving the date, associated time, justification, name(s) of the authorizing personnel, and names of all supervisory personnel responsible for the conduct of the action.
 - ○ If applicable, the date the locomotive or locomotive engine was shipped from the assembly plant, associated storage facility or port facility, and the date the locomotive or locomotive engine was received at the testing facility.
 - ○ A complete record of all emission tests or audits performed (except tests performed directly by EPA), including all individual worksheets and/or other documentation relating to each test, or exact copies.
 - ○ A brief description of any significant events during testing not otherwise described, commencing with the test locomotive or locomotive engine selection process and including such extraordinary events as engine damage during shipment.

Remanufacturer Installation Audit Program

Each calendar quarter, remanufacturers must audit the installation of locomotives covered by its certificate(s) of conformity for proper components, component settings, and component installations on randomly chosen locomotives in an engine family. Within 45 days of the end of each quarter, remanufacturers must report the following information [1033.335(g)]:

- The location and description of the test facilities where the audit was conducted.
- Total production and sample size for each engine family.
- Applicable standards and/or FELs.
- For each audit conducted: A description of the audit locomotive or locomotive engine, including engine family and configuration, year, make, built date, engine ID number, etc., and any other information the Administrator may request.
- For each failed locomotive or locomotive engine, a description of the remedy and test results for all retests.
- A statement found at 1033.335(g)(6) signed and endorsement by an authorized representative of the manufacturer or remanufacturer.

Failed PLT Testing

When a locomotive or locomotive engine fails PLT or an audit, the certificate of conformity issued to that locomotive or locomotive engine family is suspended, effective from the time the testing of that locomotive or locomotive engine is completed. The affected manufacturer or remanufacturer must then remedy the nonconformity, retest or re-audit, and submit reports with the following information:

- A description of the remedy and new test or audits results.
- The reason for the failure, the remedies and the date when the remedies will be implemented.
- A demonstration that the failed engine family does in fact conform.
- Manufacturers and remanufacturers may request a hearing.
- Within 30 days, the interested party must file two copies of their written request, which must include:
 - A statement as to which configuration(s) within a family is to be the subject of the hearing.
 - A concise statement of the issues to be raised by the manufacturer or remanufacturer at the hearing.
 - A statement specifying reasons why the manufacturer or remanufacturer believes it will prevail on the merits of each of the issues raised.
 - A summary of the evidence which supports the manufacturer's or remanufacturer's position on each of the issues raised.

D. In-use Testing Program

Manufacturers and remanufacturers must test, each year, a sample of used locomotives from one of their certified locomotive engine families previously chosen by EPA. If one manufacturer holds certificates for both freshly manufactured engine families and remanufactured engine families, EPA can request the manufacturer to test one engine family of each category [1033.405(a)(1)]. EPA may request a manufacturer to test more than one engine family if it has reason to believe that engines in an engine family do not comply with in-use standards. Engine families of less than ten locomotives per year do not need to participate in in-use testing [1033.405(a)(1)]. Within 90 days of completing their in-use testing program, respondents must submit the following information:

- All results generated.
- For each individual locomotive tested:
 - Engine family, and configuration.
 - Locomotive and engine models.
 - Locomotive and engine serial numbers.
 - Date of manufacture and/or remanufacture(s), as applicable.
 - Megawatt-hours of use (or miles, as applicable).
 - Date and time of each test attempt.
 - Results (if any) of each test attempt.
 - Results of all emission testing.
 - Summary of all maintenance and/or adjustments performed.
 - Summary of all modifications and/or repairs.
 - Determinations of noncompliance.
 - The statement at 1033.425(a)(12) signed and endorsement by an authorized representative of the manufacturer or remanufacturer.
- For each engine family tested:
 - The serial numbers of all locomotive that were excluded from the test sample because they did not meet maintenance requirements.
 - The owner of each locomotive(or other entity responsible for the maintenance of the locomotive).
 - The specific reasons why the locomotives were excluded from the test sample.

(ii) Respondent Activities

The activities a manufacturer or remanufacturer needs to perform to comply with the requirements of the certification program are as follows:

- Review the regulations and the guidance document;
- Develop locomotive and locomotive engine family groups;
- Test locomotives and locomotive engines for compliance with emission standards;
- Develop deterioration factors;
- Data entry and analysis;
- Submit the application for certification;
- Prepare and submit carry over applications;
- Prepare and submit running changes; and
- Retain and maintain records, and submit them upon request.

Manufacturers and remanufacturers electing to participate in the ABT programs will carry out the following activities:

- Review the regulations and the guidance document;
- Pre-certification activities;
- Determine which engine families will participate in ABT;
- Project applicable production volumes for the model year for all participating families;
- Submit ABT information with the certification application;
- Gather information about credit sources/recipients;
- Monitor production volumes and engine sales (customary business practice);
- Develop and submit quarterly reports;
- Develop and submit end-of-year reports; and
- Store, file, and maintain information as required.

Activities manufacturers and remanufacturers need to carry out to comply with PLT and audits requirements are:

- Gather/maintain production data (customary business practice);
- Read instructions and regulations;
- Train personnel;
- Project testing needs and plan schedules;
- Select engines to be tested;
- Inspect engines to be tested;
- Test engines;
- Enter data and analyze it;
- Prepare and submit reports; and
- Keep records.

Activities associated with in-use testing are:

- Read instructions and regulations;
- Train personnel;
- Procure locomotives;
- Test locomotives;
- Enter data and analyze it;
- Prepare and submit reports; and
- Keep records.

5. The Information Collected -- Agency Activities, Collection Methodology, and Information Management

5(a) Agency Activities

As part of the implementation of the certification programs, EPA officials carry out the following activities:

- Review and interpret regulations, provide guidance;
- Gather applications from the industry, enter data into the database;
- Review the applications for completeness and accuracy;
- Verify that the correct engines have been selected and tested;
- Answer questions from manufacturers and the public;
- Issue appropriate certificates of conformity;
- Periodically perform maintenance or enhance the database;
- Make data available to the public, including making it available through the Internet;
- Analyze and manage requests for confidentiality;
- Determining if "carry over" of data from a previous model year is appropriate or if new testing will be required; and
- Store, file and maintain data.

Activities related to ABT involve:

- Review requirements and providing guidance;
- Enter the data into the database;
- Receive quarterly and final reports, reviewing calculations, making sure that the information submitted by manufacturers and remanufacturers is accurate and complete;
- Audit manufacturers and remanufacturers reports and files to make sure all participants have zero or positive credit balances at the end of the year; and
- Keep records.

To ensure through the PLT Program that mass-produced locomotives and locomotive engines do comply with emission standards, EPA must:

- Answer questions from manufacturers, remanufacturers and the public;

- Review submissions for format and completeness;
- Input data into the database;
- Analyze and compare results to standards and FELs;
- Request and review additional information as needed;
- Take any appropriate enforcement actions;
- Keep records of the information submitted and EPA's actions and determinations;
- Periodically perform maintenance or make enhancements to the database;
- Make data from completed test programs available to the public, including posting it on the Internet; and
- Analyze and manage requests for confidentiality.

The EPA activities associated with the implementation of the In-use Testing Program are similar:

- Evaluate testing requirements;
- Review information and identify engines for testing (if additional testing is needed);
- Inform manufacturers or remanufacturers of any additional testing required (if needed);
- Answer manufacturers' questions;
- Review submissions for format and completeness;
- Enter results into the database;
- Analyze, compare and file information submitted;
- Periodically request and review additional information;
- Periodically perform maintenance or make enhancements to the database;
- Make data from completed test programs available to the public, including posting it on the Internet; and
- Analyze and manage requests for confidentiality.

5(b) Collection Methodology and Management

EPA has developed a web-based system for engine manufacturers to submit their applications for certification and compliance data. The applications for certification are submitted via the internet (web-based forms) into OTAQ's Document Module. The information is then processed and stored in VERIFY. EPA's engine and vehicle compliance information system, VERIFY, collects emissions and fuel economy compliance information for all types of vehicles (mobile sources of air pollution) including nonroad SI engines. Additional information about VERIFY and how manufacturers use the system can be found at <http://epa.gov/otaq/verify/basicinfo.htm>.

For compliance programs, such as the Averaging, Banking and Trading Program (AB&T), and the Production Line Testing Program (PLT) and In-use Testing, as well as for production reporting, EPA has developed Excel-based forms. These forms can be downloaded from EPA's website at <http://www.epa.gov/otaq/certdat2.htm>. Manufacturers submit these forms also through the Document Module. The information is then uploaded into, analyzed and stored

in the Compliance Database. SEA reports can be submitted electronically, but the manufacturer may submit these reports using other methods.

Once the data are received, the certification reviewer analyzes the information to ensure compliance with the CAA and applicable regulations.

Non-confidential portions of the applications for certification are available through the Engine Certification Information Center at <http://www.epa.gov/otaq/certdata.htm>.

5(c) Small Entity Flexibility

EPA has exempted remanufactured locomotive and locomotive engines owned by small railroads (as defined by the Small Business Administration) from the definition of 'new locomotive' and 'new locomotive engine'; thus exempting these remanufactured locomotives and locomotive engines from compliance with certain emission standards and regulations. This is due to the fact that the number of locomotives owned and operated by small railroads is very low and that the contribution of these engines to the sector's emission inventory is considered to be trivial.

Under the In-use Testing Program, locomotive families of less than 10 locomotives are exempted from the requirements of the program. This provision, found at 1033.405(a)(2), reduces the cost of the program for manufacturers and remanufacturers with limited production.

Under the other programs included in this ICR, the information being requested is considered to be the minimum needed to effectively conduct and maintain their integrity. Further measures to simplify reporting for small businesses do not appear prudent or necessary.

5(d) Collection Schedule

Collection frequency in the certification program is largely determined by the manufacturer's marketing and product plans. Information must be submitted for each 'model year' that a manufacturer intends to build (or import) an engine model. A certificate of conformity must be obtained before the start of production (or importation). Taking these two considerations into account, manufacturers normally submit information on an annual basis and submit their certification applications at their earliest convenience. In-use testing reports are also submitted once a year.

6. Estimating the Burden and Cost of the Collection

6(a) Estimating Respondent Burden

Burden estimates were taken from previous ICRs and adjusted to reflect comments from fewer than ten respondents consulted by EPA. These estimates are included in Table 1 below, and Tables 2 through 5 which are included in the Excel file that accompanies this supporting statement.

6(b) Estimating Respondent Costs

(i) Estimating Burden Hours

To estimate labor costs, EPA used the Bureau of Labor Statistics' (BLS) National Industry-specific Occupational Wage Estimates (May 2011) for the Engine and Turbines Industry under Standard Industrial Classification (SIC) code 351 and increased by a factor of 1.6 to account for benefits and overhead. Mean, hourly rates were used for this estimate and are listed below.

**Table 1
Labor Costs Estimates**

| Occupation | SOC Code Number | Mean Hourly Rate (BLS) | Rate Increased by Factor of 1.6 |
|--|------------------------|-------------------------------|--|
| Mechanical Engineers | 17-2141 | \$40.74 | \$65.18 |
| Engineering Managers | 11-9041 | \$59.83 | \$95.73 |
| Lawyers | 23-1011 | \$76.62 | \$122.59 |
| Secretaries, Except Legal, Medical and Executive | 43-6014 | \$17.15 | \$27.44 |

(ii) Estimating Capital and Operations and Maintenance Costs

All Operation and Maintenance (O&M) costs are listed in Table 7 on Section 6(e)(1). Wherever possible, estimates were developed using current costs. For others, EPA used the Bureau of Labor Statistic's Consumer Price Index Inflation Calculator, which can be found at http://www.bls.gov/data/inflation_calculator.htm.

O&M costs for this collection request include the cost of telephone calls, maintenance of emission laboratories, and testing costs. In the past, EPA accounted for CDs as well as postage and photocopying. These costs were associated with the process of submitting certification applications and compliance reports (PLT, In-use and AB&T reports), through the mail. However, EPA has developed a process for manufacturers to submit all their applications and reports electronically. Therefore, manufacturers are not expected to incur on those costs anymore.

The largest O&M cost is emissions testing. This cost varies depending on several factors discussed below. Emissions testing results can be carried from one year to the next, so respondents don't incur in this expense for carry over families (see section 4(b) and 6(e)(i) for details). There are 16 locomotive and locomotive engine manufacturers in the US market. Three of them have in-house testing facilities used for certification testing, quality control and in-use compliance testing, as well as for research and development. The cost of maintaining these laboratories have been estimated at \$74,102 per year. This estimate, which has been adjusted for inflation, includes the cost of test fuels, calibration gases, and equipment. The total cost associated with maintaining a laboratory were included only in Table 2 (Certification), but omitted from Tables 3, 4 and 5 which include the burden for ABT, PLT, and In-use Testing, respectively. These tables are included in the Excel file that accompanies this document.

Smaller companies hire contractors to conduct the necessary certification emission testing in the contractor's facilities. EPA has estimated that testing at a private facility costs, on average, \$44,055. This figure includes the cost of gathering both the line-haul and switch data required. This is a one-time expense per engine family since manufacturers and remanufacturers can carry over emissions data from one model year to the next. This cost has been annualized over the approval period requested for this ICR (three years): $\$44,055/\text{three years} = \$14,685$ per year.

Locomotive engine manufacturers and remanufacturers are required to pay a fee submitting an application for a certificate of conformity. This fee, which is recalculated every year, is requested under the authority of the CAA Section 217. EPA published the 2013 schedule of fees (CISD-07-01, which can be found at <http://www.epa.gov/otaq/fees.htm>) on March 2, 2012. For model year 2013 locomotive certificates, the required fee is \$563.

The new fees rule provides for a reduction in fee when "the full fee exceeds one percent of the projected aggregate retail price of all vehicles or engines covered by that certificate" (69 FR 26226, Section F). The reduced fee must not exceed one percent of the aggregate retail price of the vehicles and engines covered by the certificate. More information regarding reduced fee certification can be found at: <http://www.epa.gov/otaq/fees.htm>.

Based on previous year's data, EPA estimates that in the next three years an estimated 16 new engine families (out of 30), will have less than ten locomotives. Engine families with less than ten locomotives are not required to be tested in-use unless EPA has reason to believe that a compliance issue exists [1033.401(a)(2)]. Although manufacturers and remanufacturers are required to test at least two locomotives in each new engine families, they are only required to test one locomotive per "carry over" family. This provision further reduces the financial burden imposed by the In-use Program upon manufacturers and remanufacturers. Section 6(d) outlines EPA's estimates of new engine families vs. carry over families.

In assessing the In-use Testing Program's financial burden, EPA also factored in the loss of revenue resulting from stopping a locomotive for testing. That cost was calculated to be around \$2,203 per day for two days of testing. This amounts to \$4,406 per test (\$1,469 annualized).

Capital costs were covered by the previous ICR and incurred by locomotive and locomotive engine manufacturers at the beginning of the certification program. Therefore, capital costs are excluded from this ICR. EPA does not expect any new locomotive engine manufacturers or remanufacturers to enter the US market in the next three years and build its own emission testing laboratories. Other emission testing expenses are included as O&M costs as explained above.

(iii) Capital/Start-up Costs

There are no capital or start-up costs associated with the renewal of this ICR. (See 6(b)(ii) for details.)

(iv) Annualizing Capital Costs

There are no capital costs associated with the renewal of this ICR. (See 6(b)(ii) for details.)

6(c) Estimating Agency Burden

Table 6 summarizes EPA's labor costs and burden associated with this information collection. The hourly rate was obtained from the Office of Personal Management, "Salary Table 2012-GS" (http://www.opm.gov/oca/12tables/html/gs_h.asp) and adjusted by a factor of 1.6 to account for benefits and overhead.

**Table 6
Agency Labor Costs and Burden**

| Employee | Hours and Labor Cost | | | | | | | |
|----------------------|----------------------|---------|----------------------|---------------------|-----------------|------------|--------------|---------------------|
| | Level | Rate | Rate Increase by 1.6 | Number of Employees | Full time hours | % of Time | Total hr/yr | Total Labor cost/yr |
| Engineer | GS-13/6 | \$55.46 | \$88.74 | 1 | 2080 | 75% | 1560 | \$138,428 |
| Engineer | GS-9/1 | \$24.74 | \$39.58 | 1 | 2080 | 75% | 1560 | \$61,751 |
| Contracts/Compliance | GS-13/7 | \$51.19 | \$81.90 | 1 | 2080 | 1% | 20.8 | \$1,704 |
| Attorney | GS-13/7 | \$51.19 | \$81.90 | 2 | 2080 | 2% | 83.2 | \$6,814 |
| Managers | GS-15/1 | \$59.30 | \$94.88 | 1 | 2080 | 7% | 145.6 | \$13,815 |
| SES-1 | SES - 1 | \$96.01 | \$153.62 | 1 | 2080 | 1% | 20.8 | \$3,195 |
| IT Support | GS-13/6 | \$49.72 | \$79.55 | 2 | 2080 | 10% | 416 | \$33,094 |
| Contract Support | | | | | | | | \$17,500 |
| Subtotal | | | | 9 | N/A | N/A | 3,806 | \$ 276,301 |

| O&M Costs | |
|-----------|---------|
| Other | \$4,000 |

| | | |
|----------------------------------|-----------------|-----------------|
| Contract Support - Compliance | | \$100 |
| Contract Support - Certification | | \$200 |
| | Subtotal | \$4,300 |
| | TOTAL: | \$28,061 |

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

EPA receives approximately 76 certification applications from eight manufacturers and 12 remanufacturers. Four of the companies in both categories are the same; the actual number of companies affected by this collection is 16. EPA estimates that in the following three years, an average of 46 of those applications will be "carry overs". The remaining 30 applications represent new engine families for which new emissions data was collected.

Two respondents are currently participating in the ABT program with approximately 29 engine families. All manufacturers and remanufacturers must conduct PLT testing and all respondents are subject to In-use Testing.

The number of reports each respondent submits per year varies depending on several factors, such as: (1) number of engine families produced each model year, (2) the size of each family, (3) the number of corrections to the application for certification needed throughout the year, and (4) whether the respondent elects to participate in AB&T. The total number of responses for this collection has been calculated at 239 using model year 2012 data: 76 certification applications + 103 running changes and corrections + 4 AB&T reports + 40 PLT reports + 16 in-use testing reports. The average number of responses per respondent (239/16) equals 14.9.

6(e) Bottom Line Burden Hours and Cost Tables

(i) Respondent Tally

Table 7
Total Estimated Respondent Burden and Cost Summary

| Program | Number of Respond | Number of Activities | Total Hours Per Year | Total Labor Cost Per Year | Total Annual Capital Costs | Total Annual O&M Costs | Total Costs |
|---------------|-------------------|----------------------|----------------------|---------------------------|----------------------------|------------------------|-------------|
| Certification | 16 | 9 | 7,516 | \$475,318 | \$0 | \$552,406 | \$1,027,724 |
| AB&T | 2 | 7 | 580 | \$37,454 | \$0 | \$54 | \$37,508 |

| | | | | | | | |
|---------|----|----|--------|-------------|-----|-------------|-------------|
| PLT | 16 | 10 | 11,955 | \$708,746 | \$0 | \$681,208 | \$1,389,954 |
| In-use | 16 | 7 | 1,492 | \$81,718 | \$0 | \$325,213 | \$406,931 |
| Totals: | 16 | 33 | 21,543 | \$1,303,236 | \$0 | \$1,558,881 | \$2,862,117 |

(ii) The Agency Tally

| | |
|-----------------------------|-----------|
| Number of Repondents: | 16 |
| Number of Activities: | 36 |
| Total Hours Per Year: | 3,806 |
| Total Labor Cost: | \$276,301 |
| Total Annual Capital Costs: | \$0 |
| Total Annual O&M Costs: | \$4,300 |
| Total Costs: | \$280,601 |

6(f) Reasons for Change in Burden

There is an increase of 414 hours in the total estimated burden for ICR 1800.07 from the burden currently identified in the OMB Inventory of Approved ICR Burdens. This increase is due to an increase in the number of respondents.

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection is estimated to average 1,346 hours per respondent for certification and compliance activities. 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-2007-1184, 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. The electronic version of the public docket at www.regulations.gov can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access all documents in the public docket. 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-2007-1184 and OMB Control Number 2060-0392 in any correspondence.