#### PART A OF THE SUPPORTING STATEMENT

## Exhaust Emissions of Light-duty Vehicles in Metropolitan Detroit

OMB Control Number 2060-NEW

USEPA Agency Form Number 2363.01

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## Table of Contents

1.0	IDENTIFICATION OF THE INFORMATION COLLECTION	3
1(a 1(b	a) Title of the Information Collection	
2.0	NEED FOR AND USE OF THE COLLECTION	4
	a) Need/Authority for the Collection	6
3.0	NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA	6
3(b 3(c 3(d 3(e 3(f	n) Nonduplication	7 7 7 8
4.0	THE RESPONDENTS AND THE INFORMATION REQUESTED	9
4(b	a) Respondents/NAICS Codes	9 9
5.0 MET	THE INFORMATION COLLECTED – AGENCY ACTIVITIES, COLLECTION HODOLOGY, AND INFORMATION MANAGEMENT	9
5(b 5(c	a) Agency Activities	10 11
6.0	ESTIMATING THE BURDEN AND COST OF THE COLLECTION	
	a) Estimating Respondent Burden	
6(b 6(b 6(b	b) Respondent Costs	12 12 12
·	6(c)(i) Agency Burden	13 13
	6(c)(ii) Agency Costs	15
6(d 6(e	Estimating the Respondent Universe and Total Burden  Bottom-Line Burden Hours and Cost Tables	15 16
	6(e)(i) Respondent Tally	16
	ENDIX A-1: RELEVANT SECTIONS OF STATUTES	
	DENCES	າງ

#### 1.0 IDENTIFICATION OF THE INFORMATION COLLECTION

#### 1(a) Title of the Information Collection

The collection is entitled:

Exhaust Emissions of Light-duty Vehicles in Metropolitan Detroit

## 1(b) Short Characterization/Abstract

The EPA is initiating a systematic data collection designed to improve the methods and tools used by the Agency to estimate exhaust emissions as vehicles age. Data to be collected include vehicle type, vehicle characteristics, measurements of tailpipe exhaust emissions and measurements of typical driving behavior.

One of the main issues in the study of vehicle emissions is the difficulty in acquiring representative results. Major challenges include the diversity of technology, the highly variable nature of emissions, the complexity and expense of measurement, difficulty in acquiring and retaining engines or vehicles, and the array of external variables that influence emissions, ranging from temperature to driver behavior. In combination, these factors tend to limit the numbers of vehicles that can be included in a given study. Limited sample sizes in combination with high variability make emissions data challenging to interpret.

The collection is a survey, to be conducted by the Office of Transportation and Air Quality (OTAQ) in the Office of Air and Radiation (OAR). This study will be designed to develop and test novel screening, sampling and measurement procedures. These approaches promise to substantially reduce the cost of exhaust emissions measurement as well as to improve the accuracy of resulting estimates.

An innovative feature of this project will be the use of roadside remote-sensing measurements to construct a pool of vehicles from which vehicles can be sampled for purposes of recruitment and measurement using portable emissions measurement systems (PEMS) and portable activity measurement systems (PAMS). The acquisition of remote-sensing measurements for hydrocarbons, carbon-monoxide, and oxides of nitrogen will provide an index of emissions for all vehicles prior to sampling and recruitment for more intensive measurement.

The index is expected to facilitate recruitment of vehicles with an emphasis on rare high-emitting vehicles, and provide a means to appropriately relate measured vehicles to the overall fleet.

Research questions for the project include: (1) can remote-sensing be used as a reliable index of emissions across the range of emissions? (2) is it feasible to measure start emissions using portable instruments?, (3) can the emissions index used for recruitment also serve as a means to estimate potential non-response bias? and (4) how do numbers of vehicle starts differ between the work week and the weekend?

We plan to collect remote-sensing measurements on approximately 30,000 vehicles, and from this pool, to recruit approximately 250 vehicles for measurement. Tailpipe emissions will be measured over two days under various driving conditions, and vehicle activity under typical conditions over a period of three months. Participation in the program will be voluntary. The target population for the project will include light-duty cars and trucks certified to Tier 2 (Bin 5) or equivalent LEV-II standards (LEV).

The information collection will involve 850 respondents, requiring 1,213 hours to complete at a total cost to those respondents of \$33,247. For the agency, the collection will require 5,578 hours to complete at a total cost of \$641,809.

#### 2.0 NEED FOR AND USE OF THE COLLECTION

## 2(a) Need/Authority for the Collection

In December of 2010 EPA publicly released the Motor Vehicle Emission Simulator (MOVES), a software tool designed for use by parties such as State and local air-pollution agencies in estimation of emissions inventories for Clean Air Act compliance. Two important programs under the CAA are the National Ambient Air Quality Standards (NAAQS) and the Regional Haze Rule (RHR). In implementation of these programs, technical support from EPA is important, particularly with respect to estimation of emissions from passenger vehicles, because local agencies typically lack the technical and financial resources to develop independent inventories.

The MOVES model was developed with input from a committee convened under the Federal Advisory Committee Act (FACA). This group, the "MOVES Review Workgroup" is composed of representatives of State agencies, the automotive, petroleum and engine-

manufacturing industries, environmentalists and academics. Its charge was to review the MOVES development process and make recommendations to a FACA standing committee, the "Mobile-Source Technical Review Sub-Committee" (MSTRS). In October, 2009, one of the WorkGroup's recommendations to the Sub-Committee was that EPA "plan for long-term data collection" to support the continued development, use and updating of MOVES. This study is an initial effort to respond to this recommendation.

Passenger cars and trucks certified to Tier-2 emissions standards were introduced to the U.S. market in 2004. Adoption of these standards resulted in a large reductions in emissions of carbon monoxide (CO), total hydrocarbons (HC) and oxides of nitrogen (NOx) emissions. For example, the Tier-2 standards represent reductions of 70-90% in NOx emissions relative to the previous Tier-1 standards (ending in model-year 2000).

During the same time frame, vehicles certified to the "LEV-II" emissions standards were introduced. These "Low-Emitting Vehicle" standards apply in California and those states that have adopted them in lieu of the Federal Tier-2 standards. As of model year 2010, over 90% of all vehicle sold are certified to Tier-2/LEV-II standards. As of calendar year 2010 approximately 25% of vehicle in the national fleet will be composed of Tier-2/LEV-II vehicles. Within ten years, the majority of vehicles on the road will be Tier-2 vehicles. In various ways, Tier 2 vehicles represent new technologies for fuel and emissions control. For exhaust emissions Tier-2 vehicles incorporate dramatically improved catalyst formulations for NOx control including complementary refinement in the electronic controls that maintain peak efficiency.

Despite the prominent position of Tier 2 vehicles in the fleet, much less data is available on them than we than on earlier technologies, certified to Tier 1 or "National Low-Emitting Vehicle" (NLEV) standards. In particular, we lack data on how Tier-2 vehicles will behave in "real-world" conditions, as opposed to controlled laboratory conditions. Our current projections of their emissions assume that that they will behave similarly to vehicles certified to less stringent standards. This point applies particularly to the behavior of Tier-2 technologies as they age and experience wear in use.

By laying the groundwork by developing innovative methods to capture in-use emissions of Tier-2 vehicles, this study is designed to start filling this gap. The goals and approaches for this project are described in greater detail in Part B of this Supporting Statement.

#### 2(a)(3) Legislative Basis

The legislative basis for this data collection is Section 103(a)(1)(2)(3) of the Clean Air Act, which requires the Administrator to: "conduct ... research, investigations, experiments, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, and control of air pollution, ..." and "cooperate with ... pollution control agencies and other appropriate public or private agencies, institutions, and organizations, and individuals in the conduct of such activities, ..." and "conduct investigations and research and make surveys concerning any specific problem of air pollution in cooperation with any air pollution control agency ..."

In addition, Section 103(b)(1) of the Clean Air Act authorizes the Administrator to: "collect and make available, through publications and other appropriate means, the results of and other information, including appropriate recommendations by him in connection therewith, pertaining to such research and other activities." The full text of the relevant sections is provided in Appendix A.1.

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

The principal users of the data will be EPA technical staff, for purposes of performing analyses designed to evaluate the projects research goals. A primary goal is to evaluate the use of a screening measure to improve collection of representative samples of vehicles, as described in Part B. In addition, analysis and evaluation of this initial data set will enable evaluation of the cost and logisitics of the design as proposed.

# 3.0 NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

## 3(a) Nonduplication

In development of this collection, EPA has attempted to locate sources of data that would partially or wholly duplicate the information to be collected. No such duplication was found. EPA searched published literature for terms related to light-duty exhaust emissions deterioration measurement. No duplication of the data collection effort was found. To our knowledge, no other agency has a proven method to identify and measure emissions from new technology vehicles over their useful life.

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

The initial announcement of the public comment period for the proposed ICR was placed in the Federal Register on December 10, 2009. No comments were received. A second Federal Register Notice was published concurrent with submission of this collection to OMB.

#### 3(c) Consultations

*Technical Consultations*. In the development of this collection, we consulted with professionals with expertise in statistics and emissions measurement. Specific parties and contact information are listed below:

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## 3(d) Effects of Less Frequent Collection

For each respondent, participation in the study is a voluntary one-time event. Thus, periodic reporting is not requested or required.

#### 3(e) General Guidelines

Participation in the program by each owner is on a voluntary basis. Further, this information collection complies with the guidelines in the Paperwork Reduction Act (5 CFR 1320.5(d)(2)). Specifically, the collection does not require the respondents to:

- Report information to EPA more often than quarterly;
- Prepare a written response to a collection in fewer than 30 days after receipt;
- Submit more than one original document;
- Retain any records for more than three years;
- Participate in a statistical survey that is not designed to produce data that can be generalized to the universe of study;
- Use a statistical data classification that has not been reviewed and approved by OMB;
- Submit any information that they may consider to be confidential, without EPA demonstrating that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

## 3(f) Confidentiality

Information that identifies respondents will be kept confidential to the maximum extent permitted by law. To protect the confidentiality of respondents, the following items allowing direct identification of individuals will not be disclosed or directly linked to survey results unless required by law or court order.

- Participant name(s)
- Participant street address(es)
- Participant electronic mail addresses
- Participant phone number(s)
- License plate numbers(s)
- Vehicle Identification number (VIN)
- Geographic-positioning-system results or coordinates.

## 3(g) Sensitive Questions

The questionnaires do not ask any sensitive questions.

## 4.0 THE RESPONDENTS AND THE INFORMATION REQUESTED

#### 4(a) Respondents/NAICS Codes

As defined in Part B, section 2(a), respondents to the survey will be private owners of light-duty cars and trucks. This sub-population is well-defined and we anticipate our sampling of this population will provide a representative sample based on the statistical methods outlined in Part B of this ICR. We define the target population in more detail in Part B, section 2(a).

## 4(b) Information Requested

#### 4(b)(i) Data Items, Including Recordkeeping Requirements

*Reporting Items*. All items that respondents will be requested to report are listed and described in Part B, Section 4.

*Recordkeeping Items.* This collection will not request or require respondents to compile or maintain any records.

#### 4(b)(ii) Respondent Activities-

Respondent activities for this data collection include:

- Respond to initial mail and phone contacts
- Travel to and from to facility on first day, to drop off vehicle (and pick up rental car)
- Complete solicitation process transfer vehicle to contractor
- Travel to and from facility on second day, to pick up vehicle (and return rental)
- Complete vehicle exit paperwork

# 5.0 THE INFORMATION COLLECTED - AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT

The following sections describe Agency activities related to survey design, oversight, and analysis, maintenance and distribution of the information collected. The primary activities

associated with the actual collection of information will be performed by EPA personnel or contractors hired by the Agency.

## 5(a) Agency Activities

In conduction of the survey, the agency will perform the following activities:

- Develop data forms and measurement procedures
- Construct sample frame (using screening measure and vehicle registration database)
- Draw vehicle sample
- Perform recruitment
- Mail advance letters
- Conduct phone interviews/ arrangement participant scheduling
- Perform emissions measurements
- Perform activity measurements
- Quality-assure data
- Analyze data
- Draft report

## 5(b) Collection Methodology and Management

Due to the brevity and simplicity of the solicitation interview (Appendix A to Part B), we have selected the telephone interview as the primary collection mode for verifying the eligibility of sampled vehicles and soliciting participation. Making initial contact by phone facilitates multiple direct contacts to make contact with the owner or person knowledgeable about the selected vehicle.

Upon arrival at the facility, another brief personal interview will be conducted to collect general information about the vehicle's ownership and maintenance history (Appendix B to Part B). Due to the brevity and simplicity of the questionnaire, we do not anticipate any hardship to the vehicle owner in completing it quickly during the interview process with the technician. Additional detailed information about the vehicle will be collected through direct inspection. (Appendix C to Part B). Collection methods are discussed further in Part B, Section 4(a), "Collection Methods."

To ensure data quality for interview information, each interview response will be reviewed for completeness and internal consistency. Emissions and activity data collected via instrumentation will be quality-assured through use of computer algorithms. Time series for key variables will also be plotted and visually checked on a case-by-case basis. Quality-assurance steps for data collected are discussed in Part B, Section 5(a), "Data Preparation." Following quality-assurance, electronic data will be directly transferred into database software. Computer files containing interview responses will be stored or managed in spreadsheet software, such as Microsoft Excel®, or database software such as Microsoft Access® or Microsoft FoxPro®. Analyses will be performed using SAS, version 9.2®, or SPSS, version 9®. Data will be stored in the "Mobile Source Observation Database," (MSOD). This database is available to the public on request.

#### 5(c) Small Entity Flexibility

As described above, collection methods for the survey have been designed to keep the burden of participation to a minimum. Additionally, participation in the program is voluntary, giving owners the option of not participating.

## 5(d) Collection Schedule

The tentative schedule below assumes OMB clearance for this collection will be obtained by September 8, 2010. For each task, we show the date targeted for its completion.

Project Step	Completion Date
Complete Study Plan	April, 2010
Perform Remote sensing measurements (For development of screening measure)	July, 2010
Conduct sampling	Mid-September, 2010
Conduct field measurements	Mid-March, 2011
Submit Draft Report	Mid-May, 2011
Submit Final Report	Mid-June, 2011

#### 6.0 ESTIMATING THE BURDEN AND COST OF THE COLLECTION

#### 6(a) Estimating Respondent Burden

Table A.1 presents estimates of burden and cost for respondents participating in the collection. The initial screening by remote sensing is non-intrusive and thus imposes no burden on respondents.

Initial contact with the vehicle owners will take no more than 15 minutes. This step will involve mail contact followed by a phone interview outlining the program and requesting participation. All owners contacted will receive a \$10 incentive, regardless of further participation. Those owners who agree to participate shall also be reimbursed for effort and inconvenience. This reimbursement will include access to a rental car is the respondent desires plus an additional \$100 incentive if the respondent participates in emissions measurement, and a final \$100 if the respondent participates in activity measurement. We estimate that participants will spend approximately 3 hours on average traveling to and from the facility, and an additional hour at the facility.

#### 6(b) Respondent Costs

Table A.1 presents estimated burden and cost to respondents.

#### 6(b)(i) Labor Costs

For respondents, we have used the average of total employee compensation in the private sector as a whole as representing the opportunity cost of participation in this collection. Though not "labor cost" as such, we have multiplied total compensation by respondent time to represent total cost. As of December, 2009 this figure came to \$27.42/hour<sup>i</sup>.

## 6(b)(ii) Capital and Operations Costs

For respondents, participation in this collection will not require any capital or startup costs, nor will respondents incur operating or maintenance costs. Thus, no costs in either of these two categories are represented in Table A.1.

Table A1- Annual Respondent & Burden Cost

Information Activity	Respondent Time (hrs)	Time Responder		Total Time hrs	Total Cost (\$)		
Respond to mail and phone contacts	0.25	\$ 27.42	850	213	\$ 5,827		
Travel to and from facility	3.00	\$ 27.42	250	750	\$ 20,565		
On-site interview and vehicle transfer	1.00	\$ 27.42	250	250	\$ 6,855		
			Total	1,213	\$ 33,247		

## 6(c) Agency Burden and Cost

Table A.2 presents Agency burden and cost for the program. For all tasks, separate estimates are presented for Contractor personnel and Agency staff.

#### 6(c)(i) Agency Burden

#### 6(c)(i)(1) Collection of Emissions Data

Table A.2 presents estimated agency labor hours for each activity listed above. We have separated labor hours into two components, those hours to be worked by Agency staff and those to be worked by contractor personnel. In general, the contractor will solicit vehicle owners, handle initial processing and coordinate field logistics. In addition to the contractor personnel, Agency personnel will also be active in constructing the sample frame and performing emissions measurements, contributing approximately 40% of labor hours as well as specialized expertise and oversight for this purpose. Both contractor and agency personnel will contribute to data processing and quality assurance, while agency staff will play a leading role in substantive analyses. As always, the contractor will draft and deliver a project report to the agency.

Table A2. Agency Burden and Cost

Activity	Labor Hours by Personnel Category (hrs)					Total time (hr/yr) Labor cost								Capital/ Startup cost		Total Labor Cost	Total Cost	
		Agency		(	Contractor	1	Agency	Contractor		Agency			Contractor		(\$)	(\$)	(\$)	(\$)
	Man	Tech	Cler	Manag	Tech	Cler			Manag	Tech	Cler	Manag	Tech	Cler				
Construct sample frame	5	64	4	9	108	7	73	123	543	4,946	148	1,208	10,805	437			18,087	18,087
Draw vehicle sample	2	30	2	3	40	3	34	46	254	2,318	69	448	4,002	162			7,254	7,254
Mail advance letters	0	0	0	13	160	10	0	183	0	0	0	1,790	16,008	647			18,445	18,445
Conduct phone interviews/arrange participant scheduling	0	0	0	63	800	51	0	914	0	0	0	8,951	80,040	3,236	62,000	43,500	92,226	197,726
Perform emissions measurements	99	1,260	80	149	1,890	119	1,439	2,159	10,686	97,373	2,916	21,146	189,095	7,644			328,859	328,859
Quality-assure Data	9	108	7	17	216	14	123	247	916	8,346	250	2,417	21,611	874			34,413	34,413
Analyze Data	14	180	11	0	0	0	206	0	1,527	13,910	417	0	0	0			15,853	15,853
Draft Report	1	10	1	14	176	11	11	201	85	773	23	1,969	17,609	712			21,171	21,171
				Tota	l Hours		1,887	3,872								Total		

#### 6(c)(ii) Agency Costs

#### 6(c)(ii)(1) Labor Costs

Contract Labor Costs. The average loaded values for managerial, technical and clerical personnel are \$142, \$100, and \$64 per hour, respectively. These values represent wages and salaries, multiplied by a factor of 1.9 to account for overhead and indirect costs. The average contract labor cost for this effort is \$101 per hour.

Agency Labor Costs. Labor Costs for EPA staff were taken from the 2010 Locality Schedule for Civilian Federal Employees in the Detroit area. Based on the Schedule, we have assumed average hourly labor costs of \$67.14 for managerial personnel, \$48.30 for technical personnel and \$22.90 for clerical personnel. These assignments correspond to levels of GS-15, GS-13 and GS-7, all at the step-5 level, respectively. We have multiplied the hourly labor rates by a "benefits multiplier" of 1.6, to represent the total cost of employment for Federal staff (OEI, 1999).

#### 6(c)(ii)(2) Capital and Operations Costs

Capital costs during the pilot and main study include costs for facility rental and utilities, instrument set up, equipment and tools. Operation and maintenance costs include participant incentives, rental cars (for participants), supplies and contractor travel.

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

Table 2 presents total burden and cost for respondents, by activity. The respondent universe is determined by the proposed sample sizes. We anticipate up to 850 completed phone interviews, at a total cost to respondents of \$5,827. For emissions measurement, we anticipate approximately 250 respondents, with total burden and cost to respondents estimated at 1,000 hours and \$27,420, respectively.

Table 3 presents total burden and cost for the Agency, by activity. For participant screening and recruitment, we estimate a burden and cost of 1,373 hours and \$136,013. For emissions measurement and quality assurance, we estimate burden and cost of 3,968 hours and \$363,272, and for analysis and reporting, we estimate a burden and cost of 418 hours and \$37,024.

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

## 6(e)(i) Respondent Tally

Table 2 presents total respondent burden hours and costs. Estimates are presented separately for screening interviews and emissions measurement.

Table 2 Total Estimated Respondent Burden and Cost

Activity	No.	Total	Total Labor	Total Capital Cost	Total O&M Cost
	Respondents	Hours	Cost	_	
Screening and					
Recruitment					
	850	213	\$5,827	\$0.00	\$0.00
Emissions					
Measurements	250	1,000	\$27,420	\$0.00	\$0.00
Total		1,213	\$33,247	\$0.00	\$0.00

## 6(e)(ii) Agency Tally

Table 1 presents total respondent burden hours and costs. Estimates are presented separately for screening interviews and emissions measurement.

Table 1. Total Estimated Agency Burden and Cost

Activity	No.	Total	Total Labor	Total Capital Cost	Total O&M Cost
	Respondents	Hours	Cost		
	_				
Screening and					
Recruitment	850	1,373	\$136,013	\$0	\$0
Emissions					
Measurements	250	4,386	\$400,296	\$62,000	\$43,500
Total		5,758	\$536,309	\$62,000	\$43,500

#### 6(g)(i) Burden Statement

The USEPA is conducting a statistical survey to characterize the gaseous tailpipe emissions and activity of vehicles certified to Tier-2/Bin-5 standards and to estimate emissions deterioration with vehicle age. Responses to this collection are voluntary. The public reporting and recordkeeping burden for this collection of information is estimated to average 1.5 hours per response. This average reflects a burden of 0.25 hours for 600 respondents participating only in a screening interview, and 4.25 hours for 250 respondents participating in emissions measurement as well as a screening interview.

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.

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 No. EPA-HQ-OAR-2009-0548, which is available for public viewing in the Air and Radiation Docket at the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202) 566-1742.

An electronic version of the public docket is available at www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Please include the EPA Docket ID No. EPA-HQ-OAR-2009-0548 and OMB control number 2060-NEW in any correspondence.

## APPENDIX A-1: Relevant Sections of Statutes

The Statutes relevant to this collection are '103(a) and '103(b) of the Clean Air Act, listed below:

Sec. 103. (a) The Administrator shall establish a national research and development program for the prevention and control of air pollution and as part of such program shall -

- (1) conduct, and promote the coordination and acceleration of, research, investigations, experiments, demonstrations, surveys, and studies relating to the causes, effects (including health and welfare effects), extent, prevention, and control of air pollution;
- (2) encourage, cooperate with, and render technical services and provide financial assistance to air pollution control agencies and other appropriate public or private agencies, institutions, and organizations, and individuals in the conduct of such activities;
- (3) conduct investigations and research and make surveys concerning any specific problem of air pollution in cooperation with any air pollution control agency with a view to recommending a solution of such problem, if he is requested to do so by such agency or if, in his judgment, such problem may affect any community or communities in a State other than that in which the source of the matter causing or contributing to the pollution is located;
- (4) establish technical advisory committees composed of recognized experts in various aspects of air pollution to assist in the examination and evaluation of research progress and proposals and to avoid duplication of research; and
- (5) conduct and promote coordination and acceleration of training for individuals relating to the causes, effects, extent, prevention, and control of air pollution.
- (b) In carrying out the provisions of the preceding subsection the Administrator is authorized to -
  - (1) collect and make available, through publications and other appropriate means, the results of and other information, including appropriate recommendations by him in connection therewith, pertaining to such research and other activities;
  - (2) cooperate with other Federal departments and agencies, with air pollution control agencies, with other public and private agencies, institutions, and organizations, and with any industries involved, in the preparation and conduct of such research and other activities;
  - (3) make grants to air pollution control agencies, to other public or nonprofit private agencies, institutions, and organizations, and to individuals, for purposes stated in subsection (a)(1) of this section;
  - (4) contract with public or private agencies, institutions, and organizations, and with individuals, without regard to sections 3648 and 3709 of the Revised Statutes (31 U.S.C. 529; 41 U.S.C. 5);

- (5) establish and maintain research fellowships, in the Environmental Protection Agency and at public or nonprofit private educational institutions or research organizations;
- (6) collect and disseminate, in cooperation with other Federal departments and agencies, and with other public or private agencies, institutions, and organizations having related responsibilities, basic data on chemical, physical, and biological effects of varying air quality and other information pertaining to air pollution and the prevention and control thereof;
- (7) develop effective and practical processes, methods, and prototype devices for the prevention or control of air pollution; and
- (8) construct facilities, provide equipment, and employ staff as necessary to carry out this Act.

In carrying out the provisions of subsection (a), the Administrator shall provide training for, and make training grants to, personnel of air pollution control agencies and other persons with suitable qualifications and make grants to such agencies, to other public or nonprofit private agencies, institutions, and organizations for the purposes stated in subsection (a)(5). Reasonable fees may be charged for such training provided to persons other than personnel of air pollution control agencies but such training shall be provided to such personnel of air pollution control agencies without charge.

## REFERENCES.

Bureau of Labor Statistics. *Employer Costs for Employee Compensation* – December 2009. USDL-10-0283. U.S. Department of Labor, March 2010.