

Application for Federal Assistance SF-424

Version 02

* 1. Type of Submission:

- Preapplication
- Application
- Changed/Corrected Application

* 2. Type of Application:

- New
- Continuation
- Revision

* If Revision, select appropriate letter(s):

* Other (Specify)

* 3. Date Received:

Completed by Grants.gov upon submission.

4. Applicant Identifier:

1-62-600-1445D

5a. Federal Entity Identifier:

* 5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: State of Tennessee

* b. Employer/Taxpayer Identification Number (EIN/TIN):

1-62-600-1445D

* c. Organizational DUNS:

87-835-5437

d. Address:

* Street1: 401 Church Street

Street2: 9th Floor, L&C Annex

* City: Nashville

County: Davidson

* State: Tennessee

Province:

* Country: USA

* Zip / Postal Code: 37243

e. Organizational Unit:

Department Name:

Department of Environment and Conservation

Division Name:

Air Pollution Control

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: * First Name: Greg

Middle Name:

* Last Name: Riggs

Suffix:

Title:

Organizational Affiliation:

* Telephone Number: 615-532-0567

Fax Number: 615-532-6817

* Email: greg.riggs@state.tn.us

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9. Type of Applicant 1: Select Applicant Type:

State Agency

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

*** Other (specify):**

*** 10. Name of Federal Agency:**

Environmental Protection Agency - Region 4

11. Catalog of Federal Domestic Assistance Number:

66.040

CFDA Title:

*** 12. Funding Opportunity Number:**

*** Title:**

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

All counties in the state of Tennessee

*** 15. Descriptive Title of Applicant's Project:**

ARRA DERA Stimulus Grant

Attach supporting documents as specified in agency instructions.

[Add Attachments](#) [Delete Attachments](#) [View Attachments](#)

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16. Congressional Districts Of:

* a. Applicant

* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:

* a. Start Date:

* b. End Date:

18. Estimated Funding (\$):

* a. Federal	<input type="text" value="\$1,730,000.00"/>
* b. Applicant	<input type="text"/>
* c. State	<input type="text"/>
* d. Local	<input type="text"/>
* e. Other	<input type="text"/>
* f. Program Income	<input type="text"/>
* g. TOTAL	<input type="text" value="\$1,730,000.00"/>

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- a. This application was made available to the State under the Executive Order 12372 Process for review on
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)**

Yes No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)

** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:
Middle Name:
* Last Name:
Suffix:

* Title:

* Telephone Number: Fax Number:

* Email:

* Signature of Authorized Representative: *James H. Fyke* * Date Signed: *3-15-09*

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 0348-0044

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	SECTION A - BUDGET SUMMARY				New or Revised Budget		Total (g)	
		Estimated Unobligated Funds		Federal (e)	Non-Federal (f)				
		Federal (c)	Non-Federal (d)						
1. ARRA DERA	66,040	\$	\$	\$	\$	\$	\$	1,730,000.00	
2.								0.00	
3.								0.00	
4.								0.00	
5. Totals		\$	\$	\$	\$	\$	\$	1,730,000.00	
SECTION B - BUDGET CATEGORIES									
6. Object Class Categories		GRANT PROGRAM, FUNCTION OR ACTIVITY							
		(1)	FY 09	(2)	FY 10	(3)			Total (5)
a. Personnel		\$		\$		\$		\$	0.00
b. Fringe Benefits									0.00
c. Travel			500.00		500.00				1,000.00
d. Equipment									0.00
e. Supplies			3,000.00		3,000.00				6,000.00
f. Contractual			71,806.00		71,806.00				143,612.00
g. Construction									0.00
h. Other			154,694.00		1,424,694.00				1,579,388.00
i. Total Direct Charges (sum of 6a-6h)			230,000.00		1,500,000.00			0.00	1,730,000.00
j. Indirect Charges									0.00
k. TOTALS (sum of 6i and 6j)		\$	230,000.00	\$	1,500,000.00	\$	0.00	\$	1,730,000.00
7. Program Income		\$		\$		\$		\$	0.00

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SECTION C - NON-FEDERAL RESOURCES

	(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8.	ARRA DERA	\$	\$	\$	\$ 0.00
9.					0.00
10.					0.00
11.					0.00
12.	TOTAL (sum of lines 8-11)	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	FUTURE FUNDING PERIODS (Years)			
		1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13.	Federal \$ 230,000.00	\$ 57,500.00	\$ 57,500.00	\$ 57,500.00	\$ 57,500.00
14.	Non-Federal 0.00				
15.	TOTAL (sum of lines 13 and 14)	\$ 230,000.00	\$ 57,500.00	\$ 57,500.00	\$ 57,500.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

	(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
		(b) First	(c) Second	(d) Third	(e) Fourth
16.	ARRA DERA	\$	\$ 1,500,000.00	\$	\$
17.					
18.					
19.					
20.	TOTAL (sum of lines 16-19)	\$ 0.00	\$ 1,500,000.00	\$ 0.00	\$ 0.00

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:	22. Indirect Charges:
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23. Remarks:

AMERICAN RECOVERY AND REINVESTMENT ACT of 2009 FUNDING FOR STATE CLEAN DIESEL GRANT PROGRAM

Project Title: ARRA DERA Stimulus Grant - TN

Project Manager and Contact Information

Organization name	Tennessee Department of Environment and Conservation
Project manager	Greg Riggs
Address	401 Church Street, 9 th Floor, L&C Annex, Nashville, TN 37243
Phone	615-532-0567
Fax	615-532-6817
Email	greg.riggs@state.tn.us

Project Budget

EPA allocation	\$ 1,730,000.00
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Project Period

April 1, 2009 – September 30, 2010

Summary Statement

The Tennessee Division of Air Pollution Control will build upon the current State Clean Diesel grant by utilizing the DERA Stimulus funds to increase funding for the installation of APU's on long-haul trucks operating in the state. By using these additional funds for idling reduction, truckers will decrease their costs by using less diesel, which will enable more of them to continue to operate. The Division will utilize the structure of the existing incentive rebate program for the installation of idling reduction technologies, e.g., auxiliary power units (APUs).

SCOPE OF WORK

Project Description

Check the appropriate boxes and fill out the appropriate narrative sections to identify the activities that will be performed with the funds provided. This section should include a 2-3 page description of the State's plan to develop and implement grants that are appropriate to meet State needs and goals relating to the reduction of diesel emissions, including a description of the tasks and activities that will be conducted to accomplish this goal.

Technology options:

Retrofit Technologies: A "retrofit" project is defined broadly to include any technology, device, fuel or system that when applied to an existing diesel engine achieves emission reductions beyond what is currently required by EPA regulations at the time of the engine's certification. A list of EPA verified technologies is available at <http://www.epa.gov/otaq/retrofit/verif-list.htm>. A list of CARB verified technologies is available at <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>.

- i. **Exhaust Controls:** Exhaust Controls include pollution control devices installed in the exhaust system (such as oxidation catalysts and particulate matter filters), or systems that include crankcase emission control (like a closed crankcase filtration system).
- ii. **Idle Reduction Technologies:** An idle reduction project is defined as the installation of a technology or device that (a) is installed in one or more of the following vehicle(s) or equipment: a bus; a medium-duty or heavy-duty truck; a marine engine; a locomotive; or a non-road engine or vehicle used in construction, handling of cargo (including at a port or airport), agriculture, mining, or energy production, or is installed in the ground and (b) is designed to provide services (such as heat, air conditioning, and/or electricity) to vehicles and equipment that would otherwise require the operation of the main drive engine while the vehicle is temporarily parked or remains stationary, and (c) reduces unnecessary idling of such vehicles or equipment. The reduction in idling must also lower emissions. EPA has verified a number of categories of idle reduction technologies: (1) auxiliary power units and generator sets; (2) battery air conditioning systems; (3) thermal storage systems; (4) electrified parking spaces (truck stop electrification); (5) fuel operated heaters; (6) shore connection systems and alternative maritime power. See <http://www.epa.gov/cleandiesel/idle-ncdc.htm> for more information.

Project Description

The Tennessee ARRA Stimulus Grant program will target Tennessee trucking companies with thirty or fewer truck tractors registered and operating in the state. TDEC will initially give priority to fleets with 5 or fewer truck tractors. If additional funds remain, TDEC will then begin funding APU installations on fleets with more than 5 truck tractors. This segment of the transportation industry typically spends the most time in their vehicles and are most likely to idle for long periods. This segment of the industry also may be the most likely to struggle with fuel costs and can most benefit from fuel-saving technologies. Some of these truck owners may also be eligible to participate in the SmartWay Transport Partnership Small Business Loan Program.

The Division will develop a grant program that will build upon the existing State Clean Diesel grant by funding approximately 395 additional APU installations. There are currently 16,000 motor carriers in Tennessee. Approximately 85% of the carriers have 5

or fewer trucks in their fleets and 90% of the carriers have 30 or fewer trucks in their fleets. The program will assist these motor carriers with eligible costs for idling reduction units. Motor carriers will be eligible to apply for incentive grants that will reimburse up to 50 percent of the cost to purchase and install idling reduction equipment. The following guidelines from the existing program will be used to access the eligibility of the applicants:

1. Vehicle type, make and engine
2. Diesel fuel consumption at idle (gallons/hr)
3. Anticipated annual idling hours reduced by using the APU
4. Anticipated total APU cost (includes installation)
5. Vehicle tag number and state of registration
6. Is this a TN business?
7. Is this vehicle equipped with a sleeper berth?
8. Is vehicle part of the target sector of fleets with 30 or fewer trucks ?

Once an application is approved, the applicant will select the APU manufacturer and installer. When the installation is completed, the applicant will submit the bill for reimbursement. The reimbursement amount will be 50% of the total cost, up to \$4000.

As a requirement of the grant program, grantees will be required to report data on a frequency to be determined by EPA. This data will allow the state to calculate actual fuel savings and actual emissions reduced by each truck.

APUs provide an alternative to a truck's main engine when power is needed for heating, cooling, or electrical power in the cab or other parts of the truck. Heavy duty diesel trucks use approximately one gallon of diesel per hour when idling. Long haul trucks may idle up to 10 hours per day. The small APU engine uses an average of .2-.3 gallons of diesel per hour. A recent EPA study indicates that yearly emissions produced from excessive idling include 180,000 tons of NOx, 5,000 tons of PM, 11 million tons of CO2, and burns over 1 billion gallons of fuel. Excessive idling also causes noise pollution, increases maintenance intervals on engines, and decreases engine life.

Currently, 10 Tennessee counties are designated nonattainment for the National Ambient Air Quality Standards (NAAQS) for either ozone or PM 2.5 or both. EPA may designate additional counties as nonattainment in 2009 and 2010. Direct and indirect emissions from diesel engines, including nitrogen oxides and fine particles, contribute to elevated concentrations of these pollutants. Diesel exhaust also contains toxic compounds and EPA classifies diesel exhaust as a probable human carcinogen. Reducing emissions from this sector is an important measure to protect public health and can provide a range of benefits, including reducing health care costs and improving Tennessee's overall air quality.

TDEC will provide grants for APUs installed after 4/1/09. The installed equipment will be APUs listed on the EPA SmartWay website:

<http://www.epa.gov/SmartwayLogistics/transport/what-smartway/idling-reduction-available-tech.htm> or on the California Resources Board website:

<http://www.arb.ca.gov/msprog/cabcomfort/cabcomfort.htm#CERTIFIED>.

The timeline for using these funds is April 1, 2009 – September 30, 2010. The funds will be drawn down/ used on an expedited schedule in order to help stimulate the economy as soon as possible.

iii. **Cleaner Fuels Use:** Cleaner fuels include, but are not limited to, ultra-low sulfur diesel fuel (for non-road vehicles/engines prior to EPA's mandate), biodiesel, diesel emulsions or additives verified by EPA or CARB, compressed natural gas and other alternative fuels. Funding available under this program may be used to cover the cost differential between the cleaner fuel and conventional diesel fuel. Note: This funding may not be used for fueling infrastructure, such as that used for the production and/or distribution of fuels.

Engine Upgrades: An engine upgrade is defined as an engine that is rebuilt or remanufactured to meet higher federal emission standards. Some engines may be able to be upgraded to reduce their emissions by applying manufacturer recommended upgrades (or kits) to certified or verified configurations. It is recommended that funding be applied only to the emissions-reducing upgrade kit and associated labor costs for installation.

Note: Both Engine Repowers and Vehicle and Equipment Replacements require that the engine or vehicle being replaced be scrapped or rendered permanently disabled. For more information and requirements on scrapped or disabled engines/vehicles, contact your EPA Regional office.

Certified Engine Repowers: Repower refers to the removal of an existing engine and its replacement with a newer or cleaner engine that is certified to a more stringent set of engine emissions standards. Repowers may include diesel engine replacement with an engine certified for use with a cleaner fuel (such as compressed natural gas or propane). These projects can also include the replacement of nonroad engines with highway engines if vehicles/equipment continues to perform the same function as before the repower.

Certified Vehicle and Equipment Replacements: Non-road and highway diesel heavy-duty vehicles and equipment can be replaced under this program with newer, cleaner vehicles and equipment that operate on diesel or alternative fuels and meet a more stringent set of engine emissions standards. Replacement projects can include the replacement of diesel vehicles/equipment with newer, cleaner diesel or hybrid or alternative fuel vehicles/equipment. The replacement vehicle/equipment must be of the same type and similar gross vehicle weight rating or horsepower as the vehicle/equipment being replaced (e.g., a 300 horsepower bulldozer is replaced by a bulldozer of similar horsepower). The replacement vehicle/equipment must perform the same function as the vehicle/equipment that is being replaced (e.g., an excavator used to dig pipelines would be replaced by an excavator that continues to dig pipelines). These projects can also include the replacement of non-road vehicles/equipment with highway models if the highway models are capable of performing the same functions as the non-road models. EPA encourages the replacement of older

vehicles/equipment containing engines that were manufactured prior to the implementation of emissions standards.

- Other: If the project will include emerging technologies not covered by the above list, please provide information below describing the technologies/approaches. See <http://www.epa.gov/cleandiesel/prgemerg.htm> for more information.

- Other: If the project will include non-technology approaches (e.g., operational strategies) not covered by the above list, please provide information below describing the technologies/approaches.

Fleets that will be impacted with the technologies (check all that apply):

- | | |
|-------------------------------------|--------------------------|
| <input type="checkbox"/> | School Buses |
| <input type="checkbox"/> | Transit Buses |
| <input type="checkbox"/> | Medium Duty Truck |
| <input checked="" type="checkbox"/> | Heavy Duty Truck |
| <input type="checkbox"/> | Marine Engine |
| <input type="checkbox"/> | Locomotive |
| <input type="checkbox"/> | Construction |
| <input checked="" type="checkbox"/> | Cargo Handling |
| <input type="checkbox"/> | Agriculture |
| <input type="checkbox"/> | Mining |
| <input type="checkbox"/> | Energy production |
| <input type="checkbox"/> | other: (please describe) |

Administrative Activities

Please provide a summary of any administrative activities that are funded under this work plan. States may spend up to 15% on administrative activities.

The administrative activities associated with this grant will be in the travel, supplies and contractual categories. The travel will be to various parts of the state to inform trucking companies and installation sites of the available opportunities. The supplies needed will be in the form of advertisements announcing the grant opportunity. An existing contract with The University of Tennessee will be amended to include work associated with this grant, such as meetings with trucking associations, delivering grant information to truck stops, initial screening of APU applications, and compiling data for reporting purposes.

Timeline

Date	Activity
April 2009	Notify Tennessee Truckers Association and the Independent Truckers Association of upcoming grant opportunity
April 17, 2009	Grant awarded. Issue press release for grant opportunity.
April 20, 2009	Grant application on BioTenn website
April 27, 2009	Anticipated date to begin receiving applications
April 30, 2009, July 31, 2009, Oct. 31, 2009, Jan. 31, 2010, April 30, 2010, July 31, 2010	Quarterly report due dates
May 18, 2009	Anticipated date for first rebate award
May 2009 – July 2010	Continue outreach to independent truckers to encourage submittals for APU rebates
May 2009 – September 2010	Continue processing approved applications until funds are depleted
September 30, 2010	End of grant period

Program Priorities

- The State Program will ensure that the programmatic priorities listed below as outlined in the Energy Policy Act of 2005, Subtitle G will be met to the extent practicable:
1. Maximize public health benefits;
 2. Are the most cost-effective;
 3. Are in areas with high population density, that are poor air quality areas (including nonattainment or maintenance of national ambient air quality standards for a criteria pollutant; Federal Class I areas; or areas with toxic air pollutant concerns);
 4. Are in areas that receive a disproportionate quantity of air pollution from diesel fleets, including truck stops, ports, rail yards, terminals, and distribution centers or that use a community-based multi-stakeholder collaborative process to reduce toxic emissions;
 5. Include a certified engine configuration or verified technology that has a long expected useful life;
 6. Maximize the useful life of any certified engine configuration or verified technology used or funded by the eligible entity;
 7. Conserve diesel fuel; and
 8. Utilize ultra low sulfur diesel fuel (15 parts per million of sulfur content) ahead of EPA's mandate (for nonroad projects).

The state of Tennessee will use this grant to maximize public health benefits and help Tennessee truckers stay in business by reducing their fuel costs. By targeting those truckers who might not otherwise be able to purchase an APU, we will be expanding the benefits of the grant program across the state. The larger an area that can be covered will benefit all Tennesseans and help reduce the health impacts associated with diesel emissions

We feel that the use of rebates for APUs will be a cost effective way to reduce diesel idling. Requiring the owner/operator to pay up to 50% of the APU cost allows us to expand the use of the funds over a greater geographic area.

The most common locations of commercial truck idling in Tennessee are in rest areas and truck stops. As we target the truckers who most often use these areas, the communities surrounding the rest areas and truck stops will benefit from the reduced idling technologies that will be installed.

EPA does not certify idle reduction technologies, they do however certify some of the engines used in auxiliary power units.

The APUs will continue to be used as designed as the cost of diesel is expected to increase. This will not only reduce the fuel consumption and reduce emissions, but it will also extend the life of the truck engine. An APU installed on a long-haul diesel truck can reduce idling fuel consumption by 50% - 80% when compared to the current practice of idling the main diesel engine.

Outputs

The following information will be gathered from all applicants at specified intervals for reporting purposes:

1. Total miles driven
2. Average miles per gallon
3. Amount of idling time reduced by using the APU
4. Fuel saved by using the APU
5. Total gallons of fuel consumed

The above information will help the Division track and measure progress towards the environmental goal throughout the grant period. Other information will be gathered as deemed necessary.

According to an EPA study, ("Study of Exhaust Emissions from Idling Heavy-Duty Diesel Trucks and Commercially Available Idle Reducing Devices") (October, 2002, EPA 420-R-02-025), the average expected emissions reductions when using an APU will be 94% NOx, 81% PM, and 73% CO2. According to the Diesel Emission Quantifier, located at www.epa.gov/cleandiesel, the installation of an APU on 395 trucks will result in a reduction of 44.80 tons of NOx and 1.04 tons of PM.

Of the approximately 395 APU installations, the Division anticipates issuing approximately 39 APU rebates during FY09 and 356 APU rebates during FY10.

The installation of the approximately 395 APUs will enable those truckers to remain competitive in the trucking industry by decreasing their diesel costs, thereby helping them remain in business.

Outcomes

The outcomes of this project will be an estimated 632,800 gallons less diesel fuel consumed by idling trucks, lower costs for the owner/operator trucking businesses in Tennessee, and reduced emissions in the areas where these vehicles have traditionally idled using the main diesel engine. With the current state of the economy, it is hoped that the reduced fuel savings will enable the truckers to continue to operate that would otherwise be forced to stop operating.

This project will increase the use of idle reduction technologies in the state and focus more attention on the positive benefits of reducing unnecessary idling in this industry. This added emphasis on low emission APUs will hopefully increase consumer demand for all types of idle reduction technologies.

As previously stated, there are currently, 10 Tennessee counties are designated nonattainment for the National Ambient Air Quality Standards (NAAQS) for either ozone or PM 2.5 or both. The use of this idle reduction technology will improve the overall ambient air quality in the state.

The various APU manufacturers will have an immediate increase in production due to the demand for their product. The expected rise in demand should help stimulate the economy by creating additional jobs in the manufacturing facilities and in the installation facilities.

Sustainability of State Program

At this time, there are no plans to provide funding past the grant period. However, it is hoped that the industry as a whole will see the economic and environmental benefits of idle reduction and go forward with installing APUs on more long-haul vehicles in the state.

The State will ensure that, per the Recovery Act, grant activities preserve and/or create jobs and promote economic recovery. The State should also commence expenditures and activities as quickly as possible consistent with prudent management when implementing this grant and/or loan program.

Tennessee estimates that approximately 397 jobs will either be created or retained with the funding received for DERA under the ARRA. The following jobs will be created or retained through the funding:

- ❖ TDEC – 1 full-time position retained
- ❖ University of Tennessee – 1 full time position retained
- ❖ Tennessee truck owners/operators - 395 owner/operators will retain their jobs in the trucking industry by installing an APU which will reduce their fuel consumption, thereby enabling them to remain competitive in the trucking industry.

- The State Program understands that all proposals must support Goal 1 of EPA's 2006-2011 Strategic Plan, Clean Air and Global Climate Change; Objective 1.1: Healthier Outdoor Air, which states, "Through 2011...[EPA will]...protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants." See <http://www.epa.gov/cfo/plan/plan.htm> for more information on EPA' Strategic Plan.

Linkage to EPA Strategic Plan

This idle reduction program will reduce fuel consumption and reduce emissions associated with idling. By using an APU, diesel engines certified before 2007 will typically have reduced emissions of NOx, CO2, and PM. Tennessee based diesel fleets with up to 30 diesel vehicles will be targeted for this idle reduction incentive. This financial incentive is designed to leverage federal funds in order to maximize the emission and fuel savings benefits for the independent or small fleet owner in Tennessee.

- Check this box if the proposed project involves environmentally related measurements or data generations that would need quality assurance and quality control plans and procedures as pursuant to 40 CFR 31.45.

Reporting

- The State Program understands that reporting will at least be quarterly and additional reporting may be required for these special Recovery Act grants. Reporting requirements will be detailed in the grant Terms and Conditions.

BUDGET NARRATIVE (1-2 pages)

Project Budget

States should provide a detailed itemized budget (in addition to the Standard Form 424A) using the table below:

Budget Category	EPA Allocation
1. Personnel	
2. Fringe Benefits	
3. Travel	\$ 1,000
4. Supplies	\$ 6,000
5. Equipment	
6. Contractual	\$ 143,612
7. Other	\$ 1,579,388
Total Direct Charges	\$ 1,730,000
8. Indirect Charges	
Grand Total	\$ 1,730,000

Explanation of Budget Framework

States must demonstrate that no more than 15 percent of a State's total allocation from EPA is being used to cover administrative type costs as identified in OMB Circular A-87 Attachment B (e.g., personnel, benefits, travel, supplies) The 15 percent maximum does not include indirect cost rates or funds going directly to projects through grants and/or loans.

1. Personnel

Indicate salaries, percentage of time assigned to the project and total cost for budget period, by job title of all individuals who will be supplemented with these funds.

Category	EPA
N/A	

2. Fringe Benefits

Fringe benefit costs are those costs for personnel employment other than the employees' direct income (i.e., employer's portion of FICA insurance, retirement, sick leave, holiday pay, and vacation cost) that will be paid by the grantee. Provide the total cost of fringe benefits unless treated as part of an approved indirect cost rate. Provide break-down of amounts and percentages that comprised fringe benefit costs, such as health insurance, FICA, retirement insurance, etc. Indicate all mandated and voluntary benefits to be supplemented with these funds.

Category	EPA
N/A	

3. Travel

Travel and per diem costs are those costs for travel and subsistence which are directly related to the grant. Identify the number of trips planned, the purpose of each trip, the destination for each trip, the number of travelers, and the estimated cost of each trip.

Category	EPA
<i>Visits to UT Knoxville (2 trips)</i>	
Travel Mileage – 800 miles x \$0.54	\$432
<i>Per diem for 2 days @\$50/day for 1 person</i>	\$100
Hotel for 2 nights for 1 person	\$200
Travel to various locations in the state to help promote awareness of the grant 496 miles x \$0.54	\$268

4. Supplies

Equipment (less than \$5,000), material, and supply costs are those costs directly related to the grant. Identify all supplies purchased and its cost. The budget detail should be as descriptive as possible. Categories of supplies to be procured; e.g., laboratory supplies or office supplies, are acceptable if items cannot be reasonably separated. Provide the individual and total cost of supplies. For example:

Category	EPA
Initial advertising in 3 major newspapers across the state \$2000 per ad x 3	\$6000

5. Equipment

Equipment, material, and supply costs are those costs directly related to the grant. Identify each item of equipment to be purchased which has an estimated acquisition cost of \$5,000 or more per unit and a useful life of more than one year. Provide a description of each item of equipment and its cost. No equipment may be purchased without the expressed approval of the EPA regional contact. If equipment purchased wholly or partially with assistance agreement funds is to be used on more than one project/program, acquisition costs or usage fees must be approved and allocated properly.

6. Contractual

Contractual services are those services directly related to the EPA program/project. Identify each proposed contract and specify its purpose, nature, period of performance and estimated cost. Do not include procurement contracts which are reflected in other object class categories such as equipment, supplies, etc. If funds allocated to this object class category include proposed expenditures not usually categorized as services to be procured at the market place, explanatory footnotes must be included. Provide the total cost for contracts.

Category	EPA
Utilizing an existing contract with The University of Tennessee which will be amended to include activities associated with this grant. This part of the contract will begin 4/1/2009 and end 9/30/2010.	\$ 143,612 (see Attachment 1)

The Tennessee Division of Air Pollution Control has had numerous contracts with the University of Tennessee - Knoxville (UTK) over the past 10 years or more. UTK is the only university that APC has used as a contractor. As UTK is considered another state agency, APC is not required to obtain bids to use their services.

UTK has a very strong environmental engineering program. In the past, Dr Wayne T. Davis, a professor who is known internationally, and his academic staff and graduate students have provided emission inventory and modeling support to APC for SIP development for ozone and fine particulate matter. UTK has assisted APC with the development of the state's air toxic inventory.

Dr Terry Miller, of UTK, has most recently accepted the role of providing contracting services to the state. He has a post graduate student on his staff that has just completed research on the air pollution emission levels in the cabs of idling diesel trucks. This post graduate student (along with Dr. Terry Miller) will be assigned to assist APC with the ARRA DERA project described.

Please describe your competitive bid process for contracts and/or sub-grants. Contracts must be competed for services and products. You must also conduct cost, price and value analyses to the extent required in 40 CFR Parts 30 or 31, as applicable, as well as any regulations covered by state or local procurement requirements. The regulations also contain limitations on consultant compensation. You are not required to identify contractors or consultants in your application. Moreover, if you have named a specific contractor or consultant in your application EPA approves, it does not relieve you of your obligations to comply with competitive procurement requirements as well as any regulations covered by state or local procurement requirements.

Sub-grants or sub-awards may be used to fund partnerships with non-profit organizations and governmental entities. Successful applicants cannot use sub-grants or sub-awards to avoid requirements in EPA grant regulations for competitive procurement by using these instruments to acquire commercial services or products to carry out its cooperative agreement. The nature of the transaction between the recipient and the sub-grantee must be consistent with the standards for distinguishing between vendor transactions and sub-recipient assistance under Subpart B Section 210 of OMB Circular A-133, and the definitions of "sub-award" at 40 CFR 30.2 (ff) or "sub-grant" at 40 CFR 31.3, as applicable.

7. Other

This category should include the funds going toward the actual State grants and to eligible entities. This category should constitute the main part of your budget.

Category	EPA
ARRA DERA Grant – installation of 395 APUs with a maximum rebate of \$4000	\$ 1,579,388

8. Direct Charges

Provide total amount of direct costs (items 1-7 above). \$ 1,730,000

9. Indirect Charges

Indirect costs result from allocation of a grouping of administrative costs which are not easily identified as a direct cost. Provide the total amount of indirect costs. Include a copy of your current indirect cost agreement which reflects the approved rate.

SIGNATURES

James H. Ayres Date: 3-18-09

This work plan and detailed budget narrative must be signed and dated by the Authorized Representative signing the SF-424 form.

If your organization has the capability to sign the application with a digital or electronic signature, this will be accepted.

APPENDIX

Resources

States may wish to consult the CFR and OMB circulars as referenced in the Federal Register Notice. Links to these references are:

40 CFR 31: <http://www.gpoaccess.gov/cfr/index.html>

OMB Circular A-87: <http://www.whitehouse.gov/omb/circulars/index.html>

More information is available on EPA's web site at
<http://www.epa.gov/otaq/eparecovery/progstate.htm>

PROPOSAL TO TDEC FROM THE UNIVERSITY OF TENNESSEE

COST ESTIMATE TO ADMINISTER A GRANT PROGRAM FOR TDEC
TO PROVIDE 50% COST GRANTS TO TRUCKING COMPANIES IN TENNESSEE
TO PURCHASE AND INSTALL AUXILLARY POWER UNITS (APU's) TO REDUCE
IDLING EMISSIONS AND FUEL CONSUMPTION

Costs shown below are for labor and expenses to administer the program and do not include the cost of the grants.

Labor:	(To prepare brochures and display containers, prepare and place advertisements, do phone solicitations, meet with trucking associations, send grant applications, screen grant applications, make recommendations to TDEC concerning qualified applicants, collect and compile data from the trucking companies concerning their use of the APU's and prepare reports to TDEC)	
	Terry Miller 10% Time for 18-months	\$ 16,500
	James Calcagno 100% Time for 18-months	72,000
	Subtotal	<u>88,500</u>
	Fringe Benefits at 28% of Nonstudent Labor	24,780
Other Expenses:		
	Travel Expenses to Visit Truck Stops, TDEC, Etc (Based on 4000 miles of travel in-state to truck stops at \$.40 per mile)	1,600
	Misc Supplies: (Printing 10,000 Brochures at \$.25 each)	2,500
	Long Distance Phone calls to Trucking Companies (1000 calls at \$1.00 each)	1,000
	Advertising in Newspapers and Trade Magazines	<u>6,500</u>
Cost Without UT Overhead	Subtotal:	124,880
UT Overhead to TDEC @ 15% of total		<u>18,732</u>
Total Cost to Administer Program		\$ 143,612