



**Department of
Development**

Ted Strickland, Governor

Lee Fisher, Lt. Governor
Director, Ohio Department of Development

Diesel Emissions Reduction Grant (DERG) Program for
Equipment Replacement, Repower, Retrofit and Anti-Idle
Request for Proposal
December 2008

The State of Ohio Department of Development, Ohio Energy (OEO) is soliciting proposals from all public and private diesel fleets (with a public sponsor) that will undertake machinery/ replacement, repower, or retrofit for the purpose of emissions reduction. Fleets may also apply for anti-idle equipment.

**Diesel Emissions Reduction Grant Program
Ohio Energy Office
77 S. High St. 26th Floor
P.O. Box 1001
Columbus, OH 43216-1001**

December 18, 2008

To Prospective Bidders:

On behalf of the Ohio Department of Development, the Ohio Department of Transportation and the Ohio Environmental Protection Agency, I am pleased to provide you with the second opportunity to submit proposals for the Diesel Emissions Reduction Grant Program. The accompanying Request for Proposal describes the purpose and goals of the program, the eligibility requirements, the content and structure requirements for your proposal, and a discussion of how the proposals will be evaluated through a competitive review process.

The first round of the Diesel Emissions Reduction Grant Program resulted in awards to ten projects. As before, this round of funding is intended to reduce the financial barriers to deploying clean diesel technology for public fleets and private fleets with a public sponsor operating diesel equipment within Ohio's air quality non-attainment counties. The Diesel Emissions Reduction Grant Program highlights the linkage between clean air, transportation, and economic development and continues the historic collaboration between our three state agencies. Applications for investments in retrofits, anti-idling, engine repower, and machinery/vehicle replacement will be evaluated for their effectiveness in reducing harmful emissions in Ohio communities.

I encourage you to consider responding to this opportunity. Thank you for all you do to keep Ohio's economy strong and its quality of life excellent.

Sincerely,



Lee Fisher
Lt. Governor of Ohio
Director, Ohio Department of Development

TABLE OF CONTENTS

1. RFP Overview
 - 1.1. RFP Time Table
 - 1.2. Ohio Department of Development Organization and Mission
 - 1.3. Project Background
2. Program Requirements
 - 2.1. Fund Reimbursement Policy
 - 2.2. Twenty Percent Match Requirement
 - 2.3. Advertising and Bid Procedures
 - 2.4. Record Maintenance
 - 2.5. DERG Program Project Selections
3. Applications
 - 3.1. Project Applications
 - 3.2. Communication and Inquires
4. Eligibility
 - 4.1. Project Type
 - 4.2. CMAQ Program Eligibility
 - 4.3. Ineligible Costs
5. Project Types
 - 5.1. Vehicle / Machinery Replacement
 - 5.2. Equipment Repower
 - 5.3. Equipment Retrofit
 - 5.4. Anti-Idle Equipment
6. Project Selection Criteria
7. General Requirements
 - 7.1. Cost of Application
 - 7.2. Confidentiality
8. Appendices
 - Appendix A: Diesel Emissions Reduction Grant Application
 - Appendix B: Required Forms
 - Appendix C: PM 2.5 Hot Spot Maps
 - Appendix D: Sample Emissions Calculation Chart
 - Appendix E: Sample Public-Private Partnership Agreement

Section One—RFP Overview

1.1 RFP Time Table

Release of RFP	December 18, 2008
Bidder Conferences	January 12, 2009, 10:00 a.m. February 9, 2009, 10:00 a.m.
Deadline to submit applications	March 2, 2009
Announcement of award	May 1, 2009

The DERG Committee reserves the right to adjust the dates listed above, for whatever reasons it deems appropriate. The DERG Committee also reserves the right to request additional information to assist in the review process or to reject any and all applications and make no awards under this program or make fewer and smaller awards than anticipated or to fund partial projects.

1.2 Ohio Department of Development Organization and Mission

The Department of Development, through the Ohio Energy Office, works to grow the economy of the state by connecting companies and communities to financial and technical resources to deploy advanced energy technologies and energy efficiency.

1.3 Project Background

The Ohio Department of Development (ODOD), in partnership with the Ohio Department of Transportation (ODOT), and the Ohio Environmental Protection Agency (OEPA), proudly announces the second round of the Diesel Emissions Reduction Grant (DERG) Program. Invited to apply are all public diesel engine fleets and private diesel engine fleets with a public sponsor (Public-Private Partnerships) that will undertake machinery/vehicle replacement, repower, retrofit, or installation of anti-idle equipment for the purpose of emission reductions. Public-Private Partnerships (PPP) are defined in the Federal Highway Administration (FHWA) Congestion Mitigation and Air Quality Improvement (CMAQ) Program Guidance dated October 20, 2008. <http://edocket.access.gpo.gov/2008/pdf/E8-24704.pdf>. An example of an acceptable PPP agreement is at <http://www.odod.state.oh.us/diesel-emissions/>.

Funds will be made available under DERG, from the ODOT's CMAQ moneys. The CMAQ Program is authorized through the federal Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). As the DERG Program is federally funded, prevailing wage under the Davis-Bacon Act will apply to projects selected for funding.

The DERG Committee makes all project selections and funding decisions. The Committee consists of staff from ODOD, ODOT, and OEPA.

The total funding available for this competitive funding opportunity through June 30, 2009, is the remainder from the first round of funded projects plus the amount appropriated for the second round – for a projected total of \$11.2 million in federal CMAQ funds. Up to \$5 million will be set aside for public transit projects in Round Two.

Each application must contain a request for at least Twenty Thousand Dollars (\$20,000) to be considered.

Section Two—Program Requirements

2.1 Fund Reimbursement Policy

DERG is a reimbursement program and applicants must provide non-federal funding to cover expenses as they are incurred. Projects selected for funding will be reimbursed *up to the amount approved for that project* upon proper documentation of payment for eligible expenses.

2.2 Twenty Percent Match Requirement

For projects that are selected, up to eighty percent (80%) of project costs may be eligible for reimbursement from CMAQ moneys. Applicants are required to provide a minimum twenty percent (20%) match. Matching funds cannot be from federal funds or from in-kind services.

2.3 Advertising and Bid Procedures

Projects selected to receive funding must comply with all competitive bid standards. Applicants must employ advertising and bid procedures as approved by ODOT and FHWA.

2.4 Record Maintenance

Successful applicants will be required to maintain document recording utilization of the vehicle/equipment.

2.5 DERG Program Project Selections

Due to the competitiveness of the program, all eligible projects will not receive awards.

Section Three—Applications

3.1 Project Application

To apply for an award through DERG, submit one original and two (2) copies of the appended application corresponding to your project type and the application checklist and return to:

Diesel Emissions Reduction Grant Program
Ohio Energy Office
77 S. High St. 26th Floor
P.O. Box 1001
Columbus, OH 43216-1001

Applications must be received by OEO no later than March 2, 2009, at 5:00 p.m. Eastern Time. The applications must be submitted in hard copy. No fax or e-mail submittals will be accepted. Late submittals will not be considered.

3.2 Communication and Inquiries

Prior to the deadline for submission, two conference calls will be scheduled for questions and answers. The minutes will be posted on the website. Oral communication regarding this RFP with any of the staff or reviewers is not permitted. Questions may only be submitted during the conference calls. Answers to questions posed on either of the conference calls will be posted on ODOD's website at: <http://www.odod.state.oh.us/diesel-emissions/>.

Section Four—Eligibility

4.1 Project Type

Project types eligible for funding under DERG include retrofit, repower, installation of anti-idle equipment, and replacement of public fleets¹ and PPP fleets². Projects financed under this program must affect surface transportation system travel consistent with FHWA's October 20, 2008, CMAQ Program Guidance³. Projects must result in a reduction of mobile source NOx "oxides of nitrogen" and/or "particulate matter" PM 2.5 pollutant emissions. Projects will also receive additional points if applicant or private end-user, in the case of a PPP, makes a commitment to use biodiesel.

¹ Including but not limited to: school buses, mass transit vehicles, trash trucks, government fleets.

² Including but not limited to: long and short haul trucks, switcher locomotives and nonroad construction equipment.

³ Nonroad vehicles or construction equipment must be working on a surface transportation construction project (Title 23) within an Ohio nonattainment or maintenance area to be eligible. Only those costs associated with components that produce emissions will be considered.

With the exception of anti-idle equipment, projects must utilize verified technologies as determined by the United States Environmental Protection Agency (US EPA) or the California Air Resources Board (CARB). Anti-idle projects must utilize verified technologies as determined by the US EPA and listed at <http://www.epa.gov/cleandiesel/idle-ncdc.htm>.

4.2 CMAQ Program Eligibility

Prior to final project selection by the DERG Committee, FHWA must issue a formal CMAQ program eligibility determination on each proposed project submitted by ODOT. FHWA's eligibility determinations are based on the documentation project sponsors prepare describing the project scope, its consistency with FHWA's CMAQ program eligibility guidance, and an analysis of the mobile source emission reductions that will result from project implementation.

FHWA's CMAQ program guidance is available at <http://edocket.access.gpo.gov/2008/pdf/E8-24704.pdf>

The minimum requirements are that equipment is operated in nonattainment or maintenance areas for a minimum sixty-five percent (65%) of the time and that PPPs are documented. If this information is not supplied the application will not be scored.

CMAQ program eligibility documentation includes the following items:

- Narrative description of the project scope
- Narrative description of project consistency with FHWA CMAQ eligibility guidance
- Project location
- Project cost
- Project sponsor
- Quantitative analysis of mobile source emission reductions resulting from project implementation

The following list contains counties (or parts of counties) that are either in nonattainment or maintenance status as determined by US EPA. A project must be located in at least one of these counties or geographic locations (in the case of partial counties) in order to be considered for CMAQ funding.

Adams (p)	Franklin	Mahoning
Allen	Gallia (p)	Medina
Ashtabula	Geauga	Miami
Belmont	Greene	Montgomery
Butler	Hamilton	Portage
Clark	Jefferson	Scioto
Clermont	Knox	Stark
Clinton	Lake	Summit
Columbiana	Lawrence	Trumbull
Coshocton (p)	Licking	Warren
Cuyahoga	Lorain	Washington
Delaware	Lucas	Wood
Fairfield	Madison	

*p= partial county for Particulate matter (2.5)

Ohio PM 2.5 Standard Area Map:

http://www.epa.state.oh.us/dapc/SIP/Nonattain/pm25_041205.pdf

Ohio 8 Hour Ozone Standard Area Map:

<http://www.epa.state.oh.us/dapc/SIP/Nonattain/Ohio8HourNonattainmentAreas.pdf>

Ohio 8 hour Ozone Maintenance Area Map:

<http://www.epa.gov/air/oaqps/greenbk/oh8m.html>

4.3 Ineligible Costs

Ineligible costs include but may not be limited to:

- Operating expenses and fuel costs, including incremental costs of fuel
- Any project required by any law or other agreement
- Work done or purchases made prior to official notice of project funding approval or for costs incurred for work or purchases not included in the approved project costs
- Installation costs incurred from in-kind services or by an unauthorized vendor
- Administrative costs

Section Five—Project Types

Type	Description	Limitations	Maximum Funding
Vehicle/Machinery Replacement	Replacing old vehicles/machinery with new vehicles/machinery, including replacing with hybrid or alternatively fueled vehicles as identified in section 301 of the 1992 Energy Policy Act	New vehicles/machinery must meet higher emission standards than old vehicles/machinery. Verification that old vehicles/machinery have not been returned to service	80 percent of total project cost subject to provisions of CMAQ; less core or scrap value and less other governmental financial purchase contributions
Repower (Engine Replacement)	Removing the engine from a piece of equipment and replacing it with a new, rebuilt, or remanufactured engine	Engines must meet a higher emission standard; verification that old engine remanufactured or permanently destroyed	80 percent of equipment invoiced cost less core value or scrap value and 80 percent of installation performed by outside vendor
Retrofit	Adding on emission reduction technologies to reduce pollution	Retrofit technology must be verified by US EPA or CARB	80 percent of total project cost
Anti-Idle	Adding anti-idle technologies to reduce pollution		80 percent of total project cost

5.1 Vehicle/Machinery Replacement

Vehicle or machinery replacement⁴ involves permanently removing an old vehicle or machinery from service, and replacing it with a new vehicle or machinery, including hybrid, or alternatively fueled vehicles as identified in section 301 of the 1992 Energy Policy Act. Because construction equipment tends to have a very long life span, and in the past decade the federal government has implemented increasingly stringent emission standards for both on-road and off-road diesel equipment, upgrading to new model year diesel equipment has a significant air quality benefit.

⁴ Including but not limited to: long and short haul trucks, switcher locomotives and nonroad construction equipment. Nonroad vehicles or construction equipment must be working on a surface transportation construction project (Title 23) within an Ohio nonattainment or maintenance area to be eligible. Only those costs associated with components that produce emissions will be considered.

In order to be eligible for funding for vehicle or machinery replacement, the award recipient must verify that the machinery to be replaced is currently in proper working order with at least five (5) years of remaining life. For public transit agency replacement projects, vehicles will follow the Federal Transit Authority (FTA) replacement guidelines. Additionally, the replacement vehicle/machinery must be used for the same or similar purpose as the retired equipment.

Documentation must be maintained verifying that the old machinery/vehicle has been scrapped and has not been returned to service.

Eligible expenses for reimbursement for replacements under this program include:

- Invoice cost of a replacement vehicle (subject to FHWA eligibility approval) including delivery charges;
- Costs to remove and dispose of fluids in the decommissioned vehicle/machinery less any payments received for reuse of such fluids; and
- Other costs directly related to the project, subject to prior approval.

The incremental cost of the new vehicle/machinery minus any core or scrap value and any other governmental financial purchase contributions will constitute the total cost of vehicle/machinery replacement.

Note: the FHWA Ohio Division Office will not approve CMAQ funding to finance the entire cost of private fleet replacement vehicles. FHWA will approve CMAQ funding only for private fleet replacement vehicle components that contribute to the vehicles' emission characteristics.

5.2 Equipment Repower

An equipment repower involves removing the engine from a piece of equipment and replacing it with a new, rebuilt, or remanufactured engine (including clean natural gas or propane repowers). Because new engines meet more stringent emission standards than older engines, a repower can provide a significant air quality benefit without the cost of replacing an entire piece of machinery.

To be eligible for funding, new engines must be verified by US EPA or the California Air Resources Board (CARB) as agreed to by US EPA. Information on verified engines may be found at:

<http://www.epa.gov/otaq/retrofit/verif-list.htm>

<http://www.epa.gov/otaq/retrofit/nonroad-list.htm>

<http://www.arb.ca.gov/diesel/cv.htm>

Eligible rebuilt or remanufactured engines must use original-equipment-manufacturer (OEM) components only and must be purchased from an OEM or its authorized dealers or distributors.

In order to be eligible for funding for equipment repower, the award recipient must verify that the equipment to be repowered is currently in proper working order. Before receiving reimbursement, the award recipient must document that the engine was removed and shipped to an OEM authorized remanufacturing center, or that the engine in the old equipment has been permanently destroyed so that it cannot be sold or reused.

Eligible expenses for reimbursement for repower under this program include:

- Invoice cost of new engine including delivery charges less the replaced engine's core or scrap value;
- Invoice cost of additional equipment that must be installed with the new engine;
- Costs to remove and dispose of hazardous fluids less any payments received for reuse of such fluids;
- Installation costs if installed by an authorized outside vendor;
- Reengineering costs by an authorized outside vendor, if the vehicle or equipment must be modified for the new engine to fit; and
- Other costs directly related to the project, subject to prior approval.

The cost of purchasing and installing the new engine and required equipment minus the core value will constitute the cost of the equipment repower.

5.3 Equipment Retrofit

An equipment retrofit involves installation of an emission-reductions technology in an existing piece of equipment. To be eligible for funding, retrofit technologies must be verified by US EPA or CARB as agreed to by US EPA. Information on verified technologies may be found at:

<http://www.epa.gov/otaq/retrofit/verif-list.htm>

<http://www.epa.gov/otaq/retrofit/nonroad-list.htm>

<http://www.arb.ca.gov/diesel/cv.htm>

Eligible expenses for reimbursement for retrofits under this program include:

- Invoice cost of retrofit kit or add-on device including delivery charges;
- Invoice cost of additional equipment that must be installed;
- Installation costs if installed by an authorized outside vendor;
- Reengineering costs by an authorized outside vendor, if the vehicle or equipment must be modified for the retrofit less any scrap or resale value; and
- Other costs directly related to the project, subject to prior approval.

5.4 Anti-Idle Equipment

Anti-idle equipment consists of installation of idling reduction technologies in order to reduce pollution. Anti-idle projects must utilize verified technologies as determined by the US EPA and listed at <http://www.epa.gov/cleandiesel/idle-ncdc.htm>.

Eligible expenses for reimbursement for anti-idle equipment under this program include:

- Invoice cost of anti-idle kit or add-on device including delivery charges;
- Installation costs if installed by an authorized outside vendor;
- Reengineering costs by an authorized outside vendor, if the vehicle or equipment must be modified for the anti-idle technology; and
- Other costs directly related to the project, subject to prior approval.

Section Six—Project Selection Criteria

DERG project applications will be evaluated consistent with the FHWA CMAQ program guidance eligibility criteria and ranked consistently with the scoring parameters below.

The minimum requirements are that equipment is operated in nonattainment or maintenance areas for a minimum sixty-five percent (65%) of the time and that PPPs are documented. If this information is not supplied the application will not be scored.

For PPPs, partnerships must have a legal, written agreement in place between the public agency and the private or non-profit entity before a CMAQ-funded project application is submitted. These agreements should be developed under relevant State contract law and should specify the intended use for CMAQ funding; the roles and responsibilities of the participating entities; and how the disposition of land, facilities, and equipment will be carried out should the original terms of the agreement be altered (e.g., due to insolvency, change in ownership, or other changes in the structure of the PPP). **If an applicant is a PPP and does not provide a copy of the required executed agreement at the time the application is submitted, then the application will not be scored.** See PPP example, [Appendix E](#).

The evaluation of eligible applications will be based on the following parameters:

- a). **Project emission reductions of particulate matter and/or oxides of nitrogen, reported in kilograms per day:** The project score will be based on reductions of NO_x and PM 2.5 emissions. **(0-10 points NO_x; 0-30 points PM 2.5)**

- b). **Cost effectiveness of the emission reductions:** The total reimbursable cost requested in the application will be divided by the estimated total emission reduction of PM 2.5 and NOx to determine the 'cost effectiveness' of the project, in dollars per kg of reduced emissions. **(0-10 points NOx; 0-20 points PM 2.5)**
- c). **Percent of funds matched on the project:** The minimum is twenty percent (20%) and will receive no points. Greater points will be awarded to those who provide a higher percent matching funds; there is no maximum for matching funds. **(0 – 10 Points)**
- d). **Percent of emission reductions that will occur in nonattainment or maintenance areas:** Emission reductions would be more beneficial if realized in the state's current PM 2.5 and Ozone nonattainment and/or maintenance areas. (Applicants can find nonattainment maps at <http://www.epa.state.oh.us/dapc/SIP/Nonattain/nonattain.html> and maintenance area maps at <http://www.epa.gov/air/oacqps/greenbk/oh8m.html> .)

Points will be deducted for percentage of time that projects operate outside current PM 2.5 and Ozone areas using the following scale.

<u>Percentage of Time</u>	<u>Deduct Points</u>
100%	0
90 – 99 %	5
80 – 84 %	10
65 – 79%	15

If below 65%, project is ineligible and will not be scored.

Successful applicants will be required to maintain documentation recording utilization of the vehicle/equipment for the life of the equipment.

- e). **Use of biodiesel:** Evidence of commitment by the public entity or end-user to use biodiesel in a diesel engine fleet(s). Greater points will be awarded to projects that commit to a higher percent of biodiesel use. **(0-5 Points)**
- f). **Emission reductions near a PM 2.5 hot spot:** There are three areas within the state that are projected to have the highest residual concentrations of PM 2.5. These three areas are geographically localized and are impacted by local transportation sources, including diesel from on-road, off-road, and rail sources. (Applications will receive **15 Points** if a

majority of the equipment use is within the white zone; **or 10 Points** if within the yellow zone but outside of the white zone). The three areas are:

1. Mingo Junction, Jefferson County, Ohio
2. The Cleveland 'Flats' area
3. The I-75 corridor in Hamilton County near Ivorydale and Saint Bernard

Maps of these areas are in Appendix C.

Section Seven—General Requirements

7.1 Cost of Application

The cost of preparing and submitting applications in response to this RFP are solely the responsibility of the applicant. The program shall not reimburse or contribute, in any way, to the cost of the preparation and delivery of the application.

7.2 Confidentiality

All information submitted in response to this RFP shall be public information unless a statutory exception exists which would thereby determine that the information cannot be released to the public. Any information submitted with the application which the applicant feels is a trade secret must be conspicuously designated as such and shall be treated accordingly if the information is determined to be a trade secret under the laws of the State of Ohio. It is the applicant's sole duty to identify and mark such passages it deems trade secrets. All submitted applications will become the property of OEO and any information submitted in response to this Request for Proposals will not be returned to the applicant.

Section Eight—Appendices

Appendix A: Diesel Emissions Reduction Grant Application

Appendix B: Required Forms

Appendix C: PM 2.5 Hot Spot Maps

Appendix D: Sample Emissions Calculation Chart

Appendix E: Sample Public-Private Partnership Agreement