



# The Michigan Clean Diesel Program

State Clean Diesel Grant  
Applicant Training  
October 13, 2011  
Lansing





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# Background

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**The National Clean Diesel Campaign,  
the Midwest and Michigan Initiatives**

# Why Does the State Have a Clean Diesel Program?

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It's all about keeping track of pollution by type and by source...

# Air Quality Regulations at the National Level (U.S. EPA)

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- Our air quality is regulated by the U.S. EPA under the **National Ambient Air Quality Standards (NAAQS)**.
- The NAAQS sets the **maximum level** of pollution allowed before health and welfare are impacted.
- **The NAAQS sets pollution levels for six types of pollutants:** carbon monoxide, nitrogen dioxide, particulate matter, lead, sulfur dioxide and ozone.

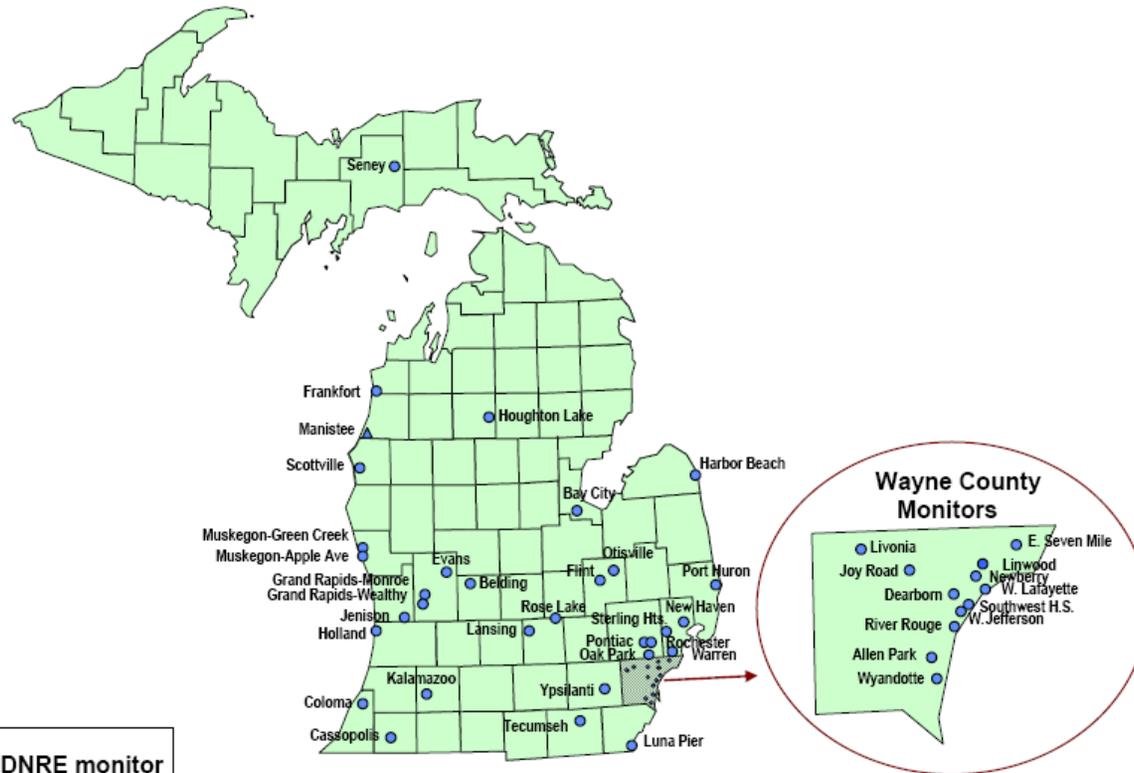
# Monitoring in Michigan

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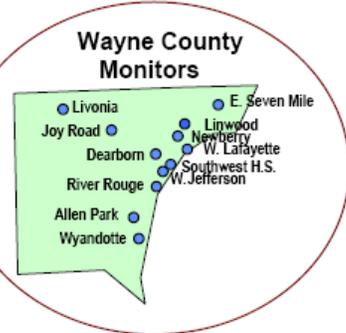
- States are required to monitor their own pollution levels and report them to the U.S. EPA on a quarterly basis.
- Michigan currently has **38** monitors - not all counties have a monitor.

# Air Monitoring in Michigan

## 2010 Michigan Air Monitor Network



- DNRE monitor
- ▲ Tribal monitor



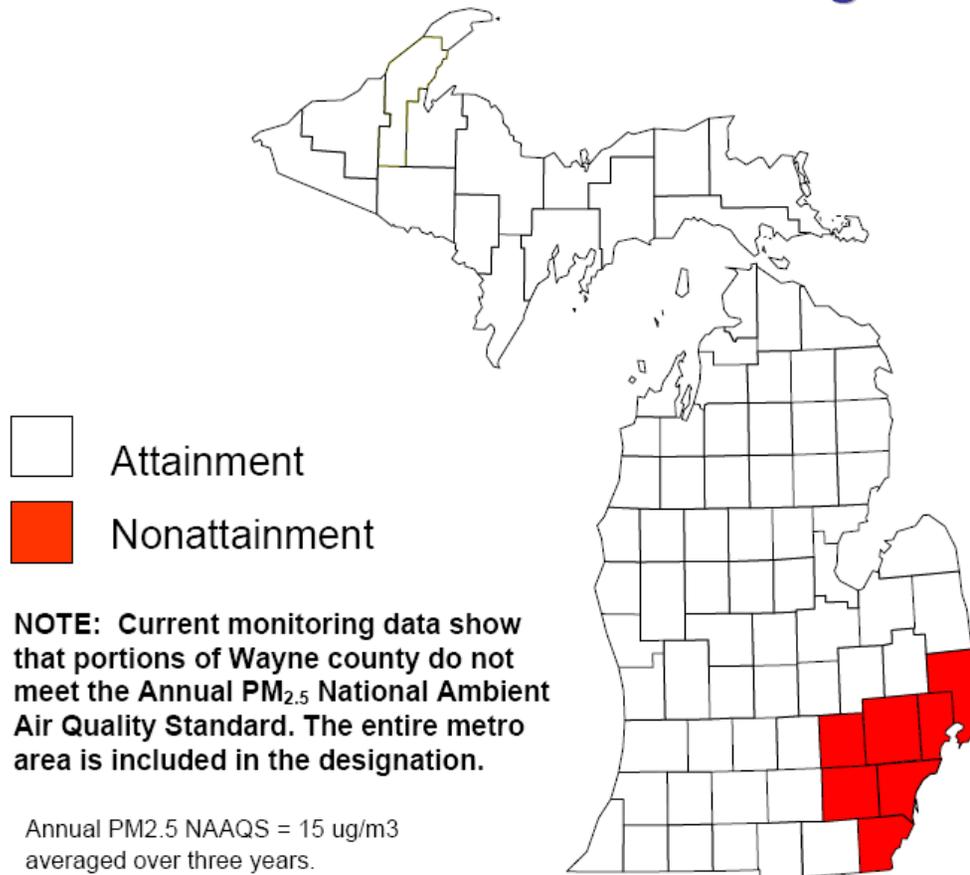
# Air Quality in Michigan

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- The status of air quality for each pollutant is listed as being in either “**attainment**” or “**non-attainment**.”
- **Attainment** means that the air quality is “**good**” – it’s meeting the federal standard.
- **Non-attainment** means that the air quality is “**bad**” – it’s not meeting the federal standard.

# Attainment Status for Particulate Matter (Soot)

## Annual PM<sub>2.5</sub> Attainment Designation Status



# What the State Has Do to Comply With The National Standards

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- States are implementing voluntary activities to help keep pollutants in “attainment” status so that mandatory activities are not required of business, industry and the state’s citizens.
- One of these voluntary activities is the Michigan Clean Diesel Program.

# The Michigan Clean Diesel Program

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- The program was formed in **October 2007** as a coalition of public and private organizations concerned about diesel engine pollution in Michigan.
- The focus of the program is on **reducing the overall levels of particulate matter (soot) and nitrous oxides** that lead to the creation of **ozone** in the air.
- To help achieve this, **grants are given out to public and private organizations** to implement voluntary diesel engine emissions reduction activities.

# The Michigan Clean Diesel Program

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- Comprised of:
  - The Michigan Clean Diesel Initiative (MiCDI)
  - The State Clean Diesel Grant Program

# The Michigan Clean Diesel Initiative (MiCDI)

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## *History*

- The MiCDI was one of the last Midwest state clean diesel coalitions to be formed.
- Is one of six state members of the U.S. EPA-sponsored Midwest Clean Diesel coalition.
- Purpose: To identify where environmental improvements can be made through diesel engine emission reductions, to encourage development of innovative technologies, and to help identify funding opportunities and resources.

# The Diesel Emissions Reduction Act (DERA)

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- Enacted under the 2005 Energy Policy Act.
- In 2008, the U.S. EPA and states received their first funding opportunity to implement voluntary diesel emission reduction projects under DERA at \$49.2 million.
- There are (4) components of DERA.

# DERA's Components

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- U.S. EPA Clean Diesel National Competitive Grant Program
- U.S. EPA Clean Diesel Emerging Technologies Program
- U.S. EPA SmartWay Clean Diesel (Revolving) Loan Program
- State Clean Diesel Grant Program
- 70% of DERA funding goes to the U.S. EPA-administered programs; 30% goes to the State Clean Diesel Grant Programs.

# State Clean Diesel Grant Program

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- As of October 2011, Michigan has received over \$3 million in federal DERA grant funds.
- More than \$775,000 is available under the state's existing Request for Projects (RFP)

# The Basics

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Who Has Access to DERA and How Can  
the Funding Be Used?

# The Basics

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- A single applicant may submit only one application.
- Each application can contain one or more partners.
- All applicant and partner entities must have contiguous and on-going business operations that include a permanent location in Michigan.

# The Basics: Eligibility Criteria

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- Cities, townships, and villages.
- County government agencies.
- Port authorities.
- Public school districts.
- Private schools that are designated as tax exempt under 501(c)(3) of the Internal Revenue Code.
- Other non-profit organizations or institutions that have the promotion of transportation or air quality as their focus and are designated as tax exempt under 501(c)(3) of the Internal Revenue Code.
- Metropolitan Planning Organizations (MPOs).
- Private business and industry.

# The Basics: Eligible Diesel Engine Vehicles/Equipment

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- School buses
- Heavy and medium-duty trucks
- Construction equipment and vehicles
- Agricultural equipment and vehicles
- Port/freight-handling and marine equipment and vehicles
- Mining equipment
- Locomotive equipment
- Energy production equipment like generators.

# The Basics: Eligible Technologies

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- Must be *verified* by the U.S. EPA or CARB.
  - Retrofit technologies such as exhaust controls.
  - Idle Reduction Technologies including heaters, APUs and generator sets.
  - Engine repowers (replacements that upgrade the engine to a cleaner burning one).
  - Vehicle/equipment replacements.

# The Basics: Eligible Technologies

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- List of **U.S. EPA** Verified **Exhaust Control Technologies**  
[www.eap.gov/cleandiesel/verification/verif-list.htm](http://www.eap.gov/cleandiesel/verification/verif-list.htm)
- List of **California Air Resources Board** Verified **Exhaust Control Technologies**  
[www.arb.ca.gov/diesel/verdev/vt/cvt.htm](http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm)

# The Basics: Eligible Technologies

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- List of **U.S. EPA** SmartWay Verified **Idle Reduction** Technologies

[www.epa.gov/smartway/technology/idling.htm](http://www.epa.gov/smartway/technology/idling.htm)

- List of **U.S. EPA** SmartWay Verified **Aerodynamic** Technologies

[www.epa.gov/smartway/technology/aerodynamics.htm](http://www.epa.gov/smartway/technology/aerodynamics.htm)

# The Basics: Eligible Technologies

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- List of **U.S. EPA** Smartway Verified Low Rolling Resistance Tires

[www.epa.gov/smartway/technology/tires.htm](http://www.epa.gov/smartway/technology/tires.htm)

- Certified **Engine Repowers** – The new engine must meet a higher U.S. EPA emissions standard. New engine may be diesel or hybrid (i.e. propane, natural gas, biodiesel, etc.). Information on certified engines can be found at [www.epa.gov/otaq/certdata.htm](http://www.epa.gov/otaq/certdata.htm)

# The Basics: Eligible Technologies

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Vehicle/Equipment Replacements - Certified new engines that meet the highest U.S. EPA emission standard for that vehicle or piece of equipment.

# Cost Share Requirements

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The following are covered for both labor cost and the cost of the technology.

- Exhaust Control Equipment: 100% covered
- Idle Reduction: 50% covered
- Aerodynamics: 50% covered
- Low Rolling Resistance Tires: 50% covered
- Engine Repowers: 50% covered

# Cost Share Requirements

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The following are covered for both labor and the cost of the technology.

- **Vehicle/Equipment Replacements** – 25% covered unless the vehicle or equipment is publicly-owned and operated by an eligible applicant or partner.
  - **Publicly-owned vehicles/equipment** manufactured in model years 2007-2009 – 25% covered.
  - **Publicly-owned vehicles/equipment** manufactured in model years 2006 and older – 50% covered.

# What the Grant Cannot Be Used For

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- Engine repowers or vehicle/equipment replacements if the replacement would have occurred as a result of normal fleet turnover.
- Disposal costs for engine replacements or any devices removed from a vehicle/equipment.
- Optional accessories that are in addition to the basic unit (verified technology or certified engine) required for this project.
- Educational components of a project such as public relations, promotional events or for staff training are ineligible activities for grant funding or match.

# Important Side Notes

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## Projects Involving Engine Repowers and Vehicle/Equipment Replacements

1. Must demonstrate accelerated replacement in grant application either with a:
  - a) Fleet characterization showing fleet age ranges and average turnover rates per vehicle
  - b) Fleet owner's budget plan, operating plan, standard procedures or retirement schedule.

# Important Side Notes

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## Projects Involving Engine Repowers and Vehicle/Equipment Replacements

1. Old engine must be scrapped or returned to the manufacturer to be upgraded to a cleaner, higher emission standard.
2. Some portions of the old vehicle/equipment's parts may be salvaged, but the old vehicle/equipment must be disabled.

# Important Side Notes

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## Projects Involving Engine Repowers and Vehicle/Equipment Replacements

1. If a **repower** is chosen, applicant must provide an **explanation (cost-benefit)** of choosing this option over a vehicle/equipment replacement.
2. If a vehicle/equipment **replacement** is chose, applicant must provide an explanation **(cost-benefit)** of choosing this option over an engine repower.

# Benefits of Implementing a Clean Diesel Project

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1. **Environmental** – Immediate reduction in levels of soot and ozone-generating pollutants. Cleaner fleet!
2. **Health** – Works to alleviate or ease the exacerbation of chronic illness and disease.
3. **Economic development** – Promotes job creation and retention in the Midwest.
4. Can **extend the life of a diesel engine** fleet.
5. Funding that would have been otherwise dedicated to fleets may be utilized elsewhere in an organization, providing a sorely needed **buffer for today's tight fiscal budgets**.

# State Grant Application Process

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What things are needed to apply for grant funds? Submit:

- ☑ A Grant Application and Proposal Format
- ☑ A Budget
- ☑ A Description of the Diesel Engine Fleet

# Grant Application Example

## Cover Sheet Page 1

Michigan Department of Environmental Quality State Clean Diesel Grant Program The 2011-2012 Request for Projects Competition GRANT PROPOSAL COVER SHEET (This is page 1 of your proposal)		EXAMPLE
<b>APPLICANT/ORGANIZATION INFORMATION</b>		
Project Name:	ABC School District's Engine Project	
Applicant/Organization's Name:	ABC School District	
Address (physical location):	2468 Mulberry Lane	
Address (mailing address):	P.O. Box 987654-0000	
City:	East Lansing	State: Michigan Zip Code: 48823
County:	Ingham	
Applicant/Organization Telephone Number:	(517) 555-1212	
Applicant/Organization Fax Number:	(517) 555-1212	
Applicant/Organization's Federal ID #:	006-1234567	
<b>PROJECT CONTACT INFORMATION</b>		
Project Manager's Name and Title:	Joe Schmoe, Transportation Director	
Address (if different than above):	(same as above)	
City:	(same as above)	State: Michigan Zip Code: (same as above)
Project Manager's Telephone Number (if different from the above):	(same as above)	
Project Manager's E-mail Address:	JoeSchmoe@gmail.com	
Project Location(s) - city, township, village or county. If more than one, list all	City of ABC and City of DEF	
<b>GRANT INFORMATION</b>		
Grant Funding Amount Requested:	\$161,172.50	
Value of Additional Match:	\$83,172.50	
Total Project Costs:	\$244,345.00	

# Grant Application Example

## Cover Sheet Page 2

EXAMPLE

**GRANT PROPOSAL COVER SHEET**  
*(continued)*  
**(This is page 2 of your proposal)**

Please check the most appropriate box(es) for the types of fleets represented in the application

- School bus(es)
- Municipal bus(es)
- Medium-duty truck(s)
- Long Haul truck(s)
- Heavy duty truck(s), not elsewhere specified
- Marine vessel(s)
- Non-road equipment – construction/material handling
- Non-road equipment – port/rail/material handling
- Non-road equipment - mining
- Non-road equipment - agricultural
- Energy production equipment

Please check the most appropriate box(es) for the type of technology represented in the application

- Shut down/start up system
- Auxiliary power (APU)
- HVAC battery-power system
- Fuel operated heater
- Generator set
- Solar storage & transfer
- Thermal storage & transfer
- Diesel oxidation catalyst
- Diesel particulate filter
- New vehicle with certified engine, type: school bus
- Certified engine, repower
- Other:

**GRANT ACCEPTANCE**

Name of Person with Grant Acceptance Authority:

Arnold Smythe

Title of Person:

Superintendent, ABC School District

Signature:

*Jess Schmeck*

11/30/11

Title of Signatory

Transportation Director, ABC School District

Date

# Grant Application Example

## Pages 3-10 Work Plan, Section I

- Explain the reason for doing the project the type of project to be done and the possible benefits of the project.

### EXAMPLE

Michigan Department of Environmental Quality  
State Clean Diesel Grant Program  
The 2011-2012 Request for Projects Competition  
GRANT PROJECT PROPOSAL FORMAT

(This information begins the 3<sup>rd</sup> page of your proposal)

Project Name:	ABC School District's Engine Project
Applicant/Organization's Name:	ABC School District
City:	ABC City
County:	Ingham

#### I. Work Plan

The City of ABC and the City of DEF, an adjacent upriver community, bear a disproportionate environmental and public health burden as the host communities for industries, utilities and infrastructure that benefit the entire ABC metropolitan area economically. The area is a major transportation hub for planes, trains, freight yards, and automobiles. In addition to having the busiest waterway passage in Michigan, this region is home to several heavy industries including three textile mills, an automotive manufacturing operation, and a waste recycling/incineration facility that burns trash in antiquated incinerators. Additionally, in the last 10 years the City of ABC's population has grown by over 400% and is the fastest growing area in the county, with over 200,000 residents.

The Michigan Department of Environmental Quality's 2009 Annual Air Quality Report shows the 2007-2009 annual three-year average PM<sub>2.5</sub> concentrations measured in Ingham county, which includes both ABC and DEF cities, was one of the highest in Michigan. The three-year average shows that Ingham county has a disproportionate amount of particulate matter and ozone pollution, mainly generated by the industrial, commercial and mobile sources in the area. Every year, over two million long haul trucks cross the Wiblywobly Bridge in the City of ABC, contributing to the amount of particulate matter and ozone pollution in the air. This air pollution contributes to higher than average incidence of asthma in the community. According to the Michigan Department of Community Health, the average rate of asthma cases in 2007 rose by 10% over the previous two years, mainly among school-aged children. The hospitalization rate for Ingham county also remained high, especially among school-age children at a 17.1 rate per 10,000 population, compared to 10.1 per 10,000 population statewide for children of the same age.

In addition, several major transportation infrastructure projects are being considered for the area, including a new port docking station for large freighters and a highway extension to the local major interstate to provide a new connection to Wiblywobly Bridge. Each of these projects will increase the amount of pollution, most especially the level of particulate matter, from diesel engines that are used during the construction of the projects and from vehicles that will use the new highway span.

For the last 10 years, the City of ABC's School district has worked with a local environmental advocacy group to educate residents and business. ABC School District and the City of DEF's

# Grant Application Example

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Pages 3-10

## Work Plan, Section II – Commitment to National Program Priorities

- Describe health disparities of community.
- Demonstrate cost-effectiveness of project.
- Show high population density in project area.
- Demonstrate if area is exposed to disproportionate quantity of pollution.
- Show project as maximizing the useful life of the fleet.
- Explain how the project conserves diesel fuel.

# Grant Application Example

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Pages 3-10

## Work Plan, Section II – Sources of Health Data

- Local/county health departments
- Michigan Department of Community Health website
- University of federal research/academic white papers
- Aggregated local school district annual health surveys

# Grant Application Example

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Pages 3-10

## Work Plan, Section II – Sources of Environmental and Population Data

- **Air pollution** status (by pollutant type, by county) – Search the MDEQ Air Quality web site.
- **Population Density** – Search the Michigan Departments of Community Health and Technology, Management and Budget as well as the U.S. Census Bureau web sites.

# Grant Application Example

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Pages 3-10

## Work Plan, Section II – Commitment to Regional and State Program Priorities

- Participate in meetings and activities of the state clean diesel coalition.
- Work to improve populace's understanding and awareness of the federal air pollution standards, their exposure and impact on human health and the environment.

# Grant Application Example

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Pages 3-10

Work Plan, Section II – Certify Commitment to Program Priorities – Make sure to check the box!

EXAMPLE

II. Commitment to the U.S. EPA, regional Midwest Clean Diesel Initiative and the DEQ's Programmatic Priorities

- This certifies that my organization is committed to helping the U.S. EPA, the Midwest and Michigan Clean Diesel Initiatives and the Michigan Department of Environmental Quality achieve clean diesel programmatic priorities as outlined in the "Instructions" section of this document and the project proposal.

# Grant Application Example

Pages 3-10

## Work Plan, Section III – Administrative Ability

- Who does what with the project.
- List previous jobs or experiences for each staff listed in the budget.

### III. Description of Administrative Abilities, Staff Expertise and Previous Project History

#### Staff and Partner Roles and Responsibilities

Name of Project Staff	Title of Staff	Affiliated Organization	Role/Responsibility with the Project
Joe Schmoe	Transportation Director	ABC School District	Grant Administrator
Mary Lou Smith	Accountant	ABC School District	Assist in preparation of invoices and reports
Bob Ryan	Installation Mechanic	ABC School District	Install DOCs on school buses
Kevin King	Installation Mechanic	DEF School District	Install DPFs and heaters on school buses

Mr. Joe Schmoe has been Transportation Director for more than 20 years with ABC School District and commands a staff of more than 10 mechanics and repair personnel that maintain the school districts' 25 diesel engine vehicles. He and his staff are certified to repair and install equipment on heavy-duty diesel engine vehicles by the Diesel Mechanics Association. Mr. Schmoe is in charge of ABC School District's fleet which consists of school buses and one heavy duty plow truck used for snow removal. Mr. Schmoe will coordinate with Mr. King on the equipment orders and installation needs for DEF School District for this project, and submit the project's progress and financial status reports to the MDEQ.

Ms. Mary Lou Smith has been an accountant with ABC School District for the last 13 years and is responsible for all receivables and payments made to and from the school district. In 2009, she assisted Mr. Schmoe with the financial reporting aspects of ABC School District's First Bus Project where she tracked the activities of equipment and installation payments on behalf of the project.

Mr. Bob Ryan is the lead mechanic at ABC School District and has more than 30 years of experience maintaining and repairing diesel engine vehicles. Mr. Ryan has previous experience installing diesel oxidation catalysts (DOC) on a similar school bus grant and will be doing the DOC equipment installation for this project.

Mr. Kevin King is the chief mechanic at DEF School District with 22 years of experience with diesel engine vehicles and equipment. Mr. King's experience includes installing diesel particulate filters (DPF) on heavy duty trucks prior to coming to DEF School District. Mr. King also has experience with heater installation on school buses in the Arizona Public School System, and will be doing the DPF and heater installations on DEF's school buses. He will be the primary contact for DEF School District on this project.

# Grant Application Example

Pages 3-10

## Work Plan, Section IV – Timeline

- Set the timeline based on quarterly milestones/ activities vs. dates.
- Provide enough detail to demonstrate all courses of action needed for project.

### IV. Timeline and a description of Tasks/ Milestones

Anticipated Timeline for Completion	Task or Milestone to Achieve
January 5, 2012	Review fleet needs of ABC and DEF School District and develop procurement documents for equipment purchases.
January 15, 2012	Present draft procurement documents to administrators for presentation and approval at the January 25, 2012 school board meeting.
January 25, 2012	Receive school board approval to proceed with bid process; send documents to MDEQ for review.
January 30, 2012	Post procurement bid document for equipment purchases.
February 28, 2012	Review bid documents; finalize decision; inform vendors.
March 7, 2012	Place orders for equipment, engine and vehicle based on bid documents.
April 30, 2012	Orders for DOCs and DPFS arrive; mechanics begin installation of DOCs and DPFS on school buses; First quarter report to MDEQ due.
May 6, 2012	Order for heaters arrive; mechanic begins installing heaters on school buses.
May 30, 2012	Order for new heavy duty truck engine arrives; engine installation begins.
June 10, 2012	All DOCs and DPFS installed in each fleet's school buses.
June 23, 2012	All heaters installed on DEF School District's buses.
July 12, 2012	Engine repower complete on ABC School District's truck.
July 21, 2012	New school bus arrives and joins ABC School District's fleet.
July 31, 2012	Second quarter report due to the MDEQ.
August 2, 2012	Diesel engines disabled from school bus and heavy duty truck; old school bus and engines scrapped; program income documented from scrappage.
August 7, 2012	U.S. EPA Certificates of Conformity and new emission levels received from vendor; forwarded to MDEQ.
August 15, 2012	Final report and supporting documentation submitted to the MDEQ.

# Grant Application Example

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Pages 3-10

**Work Plan, Section IV – Timeline – Important Items to Keep in Mind. Allow for...**

- An appropriate amount of time for development, review and issuance of a **competitive bid document**. Think 30 days +
- Adequate time for **technology orders, delivery and installation**. Consult a technology vendor to appropriately plan for this aspect of the project. The time frame may be longer or shorter than you think!
- Organizational needs for quarterly **activity and financial documentation, report development and submission**.

# BREAK

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# Grant Application Example

## Characterizing Your Fleet

- Certain information about the fleet you have selected for the grant application project will be listed on what is known as a *Fleet Description Spreadsheet*. Such things as annual fuel use, annual idling hours, mileage, age of vehicle or engine, make and model will have to be documented.
- This level of detail is needed for the grant application and will be recalculated at the end of the project when you determine the final amount of diesel engine emissions reduced over the lifetime of the technology, engine and vehicle.

# Grant Application Example

**U. S. Environmental Protection Agency  
Project Fleet Description Spreadsheet**



**Recipient Information**

Organization/ Grantee Name	FirstName	LastName	JobTitle	Address	City	State	EmailAddress	ZipCode	OfficePhone	OfficePhoneExt
ABC School District	Joe	Schmoe	Transportation Director	2468 Mulberry	City of ABC	MI	JoeSchmoe@gmail.com	48823	(517) 555-1212	N/A

**Project 1 Information**

ProjectName	Organization Performing Project	TargetFleet	Number of Vehicles	City	County	State	Region	Funding Amount	Additional Funding Source	Additional Funding Amount	Public Benefit
ABC School District's Engine Project	ABC School District	School Bus	17	City of ABC	Ingham	MI	5	\$91,100.00	ABC School District	\$72,500.00	yes

**Fleet 1 Information:**

Current Vehicle Information													
VehicleType	TargetFleet	Class/ Equipment	Vehicle Count	Engine Make	Engine Model	Engine Model Year	Horsepower (Nonroad Only)	Current Tier Level (Nonroad Only)	Current Standard Level for PM and NOx or NMHC+NOx	Fuel Type	Amount of Fuel Used (gal/year for all engines in this row)	Annual Miles per vehicle (On Highway Only)	Annual Usage Hours engine (Nonroad Only)
On Highway	School Bus	School Bus	7	GMC	1245.678	1996				Diesel (ULSD), 15 ppm	24,000	12000	
On Highway	School Bus	School Bus	5	Catapillar	246-80	1996				Diesel (ULSD), 15 ppm	20,000	15000	
On Highway	School Bus	School Bus	3	Cummins	AB-5678	1995				Diesel (ULSD), 15 ppm	15,000	12000	
On Highway	School Bus	School Bus	1	GMC	000-44400	1982			Unregulated	Diesel (ULSD), 15 ppm	5,000	900	
				Detroit					PM:0.25 g/bhp-hr; NOx:	Diesel (ULSD),			

Project Fleet Description | References

# Grant Application Example

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## ABC School District Grant Application Project Fleet:

- Installation of 15 Diesel Oxidation Catalysts (DOCs) on school buses.
  - 7 buses are 1996 GMC engines
  - 5 buses are 1996 CAT engines
  - 3 buses are 1995 Cummins engines
- One engine repower (new engine) on school bus with 1982 GMC engine.
- One vehicle replacement for 1992 Detroit Diesel engine utility vehicle.

# Grant Application Example

The DEQ  
First Screen

Add Fleet  
Information

The screenshot shows the EPA website interface for the National Clean Diesel Campaign (NCDC). The header includes the EPA logo and navigation links. The main content area is titled 'National Clean Diesel Campaign (NCDC)' and features a sidebar with navigation options. The current page is 'Quantifier: Use The Quantifier', which includes a breadcrumb trail and a 'Start Over' button. The 'Enter Fleet Information' form is the primary focus, containing fields for Fleet Name, Fleet Type, State, and a section for estimating total cost effectiveness with various funding source inputs.

**EPA** United States Environmental Protection Agency  
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### National Clean Diesel Campaign (NCDC)

Contact Us

You are here: EPA Home » OTAQ Home » NCDC Home » Quantifier » Use The Quantifier

## Quantifier: Use The Quantifier

Working Together for Cleaner Air

Overview Getting Started Use The Quantifier My Account References

### Enter Fleet Information

Not logged in | login

**New** Start Over

Fleet Name: ABC-DEF School Districts

Fleet Type: On Highway/NonRoad

State: Michigan

Do you want to estimate the total cost effectiveness of the project? Yes  No

Total cost effectiveness numbers are based solely on the user inputs below

EPA \$	138992	Private \$	0	Other \$	0
Other Federal \$	0	Match/Lev. \$	0	Unknown \$	0
CMAQ \$	0	SEP \$	0	State \$	0
Local \$	0				

Save Fleet

# Grant Application Example

The DEQ  
Second  
Screen

Detail  
Vehicle  
Groups

ABC School District Fleet

- Fleet Type On Highway / Non-road
- State Michigan

Total Project Funding \$ 161,172

[Edit Fleet](#) | [Start Over](#)

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**New Vehicle Group** Vehicle Group

Group Name

Quantity

Type

Target Fleet

Class/Equipment

Model Year

Year of Retrofit Action

NOTE: If you select 2010 or earlier for the Year of Retrofit Action, calculations will be performed with the previously approved MOBILE 6.2 emission factors (regardless of Model Year). If you select 2011 or later for the Year of Retrofit Action, the new agency-approved MOVES emission factors will be used (regardless of Model Year). We highly recommend that you use the MOVES model for current and future projects. Please see Overview Tab for more info.

Fuel Type

[Get Default Values](#)

Fuel Volume  gal/year for group

Calc. Fuel Volume  diesel gal/year for group

Vehicle Miles Traveled  miles/vehicle/year

Idling Hours  hours/vehicle/year

# Grant Application Example

The DEQ  
Third  
Screen

Begin Adding  
Technology  
Information

The screenshot displays a web application interface for a grant application. It is divided into two main sections: 'ABC School District' and 'ABC Schools - 1996 DOCs'. The 'ABC School District' section shows 'Fleet Type' as 'On Highway / Non-road' and 'State' as 'Michigan', with a 'Total Project Funding' of '\$ 161,172'. Below this are buttons for 'Edit Fleet' and 'Start Over'. The 'ABC Schools - 1996 DOCs' section shows 'Quantity' as 7, 'Type' as 'On Highway', 'Target Fleet' as 'School Bus', 'Class/Equipment' as 'School Buses', 'Model Year' as 1996, 'Retrofit Year of Action' as 2011, 'Fuel Type' as 'Regular Diesel (ULSD), 15 ppm', 'Fuel Volume' as 24000, 'Veh. Miles Traveled' as 12000, and 'Idling Hours' as 3. Below this are buttons for 'Edit Group' and 'Delete'. A 'Technology' box on the right indicates 'No retrofit technologies currently applied' and provides a link to 'Add a new technology'. A green arrow points to this link with the text 'Add your first retrofit technology'. At the bottom, there is a button for 'Add a New Vehicle Group' and a 'Quantify Emissions' button.

ABC School District Fleet

- Fleet Type On Highway / Non-road
- State Michigan

Total Project Funding \$ 161,172

[Edit Fleet](#) | [Start Over](#)

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ABC Schools - 1996 DOCs Vehicle Group

- Quantity 7
- Type On Highway
- Target Fleet School Bus
- Class/Equipment School Buses
- Model Year 1996
- Retrofit Year of Action 2011
- Fuel Type Regular Diesel (ULSD), 15 ppm
- Fuel Volume 24000
- Veh. Miles Traveled 12000
- Idling Hours 3

[Technology](#)  
No retrofit technologies currently applied.  
To apply a retrofit technology, click on the link below.

[+ Add a new technology](#)

  
Add your first retrofit technology

[Edit Group](#) | [Delete](#)

---

[+ Add a New Vehicle Group](#)

[Quantify Emissions](#)

# Grant Application Example

- DOC Unit Installation Cost = \$40
- DOC Technology Cost = \$1,200

Enter Fleet Information Not logged in | [login](#)

[Start Over](#)

---

**ABC School District** Fleet

- **Fleet Type** On Highway / Non-road
- **State** Michigan

Total Project Funding \$ 161,172

[Edit Fleet](#) | [Start Over](#)

---

**ABC Schools - 1996 DOCs** Vehicle Group

- **Quantity** 7
- **Type** On Highway
- **Target Fleet** School Bus
- **Class/Equipment** School Buses
- **Model Year** 1996
- **Retrofit Year of** 2011
- **Action** Regular Diesel (ULSD), 15 ppm
- **Fuel Type**
- **Fuel Volume** 24000
- **Veh. Miles Traveled** 12000
- **Idling Hours** 3

[Edit Group](#) | [Delete](#)

---

**New Technology** Technology

Technology Type  
Emissions Control Devices

Technology  
Diesel Oxidation Catalyst

Apply To  (out of 7) with no technology

**Reduction by Pollutant**

NOX %

PM %

HC %

CO %

CO2 %

Install Cost  \$ per vehicle

Unit Cost  \$ per vehicle

[Save Technology](#) | [Cancel](#)

# Grant Application Example

Ready to  
Quantify the  
Calculation of  
Emission  
Reductions for  
 $\text{NO}_x$ , PM, HC,  
CO and  $\text{CO}_2$

The screenshot shows a web application interface titled "Enter Fleet Information". It is divided into two main sections: "ABC School District" and "ABC Schools - 1996 DOCs".

**ABC School District** (Fleet):

- Fleet Type: On Highway / Non-road
- State: Michigan
- Total Project Funding: \$ 161,172
- Buttons: Start Over, Edit Fleet, Start Over

**ABC Schools - 1996 DOCs** (Vehicle Group):

- Quantity: 7
- Type: On Highway
- Target Fleet: School Bus
- Class/Equipment: School Buses
- Model Year: 1996
- Retrofit Year of Action: 2011
- Fuel Type: Regular Diesel (ULSD), 15 ppm
- Fuel Volume: 24000
- Veh. Miles Traveled: 12000
- Idling Hours: 3
- Buttons: Edit Group, Delete

**Technology Mix 1** (Technology):

- Applied to 7 vehicles
- Diesel Oxidation Catalyst
- Buttons: Delete, Add a new technology

At the bottom of the interface, there is a button labeled "Quantify Emissions" and a link to "Add a New Vehicle Group".

# Grant Application Example

Output from the DEQ that estimates Annual and Lifetime Emission Reductions for the 7 DOCs for ABC School District's 1996 School Bus Fleet

Summary Emissions Results						
Annual	NOx (tons/year)	PM (tons/year)	HC (tons/year)	CO (tons/year)	CO2 (tons/year)	Diesel- Equivalent (gallons/year)
Baseline of Entire Fleet	12.1911	0.5988	0.9496	5.3494	266.4000	24,000.0000
Baseline of Engines Retrofitted	12.1911	0.5988	0.9496	5.3494	266.4000	24,000.0000
Percent Reduced (%)	0.0%	20.0%	50.0%	30.0%	0.0%	0.0%
Amount Reduced Per Year	0.0000	0.1198	0.4748	1.6048	0.0000	0.0000
Daily	NOx (kg/day)	PM (kg/day)	HC (kg/day)	CO (kg/day)	CO2 (kg/day)	Diesel- Equivalent (gal/day)
Kilograms Reduced Per Day (kg/day)	0.0000	0.2977	1.1801	3.9887	0.0000	0.0000
Lifetime	NOx (tons)	PM (tons)	HC (tons)	CO (tons)	CO2 (tons)	Diesel- Equivalent (gallons)
Baseline of Entire Fleet	138.1247	6.7849	10.7589	60.6090	3,018.3120	271,920.0000
Baseline of Engines Retrofitted	138.1247	6.7849	10.7589	60.6090	3,018.3120	271,920.0000
Percent Reduced(%)	0.0%	20.0%	50.0%	30.0%	0.0%	0.0%
Amount Reduced	0.0000	1.3570	5.3795	18.1827	0.0000	0.0000
Amount Emitted After Retrofit, Retrofitted Engines	138.1247	5.4279	5.3795	42.4263	3,018.3120	271,920.0000
Amount Emitted After Retrofit, Entire Fleet	138.1247	5.4279	5.3795	42.4263	3,018.3120	271,920.0000
Capital Cost Effectiveness (\$/ton), Retrofitted Engines	\$0.00	\$6,396.57	\$1,613.54	\$477.38	\$0.00	\$0.00
Total Cost Effectiveness (\$/ton), Retrofitted Engines	\$0.00	\$118,772.87	\$29,960.57	\$8,864.03	\$0.00	\$0.00

**Note:** The lifetime results are dependent on each vehicle group's remaining life. To determine the remaining life for each vehicle group, divide the lifetime results by the annual results using the Detailed Results tables below.

# Grant Application Example

## Lifetime Amount of Emissions Reduced (in Tons)

Lifetime	NOx (tons)	PM (tons)	HC (tons)	CO (tons)	CO2 (tons)	Diesel- Equivalent (gallons)
Baseline of Entire Fleet	138.1247	6.7849	10.7589	60.6090	3,018.3120	271,920.0000
Baseline of Engines Retrofitted	138.1247	6.7849	10.7589	60.6090	3,018.3120	271,920.0000
Percent Reduced(%)	0.0%	20.0%	50.0%	30.0%	0.0%	0.0%
Amount Reduced	0.0000	1.3570	5.3795	18.1827	0.0000	0.0000

# Grant Application Example

An estimate of annual health benefits and health avoidance costs from the reduction of diesel engine pollution.

The screenshot displays a web interface for 'ABC School District' with a 'Fleet' tab. It shows 'Fleet Type' as 'On Highway / Non-road' and 'State' as 'Michigan'. A navigation menu includes 'Summary Emissions Results', 'Detailed Results', 'Download Results', and 'Health Benefits'. The 'Health Benefits' section is active, showing 'Benefits Module Results' and a table of 'Health Benefits Results'.

**Benefits Module Results**

The table below estimates the benefits of reducing diesel emissions in the manner specified in the chosen scenario. The benefits are presented as the dollar value of avoiding health effects that result from exposure to PM2.5, such as premature mortality, chronic bronchitis, asthma attacks, non-fatal heart attacks, and others. These dollar values are based on a number of studies that EPA uses when estimating the health benefits of environmental rules. For more information about how these benefits are calculated see the [Health Benefits Methodology](#).

These estimates are more robust for projects that affect a larger geographic area and that result in greater emission reductions. Likewise, the sum of the benefits in each county is more robust than the individual county estimates.

**Health Benefits Results**

County and State	Annual Diesel PM Reduction (tons)	Annual Cost <sup>++</sup>	Annual Benefits <sup>++</sup>
Ingham, Michigan	0.1198	-	\$91,000
<b>Total</b>	<b>0.1198</b>	<b>\$910</b>	<b>\$91,000</b>

<sup>++</sup> [More information](#) is available on why costs and benefits are only presented on an annual basis.

The Benefits Module reports total monetized benefits, which is a sum of the benefits of an array of individual health endpoints affected by PM2.5 exposure. Data limitations prevent us from providing detailed incidence estimates for each health endpoint. Specifically, the underlying health data, including concentration-response relationships and baseline incidence rates, lack sufficient spatial resolution to support county-level estimates of incidence changes.

[Edit Counties](#)

[View/Download benefits table as Microsoft Excel File](#) | [as CSV \(comma separated values\) file.](#)

[↑ top of page](#)

# Grant Application Example

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These are based on the emission reductions from each type of diesel engine project.

## Health Benefits Results

County and State	Annual Diesel PM Reduction (tons)	Annual Cost <sup>++</sup>	Annual Benefits <sup>++</sup>
Ingham, Michigan	0.1198	-	\$91,000
<b>Total</b>	0.1198	\$910	\$91,000

# Grant Application Example

Pages 3-10

Work Plan, Section IV – Outputs and Outcomes

**EXAMPLE**

## V. Anticipated Outputs/Outcomes

### Outputs – Type of Fleet -Vehicles and Technologies Used in Project

Applicant Name: ABC School District		City: City of ABC		County: Ingham	
Fleet Type	Fleet Owner	Industry	Technology	Total Number of Vehicles/Eq.	Total Number of Engines Affected
School Bus	ABC School District	Public School	Diesel Oxidation Catalyst	15	15
Heavy Duty Truck	ABC School District	Public School	Certified Engine Repower	1	1
School Bus	ABC School District	Public School	Vehicle Replacement	1	1
School Bus	DEF School District	Public School	Diesel Particulate Filters	15	15
School Bus	DEF School District	Public School	Idle Reduction Heaters	3	3

# Grant Application Example

Pages 3-10

## Work Plan, Section IV – Outputs and Outcomes

### Outcomes – Short, Medium and Long-Term

- **Short Term Outcomes:** The ABC School District's Diesel Engine Project is expected to provide students, parents, and the staff of the school system with an increased awareness of idle time and the pollution that can result from excessive idling. A demonstration project, by the vendor of the equipment provided to the school district, has agreed to hold 5 evening educational sessions at each school district so that those that are interested can see how the new equipment functions and how it limits the levels of pollution in the vehicle and around the community. Both ABC and DEF School Districts have agreed to post a video of the educational sessions on the web, along with background information about the equipment and the benefits to the community's health.
- **Medium Term Outcomes:** Both ABC and DEF School Districts will track the amount of diesel fuel use to determine if restricted idling efforts, used in conjunction with the new technology, reduces the amount of fuel used, and thus the amount of diesel engine emissions coming from the school buses. At the conclusion of the project, ABC School District will use the U.S. EPA Diesel Emissions Quantifier (DEQ) to determine the annual and lifetime amounts of PM and NOx pollutants reduced, along with the level of hydrocarbons, CO and CO<sub>2</sub> reduced as well as track the cost-effectiveness of the overall project. Cost effectiveness includes tracking the savings generated from cost avoidance activities such as work place absenteeism and the development of health-based chronic ailments as asthma, cardiac disease and cancer. ABC School District's overall diesel engine emission reduction efforts are a part of the larger strategy by the City of ABC to track its carbon footprint (the amount of CO<sub>2</sub> reduced), by defining and applying activities that reduce CO<sub>2</sub> in Ingham county.
- **Long Term Outcomes:** ABC and DEF School Districts will provide the community with non-identifiable information from each school's annual health surveys and county health statistics so that parents and community members can track the health improvements that may take place as a result of the project. Both ABC and DEF School Districts will annually survey parents and staff to determine if there is an improved quality of life associated with the school buses that receive new technology. Given that this is the second diesel engine emissions reduction project that ABC School District has undertaken, it is working with the City of ABC and the City of DEF to incorporate additional diesel emissions reduction projects for each city's owned and operated diesel engine vehicles. Finally, ABC and DEF School Districts will also work with other school

# Grant Application Example

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Pages 3-10

## Work Plan, Section IV – Outputs and Outcomes

### Examples of Short-term outcomes

- An increased understanding of the environmental effectiveness of the implemented technology.
- Dissemination of the increased knowledge via list serves, web sites, journals, and outreach events.

# Grant Application Example

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Pages 3-10

## Work Plan, Section IV – Outputs and Outcomes

### Examples of Medium-term outcomes

- Cost effectiveness of project (in \$/ton or \$/lb).
- Health benefits achieved (health benefits may be measured by numbers of illnesses, health care costs, or missed work/school days avoided).
- Annual gallons of diesel fuel saved.

# Grant Application Example

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Pages 3-10

## Work Plan, Section IV – Outputs and Outcomes

### Examples of Medium-term outcomes

- Widespread adoption of the implemented technology.
- Annual pounds or tons of fine particulate matter (PM<sub>2.5</sub>) and NO<sub>x</sub> reduced.
- Greenhouse gases (GHG) or CO<sub>2</sub> and/or volatile organic compound (VOCs) reduced.

# Grant Application Example

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Pages 3-10

## Work Plan, Section IV – Outputs and Outcomes

### Examples of Long-term outcomes

- The level of health benefits achieved. Health benefits may be measured by numbers of illnesses (e.g. reductions in the number of children with asthma, health care costs, or missed work/school days avoided).

# Grant Application Example

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Pages 3-10

## Work Plan, Section IV – Outputs and Outcomes

### Examples of Long-term outcomes

- Documented improved ambient air quality, including antidotal testimony from populations of concern.
- The applicant, or their partner's investment in transportation, environmental protection and other activities that will provide long-term environmental and health benefits.

# Grant Application Example

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Pages 3-10

**Work Plan, Section IV – Outputs and Outcomes –**  
**How to Determine Outcomes and Cost**  
**Effectiveness**

Looking to report and approximate the annual and lifetime emissions reductions for the following pollutants: Nitrous Oxides (NO<sub>x</sub>), Particulate Matter (PM), Hydrocarbons (HC), Carbon Monoxide (CO) and Carbon Dioxide (CO<sub>2</sub>).

# Cost Effectiveness

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Pages 3-10

Work Plan, Section IV – Outputs and Outcomes

- Grant Project Cost Effectiveness of Project is determined by:

**Costs funded by the Grant (\$)**

---

Lifetime **Emissions Reductions (tons/yr.)**

# Grant Application Example

Determining Cost Effectiveness using the  
U.S. EPA Diesel Emissions Quantifier  
or The DEQ data

Outcomes--Cost-Effectiveness-Calculations

Type-of-Pollutant	Estimated-Emission-Reductions-(tons/yr)	Lifetime-Emissions-Reductions-(tons/yr)	Total-Grant-Cost-Effectiveness
PM	0.00	0.00	\$0.00
HC	4.56	60,719.39	\$2.65
CO	23,360	311,155.32	\$0.52
NOx	85,263.11	1,135,704.69	\$0.14
CO2	0.00	0.00	\$0.00

Amount-of-Grant-Funding-Used-for-Project-Activities: \$161,172.50

Source-of-Cost-Effectiveness-Calculations: The-U.S.-EPA-Diesel-Emissions-Quantifier

# Grant Application Example

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Pages 3-10  
Section VI  
Filling Out the Project's Budget

# Administrative Expenses

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## Need to Know Information to Complete the Grant Application's Budget:

- **Salary and Fringe Benefit** information for those participating and listed in the Administrative portion (Section III) of the work plan.
- Estimates of **technology or vehicle costs**, separated out by **labor and equipment**.
- Estimates of **travel needed** for the project.
- An identified **source of match or cost share** for the project.

# Administrative Expenses

---

- Grant funding can be used to offset the salary, fringe benefits and indirect costs of an organization for work that is done on a state DERA grant project.
  - Up to 40% of salary and indirect costs (up to 20% of salary and benefits) can be covered by grant funds.
- All work must be documented throughout the grant project period if reimbursement of administrative costs is requested in the grant application's budget.

# Grant Application Example

Grant application's Budget Form – in MS Excel Software.

This is a protected document so only certain fields can be filled in but not changed.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF ENVIRONMENTAL ASSISTANCE					
PROJECT BUDGET FORM (Authorized by 1994 P.A. 451)					
Applicant Name:					
Project Name:					
Tracking Code Number:					
STAFFING		GRANT	LOCAL MATCH		
NAME & TITLE	HOURS	AMOUNT	AMOUNT	TOTAL	
			\$ -	\$ -	\$ -
			\$ -	\$ -	\$ -
			\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
STAFFING Subtotal		\$ -	\$ -	\$ -	\$ -
FRINGE BENEFITS (not to exceed 40%)		RATE			
NAME & TITLE					
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
		\$ -	\$ -	\$ -	\$ -
FRINGE BENEFITS Subtotal		\$ -	\$ -	\$ -	\$ -
STAFFING AND FRINGE BENEFITS Subtotal		\$ -	\$ -	\$ -	\$ -
CONTRACTUAL SERVICES		HOURS or	RATE or		
NAME	UNITS	TOTAL			
			\$ -	\$ -	\$ -
			\$ -	\$ -	\$ -
			\$ -	\$ -	\$ -
			\$ -	\$ -	\$ -

# Budget - Staffing

10	STAFFING			GRANT	LOCAL MATCH	
11	NAME & TITLE	HOURS	RATE	AMOUNT	AMOUNT	TOTAL
12	Joe Schmoe, Transportation Director	500.00	\$ 21.00	\$ 5,250.00	\$ 5,250.00	\$ 10,500.00
13	Mary Lou Smith, Accountant	100.00	\$ 12.00	\$ 600.00	\$ 600.00	\$ 1,200.00
14					\$ -	\$ -
15					\$ -	\$ -
16			\$ -		\$ -	\$ -
17			\$ -	\$ -	\$ -	\$ -
18			\$ -	\$ -	\$ -	\$ -
19			\$ -	\$ -	\$ -	\$ -
20			\$ -	\$ -	\$ -	\$ -
21			\$ -	\$ -	\$ -	\$ -
22	STAFFING Subtotal			\$ 5,850.00	\$ 5,850.00	\$ 11,700.00

# Budget – Fringe Benefits

23 FRINGE BENEFITS (not to exceed 40%)		RATE			
24	NAME & TITLE				
25	Joe Schmoe, Transportation Director	25.00%	\$ 1,312.50	\$ 1,312.50	\$ 2,625.00
26	Mary Lou Smith, Accountant	25.00%	\$ 150.00	\$ 150.00	\$ 300.00
27	0		\$ -	\$ -	\$ -
28	0		\$ -	\$ -	\$ -
29	0		\$ -	\$ -	\$ -
30	0		\$ -	\$ -	\$ -
31	0		\$ -	\$ -	\$ -
32	0		\$ -	\$ -	\$ -
33	0		\$ -	\$ -	\$ -
34	0		\$ -	\$ -	\$ -
35	FRINGE BENEFITS Subtotal		\$ 1,462.50	\$ 1,462.50	\$ 2,925.00
36	STAFFING AND FRINGE BENEFITS Subtotal		\$ 7,312.50	\$ 7,312.50	\$ 14,625.00

# Budget – Contractual Services

	A	B	C	D	E	F
37	<b>CONTRACTUAL SERVICES</b>	<b>HOURS or</b>	<b>RATE or</b>			
38	NAME	<b>UNITS</b>	<b>TOTAL</b>			
39	Bob Ryan, ABC School Dist. Install Mechanic - DOCs	30.00	\$ 20.00	\$ 300.00	\$ 300.00	\$ 600.00
40	Kevin King, DEF School Dist Install Mechanic - DPFs	30.00	\$ 20.00	\$ 300.00	\$ 300.00	\$ 600.00
41	Heater Vendor - Installation for DEF School District	9.00	\$ 80.00	\$ 360.00	\$ 360.00	\$ 720.00
42	Engine Repower Vendor - Install for ABC School District	20.00	\$ 300.00	\$ 3,000.00	\$ 3,000.00	\$ 6,000.00
43				\$ -	\$ -	\$ -
44			\$ -	\$ -	\$ -	\$ -
45			\$ -	\$ -	\$ -	\$ -
46			\$ -	\$ -	\$ -	\$ -
47			\$ -	\$ -	\$ -	\$ -
48			\$ -	\$ -	\$ -	\$ -
49	<b>CONTRACTUAL SERVICES Subtotal</b>			\$ 3,960.00	\$ 3,960.00	\$ 7,920.00

# Budget – Supplies, Material and Equipment

	A	B	C	D	E	F
50	<b>SUPPLIES, MATERIALS AND EQUIPMENT</b>					
51	<b>SUPPLIES &amp; MATERIALS</b> (itemize)	<b>QUANTITY</b>	<b>COST</b>			
52	Diesel Oxidation Catalysts - ABC School District	15.00	\$ 1,200.00	\$ 18,000.00	\$ -	\$ 18,000.00
53	Diesel Particulate Filters - DEF School District	15.00	\$ 4,000.00	\$ 60,000.00	\$ -	\$ 60,000.00
54	Engine Repower and Parts - ABC School District	1.00	\$50,000.00	\$ 25,000.00	\$ 25,000.00	\$ 50,000.00
55	Idle Reduction Heater and Parts - DEF School District	3.00	\$ 1,600.00	\$ 2,400.00	\$ 2,400.00	\$ 4,800.00
56	Vehicle Replacement - ABC School District	1.00	\$89,000.00	\$ 22,250.00	\$ 66,750.00	\$ 89,000.00
57			\$ -	\$ -	\$ -	\$ -
58			\$ -	\$ -	\$ -	\$ -
59			\$ -	\$ -	\$ -	\$ -
60			\$ -	\$ -	\$ -	\$ -
61			\$ -	\$ -	\$ -	\$ -
62	<b>SUPPLIES AND MATERIALS Subtotal</b>			\$ 127,650.00	\$ 94,150.00	\$ 221,800.00
63	<b>EQUIPMENT</b> (any item over \$1000)					
64			\$ -		\$ -	\$ -
65			\$ -		\$ -	\$ -
66	<b>EQUIPMENT Subtotal</b>				\$ -	\$ -
67	<b>SUPPLIES, MATERIALS AND EQUIPMENT Subtotal</b>			\$ 127,650.00	\$ 94,150.00	\$ 221,800.00

# Budget – Indirect Costs

81	INDIRECT RATE (not to exceed 20% Staffing and Fringe Benefits)	0.00%	RATE		
82	INDIRECT COSTS (Summarize Below)		\$ -	\$ -	\$ -
83	TOTAL GRANT AND MATCH BUDGET		\$ 161,172.50	\$ 83,172.50	\$ 244,345.00
84	Project Percentage Split		65.96%	34.04%	
85					

# Budget – Sources of Match

89 SOURCES OF MATCH:		DOLLAR VALUE COMMITTED:		
90 Organization		In Kind	Cash	Total
91 ABC School District Local School Funds		\$ 10,612.50	\$ 91,750.00	\$ 102,362.50
92 DEF School District Local School Funds		\$ 300.00	\$ 2,760.00	\$ 3,060.00
93				\$ -
94		\$ -	\$ -	\$ -
95		\$ -	\$ -	\$ -
96		\$ -	\$ -	\$ -
97		\$ -	\$ -	\$ -
98		\$ -	\$ -	\$ -
99		\$ -	\$ -	\$ -
100		\$ -	\$ -	\$ -
101		Subtotal	\$ 10,912.50	\$ 94,510.00
102		Total Match Must Equal Amount in Budget Sheet Above		\$ 105,422.50

# Grant Application Example

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Pages 3-10

Section VII

Fleet Description

# Grant Application Example

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## ABC School District – Fleet Description

- Fifteen diesel oxidation catalysts (DOCs) for 15 diesel engine school buses used for transportation of ABC School District's children.
- Fifteen diesel particulate filters (DPS) for 15 diesel engine school buses used for transportation of DEF School District's children.
- One certified engine repower for ABC School District for one 1992 heavy duty Class 8 truck used for snow plowing and clearing during the winter. This is the only heavy duty truck in the ABC School District's fleet and was not scheduled to be replaced for another 7 years.

# Grant Application Example

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## ABC School District

**Early Repower vs. Early Replacement Demonstration:** The cost of a new and similar heavy duty truck that could be used for this purpose is estimated to be \$250,000, and the cost of the repower is estimated to be \$56,000. Given the body of the truck and other mechanics are in better-than-average working condition, the repower saves the school district \$194,000 over the cost of a new truck. That amounts to over \$27,000 a year for the next 7 years in savings to the school district. The new 2009 certified engine meets the following 2007 on-road vehicle diesel engine emission standards: PM - 0.01 g/bhp-hr, NOx -0.20 g/bhp-hr, CO - 14.4 g/bhp-hr and NMHC - 0.14 g/bhp-hr.

# Letters of Support

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- **Optional** but highly recommended for the grant applicant.
- Fleets used in a project but are not owned by the direct applicant must have a **current, signed letter of support** from the owners of the fleet that certifies approval and permission to participate in the project.

# Evaluation and Selection Criteria

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1. **Outputs, Outcomes and Overall cost-effectiveness of the project.**
2. **Linkage and ability to meet the National, Midwest and MDEQ priorities.**
3. **An applicant's administrative ability.**
4. **A well developed and clear project work plan.**
5. **Level of resources in excess of cost-share requirements.**

# What Are My Chances of Getting Grant Funding?

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It depends on...

- The number of grant applications received.
- The types and scopes of projects proposed.
- Where the projects are located in the state.
- Cost effectiveness of the project.

# Deadlines and Submission

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- This year, for the first time, the MDEQ is allowing electronic submission of an application by e-mail. The e-mail must be date stamped by our system by 5 p.m. EST or it is considered late and will not receive further consideration.
- E-mail submissions **MUST** include the required hard copy submissions as specified in the RFP or an application will not receive further consideration.

# Deadlines and Submission

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- Complete grant applications are due in the Lansing MDEQ Office of Environmental Assistance (OEA) by Wednesday, November 16, 2011 at 5 p.m. EST.
- Grant applications may be submitted by U.S. Postal Mail, Express Mail, In-Person and by E-mail (NO faxed applications).

# Grant Process Tidbits

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- Review the cost-share requirements carefully as they are not the same as those advocated by the U.S. EPA's RFP process.
- If your project in itself does not meet the minimum grant amount, collaborate with colleagues doing similar projects to meet the minimum grant submission requirement.

# Grant Process Tidbits

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- Don't forget! U.S. EPA is looking to states (and potential grantees) to demonstrate why a project is an accelerated repower or replacement. This information **MUST** be in the grant application.
- Additionally, repower and replacement projects must indicate why one type of project was chosen over the other.

# Grant Process Tidbits

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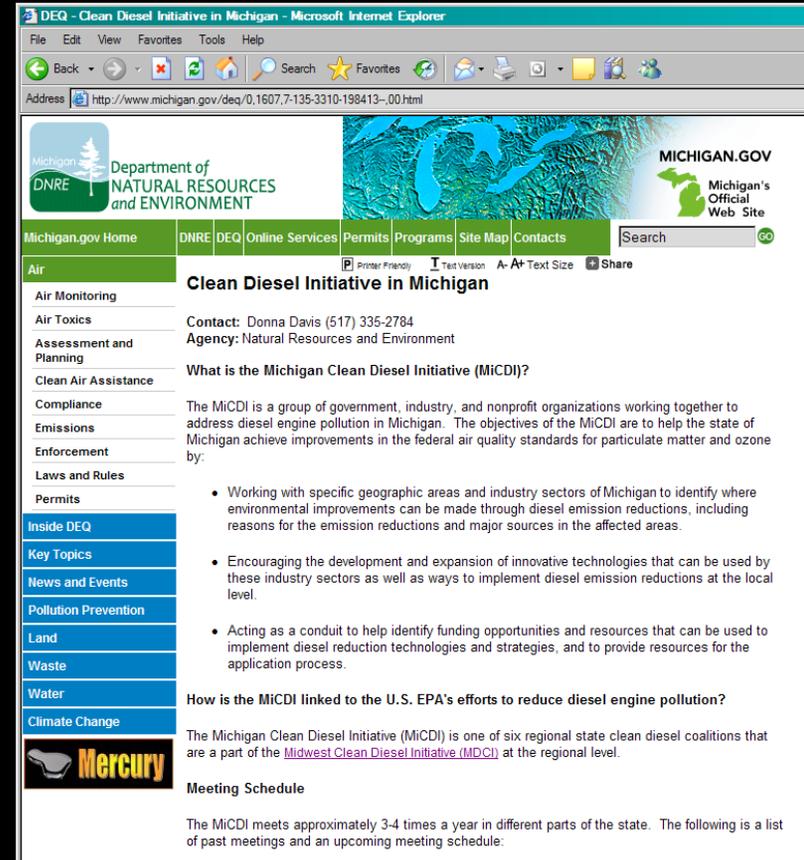
- **Important:** Don't wait until the last minute to quantify your potential emissions reductions using the U.S. EPA's Diesel Emissions Quantifier! The DEQ can be very temperamental and if you wait until the last minute, it may be down, in high use, etc. and you may not be able to complete your emission reduction calculations.
- Use the checklist at the end of the application package to ensure that you include all vital documents for a complete application.

# How to Find Grant Application Documents

All grant application documents and information about the Michigan Clean Diesel coalition are located on the MDEQ web site by visiting:

[www.michigan.gov/deqair](http://www.michigan.gov/deqair)

(Select “Spotlight” from the middle of the page and then “Clean Diesel Initiative in Michigan”)

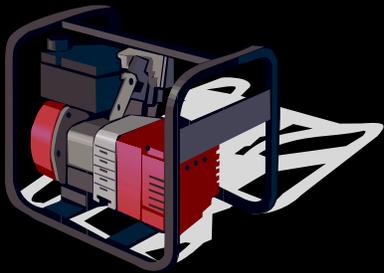


The screenshot shows a Microsoft Internet Explorer browser window displaying the MDEQ website. The address bar shows the URL: <http://www.michigan.gov/deq/0,1607,7-135-3310-198413--,00.html>. The page header includes the Michigan Department of Natural Resources and Environment logo and a navigation menu with links for Home, DNRE, DEQ, Online Services, Permits, Programs, Site Map, and Contacts. The main content area is titled "Clean Diesel Initiative in Michigan" and includes contact information for Donna Davis (517) 335-2784, the agency name (Natural Resources and Environment), and a section titled "What is the Michigan Clean Diesel Initiative (MiCDI)?" which explains the initiative's goals and lists several key points:

- Working with specific geographic areas and industry sectors of Michigan to identify where environmental improvements can be made through diesel emission reductions, including reasons for the emission reductions and major sources in the affected areas.
- Encouraging the development and expansion of innovative technologies that can be used by these industry sectors as well as ways to implement diesel emission reductions at the local level.
- Acting as a conduit to help identify funding opportunities and resources that can be used to implement diesel reduction technologies and strategies, and to provide resources for the application process.

Additional sections on the page include "How is the MiCDI linked to the U.S. EPA's efforts to reduce diesel engine pollution?", "The Michigan Clean Diesel Initiative (MiCDI) is one of six regional state clean diesel coalitions that are a part of the Midwest Clean Diesel Initiative (MDCI) at the regional level.", and "Meeting Schedule" which states that the MiCDI meets approximately 3-4 times a year in different parts of the state.

# Questions for Donna



# How to Get Others Involved in the MiCDI

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DONNA DAVIS

Michigan Department of  
Environmental Quality

(517) 335-2784 or [david8@michigan.gov](mailto:david8@michigan.gov)

Visit the MiCDI Web Site at:

[www.michigan.gov/deqair](http://www.michigan.gov/deqair)

(Select “Spotlight” from the middle of the page  
and then “Clean Diesel Initiative in Michigan”)

# Thank you!

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