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2010 Innovations Awards Application

DEADLINE EXTENDED: MARCH 15, 2010

ID # (assigned by CSG): **10-MW-23OH**

Please provide the following information, adding space as necessary:

State:

Ohio

Assign Program Category (applicant):

Infrastructure & Economic Development - Transportation

- 1. Program Name** – “Green Fleet Team”
- 2. Administering Agency** – Ohio Department of Transportation – District 9
- 3. Contact Person (Name and Title)** – Dave Kellough, Equipment Superintendent
- 4. Address** – 650 Eastern Avenue, Chillicothe, Ohio 45601
- 5. Telephone Number** – 740-774-8920
- 6. FAX Number** – 740-775-4889 or 740-773-2710
- 7. E-mail Address** – dave.kellough@dot.state.oh.us
- 8. Web site Address** – www.ohiogreenfleets.org

- 9. Please provide a two-sentence description of the program.**

The program is designed to significantly improve environmental stewardship and the performance of business and government vehicle fleets across Ohio through the reduction of diesel emissions and petroleum fuel consumption. As such, ODOT crews are asked to reduce engine idle time on dump trucks and use biodiesel as an alternative fuel whenever possible. It is part of the Ohio Department of Transportation’s “Go with Green” Strategic Initiative.

**10. How long has this program been operational (month and year)?
(Note: the program must be between 9 months and 5 years old on March 1, 2010 to be considered.)**

The program began August 13, 2008; thus, the program has been in existence for one year, seven months.

11. Why was the program created? What problem[s] or issue[s] was it designed to address?

The department's "Go with Green" Strategic Initiative states that ODOT will "use the best environmentally-sensitivity practices in our operations and pilot new green initiatives as ODOT leads by example in embracing environmental stewardship and reducing energy consumption." In addition, the department will measure how department projects, maintenance and operations impact water and air quality, and it will recommend ways to reduce negative impacts.

As part of this initiative, ODOT crews throughout the state are reducing engine idle time on the department's fleet of large dump trucks - which reduces diesel emissions into the air - and are using more biodiesel as an alternative fuel.

This specific program was created to decrease the amount of pollutants emitted into the atmosphere in all areas of high motor vehicle traffic; the amount of pollution is especially substantial in metro or urban areas. The program was also created to improve the environmental performance of business and government vehicle fleets across Ohio through diesel cleanup and other strategies.

By using an alternative, renewable resource, ODOT is able to promote a cleaner environment, improve air quality and health, reduce climate change and increase energy efficiency. The "Go with Green" initiative and the use of bio-diesel fuel in all trucks also works in tandem with District 9's commitment toward implementing other environmentally friendly efforts to reduce waste and recycle more.

12. Describe the specific activities and operations of the program in chronological order.

The specific activities began with the use of biodiesel as the alternative fuel product. Usage was monitored for a fiscal year period beginning July 1st and ending June 30th. It is continually monitored on a monthly basis with the final tabulations submitted to all districts within the Department of Transportation at the end of the fiscal year. This was followed by adoption of an anti-idle policy whereby the program measured the current hourly rate against the project the truck was completing. Idle time was then factored as a base measurement, and locations (operators) were challenged to reduce the idle time of equipment.

13. Why is the program a new and creative approach or method?

The adoption of alternative fuel as the main fuel source for the diesel fleet was a new concept, and the use of biodiesel fuel in ODOT's fleet of dump trucks is a creative and environmentally-friendly approach to promote cleaner exhaust, cleaner mechanical systems and cleaner air.

The creative approach was met by examining all the functions each fleet unit accomplished in a given year and issuing a challenge to reduce idle time based on a set base measurement. This made each operator aware of his/her influence to these goals and the impact to the environment.

14. What were the program's start-up costs? (Provide details about specific purchases for this program, staffing needs and other financial expenditures, as well as existing materials, technology and staff already in place.)

The set up of the complete biodiesel purchase included the finance/budget and department to encumber funds to cover the differential costs of the purchase of reported biodiesel products. Each area was equipped with the current diesel tanks that were cleaned to support biodiesel fuel. There was an initial cost increase for fuel filters for equipment as the biodiesel acted as a "cleaner," forcing the replacement of the older filters on the fuel tanks at an approximate cost of \$350.00. A centralized person created the new stock code to receive the fuel as biodiesel in the application system. Additionally, reports were designed to evaluate the use of the biodiesel along with the metrics for evaluating use and tracking idle time.

15. What are the program's annual operational costs?

With the program in effect for more than one year, the only rolling forward annual operational cost is the price differential of purchasing biodiesel over diesel. During the previous calendar year (January – December 2009), the operational cost for using biodiesel fuel was approximately \$282,180.00. The initial costs regarding filter changes ceased shortly after the program began.

16. How is the program funded? Does this program require the passage of legislation, executive order or regulations? If YES, please indicate the citation number.

This program is funded through each district's respective operations budget. It does not require passage of legislation, executive order and/or regulations; however, it is supported by Ohio HB-245. This bill was established to support and mandate the use of alternative fuels. The use is encapsulated as a gallon total amount each state agency is mandated to achieve. Thus far, this measure can be achieved at ODOT with partial alternative fuel purchases; however, complete biodiesel was used as a means to be environmentally conscious.

17. What equipment, technology and software are used to operate and administer this program?

The equipment most affected is the on-road and off-road diesel equipment, e.g., dump truck fleets, end loaders and pick-up trucks. The technology used to monitor this program is a mix of a database equipment management system application coupled with Graphical Query Language (GQL) reporting structure and Intranet-based reporting.

18. To the best of your knowledge, did this program originate in your state? If YES, please indicate the innovator's name, present address, telephone number and e-mail address.

This program was initiated in the State of Ohio through the efforts of the Ohio Department of Transportation, Ohio Legislature, and Clean Fuels Ohio. The program adoption, which led to the reduction of engine idle time and the use of biodiesel as an alternative fuel source, was initiated by the Ohio Department of Transportation.

The innovator of this program is Alisa DiSalvo, MAS-2, ODOT Central Office, 1980 W. Broad Street, Columbus, Ohio 43202; 614-351-2814;
adisalvo@dot.state.oh.us

19. Are you aware of similar programs in other states? If YES, which ones and how does this program differ?

There are programs in various (state) departments of transportation and city governments across the United States; however, each agency has taken different steps toward being environmentally conscious, including purchasing natural gas vehicles through diesel retrofits. We are unaware of any larger agency that has transformed the mainstay heavy fleet through biodiesel use and idle policies alone.

20. Has the program been fully implemented? If NO, what actions remain to be taken?

Yes. At this time the biodiesel and anti-idle have been fully implemented. We are currently exploring additional options to take this process to the next level.

21. Briefly evaluate (pro and con) the program's effectiveness in addressing the defined problem[s] or issue[s]. Provide tangible examples.

The tangible positive effects of this program include the running of heavy equipment in high emission areas; the reduction of pollutants released by these engines as defined by the EPA; the reduction of idle time that is measured on a project basis to capture the best utilization of the fleet; and the potential expansion of green technology since this first-phase implementation. The possible disadvantages of this program included the initial set up for biodiesel fuel use and contracts ensuring the correct year-round use with additives, as well as the initial increase of fuel filter use as the biodiesel worked its way through the system.

22. How has the program grown and/or changed since its inception?

Since the program's inception more focus has been given to environmental solutions for the entire fleet. It is a statewide initiative to meet biodiesel goals along with idle reduction time. As a result of this recent initiative, District 9 was one of two districts within ODOT to receive a three-star rating from Clean Fuels Ohio as part of the department's "Ohio Green Fleets" certification. In turn, both District 9 and 11 were automatically nominated for the national Government Green Fleet Award, which is open to all federal, state, and local government fleets in North America, and both districts placed in the Top 40 and made the list of 100 Best Fleets.

23. What limitations or obstacles might other states expect to encounter if they attempt to adopt this program?

The cost difference between purchasing biodiesel and diesel can be an obstacle. When environmental improvements are made, expenditures can run high and there is generally an initial increase to the cost outlay. Others may also encounter such cost increases related to the cleaning of fuel tanks and fuel filter changes. In addition, working with vendors to create a contract to ensure the quality of biodiesel being delivered throughout the year can prove to be a distraction.

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2010 Innovations Awards Application Program Categories and Subcategories

Use these as guidelines to determine the appropriate Program Category for your state's submission and list that program category on page one of this application. Choose only one.

Infrastructure and Economic Development

- Business/Commerce
- Economic Development
- Transportation

Government Operations and Technology

- Administration
- Elections
- Information Systems
- Public Information
- Revenue
- Telecommunications

Health & Human Services

- Aging
- Children & Families
- Health Services
- Housing
- Human Services

Human Resources/Education

- Education
- Labor
- Management
- Personnel
- Training and Development
- Workforce Development

Natural Resources

- Agriculture
- Energy
- Environment
- Environmental Protection
- Natural Resources
- Parks & Recreation
- Water Resources

Public Safety/Corrections

- Corrections
- Courts
- Criminal Justice
- Drugs
- Emergency Management
- Public Safety

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CSG Innovations Awards 2010
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Lexington, KY 40578-1910

Contact:

Nancy J. Vickers, National Program Administrator
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This application is also available at www.csg.org.