



FY 2016 and FY 2017 Source Reduction Assistance Grant Program

EPA-HQ-OPPT-2016-003

RiverCents Automotive Pollution Prevention Program

The program will allow DOEE to provide a comprehensive P2 education program to auto body shops and mechanics in the District of Columbia that emphasizes source reduction. The program consists of workshops, onsite technical assistance, newsletters, and a green certification program overseen by four of DOEE's departments. The project will allow DOEE to provide a coordinated approach to influence practices at auto body and repair shops and offer a clear, unified message about how to reduce pollution through source reduction. Businesses will be encouraged to develop and adopt source reduction plans.

Total Project Funding: \$149,453

Requested Funding:

\$74,623 for year 1

\$74,830 for year 2

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System for Award Management Registration Date:

SAM Registration date – 9/15/15

SAM Expiration date – 9/10/16

Programmatic Capability

The District of Columbia Department of Energy and Environment (DOEE) requests \$149,453.05 in federal funding from the U.S. Environmental Protection Agency (EPA) to execute a two-year project to create a comprehensive District approach to hazardous materials and greenhouse gas emissions source reduction. DOEE's program will consist of a workshop program, onsite technical assistance, regular newsletters, and a green certification program for auto body and repair shops in the District of Columbia. DOEE will deliver pollution prevention technical assistance, education, and training to approximately 40 auto repair shops that conduct mechanical repair of automobiles, auto body work, collision repair, and painting of automobiles. DOEE will engage shops in environmentally-sound and legally-correct business practices within the English-, Spanish-, and Amharic-speaking communities. DOEE's work within these communities will make it easier for auto-repair shops to learn how to prevent pollution, comply with environmental laws, and ensure public health. DOEE's work will focus on reducing air pollutants, water pollutants, hazardous wastes, and greenhouse gas emissions. DOEE requests \$74,623 for **year 1** and will provide an in-kind match of \$10,515.40. DOEE requests \$74,830.05 for **year 2** and will provide an in-kind match of \$4,454.80. Including the match amounts, the total project request is \$164,423.25.

Organizational experience: DOEE is the leading authority on environmental and energy issues affecting the District of Columbia. DOEE comprises approximately 300 engineers, biologists, toxicologists, geologists, technicians, inspectors, environmental specialists, policy analysts, administrators, public outreach specialists, and support staff. This project will comprise expert staff from 4 DOEE administrations (Urban Sustainability Administration, Environmental Services Administration, Energy Administration, and Natural Resources Administration). Within those administrations, the following DOEE divisions will be involved: Urban Sustainability Administration Division, Toxic Substances Division, Air Quality Division, Energy Efficiency Division, and Stormwater Management Division (SMD). Though all of these divisions currently collaborate to offer stakeholders various technical assistance workshops on environmental compliance, the SMD will manage and collect information for this innovative project.

Request Amount and Project Period: DOEE requests \$74,623 for year 1 and will provide an in-kind match of \$10,515.40. DOEE requests \$74,830.05 for year 2 and will provide an in-kind match of \$4,454.80. Including the match amounts, the total project cost is \$164,423.25. The grant funds will be managed by DOEE Environmental Protection Specialist, Clara Elias. She will liaise between the US EPA and the contracted entities which will fulfill some elements of DOEE's project. A budget narrative is provided on the last page of this proposal and specific budget calculations are provided as an attachment to the proposal. Below is a budget breakdown by year:

	Year 1	Year 2	Total
Requested Funding from EPA	\$74,623.00	\$74,830.05	\$149,453.05
In-kind Match Provided by DOEE	\$10,515.40	\$4,454.80	\$14,970.20
Total Program Cost	\$85,138.40	\$79,284.85	\$164,423.25

Past Performance – Examples of EPA grants awarded to DOEE within the last three years:

Grant Name	Award	Grant Description	Award Date
National Toxics Trends Station	\$66,581	The grant provides support for the national air toxics trend site (NATTS), part of a 27 site national network of air monitoring stations. This resulted in long term monitoring of air toxics levels.	7/1/14
State Indoor Radon Program 2015	\$299,296	This grant supports radon risk reduction activities that have resulted in increased radon testing and mitigation activities.	10/1/14
Title IV State Lead Program	\$469,136	This project resulted in a lead accreditation and certification program of lead based paint professionals; the monitoring of lead based paint activities; and issuing of enforcement citations.	10/1/15
Performance Partnership	\$385,131	This grant resulted in enforcement of pesticides regulations and certifications for pesticides applicators.	10/1/14
DC-DOE RCRA Hazardous Waste	\$555,972	This grant resulted in the transport, treatment, storage and disposal of hazardous waste; increased hazardous waste recycling; and proper management of waste and petroleum products at facilities.	10/1/14
Green Infrastructure Retrofits	\$500,000	This grant resulted in the retrofitting of an 11-acre site with green infrastructure to restore natural hydrology, and prevent flooding and erosion.	12/1/14
Non-Point Source Program	\$1,040,873	This grant resulted in the implementation of the EPA-Approved Section 319(h) non-point source (NPS) pollution control program activities.	10/1/14

Project Strategy

DOEE’s program will emphasize a state-wide new approach to hazardous materials and greenhouse gas emission source reduction, which will consist of workshops, onsite technical assistance, newsletters, and a certification program. This grant award will expand DOEE’s pollution prevention efforts innovatively among the automotive industry by:

- Strengthening source reduction content in trainings and in outreach practices
- Making resources more accessible to small businesses and to those operated by owners and managers who may not speak English as a first language
- Inviting existing partners to focus on P2 source reduction through on-site technical assistance and specific P2 plan that emphasizes source reduction

An advisory committee to the grant will ensure project fulfillment. This committee will comprise staff members from four DOEE administrations. Each advisory committee member will spend an average of 1 to 2 hours per month, or 12- 24 hours per year (24-48 hours during the course of 2 years) on this project. The advisory committee will:

- Attend quarterly meetings

- Submit an explanation and photo on a subject related to a DOEE division’s P2 expertise for a twice-yearly newsletter
- Contribute to and review division-specific content for one-pager and P2 plan template
- Design and give division-specific P2 presentations for twice-yearly workshops and help coordinate the workshop
- Conduct interviews of auto repair shop owners and mechanics prior to the program’s start

This chart outlines DOEE’s strategy for conducting the program through project tasks and specific staff responsibilities.

Task	Task Details	Responsible Division
Industry Interviews	Interviews will be conducted with auto repair shop owners. 20 businesses will be interviewed to gauge buy-in a receive feedback on the project.	Stormwater Management Division (SMD) (Clara Elias)
Flyer/Fact Sheet	A draft will be created and will be provided to appropriate parties for translation services.	SMD (Clara Elias) +Communications Division will coordinate a subgrantee to provide graphics and layout.
Newsletters and mailings	Newsletters will be mailed to auto repair shops. Newsletter input will be collected and a contact list will be maintained.	Urban Sustainability Administration will maintain contacts list and coordinate printing/mailing. Input collected by Toxic Substances Division, SMD, and Urban Sustainability Administration.
DOEE Website	All project webpages are updated frequently. All relevant webpages will provide information about the program to auto repair shop owners.	Toxic Substances Division, SMD, and Urban Sustainability Administration. Communications Division to update website.
Workshop Feedback	Follow-up with participants to collect information on the workshop and self-reported data on source reduction practices.	SMD (Clara Elias)
Onsite Technical Visits and Certification Program	In-person visits will be made at each participating auto repair shop.	SMD Clara Elias will coordinate a subgrantee so that we can reach Spanish-speaking and Amharic-speaking community members.
Data	Gather reporting data.	All participating divisions to assist with collection. Stormwater Management Division (Clara Elias) will coordinate a subgrantee who will collect information at onsite visits.
EPA Reporting	DOEE will report on program progress to EPA.	Stormwater Management Division will assist with gathering data and completing reports.

Environmental Health/ Human Health Concerns

Pollutants of great concern, with regard to the protection of water quality and air quality, are the focus of this project. Commonly found pollutants and wastes at auto repair shops include: used oil, washer solutions (ignitable), paints and paint thinners (ignitable), lead wheel weights (toxic), concentrated cleaning products (corrosive), battery acid (corrosive), aerosol products (ignitable), spoiled gasoline (ignitable), car or forklift batteries, florescent lamps, mercury thermostats, and solvents, such as spray perch (perchloroethylene, air pollutant), among others. Many of these contain volatile organic compounds that affect air quality for workers, consumers, and the public.

Connections between DOEE project to NEA and EPA program elements

- ***Climate Change Mitigation/Prevention of Greenhouse Gas Emissions NEA:*** P2 plans provided to auto repair shops will include ways to reduce energy use, use alternative energy, and reduce the use of chemicals and practices that contribute to GHG emissions.
- ***State or Community Approaches to Hazardous Materials Source Reduction NEA:*** P2 plans provided to auto repair shops will include ways to reduce the use of toxic and hazardous wastes, their handling and storage, and proper disposal.
- ***Technical assistance available to businesses:*** This will be provided through workshops and on-site technical assistance to businesses. Bi-annual newsletters will highlight local, innovative solutions for P2 source reduction that partners will implement.
- ***Target audiences who lack information:*** Fact sheets and on-site technical assistance will be provided in English, Spanish, and Amharic, and potential other languages. Focus will be in-person and on hands-on learning to assist an ESL population, those with limited reading proficiency, and those who may not have access to a computer or smartphone.
- ***Training on source reduction techniques.*** Workshops and onsite visits will include training on source reduction, pollution prevention techniques, and instructions for how to develop and implement P2 source reduction plans.

Environmental Results and Measurement

Qualitative and quantitative estimates of expected outcomes and outputs

Hazardous material source reduction and greenhouse gas emission prevention will be achieved through a newly developed DOEE P2 source reduction program that draws on the strengths of several of DOEE's agencies. These will include onsite technical visits, development of individual business plans, and workshops that address source reduction of hazardous materials and prevention of greenhouse gas emissions through material substitution, alternative energy use, and energy savings. The following are the anticipated outputs:

- 111 onsite technical assistance visits
- 40 businesses receive onsite technical assistance and develop Pollution Prevention Plans that reflect EPA's Environmental Protection Hierarchy
- 4 workshops on pollution prevention hosted by DOEE
- 90 total participants attend the workshops
- 25 businesses are certified as reaching a high level of pollution prevention and 10 are in the process of gaining certification
- At least 130 stakeholders are connected to the resources and information needed to reduce the use of hazardous materials and the emission of greenhouse gasses

Plan for tracking progress toward expected outcomes and outputs

- **Data from Onsite Technical Visits.** Information on the amounts and types of hazardous materials and energy used, and amount of water used during operations will be gathered during 111 on-site technical visits at 40 businesses as part of a regular inspection/review of pollution prevention activities. These results will be aligned to the onsite technical visits. A third party subgrantee will collect and do an initial analysis of the data. DOEE will do the final analysis and report the data to the EPA.
- **Data from workshop participants.** 90 workshop participants will be asked to provide self-reported information about their pollution prevention activities, and an estimated 30 will respond with data used to track progress. These results will be tied to the workshops. DOEE will collect, conduct analysis, and report the data to EPA.

Estimated Annual Outputs:

P2 Activity	Outputs Year 1	Outputs Year 2	Behavior Changes
Onsite Technical Assistance	-20 technical assistance visits to pilot new program -10 auto body and repair shops receive technical visits as part of pilot (10 are reached 4 times, 11 are reached 3 times, 19 are reached 2 times) -10 auto body and repair shops develop pollution prevention plans that guide future activities -Staff at auto body and repair shops know how and what to implement to prevent pollution and do so through source reduction. -1 template pollution prevention plan for auto body and repair shops is available online. -Data on materials, water, and energy used, pollution prevention practices, and source reduction efforts are collected at 20 site visits, providing pre and post data. -Reduction in the amount of land, air and water pollution in the District from auto body and repair shops.	-91 technical assistance visits -30 new auto body and repair shops receive technical visits (11 are reached 3 times, 19 are reached 2 times) -10 pilot businesses from year 1 receive 2 additional technical visits (20 total visits) -30 more auto body and repair shops develop pollution prevention plans that guide future activities. -Staff at auto body and repair shops know how and what to implement to prevent pollution and do so through source reduction. -Data on materials, water, and energy used, pollution prevention practices, and source reduction efforts are collected at 91 site visits, providing pre and post data. -Reduction in the	-Staff at auto body and repair shops know how to and regularly take action on minimizing pollution prevention through source reduction. -Auto body and repair shops reduce pollution through source reduction by addressing energy and water use, material use, and onsite practices and control measures. -Auto body and repair shops regularly ask for assistance with improving pollution prevention measures and addressing other pollution prevention issues that arise.

P2 Activity	Outputs Year 1	Outputs Year 2	Behavior Changes
		amount of land, air and water pollution in the District from auto body and repair shops. -40 posters given out during site visits.	
Pollution Prevention Workshops	-2 workshops for auto body and repair shops -45 total workshop participants -15 participants provide self-reported data on their P2 activities and feedback on the workshops (est. 30% response rate from 90 total participants). -Reduction in the amount of land, air and water pollution in the District from auto body and repair shops.	-2 workshops for auto body and repair shops -45 total workshop participants -15 participants provide self-reported data on their P2 activities and feedback on the workshops (est. 30% response rate). -50 posters given out at workshops -Reduction in the amount of land, air and water pollution in the District from auto body and repair shops.	-Auto body and repair shops reduce pollution through source reduction by addressing energy and water use, material use, and onsite practices and control measures. -Staff at auto body and repair shops know how to and regularly take action on minimizing pollution prevention through source reduction .
Outreach and education through newsletters and other media	-P2 Source Reduction Program is established at DOEE . -2 newsletters are mailed to District auto body and repair shops over the course of 2 years. -1 press releases raise awareness of grant-funded activities. -Website updated to connect partners with source reduction information. -Increased visibility and knowledge of the pollution prevention program -Reduction in the amount of land, air and water pollution in the District from auto body and repair shops.	-2 newsletters are mailed to District auto body and repair shops over the course of 2 years. -1 press releases raise awareness of grant-funded activities, especially certification program. Website updated -Increased visibility and knowledge of the pollution prevention program. -Reduction in the amount of land, air and water pollution in the District from auto body and repair shops.	-Auto body and repair industry utilizes DOEE's P2 source reduction program. -Auto body and repair shops continue to take action and improve their P2 efforts with inspiration and knowledge gained in the newsletter. -Public is more aware of P2 activities at auto body and repair shops and choose shops that are correctly implementing P2 measures.
Communications	-Certification program is	-25 businesses are	-Customers prefer to

P2 Activity	Outputs Year 1	Outputs Year 2	Behavior Changes
and Certification	developed and designed.	certified as reaching a high level of pollution prevention and 10 are in the process of gaining certification. Pamphlets are developed and 1,000 are disseminated about the program. Branding for newly established P2 source reduction program.	use auto body and repair shops that have the P2 certification -Auto body and repair shops are incentivized to increase P2 efforts. -Public is more aware of P2 activities at auto body and repair shops and choose shops that are correctly implementing P2 measures.
Overall Program	-60 stakeholders involved in the work of EPA's NEAs	-130 stakeholders involved in the work of EPA's NEAs	-Auto body and repair shops are incentivized to increase P2 efforts. -Public is aware of P2 activities at auto body and repair shops and choose shops that are correctly implementing P2 measures.

This table reflects DOEE's Estimated Annual Environmental Outcomes based on program activities.

P2 Activity	b. Hazardous Pounds Reduced	c. MTCO₂e Reduced	d. Water Gallons Reduced	Dollars saved from (b) – (d)
Onsite Visits	712,500 lbs	94 MTCO ₂ e	36,000 gal	\$255,000
P2 Workshops	400,800 lbs	53 MTCO ₂ e	20,000 gal	\$143,000
Total	1,113,300 lbs	80 MTCO₂e	56,000 gal	\$398,000

Partnerships

- *Auto body and repair shops:* DOEE will conduct interviews with these businesses prior to launching the technical assistance and certification program to determine motivators, barriers, and effective language and outreach styles. These partners will be engaged through a variety of means that include: online resources, mailings, in-person workshops, and onsite technical visits. Feedback on the design and performance of the project will be gathered from the partners once a year for onsite technical visits and after every workshop. This project will help auto body and repair shops in developing long-term pollution prevention plans and set in place a revised P2 program that focuses on source reduction. An annual workshop and newsletter will continue to engage partners after the end of this project.
- *Latino and Ethiopian auto body repair professionals:* DOEE will work to reach Latino and Ethiopian auto body and repair professionals with assistance from the DC Mayor's Office of

Latino Affairs and the Office of African Affairs and with the help of bilingual staff, which will provide onsite technical assistance. The development of outreach materials in Spanish and Amharic will also support DOEE's outreach efforts and throughout the program.

- *Washington Metropolitan Auto Body Association*: This industry association will assist in promoting this program to members and participate on the advisory committee to develop a relevant and valuable P2 source reduction program for District auto body and repair shops.

Transferability

How Project Will Be Packaged To Promote Activities: As part of the development of the program, 20 interviews of local auto body and repair shops will be conducted, and will help inform the development of the program. Businesses will be given the following incentives to participate in the program:

- **Increased safety for workers** and an overall decreased liability from handling toxic materials
- **Improved worker and consumer atmosphere**, including better air quality, thus yielding to increased worker productivity and more consumers
- **Money savings** and/or increased earnings
- Convenient, timely, on-site **technical assistance** and follow-up from DOEE
- A **unique improvement plan** based on their business operation
- Frequent **updates on regulatory needs**, incentive programs DOEE offers (e.g. solar, RiverSmart, etc), and compliance assistance
- **Certification as a P2 business** in the District of Columbia, which will yield a more favorable image with the public

Timeline

DOEE's detailed two-year timeline is a separate attachment to this proposal.

Link to EPA Strategic Plan

Project information will be gathered in three ways:

1. Workshop participants will be invited to self-report information on pollution prevention practices before the workshop and six to eight weeks post-workshop (pre and post data).
2. Staff providing onsite technical assistance will collect information during visits.
3. Shops with hazardous materials will be required to report toxic waste to DOEE. This will track overall reduction in the use of hazardous materials in the District.

Budget

DOEE requests \$74,623 for year 1 and will provide an in-kind match of \$10,515.40. DOEE requests \$74,830.05 for year 2 and will provide an in-kind match of \$4,454.80. Including the match amounts, the total project cost is \$164,423.25.

- DOEE Personnel: DOEE will provide 118 staff hours to the program, which will be used as match.
- Technical Subgrantee: A technical subgrantee will provide 111 onsite visits, data analysis, and assist with the creation of the certification program. It will take roughly 580 hours.
- Communications Subgrantee: A communications subgrantee will provide branding and outreach materials for the project and help develop the certification program and its material, for roughly 158 hours.
- Fringe: Fringe covers costs associated employee compensation at a rate of 35 percent.
- Indirect: Indirect costs are associated with administrative and other overhead at an agency negotiated rate of 50 percent.
- Travel:
 - Mileage: 100 trips @ about 12 miles per visit = 12,000 miles or 200 miles in the first year and 1,000 miles in the second year. This mileage will be used for providing onsite technical assistance. The estimated 12 mile per trip was deduced by studying the size of DC and the location of its auto body and repair shops. Map attached.
 - Metro Fares: 60 one-way trips will provide 30 onsite technical visits and will encourage the technical subgrantee to use public transportation to get to metro-accessible sites.
- Printing:
 - Mailings: 4 mailings will reach 250 businesses each. Each mailing includes a one-page double sided newsletter and an envelope for a total of 1,000 pieces of paper and 1,000 envelopes.
 - Posters: 200 laminated posters with information on how to implement P2 source reduction measures will be printed and shared with businesses that attend the P2 workshops and participate in the technical visits. Roughly \$20 each.
 - Pamphlets: 1,000 pamphlets about the certification program will be printed and disseminated at locations where it is likely to reach auto body and repair personnel.
 - Decals: 40 decals will be printed to assist certified businesses with sharing their work with their customers. Roughly \$7 each.
- Clipboards: 200 clipboards printed with the program's branding and contact information will be given with partners to assist with regular site inspections. Roughly \$5 each.
- Postage: Postage will be use to mail the 4 newsletters to 250 businesses each. Estimated \$200 using bulk mailing rates.