



**FY 2018 and FY 2019 Pollution Prevention Grant Program
EPA-HQ-OPPT-2018-001**

GreenWrench Automotive Pollution Prevention

EPA Region 3

National Emphasis Areas Supported:

- NEA #1 - Business-Based Pollution Prevention Solutions Supporting Toxic Substances Control Act (TSCA) Priorities and Chemical Safety
- NEA #3 - Hazardous Materials Source Reduction Approaches in States or Communities

The Department of Energy and Environment (DOEE) proposes a comprehensive pollution prevention (P2) education program to effect source reduction, to include auto body shops and automotive repair technicians in the District of Columbia. The program comprises P2 technical assistance, a green certification program, training at technical schools, and guidelines and recommendations for products that use safe chemicals. The program will be managed by experts across subject areas within four DOEE departments. This project is a coordinated approach to influence practices that reduce or eliminate water, air, and solid waste pollution at auto body and repair shops and creates an effective, unified message about how to reduce pollution through source reduction. Moving forward, beyond the grant period, District of Columbia businesses will be encouraged to develop and adopt source reduction plans.

Total Project Funding: \$251,716

Requested Funding: \$125,796

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A. Project Summary/Approach

The District of Columbia Department of Energy and Environment (DOEE) requests \$125,796 in funding from the U.S. Environmental Protection Agency (EPA) for an expansion effort to its GreenWrench Automotive Pollution Prevention Project (Project). This funding will grow the scope and scale of the District of Columbia's GreenWrench Program, which provides free, robust, and thorough guidance on pollution prevention, and rigorous training to District automotive repair technicians and auto body shops. DOEE will support this request with \$125,920 in match. The match will include \$71,920 of in-kind funds from the time partners, including participating shops and technical school students, spend on the Project and \$54,000 from DOEE's Stormwater Enterprise fund. The total Project cost is \$251,716, which includes the match amounts.

The GreenWrench Program was launched in the fall of 2017 with strategic assistance and funds from the EPA's Source Reduction Assistance Grant program. The program is based on research which allows DOEE to identify opportunities and barriers for engaging the District's automotive repair industry and language with which to promote the adoption of P2 best management practices (BMPs). During the summer and fall of 2017, thirty-two shops completed in-person and phone surveys, responses to which were used to develop a communication strategy (see Appendix C for the strategy). Extensive market research yielded a productive outreach period, during which 27 shops were recruited within two months. This expansion Project will help build and maintain this momentum into a familiar, trusted city-wide program with strong brand recognition within the District of Columbia's automotive industry and among its clients.

DOEE manages the GreenWrench Program and provides technical assistance that encourages District auto body and repair shops to implement Pollution Prevention (P2) Plans. The GreenWrench program is offered free of charge – and provided in English, Spanish, and Amharic – to make resources more accessible to small businesses and to those operated by owners and managers who may not speak English as a first language.

The GreenWrench Program offers on-site technical assistance through an expert third-party grantee, which helps each auto repair shop to: develop a customized P2 Plan using a template, train employees on how to implement the P2 Plan, and track the implementation of P2 BMPs. Off-site workshops provide an outline of the environmental regulations and allow shops to ask questions. During the most recent workshop, DOEE staff took workshop participants to the Hickey Run outfall, which has a history of illicit oily discharges. This Project will allow the program to add an additional 60 shops to the original estimate of 42 shops, and allow DOEE to continue offering the GreenWrench Program to disadvantaged communities in the District.

More than half of the District's automotive repair shops are within the Anacostia River Watershed, including those that drain to Hickey Run (see Appendix D, Auto body and repair shops in the District of Columbia). DOEE stormwater inspectors have identified automotive repair facilities as one of the major sources of pollution to Hickey Run, where petroleum products and sanitary discharges are the leading causes of pollution. Many of the repair shops in the District share one and two-bay garages with limited storage space, and have high

turnover, all of which can lead to limited knowledge of environmental regulations and the lack of space and resources to implement P2 BMPs.

DOEE's GreenWrench Project will emphasize a state-wide approach to hazardous materials and greenhouse gas emission source reduction, which will consist of technical assistance, certification, training, and the promotion of safer chemical usage. GreenWrench's current contributions will be expanded to reach an additional 60 shops, to shift industry culture by training aspiring automotive repair technicians on P2 BMPs, and encourage shops to use safer chemical alternatives, by asking them to test and review products. The Project is based on community based social marketing to shift behavior and encourage innovation, and industry engagement.

A. i. Specific P2 Actions and Methods.

Total Project budget is \$251,716.

A. i. 1. Technical Assistance. Budget: \$156,510.

This activity will provide technical assistance to auto body and repair shops (partners) through a) on-site visits, b) quarterly newsletters, and c) workshops. This will be done through the strategy outlined below.

1. On-site visits to businesses will help them develop and implement a tailored P2 Source Reduction Plan (P2 Plan). The free visits will encourage 30 existing partners to further reduce sources of pollution (this assumes roughly 75% of the original 42 remain active in the program), and recruit 60 new shops to join the program. Each shop will be visited at least twice a year, with new shops being visited four times within the first year. These visits will be provided in English, Spanish, and Amharic and will be conducted during the duration of the grant period after the grant has been awarded.
 - a. **P2 Source Reduction Plans:** P2 Plans outline what businesses can do to address land, air, and water pollution by emphasizing EPA's Environmental Protection Hierarchy – source reduction, recycling, treatment, and disposal. DOEE is developing a template P2 Plan that will include a list of best management practices and resources, such as checklists, diagrams, and P2 assistance contacts within the District government that can be tailored to each shop based on the BMPs and activities on site. Main topics include: stormwater pollution prevention, hazardous material reduction and proper handling of hazardous waste, air pollution prevention, energy efficiency, and renewable energy options. The template is expected to be finalized prior to this Project, and will be improved upon as we gather feedback from shops on its effectiveness.
2. Quarterly newsletters will foster understanding and innovation by partners, encourage the adoption of BMPs, and build peer recognition and support for the program. The newsletter will be published every quarter throughout the grant period, and shared by mail, posted online, and emailed to a Project list serve. The newsletter will include case studies primarily of partnering shops and tips on how to reduce air and stormwater pollution, the amount of toxic materials and hazardous waste, and energy use.

3. Off-site workshops provided by DOEE will give an overview of environmental regulations, share BMPs for source reduction, and provide a venue for partners to collaborate and share solutions that have worked for them. Two workshops will be offered each year in the fall and spring.

A. i. 2. GreenWrench Certification. Budget: \$14,360.

The GreenWrench Certification program will advertise a business's efforts to its customers and provide incentive to implement additional BMPs in order to gain higher levels of certification. Window decals will be provided to those who receive certification and a list of certified businesses will be available on the GreenWrench webpage in order to advertise the program to consumers. This Project will allow DOEE to encourage the roughly 20 certified shops to implement new P2 BMPs to gain higher levels of certification. Outreach activities and other outreach measures, such as press releases and social media posts will both promote the program to new shops and encourage customers to patronize businesses that are working to reduce pollution. During the second year, DOEE will host a round table on the certification program that will include a recognition ceremony for shops that have attained the highest level of certification. This will help motivate shops and allow for networking and peer-learning.

A. i. 3. GreenWrench Prep. Budget: \$33,800.

This is a new element of the GreenWrench Program. DOEE will integrate workshops on source reduction and environmental regulations into automotive technician programs at technical schools in the District. This will involve developing a curriculum during the second quarter of the grant and teaching four workshops, one every quarter except during the summer quarter when low attendance is expected. These trainings will help instill the concept that pollution prevention is an essential element of an automotive technician's responsibility, and equip students with the knowledge with which to implement P2 BMPs.

A. i. 4. Research and Promote the use of Safer Chemical Alternatives. Budget: \$45,936.

This is a new element of the GreenWrench Program. Partners will be invited to test and review alternative products that contain safer chemical alternatives. This will both serve as an incentive for businesses to participate in the Program and encourage shops to adopt safer chemical use practices. Partners participating in the testing of products will share their experience with written or video reviews that will be made available on the GreenWrench web page and included in the GreenWrench Toolbox Newsletter (see Section A. i. 1. 2. above). The reviews and feedback will be incorporated into a technical report of the products that will be made available online and in printed version, and in which the products will be evaluated based on cost, effectiveness, and toxicity. Product testing and review will occur during the first year of the grant, and the review developed during the fifth quarter to allow time to disseminate the information during the grant period.

A. i. 5. EPA Reporting. Budget: \$1,110.

This activity will evaluate the environmental and fiscal impact of the GreenWrench Project. The grantee will collect and report data to DOEE quarterly. These reports will include the raw data and an appropriate analysis. This data will include pounds of hazardous materials and emissions reduced, gallons of water saved, metric tons of carbon dioxide equivalents reduced (MTCO_{2e}), and dollars saved by shops through implementing P2 BMPs. Semi-annual and final reports will report on the progress made and how the Project contributes to meeting goals in EPA's Strategic Plan. The final report will be made available to other jurisdictions, so they are able to

utilize resources and lessons learned from the Project in order to implement their own compliance assistance for automotive shops. An overview of the Project budget and a detailed project narrative can be found in Appendix A.

A. ii. Work Products Offered

Table 1 outlines the work product (outputs) that will be developed and offered by this Project and the expected outcome of each P2 activity. Table 2 provides an estimated timeline with which Project outputs are expected to be completed, and will serve as milestone markers for tracking progress.

Table 1. Summary of Activities, Outputs, and Outcomes

Activity	Outputs	Outcomes
Technical assistance	<ol style="list-style-type: none"> 1. On-site visits provide technical assistance: <ol style="list-style-type: none"> a. 30 existing partners continue involvement b. 60 new partners c. 60 facility-specific P2 Plans d. 360 on-site visits e. Outreach materials distributed: <ol style="list-style-type: none"> i. 500 outreach flyers ii. 220 signs iii. 100 posters iv. 175 chamois v. 500 pens 2. GreenWrench Toolbox Newsletter <ol style="list-style-type: none"> a. Quarterly newsletters posted online b. 200 newsletters mailed each quarter, or 1,600 total newsletters 3. Environmental Workshops for Automotive Industry <ol style="list-style-type: none"> a. 4 workshops attended by 60 participants b. Completed surveys from workshop participants 	<ul style="list-style-type: none"> • Staff at auto body and repair shops know how to and regularly take action on minimizing pollution prevention through source reduction. • Partnering shops reduce pollution with source reduction by addressing energy and water use, material use, and on-site practices and control measures. • Quantifiable reductions in hazardous pounds reduced, MTCO₂e reduced, water gallons reduced, and dollars saved by implementing the above. (see section B, Table 3, on page 10) • Partnering shops regularly ask for assistance with improving pollution prevention measures and addressing other pollution prevention issues that arise. • Auto body and repair shops continue to take action and improve their P2 efforts with inspiration and knowledge gained in the newsletter. • District automotive repair shops incorporate P2 BMPs as standard operating procedures.
Certification program	<ol style="list-style-type: none"> 4. GreenWrench Certification <ol style="list-style-type: none"> a. 30 new businesses certified b. 10 existing certified businesses increase their certification level 	<ul style="list-style-type: none"> • Auto body and repair shops are incentivized to increase P2 efforts in order to achieve higher levels of certification

Activity	Outputs	Outcomes
	c. 1 recognition event in year 2 5. Customer Outreach a. 8 outreach events attended b. Giveaways created and disseminated i. 1,000 outreach flyers ii. 500 air pressure gauges iii. 500 pens	(green, gold, and platinum). <ul style="list-style-type: none"> • Public is aware of P2 activities at auto body and repair shops and choose shops that are correctly implementing P2 measures.
GreenWrench Prep	6. Develop Curricula a. 1 curricula b. 1 pre and post survey to gauge knowledge retention 7. Conduct Workshops a. 4 workshops b. 200 students reached c. 400 completed surveys (2 per student)	<ul style="list-style-type: none"> • Aspiring automotive repair technicians know which actions they can take to implement P2 BMPs, how to implement them, and why it is important. • District automotive repair shops incorporate P2 BMPs as standard operating procedures.
Safer Chemical Research and Use	8. Test and review products a. 10 business partners test products b. 12 products tested include degreasers, wheel weights, and washing solutions 9. Share results of testing a. 10 videos or reviews of products by business partners 10. Develop and disseminate technical review of products a. 1 Technical report summarizing review of products that is made available online and in print copy.	<ul style="list-style-type: none"> • Automotive repair shops incorporate safer chemicals into their operations, and are encouraged to test new products that contain non-toxic chemicals.
EPA Reporting	11. Gather and analyze performance measures a. 8 quarterly reports from grantee with performance measures progress and data analysis 12. Report on program progress to EPA a. 3 Semi-annual reports and 1 final report b. Lessons learned are shared with other jurisdictions	<ul style="list-style-type: none"> • The environmental and fiscal impact of GreenWrench program is quantified and contributes to meeting goals in EPA's Strategic Plan. • Other organizations utilize lessons learned and resources developed by the Project. • DOEE meets the reporting requirements of the P2 Grant Program.

Table 2. Timeline

Activity	Activity Details	Year 1 Quarters				Year 2 Quarters				Total
		1	2	3	4	5	6	7	8	
Technical Assistance	1. Issue grant	1								1 grantee
	2. On-site visits develop and implement P2 plan		50	50	50	50	55	55	50	360 site visits to 80 shops
	3. Quarterly newsletters	1	1	1	1	1	1	1	1	8 newsletters
Certification program	4. Workshops		1		1		1		1	4 workshops
	5. Business certification		5	5	6	6	6	6	6	40 businesses evaluated
	6. Customer outreach		1	2	1	1	1	1	1	8 Outreach events
GreenWrench Prep	7. Develop a curriculum		1							1 curricula and survey
	8. Conduct workshops			1	*	1	1	1		4 workshops
Safer chemical research and use	9. Test and review products		5	5						10 businesses test products
	10. Share results of testing			5	5					10 product reviews
	11. Develop and disseminate technical review of products					1				1 technical report
EPA Reporting	12. Gather and analyze performance measures	1	1	1	1	1	1	1	1	8 quarterly reports
	13. Report on program progress		1		1		1		1	4 reports to EPA

** No workshops will be given during the last quarter of the first year because attendance is expected to be low during summer break.*

A. iii. Project Benefits

As part of the development of the program, DOEE interviewed 30 local auto body and repair shops and a communications strategy was developed (see Appendix C). Businesses will be offered the program free-of-charge and will also be given the following incentives to participate:

- **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 saved**, rebates earned, and/or increased earnings
- Convenient, timely, on-site **technical assistance provided** and follow-up

- A **unique improvement plan** developed based on their business operation
- Frequent **updates on regulatory needs and incentive programs** provided by DOEE offers (e.g. solar, RiverSmart, etc.), and compliance assistance
- **GreenWrench certification** in the District of Columbia, which will yield a more favorable image with the public

The main target audience, small auto body and repair shops (NAICS 811111) in the District of Columbia, often lacks information or understanding of P2 BMPs. During previous onsite visits with the GreenWrench Program, there were several shops that did not know the regulations on used oil and were burning used oil as a heat source. These shops were unaware of District used oil disposal requirements that prohibiting this activity. To help ensure that these and other environmental regulations are understood, fact sheets and on-site technical assistance will be provided in English, Spanish, and Amharic, and potential other languages. In-person outreach and hands-on learning will assist a population that does not speak English as a first language, those with limited reading proficiency, and those who may not have access to a computer or smartphone.

A. iii. 1. Support of EPA Goals

This Project will support the goals set out in the FY 2018-2022 EPA Strategic Plan and the P2 National Emphasis Areas (NEAs).

1. EPA Strategic Plan: See section B, Environmental Results, for estimated pollutant reductions.

- *Objective 1.1 – Improve Air Quality.* The Project will reduce sources of air pollution by encouraging automotive repair shops to reduce vehicle idling times, adopt safer painting practices, switch to non-toxic sprays and aerosols, and install energy saving measures and alternative energy sources at their shop.
- *Objective 1.2 – Provide for Clean and Safe Water.* The Project will help protect and restore water quality in District waterways by reducing sources of stormwater pollution. Roughly two thirds of the District automotive repair shops are in the Anacostia River Watershed, which has been found to be impaired for organics and metals, such as copper, zinc, and polycyclic aromatic hydrocarbons found in petroleum, oil, and lubricants. By providing a P2 Plan and on-site assistance, the Project will lead to the implementation of effective stormwater management practices and a switch by partners to products that do not contain these pollutants. For instance, it will teach shops about proper storage and spill response and encourage the use of copper-free brake pads, lead-free wheel weights, and non-toxic degreasers.

2. National Emphasis Areas:

- *NEA #1 Business-based Pollution Prevention Solutions Supporting Toxic Substances Control Act (TSCA) Priorities and Chemical Safety.* The Project will provide technical assistance to auto body and repair shops to identify and pilot alternatives to chemicals on the TSCA inventory. It will do this by helping the shops identify economically advantageous options during activity 1, technical assistance, and allow them to test alternatives in activity 4, research and promote the use of safer chemicals, before having to invest in them. Shops will be encouraged to use Safer

Choice products and the Safer Choice product listing. Product reviews will be shared with the automotive industry in the District through the GreenWrench newsletter and website.

- *NEA #3 Hazardous Materials Source Reduction Approaches in States and Communities.* The Project will provide P2 technical assistance to encourage the District's automotive industry to adopt non-toxic and low-toxic alternatives. It will do this by (i) teaching partners to recognize and take steps to reduce the use of hazardous chemicals, water, and energy; (ii) encouraging the exchange of information and ideas using the newsletter, workshops, and recognition event, and (iii) encouraging the adoption of P2 BMPs that will allow partners to achieve and exceed their compliance with federal and local environmental regulations.

A. iv. DOEE and Partner Roles

- 1. Technical assistance grantee:** During the first quarter of this Project, DOEE will award a grant to provide on-site technical assistance and to evaluate shops for the certification program. The grantee will develop shop-specific P2 Plans using the P2 Plan Template, and collect information during site visits on the practices adopted by the shop. This data will be used to calculate pollution reductions and money saved by implementing P2 BMPs. This information will be provided to DOEE and used to create case studies to highlight P2 BMPs being implemented by partners. The grantee will develop the curriculum and provide workshops to technical schools in partnership with DOEE, and oversee the implementation of the safer chemicals research and use activity. The entity will summarize their work at the end of the grant period with a final report.
- 2. Auto body and repair shops:** NAICS, 811111, General Automotive Repair. DOEE will continue working existing GreenWrench participants, expand outreach efforts to include additional shops, and will focus outreach to small businesses. These partners will be engaged through a variety of means that include: online resources, mailings, in-person workshops, and on-site technical visits. This Project will help partners develop long-term P2 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.
- 3. Technical Schools:** NAICS, 611519, Other Technical and Trade Schools, Mechanic's Schools. There are several automotive technical programs within the District, including Excel Automotive Institute, the University of the District of Columbia's (UDC) Community College Division of Workforce Development, and the District Department of Employment Services' DC Infrastructure Academy. These technical schools look to provide District of Columbia residents with job skills training that enable them to pursue employment opportunities at little or no cost. GreenWrench Prep will allow for students to learn about environmental regulations and P2 BMPs that they can implement in their field of work. The goal of engaging these partners is to help shift the culture among automotive repair shops to include P2 BMPs as standard operating procedures and to provide them with a strong skill set that will help make them more valuable to future employers.
- 4. 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 on-site technical assistance. The development of outreach materials in Spanish and Amharic will also support DOE's outreach efforts and throughout the program.

5. **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.
6. **DOEE Steering Committee:** The DC Department of Energy and Environment will work closely with sub-grantees selected through a grant competition to support our project efforts and achieve our stated milestones. Moreover, an advisory committee comprising of experts from within DOE across topic areas and the Washington Metropolitan Auto Body Association (WMABA). 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. To ensure the grant's overall success, the advisory committee will:
 - o Attend quarterly meetings
 - o Submit an explanation and photo on a subject related to a DOE division's P2 expertise for a quarterly newsletter
 - o Contribute to the outreach strategy for recruiting new partners and to identify channels with which to disseminate products developed by the program
 - o Design and give division-specific P2 presentations for twice-yearly workshops and help coordinate the workshop

B. Environmental Results

This Project focuses on the pollutants of greatest concern for air and water quality. Commonly found pollutants 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), vehicle batteries, fluorescent lamps, mercury thermostats, and solvents. Many of these contain volatile organic compounds that affect air quality for workers, consumers, and the public.

Table 3 reflects DOE's estimated annual environmental outcomes based on program activities. To estimate, it was assumed 90 shops adapt potential pollution prevention practices and service an average of 200 vehicles per year with each practice being adopted by roughly 50% of partners. Appendix E has additional information on how these estimates were calculated.

Table 3. Estimated Total Environmental Outcomes

P2 Activity	b. Hazardous Pounds Reduced	c. MTCO₂e Reduced	d. Water Gallons Reduced	Dollars saved from (b) – (d)
Technical Assistance	62,500	200	50,000	\$101,000
Safer Chemicals	14,500	30	100,000	\$ 2,500
Total	77,000	230	150,000	\$103,500

B. i. Plan for Tracking Progress Toward Expected Outcomes and Outputs

Hazardous material source reduction and greenhouse gas emission prevention will be achieved through the GreenWrench Project that draws on many of DOE's strengths. These will include on-site 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. In addition it will encourage the adoption of safer chemical products by allowing partners to test and review product and share their experience with the rest of the District's automotive industry.

Information on the amounts and types of hazardous materials and energy used, amount of water used during operations, and amount of money saved implementing P2 BMPs will be gathered during technical assistance activities. This will include data from on-site technical visits as part of a regular review of pollution prevention activities and from businesses who self-reported information about their pollution prevention activities using an online survey. These results will be aligned to the on-site technical visits. A third party grantee will collect and do an initial analysis of the data. DOEE will do the final analysis and report the data to the EPA. Information on progress towards other expected outcomes and outputs are outlines in Table 4.

Table 4. Performance Measures

Activity	Measurement of Success	Goal
1. Technical Assistance	<ol style="list-style-type: none"> 1. # partners 2. Partner retention 3. Yearly participant survey to id how to improve program 4. Improved reductions in the use of hazardous chemicals, water, and energy and money saved by doing so. 	<ol style="list-style-type: none"> 1. 90 partners: 30 existing; and 60 new. 2. 75 partners are involved at the end of the grant period, or an 85% retention rate. 3. 150 completed participant surveys. 4. See Table 3 for goals for money saved by implementing P2 BMPs and reductions in pollutants, water use, and energy.
2. Certification Program	<ol style="list-style-type: none"> 1. # certified 2. # certified businesses that improve rank 3. Survey certified businesses to see if the certification program is helping with customer retention and recruitment. 	<ol style="list-style-type: none"> 1. 30 new businesses certified. 2. 10 existing certified businesses increase their certification level.
3. GreenWrench Prep	<ol style="list-style-type: none"> 1. # students reached 2. # technical schools engaged 3. Survey results on existing knowledge and knowledge retention 	<ol style="list-style-type: none"> 1. 200 students reached at 2 technical schools. 2. 90% of workshop participants show in increased understanding of P2 BMPs.
4. Research and promote the use of safer chemicals	<ol style="list-style-type: none"> 1. Survey existing partners on (i) ideas for which products to test, (ii) usefulness of technical report, and (iii) amount of product substitutions. 	<ol style="list-style-type: none"> 1. 75% of partners find the reviews helpful. 2. 40% of partners start using products with safer chemicals. 3. 30 copies downloaded or

Activity	Measurement of Success	Goal
	2. Popularity of technical report: # downloads or # physical copies of technical report shared.	physical copies of the technical report shared.

C. Programmatic Capability

The District of Columbia Department of Energy and Environment (DOEE) requests \$125,796 in federal funding from the U.S. Environmental Protection Agency (EPA) to execute a two-year Project to expand a comprehensive District approach to hazardous materials and greenhouse gas emissions source reduction. DOEE's program will consist of a workshop program, on-site technical assistance, a green certification program, technical school workshops, and research into safer chemical alternatives for auto body and repair shops in the District of Columbia. DOEE will deliver pollution prevention technical assistance, education, and training to approximately 90 auto repair shops and 200 aspiring automotive repair technicians 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.

C. i. 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 four DOEE administrations (Urban Sustainability Administration, Environmental Services Administration, Energy Administration, and Natural Resources Administration) as well as the Office of the Director. Within those administrations, the following DOEE divisions will be involved: Toxic Substances Division, Air Quality Division, Energy Efficiency Division, and Watershed Protection Division (WPD). Though all of these divisions currently collaborate to offer stakeholders various technical assistance workshops on environmental compliance, the WPD will manage and collect information for this innovative project.

C. ii. Past Performance

Examples of EPA grants awarded to DOEE within the last three years are listed in Table 5.

Table 5. Example of EPA Grants Awarded to DOEE

CFDA	Grant ID #	Grant Title	Amount	Description	Start Date	End Date
66.717	96348401	Source Reduction; Automotive Pollution	\$168,141	Influence mechanic behavior and practices at auto body and repair shops in the DC area.	10/1/16	9/30/18

CFDA	Grant ID #	Grant Title	Amount	Description	Start Date	End Date
66.418	96344301	2016 Clean Water Projects	\$2,688,349	Construction of Categorically Green, non-point source projects as identified in the grant application dated 5-26-16.	10/1/16	9/30/19
66.418	96333101	Clean Water Projects	\$3,112,247	Provide funding to the District of Columbia, DOEE for the construction of Categorically green, non-point source projects as identified in the grant application	10/1/14	9/30/18
66.460	00349616	Nonpoint Source Implementation Program	\$978,191	Implement the EPA Approved CWA Section 319(h) nonpoint source (NPS) pollution control program activities.	10/1/15	9/30/20
66.454	00346718	Water Quality Management Planning	\$100,000	To assist in carrying out EPA- approved Section 604(b) water quality management planning activities.	10/1/17	9/30/18

C. iii. Plan and Approach for Expenditure of Grant Funds

The timeline outlined in Table 2 (page 6) outlines much of DOEE's strategy for implementing the Project in a timely manner, for details, including yearly budget and quarterly budget for the first year of the grant, please see Appendix B, Plan for Timely Expenditure of Grant Funds. During the first quarter of the project period, DOEE will issue a subgrant through federally compliant subgranting process and in accordance with DOEE's process for meticulously and fairly selecting a grantee to support project efforts. This subgrant selection process is in accordance with the 2 Code of Federal Regulations 200, the Uniform Grant Guidance.

During the first two quarters of the Project, supplies will be purchased for outreach materials, such as chamois, tire pressure gauges, pens, and posters. During the second year of the grant, the budget emphasizes personnel time. DOEE will receive deliverables outlining progress made by the grantee and budget expenses. These deliverables include quarterly and final reports. Throughout the grant period, DOEE will manage its subgrantees through a variety of monitoring efforts, including on-site visits, participation in workshops, phone calls, budget reviews, and desktop monitoring. DOEE is committed to stewarding a positive, collaborative relationship with all sub-grantees in an effort to better align the better with federal initiatives and achieve overall project goals.