#### **APPENDIX B**

### SAMPLE IMPLEMENTATION MANUAL

# Diesel Filter Replacement Program Sample Draft Implementation Manual For Fiscal Year 2018-19

The Implementation Manual for FY 2018-19 Diesel Filter Replacement Program will be developed by CARB, in conjunction with the Grantee, after execution of the Grant Agreement through a public work group process. The Implementation Manual must be made available and may be periodically updated as needed to clarify program requirements and improve program effectiveness.

Mobile Source Control Division February 15, 2019



# DRAFT IMPLEMENTATION MANUAL FOR THE DIESEL FILTER REPLACEMENT PROGRAM

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#### I. INTRODUCTION AND BACKGROUND

#### A. Funding Background

In 2007, Governor Schwarzenegger signed into law the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007 (AB 118, Statutes of 2007, Chapter 750). AB 118 created the Air Quality Improvement Program (AQIP), a voluntary incentive program administered by the California Air Resources Board (CARB or the Board), to fund clean vehicle and equipment projects, air quality research and workforce training.

As required in Health and Safety Code (HSC) Section 44274(a), the Board adopted regulatory guidelines in 2009 for AQIP. The Guidelines for the AB 118 Air Quality Improvement Program (Guidelines)<sup>1</sup> define the overall administrative requirements and policies and procedures for program implementation based on the framework established in statute. Central to the Guidelines is the requirement for a Board-approved annual funding plan developed with public input. The funding plan is each year's blueprint for expending AQIP funds appropriated to CARB in the annual State Budget. The funding plan focuses AQIP on supporting development and deployment of the advanced technologies needed to meet California's longer-term, post 2020 air quality goals.

With the passage of AB 8 (Perea, Chapter 401, Statutes of 2013) the funding for AQIP is extended until January 1, 2024. AB 8 also requires CARB, when considering projects for AQIP funding, to provide preference to projects with higher benefit-cost scores.

#### B. Project Background

In 2012, Cleaire Advanced Emission Controls, Incorporated (Cleaire) voluntarily recalled its LongMile verified diesel emission control system (VDECS or PM filter). During the recall, Cleaire replaced the LongMile with either a certified silicon carbide core, a Cleaire Muffler Module (CMM), or removed the entire system. However, several months later Cleaire ceased operation and their assets were acquired by ESW CleanTech Incorporated (ESW CleanTech or ESW), a manufacturer of verified on-road and off-road diesel emissions control strategies. ESW CleanTech has provided product support of the Cleaire product line since the closure.

Between May 2015 and March 2017, the Sacramento Metropolitan Air Quality Management District (SMAQMD) and ESW CleanTech entered into a Grant Agreement to provide reimbursement for up to \$6.3 million in filter substrate replacements through the Proposition 1B Goods Movement Emission Reduction Program (Proposition 1B or Prop 1B). These replacements ensured reductions of particulate matter consistent with the original system operations prior to the recall.

<sup>&</sup>lt;sup>1</sup> The Guidelines for the AB 118 Air Quality Improvement Program are available at: <a href="https://www.arb.ca.gov/msprog/aqip/aqip.htm">www.arb.ca.gov/msprog/aqip/aqip.htm</a>

However, some fleets could not qualify for Proposition 1B funding or could not meet required temperature or engine family criteria.

Staff will work closely with the Grantee and stakeholders to determine final eligibility criteria and identify potential funding recipients.

#### II. PROGRAM OVERVIEW

The Diesel Filter Replacement Program is administered and implemented through a partnership between CARB, ESW Cleantech and the Grantee (selected via a competitive CARB grant solicitation). CARB will set the requirements and develop the eligibility criteria for eligible Diesel Filter Replacement projects to apply for funding through the program. The Grantee is responsible to verify all the project eligibility requirements have been met by the applicants, and to distribute funding after an applicant has submitted the supporting documentation and required items.

The FY 2018-19 Grant Solicitation and the Funding Plan, identify the minimum requirements for implementing the Diesel Filter Replacement Program. The draft Implementation Manual for the FY 2018-19 Diesel Filter Replacement Program (Implementation Manual) provides the necessary definitions, explanations, and processes associated with the minimum requirements. A final Implementation Manual will be developed by the Grantee and CARB, in conjunction with ESW Cleantech, through a public work group process upon execution of the Grant Agreement. The Implementation Manual may be periodically updated by the Grantee in conjunction with CARB as needed to clarify program requirements and improve program effectiveness.

Key milestones for Diesel Filter Replacement Program implementation for FY 2018-19 are identified in Table 1.

Table 1 - Draft Implementation Timeline

Action Item	Date or Time Period
FY 2018-19 Diesel Filter Replacement funding is available to award to eligible Diesel Filter Replacement Projects. Installations proceed.	June 2019
Project implementation concludes	December 2020

#### III. SAMPLE APPLICANT PROCESS

This section defines the respective duties and requirements of the Grantee and Contractor in implementing the Diesel Filter Replacement Program.

The Grantee shall work with prospective contractor ESW Cleantech and CARB to develop a final Implementation Manual through a public work group process in coordination with CARB and ESW Cleantech.

#### A. The Application Process

The Grantee is responsible to contract for project implementation to receive applications from ESW Cleantech, verify all the by eligible project requirements are met and distribute funds for completed projects. Depending on the Grantee's application, CARB anticipates the following general process for each completed project in Figure 1. The Grantee shall collaborate with ESW Cleantech and CARB on a final process.

ESW Cleantech contacts vehicle owner, determines vehicle status and interest, and sets appointment. Technician performs a pre-inspection check of vehicle to determine vehicle suitability and installs data logger. Data logger is detached and data analyzed to determine suitability for substrate or PM filter replacement. Installation scheduled and work is Consultation needed if completed. Training to fleet provided. new PM filter is to be installed. Paperwork completed and sent monthly to Grantee. Application checked and payment approved by Grantee.

Figure 1- Sample Diesel Filter Replacement Process Flow

#### B. Grantee and Prospective Contractor Responsibilities

The prospective contractor ESW Cleantech shall coordinate with the Grantee to:

- a. Identify eligible projects and contact potential applicants to coordinate and schedule upgrade.
- b. Conduct site visits, inspections, data logging, and installations (including pre-and post-inspections of the installed filter substrate replacement kit). Notify the Grantee if the PM Filter and/or any related equipment shows any evidence of tampering observed during the pre-inspection.
- c. Provide written justification for any vehicle to the Grantee that is determined to be non-viable for installation of the filter substrate replacement kit and identify an appropriate CARB-verified Level 3 diesel emission control strategy (DECS) retrofit device from their list of CARB currently verified devices.
- d. Receive permission from Grantee, in consultation with CARB, to install a new verified PM filter when a substrate replacement is not appropriate based pre-inspection check and the data logging report documentation stating the vehicle did not meet the temperature requirement. Testing and analysis documents completed under previous PM filter replacement programs may be considered.
- e. Total cost of the replacement CARB-verified Level 3 DECS shall not exceed \$20,000, subject to change, including all applicable labor, taxes, or additional costs and/or fees, and removal of the previously installed equipment without Grantee and CARB approvals.
- f. Install the filter substrate replacement kit or new PM filter (per CARB Verification Procedure) on viable and eligible vehicles that participate in the program. Equipment disposal shall be in an appropriate manner.
- g. Notify the Grantee after the installation is complete and submit on a periodic basis (anticipated to be monthly) an invoice with supporting documentation for reimbursement.
- h. Grantee will use the approved criteria, payment authorization limit, and requirements to review, verify the project eligibility, and approve or disapprove applications and document the process.

- i. The Grantee will have 30 working days to reimburse the applicant after determining that the Claim for Payment packet(s) are complete.
- j. Customer and vehicle data are to be collected for each installation, entered into a database, and upon request shall be downloaded and sent to the Grantee.
- k. Provide a part testing report of all failed components that result in exceedance of any Payment Authorization Limits. Photographs may be required.
- I. Program participants are not to be charged for any additional costs or fees for the installation of the filter substrate replacement kit or new PM filter, subject to Grantee approval. Entering into a separate agreement with the Program Participant to cover additional parts and labor not covered by the Diesel Filter Replacement Program is prohibited unless approved by the Grantee and CARB.
- m. Educate applicants/participants on proper use and maintenance of the diesel PM filter in accordance with the Verification Procedure outlined in California Code of Regulations Title 13, Section 2706(v).

#### IV. PROJECT REIMBURSEMENT REQUIREMENTS

As a condition for receiving CARB funds, the applicant must comply with the requirements Diesel Filter Replacement Program. Final requirements will be developed by CARB and the Grantee through a public work group process, upon execution of the Grant Agreement. The applicant is responsible for reviewing the Diesel Filter Replacement Program requirements.

The applicant must submit the supporting documentation to the Grantee after the installation is complete and submit on a periodic basis (anticipated to be monthly) an invoice with supporting documentation for reimbursement.

- a. Vehicle Owner/Operator
- b. Company Name
- c. Vehicle Unit Number
- d. Vehicle Identification Number
- e. Vehicle Year/Model
- f. Vehicle Body Type/Application
- g. Engine Information & Family Name
- h. PM Filter Family Name and Serial Number
- i. Customer Contact Information
- j. Pre-Installation Compatibility Check List for Installation

- k. Program Reimbursement Request Form
- I. Program Reimbursement Invoice
- m. Description of any extra tasks completed
- n. Total Cost including itemized amounts
- o. Approval Documents for any excess charges
- p. Confirmation that training and warranty information was provided

Upon completion and verification of all requirements, the Grantee distributes reimbursement to the Applicant.

#### V. ELIGIBILITY CRITERIA FOR PROJECT PARTICIPANT

This section discusses the criteria of eligible projects for funding under the Diesel Filter Replacement Program and the specific requirements that a project and the entity must meet to be considered eligible for funding. At CARB's discretion, these requirements may change during the program term or through the public work group process.

Vehicles qualified for funding must have had an eligible recalled Cleaire Longmile PM filter installed and may qualify for one of the following projects:

- a. Substrate replacement kit installation
- b. Verified diesel PM filter replacement

The Implementation Manual will determine final eligibility criteria and priority of potential funding recipients. Eligibility criteria may include, but not be limited to: age of the vehicle, whether the vehicle is subject to any upcoming regulatory requirements, type of operations, whether the vehicle is eligible for substrate replacement or full diesel particulate matter filter replacement, and location or operation in disadvantaged or low income communities. Vehicles eligible for the substrate replacement kit installation shall receive priority due to the greater cost-benefit effectiveness.

Emissions reductions must be surplus to regulatory requirements per AQIP Guidelines. Participating fleets shall be compliant with CARB diesel regulations. Eligible vehicles may not have any DMV VIN Stops or registration holds through CARB Enforcement actions.

#### VI. ADDITIONAL RESPONSIBILITIES

The Grantee must meeting the following:

a. Maintain copies of all disapproved applications and related correspondence.

- b. Establish and maintain financial and project records of projects funded by the Grantee (see Sample Grant Agreement, Section K).
- c. Store all records in a safe and secure storage facility that maintains confidentiality and provides fire and natural disaster protection (see Sample Grant Agreement, Section M).
- d. Develop and maintain accounting procedures to track expenditures by grant award specified.
- e. Establish a process for returned award funds as a result of uncashed checks, prorated returns, cancellations, etc.
- f. Respond to public inquiries regarding the Diesel Filter Replacement Program.
- g. Provide periodic data summaries to the public in response to data requests.
- h. Establish and maintain oversight authority to verify projects, are on track to complete the project milestones, and funds are spent as intended and for the approved costs.
- i. Provide a monthly filter substrate installation schedule or one mutually agreed upon. In addition, a schedule of projected installations should be provided to the Grantee and updated periodically but no less than on a quarterly basis.
- j. Provide quarterly Status Reports to CARB in an agreed upon format.
- k. Provide CARB with The Diesel Filter Replacement Program Final Report that summarizes and evaluates total fund expenditures, projects funded, estimated emission reductions achieved for each project, outreach efforts, implementation challenges, and recommended potential program improvements of the Sample Grant Agreement for more details).
- I. Meet applicable requirements or statutes, the AB 118 AQIP Guidelines, the FY 2018-19 Funding Plan, this solicitation, the Grant Agreement with CARB, and the Implementation Manual.

#### VII. TERM AND CONDITIONS

The Grantee of the Diesel Filter Replacement Project is responsible for meeting the terms and conditions of the program. The specific terms and conditions for the eligible entity who applies for the Diesel Filter Replacement and the application process will be determined by CARB through a public work group process, after the Grant Agreement is executed.

#### VIII. DEFINITIONS

Definitions will be developed through the public workgroup process.

#### ATTACHMENT A

#### SAMPLE FORMS FOR THE DIESEL FILTER REPLACEMENT PROGRAM

The Grantee will work in conjunction with ESW Cleantech to develop an efficient application and payment process and are for illustrative purposes only. Sample examples that were used in previous PM filter replacement programs are in Exhibits I through IV. Final forms may also include certain terms and conditions determined by CARB.

#### Exhibit I – Sample Electronic Data Submittal

Categories	Data
End User Customer	
Engine Serial Number	
Unit Number	
Product Name	-
Kit Number	
MLC Part Number	
MLC Serial Number	
Verification Label Serial Number	
EPA Family	
Application	
Vehicle Type	
Vehicle Make	
Vehicle Model	
Vehicle Year	
Engine Make	
Engine Hours	
ngine Miles	3-8-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3-3
Engine Model	
Engine Number	
Engine Year	
End User Customer	
Customer Name/ID	3. 2
Customer Contact	
Customer Address	
Customer City	- 1. U - 3 1 - 1. U - 1. U
Customer State	
Customer Zip Code	
Sustomer Phone Number	
Dealer/Distributor ID	

# Exhibit II – Sample Reimbursement Request

Customer Name: Contact Name: Contact Number:		
	Date:	
	Location:	
Unit Number:	Vehicle Type:	
Engine Make:	Engine Model:	
Engine Rating: Engine Family:	Engine Year:	
Notes:		
Pictures:		
Additional Cost:		
Additional Cost:	Labor	Total
	Labor	Total
	Labor	Total
Parts		Total
		Total
Parts		
	Labor	Total

#### Exhibit III – Sample Reimbursement Invoice

#### Sample Reimbursement Invoice **ESW** CleanTech Invoice 9/2/2015 Date ESW CleanTech Inc PO Box 844635 Los Angeles, CA 90084-4635 28413 281 TEST Invoice # Invoice # Gust. Acct. No. PO # Ship Via Tracking # Memo Created From Order Type Dealer Claim Number CEMEX #36984 Sales Order #23415 Stock Ship To SACRAMENTO METROPOLITAN ... CITY GOVERNMENT OFFICE 777 12TH 15 #3 SACRAMENTO CA 95814 United States Warranty Case ESW CleanTech Expe... Customer Message Bill To SACRAMENTO METROPOLITAN ... CITY GOVERNMENT OFFICE 777 12TH ST #3 SACRAMENTO CA 95814 United States V-Tag S/N Unit Price 4,396.60 Description 1 LMP3, P3, 275-349 HP, EGR/ACERT LMP3-L-800 LABOR FOR SIC KIT INSTALLATION 600.00 800.00 SENSOR, THERMOCOUPLE CMA-4 94.71 94.71 LMP3-L-MISC LABOR, LONGMILE-S CASES 30.00 30.00 1 HARNESS, LONGMILE-S 197.75 197.75 LMP3-L-MISC 1 LABOR, LONGMILE-S CASES WIRING HARNESS INSTALLATION LABOR 100.00 100.00 CEMEX UNIT 36984 ESN 46638372, VIN 1BABBABBABB123 REPLACED THERMOCOUPLE AND WIRING HARNESS FINAL INVOICE \$5,619.06 Total NET 30 DAYS. A service charge of 1 1/2% per month (effective rate of 18% per annum) will be charged on past due accounts. Material returned for credit or exchange must show this invoice number. All material returned for credit or exchange must have an RA All material returned for credit will result in a 25% restocking charge. Special order and/or custom tabricated items are nonrefundable.

# Exhibit IV – Sample Receipt of Installation Form

		rate Replacement Progre ceipt of Installation	am
	Program Number	Date of completion	on
	ecipient	Lead Installer Inform	nation
Owner h	The state of the s	Name:	
Address		Title:	
City, Sta	ite, Zip:	ESW Location:	
Phone:		Phone:	
Initial	Detailed truck information	nt kits were successfully installed is located in the fleet specific ele- ement after inspection of existing	ectronic data submission.
Initial	determine compatibility.	the proper maintenance and ope	
Initial	Provided a copy of the sub	ostrate replacement warranty info	rmation.
Participa	nt must agree to the following	<b>j</b> :	
Initial	Agree to operate the truck installation.	with the installed filter for at leas	t two years after
Initial	Acknowledge receipt of equipment and confirm that ESW installed the equipment.		, ,
Initial	Acknowledge that ESW pro Diesel Particulate Filter sys	ovided training on the maintenan stem.	ce and operation of the
	der penalty of perjury, under the s accurate	e laws of the State of California th	nat the information
Signature of Participant:  Printed Name of Participant:			Date:
			_
Printed Na			2000
	of ESW Installer:		Date:

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