

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-710-3

Relating to Exemptions under
Section 27156 of the Vehicle Code

ESW CleanTech, Inc.
LongMile-S Diesel Particulate Filter

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That installation of the LongMile-S diesel particulate filter, manufactured by ESW CleanTech, Inc. of 6755 Mira Mesa Boulevard, Suite 123-122, San Diego, California 92121, has been found not to reduce the effectiveness of the applicable engine emission control system, and therefore, the LongMile-S diesel particulate filter is exempt from the prohibitions in Section 27156 of the Vehicle Code for installation on on-road heavy-duty vehicles equipped with 1994 through 2006 model-year diesel engines with displacements up to 12 liters and horsepower ratings from 100 to 400. This Executive Order excludes all engines originally equipped with an aftertreatment emission control system such as a diesel oxidation catalyst or a diesel particulate filter.

The LongMile-S diesel particulate filter consists of a metallic diesel oxidation catalyst, an uncatalyzed silicon carbide filter, a pressure sensor, exhaust temperature sensors, and an electronic controller. Major components of the LongMile-S diesel particulate filter are identified in Attachment A.

This Executive Order is only valid provided the engines meet the following operating conditions: (1) the engine exhaust temperature is above 260 degrees Celsius for at least 30 percent of the typical duty cycle and (2) the engine is operated using ultra low sulfur diesel with a maximum sulfur content of 15 parts per million by weight or biodiesel blends containing no more than 20 percent biodiesel by volume.

This Executive Order is based on emission testing originally conducted by Cleaire Advanced Emission Controls with the LongMile-S diesel particulate filter. The test data and the LongMile-S diesel particulate filter have been transferred to ESW Clean Tech, Inc. as part of a purchase agreement.

This Executive Order is valid provided that installation instructions for the LongMile-S diesel particulate filter do not recommend tuning the engines to specifications different from those of the engine manufacturer.

Changes made to the design or operating conditions of the LongMile-S diesel particulate filter, as exempted by the Air Resources Board, which adversely affect the

performance of the engine's pollution control system, shall invalidate this Executive Order.

Marketing of the LongMile-S diesel particulate filter using identification other than that shown in this Executive Order or for an application other than that listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

This Executive Order shall not apply to any LongMile-S diesel particulate filter advertised, offered for sale, sold with, or installed on a motor vehicle or an engine prior to or concurrent with transfer to an ultimate purchaser.

This Executive Order does not constitute any opinion as to the effect the use of the LongMile-S diesel particulate filter may have on any warranty either expressed or implied by the engine manufacturer.

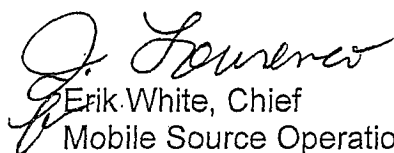
No claim of any kind, such as "Approved by the Air Resources Board," may be made with respect to the action taken herein in any advertising or other oral or written communication.

In addition to the foregoing, the Air Resources Board reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of California Code of Regulations, Title 13, Section 2222, et seq.

THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF ESW CLEANTECH, INC.'S LONGMILE-S DIESEL PARTICULATE FILTER.

Violation of any of the above conditions shall be grounds for revocation of this Executive Order. The Executive Order may be revoked only after a ten-day written notice of intention to revoke the Executive Order, in which period the holder of the Executive Order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request, and the Executive Order may not be revoked until a determination is made after a hearing that grounds for revocation exist.

Executed at El Monte, California, this 6th day of June 2013.


Erik White, Chief
Mobile Source Operations Division

Attachment A

LongMile-S Diesel Particulate Filter			
	Part	Qty	Part Number
1	Silicon Carbide Diesel Particulate Filter	1	C_F-____-
2	Diesel Oxidation Catalyst	1	CJD-27-10, CJDA-27-10, CJD-20-10, or CJDA-20-10
3	MLC (Monitor Logger Controller)	1	CMKC-5.0__ or CMKC-6.0__
4	Backpressure Sensor	1	CUE-45
5	Thermocouple	2	CMA-4

Definition:

1. Silicon Carbide Diesel Particulate Filter:
C<size>F-<filer supplier>-<varies with configuration> where:
Size:
J = 10.5" x 12"
K = 11.25" x 12"
N = 12" x 12"
P = 13.5" x 12"
Filter supplier:
1xx = Ibsiden
2xx = Liqtech
3xx = TYK
2. Diesel Oxidation Catalyst:
CJDA = uses integrated internal ring

Application	DPF Size	DOC Size
100-250 hp	10.5"x12"	7.5"x5"
250-300 hp	10.5x12", 11.25"x12"	10.4"x4"
300-400 hp	12"x12"	10.4"x4"

3. Monitor Logger Controller:
CMKC-<version><varies with configuration>

