

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-710-4

Relating to Exemptions under
Section 27156 of the Vehicle Code

ESW CleanTech, Inc.
Vista-X 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 Vista-X 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 Vista-X 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 from 5.9 to 16 liters.

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 Vista-X diesel particulate filter consists of a diesel oxidation catalyst, an uncatalyzed wall flow diesel particulate filter, a diesel-fueled burner, control sensors, and an electronic controller. The burner is supported by a fuel metering pump and a blower. The sensors include an engine speed sensor, differential pressure sensor, filter inlet temperature sensor, and an internal burner temperature sensor. Major components of the Vista-X diesel particulate filter are identified in Attachment A.

This Executive Order is based on emission testing originally conducted by Cleaire Advanced Emission Controls with the Vista-X diesel particulate filter. The test data and the Vista-X 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 Vista-X 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 Vista-X 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 Vista-X 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 Vista-X 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 Vista-X diesel particulate filter may have on any warranty either expressed or implied by the engine manufacturer.

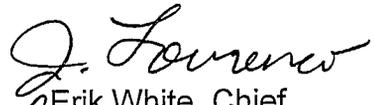
No claim of any kind, such as "Approved by the Air Resources Board," may be made with respect to the action taken herein in any advertising or other oral or written communication.

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 VISTA-X 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

Vista-X Diesel Particulate Filter			
	Part	Qty	Part Number
1	Diesel Particulate Filter Assembly	1	CJF-____-____-VS, CJF-____-____, CJF-201-EPF, or CJF-203-EPF
2	Diesel Oxidation Catalyst	1	CJD-____-____
3	Assembly, Cone, Inlet/Burner/Heat Shield	1	CPX-J____
4	Sensor, Thermocouple (Filter Inlet)	1	CMA-5-13-____
5	Sensor, Thermocouple (Internal Burner)	1	CMA-5-____
6	MLC (Monitor Logger Controller)	1	CMKV-6.0____
7	Sensor, Backpressure	1	CUE-45
8	Fuel Metering Pump	1	CUE-72-____V
9	Regeneration Air Supply Blower		CUE-73-____V or CUE-102-____V
10	Glow Plug	1	CUE-70-____V or CUE-93-____V
11	RPM Sensor	1	CMA-3, CMA-3-DUAL, CMA-6, CMA-6-DUAL, CUE-394-1

Definitions:

- Diesel Particulate Filter:
CJF-<filter supplier><attachment type>-<unidirectional flow flange> where:
Filter supplier: 1x = Ividen; 2x = Liqtech; 3x = TYK
Attachment type: 1 = double; 3 = single; 9 = round
Unidirectional flow flange: A = welded ring; B = integrated
- Diesel Oxidation Catalyst:
CJD-<substrate>-<Pt loading>-<varies with configuration>
- Inlet Cone/Burner Assembly:
CPX<varies with configuration>-J<varies with configuration>
- Thermocouple (filter):
CMA-5-13-<varies with configuration>
- Thermocouple (burner):
CMA-5-<varies with configuration>
- MLC:
CMKV-6.0<varies with configuration>
- Fuel Metering Pump:
CUE-72-<voltage>V where:
Voltage = 12 or 24 volt
- Regeneration Air Blower:
CUE-73-<voltage>V or CUE-102-____V where:
Voltage = 12 or 24 volt
- Glow Plug:
CUE-70-<voltage>V or CUE-93-<voltage>V where:
Voltage = 12 or 24 volt

