State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-710-9

Relating to Exemptions under
Section 27156 of the Vehicle Code

ESW CleanTech, Inc.
Longview System

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 Longview System, 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 vehicle pollution control system, and therefore, the Longview System is exempt from the prohibitions in Section 27156 of the Vehicle Code for installation on heavy-duty on-road vehicles equipped with the following diesel engines:

Model-Year	Make	Model
1994-1997	Cummins	M11
1994-1997	International	DT466

This exemption is only valid provided the engines meet the following operating conditions: (1) the engine exhaust temperature is greater than 260 degrees Celsius for at least 25 percent of the typical duty cycle and (2) the engine is operated using either standard California diesel with a maximum sulfur content of 500 parts per million by weight (ppmw) or ultra low sulfur diesel with a maximum sulfur content of 15 ppmw.

The Longview System consists of a lean NOx catalyst, secondary fuel injection system, electronic controller, control sensors, and a diesel particulate filter. The fuel injection system includes a fuel pump, injector, injector block, static mixer, and a pressure regulator. The sensors include a manifold absolute pressure sensor, engine speed sensor, two exhaust temperature sensors, and an engine backpressure sensor. The fuel injection control algorithms for both standard California diesel and ultra low sulfur diesel are identical. The major components of the Longview System are identified in Attachment A.

This Executive Order is based on emission testing originally conducted by Cleaire Advanced Emission Controls with the Longview System. The test data and the Longview System have been transferred to ESW CleanTech, Inc. as part of a purchase agreement.

This Executive Order is valid provided that installation instructions for the Longview System do not recommend tuning the engine to specifications different from those of the engine manufacturer.

Changes made to the design or operating conditions of the Longview System, as exempt by the Air Resources Board, which adversely affect the performance of the vehicle's pollution control system, shall invalidate this Executive Order.

Marketing of the Longview System 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 Longview System advertised, offered for sale, sold with, or installed on a motor vehicle 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 Longview System may have on any warranty either expressed or implied by the vehicle 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 LONGVIEW SYSTEM.

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.

J. Lorenzo
for Erik White, Chief
Mobile Source Operations Division

Attachment A

Longview System P/N 8011		
Part Number	QTY	Description
MK-502	1	Controller and Sensor Kit
7004A	1	Monitor Logger Controller
P604-9491	1	Pressure Transducer
194-6724	1	MAP Sensor
2T-125K316-R-6-TIS-30-CF11	2	Thermocouple – braided sheath, solid wire
71255-00	1	Magnetic Pickup (tachometer)
FK-501	1	Fuel System Kit
RAC58500-10	1	Diesel Fuel Pump/Filter
FK-1	1	Injector Assembly (inj., adp., o-ring)
B4CPA2-50	1	4mnpt x 4mnpt Check Valve (pressure regulator)
U4M-S or U5M-S	1	Static Mixer Assembly (4" or 5" exhaust pipe)
JC-02	2	Lean NOx Catalyst (10.5" x 6")
JF-10 or JF-12	1	Diesel Particulate Filter (10.5" x 12")