

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-710U-7

Relating to Exemptions under
Sections 38390 and 38391 of the Vehicle Code

ESW CLEANTECH, INC.
Lonestar

Pursuant to the authority vested in the Air Resources Board by Part 5, Division 26 of the Health and Safety Code and Sections 38390, 38391, and 38395 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 Lonestar, 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 pollution control system, and therefore, the Lonestar is exempt from the prohibitions in Sections 38390 and 38391 of the Vehicle Code for installation on the following engines:

<u>Engine</u>	<u>Engine Family</u>	<u>Power Class</u>	<u>Standards</u>
2005 Cummins 6C8.3	5CEXL0505ABD	130-225 kW	Tier 2
2008 John Deere Power Systems 6081H	8JDXL08.1037	130-450 kW	Tier 3

This Executive Order 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 40 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.

The Lonestar consists of a lean-NOx catalyst, fuel injection system, catalyzed passive diesel particulate filter, control sensors, and an electronic controller. The fuel injection system includes a fuel pump, filter, injector, hoses, pressure switch, regulator, shut-off valve, and a static mixer. The sensors include an engine speed sensor, manifold absolute pressure sensor, differential pressure sensor, and two exhaust temperature sensors. Major components of the Lonestar are identified in Attachment A.

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

This Executive Order is valid provided that installation instructions for the Lonestar 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 Lonestar, as exempt 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 Lonestar 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 Lonestar advertised, offered for sale, sold with, or installed on an engine, vehicle, or equipment 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 Lonestar 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 2474, 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 LONESTAR.

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

Lonestar		
Part	QTY	Part Number
Diesel Particulate Filter	1	JF-116, JF-216, KF-116, KF-216, CJF-116, CJF-216, CKF-116, or CKF-216
NOx Reduction Catalyst	2	JC-02, KC-02, CJC-02, or CKC-02
MLC (Monitor Logger Controller)	1	MK-5.0B or CMK-5.0B
Pressure Transducer	1	P604-9491, P321-5074, 4088588, P321-5117, P321-5073, or CUE-45
Manifold Absolute Pressure Sensor	1	194-6724 or CUE-41
Thermocouple	2	2T-125K316-R-4-TIS-30-CF11, 2T-125K316-R-TIS-30-CF11, CMA-4, or CMA-6
Magnetic Pickup (tachometer)	1	71255-00, CMA-3, or CMA-3-DUAL
Diesel Fuel Pump/Filter	1	RAC58500-10, CUE-21, or CUE-55
Injector Assembly	1	FP-1 or CUE-1
Pressure Regulator	1	B4CPA2-50 or CUP-7
Static Mixer Assembly	1	CU4ME-Sxx, CU5ME-Sxx, or CU6ME-Sxx

