

EXECUTIVE ORDER DE-08-002-06

Pursuant to the authority vested in the California Air Resources Board (CARB) by Health and Safety Code, Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code section 39515 and 39616 and Executive Order G-14-012;

This action relates to Verification under sections 2700 through 2711 of Title 13 of the California Code of Regulations (CCR):

DCL International Inc.
Mine-X Sootfilter® Diesel Particulate Filter

CARB has reviewed DCL International Inc.'s request for verification of their Mine-X Sootfilter® diesel particulate filter (DPF) system. Based on an evaluation of the data provided, and pursuant to the terms and conditions specified below, the Executive Officer of CARB hereby finds that the Mine-X Sootfilter® DPF system reduces emissions of diesel particulate matter (PM) consistent with a Level 3 device (greater than or equal to 85% reductions) (CCR, title 13, section 2702 (f) and section 2708) and complies with the CARB January 1, 2009, nitrogen dioxide (NO₂) limit (CCR, title 13, section 2702 (f) and section 2706 (a)). Accordingly, the Executive Officer determines that the Mine-X Sootfilter® DPF system merits verification as a Level 3 Plus system, for use with stationary prime and emergency standby generators, pumps, and compressors using engine families listed in Attachment 1.

This verification is subject to the following terms and conditions:

- The diesel engine must be used in a stationary application associated with prime or emergency standby generators, pumps, and compressors.
- The engines are model years 1996 or newer having the engine family names listed in Attachment 1.
- The engine must be certified for use in California or certified by the United States Environmental Protection Agency and the engine must be in its original certified configuration.
- The engine must be:
 - Greater than 50 horsepower (hp) and certified to Tier 1, Tier 2, Tier 3, or Tier 4 Alt 20% oxides of nitrogen (NO_x) and PM standards, or;
 - Certified to Tier 4i standards with a rated hp between 50 and 75, or over 750.
- The engine must be a certified off-road diesel engine meeting 0.15 grams per brake horsepower hour (g/bhp-hr) PM or less based on certification or In-use emissions

testing (as tested on an appropriate steady state certification cycle outlined in the CARB off-road regulations – similar to ISO 8178 D2).

- The engine must not employ exhaust gas recirculation.
- The engine must not have a pre-existing diesel particulate filter.
- The engine must be four-stroke.
- The engine can be turbocharged or naturally-aspirated.
- DCL International Inc. must review actual operating conditions (duty cycle, baseline emissions, exhaust temperature profiles, and engine backpressure) prior to retrofitting an engine with the Mine-X Sootfilter® DPF system to ensure compatibility.
- The engine should be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer.
- The product must not be operated with fuel additives, as defined in section 2701 of Title 13, of the CCR, unless explicitly verified for use with fuel additive(s).
- The other terms and conditions specified in Table 1 below.

Table 1: Summary of Conditions for the Mine-X Sootfilter® DPF System

Parameter	Value
Application	Stationary Prime and Emergency Standby Power Generation, Pumps, and Compressors.
Engine Type and Size	<ul style="list-style-type: none">• Diesel, with or without turbocharger, without Exhaust-Gas Recirculation (EGR), mechanically or electronically controlled.• An off-road engine certified to a PM emission limit of less than or equal to 0.15 g/bhp-hr, and:<ul style="list-style-type: none">○ Greater than 50 hp and certified to Tier 1, Tier 2, Tier 3, or Tier 4 Alt 20% NOx and PM standards, or;○ Certified to Tier 4i standards with a rated hp between 50 and 75, or over 750.
Fuel	California diesel fuel with less than or equal to 15 ppm sulfur or a biodiesel blend provided that the biodiesel portion of the blend complies with ASTM D6751, the diesel portion of the blend complies with title 13, CCR, sections 2281 and 2282, and the blend contains no more than 20% biodiesel by volume.

Parameter	Value
Minimum Exhaust Temperature for Filter Regeneration	The filter must operate at the load level required to achieve 350 degrees Celsius (°C) for a minimum of 30% of the engine's operating time. Operation at lower temperatures is allowed, but only for a limited duration.
Maximum Consecutive Minutes Operating Below Passive Regeneration Temperature	240 Minutes.
Number of Consecutive Cold Starts and 15 Minute Idle Sessions before Regeneration Required	16
Number of Hours of Operation Before Cleaning of Filter Required	1,000 hours when using Ultra Low Sulfur Diesel (<15 ppm Sulfur).
PM Verification Level	Level 3 Plus: <ul style="list-style-type: none"> • PM - at least 85% reduction • NO₂ - meets January 2009 limit

The Mine-X Sootfilter® DPF system consists of a catalyzed passive diesel particulate filter and a DCL Exhaust Monitor/Logger backpressure monitor. A schematic of the approved label is shown in Attachment 2. Labels attached to the Mine-X Sootfilter® DPF system and the engine must be identical.

This Executive Order is valid provided that installation instructions for the Mine-X Sootfilter® DPF system do not recommend tuning the engine to specifications different from those of the engine manufacturer.

Prior to sale of a Mine-X Sootfilter® DPF system, DCL International Inc. must provide each prospective owner/purchaser of the Mine-X Sootfilter® DPF system with a written estimate of the number of hours of engine operation that will typically elapse before regeneration is required. DCL International Inc. must also provide, in writing, the length of time of a typical regeneration event.

Proper engine maintenance is critical for the proper functioning of the diesel emission control strategy. The owner of the equipment on which the diesel emission control strategy is installed is strongly advised to adhere to all good engine maintenance practices. Failure to document proper engine maintenance, including keeping records of the engine's oil consumption, may be grounds for denial of a warranty claim.

The Mine-X Sootfilter® DPF system must not be used with any other systems without CARB evaluation and approval. No changes are permitted to the Mine-X Sootfilter® DPF system without CARB evaluation and approval. CARB must be notified in writing of any changes to

any part of the Mine-X Sootfilter® DPF system. Failure to report any changes shall invalidate this Executive Order.

Changes made to the design or operating conditions of the Mine-X Sootfilter® DPF system as exempted by CARB, which adversely affect the performance of the engine's pollution control system, shall invalidate this Executive Order.

No person shall alter, physically disable, disconnect, bypass, or tamper with an installed CARB verified diesel emissions control strategy, as outlined in title 13, CCR, section 2711(e). Should CARB become aware that a design feature of a verified device is altered, physically disabled, disconnected, bypassed, or tampered on multiple units by independent persons, DCL International Inc. will be responsible to propose a design modification and recall plan to the Executive Officer to minimize existing and potential for future tampering of the verified device.

Marketing of the Mine-X Sootfilter® DPF system using identification other than that shown in the Executive Order or for an application other than that listed in the Executive Order shall be prohibited unless prior approval is obtained from CARB.

As specified in the Diesel Emission Control Strategy Verification Procedure (CCR, Title 13, section 2706 (j)), CARB assigns each Diesel Emission Control Strategy a family name. The designated family name for the verification as outlined above is:

CA/DCL/2008/PM3+/N00/ST/DPF01

This identification number should be used in reference to this verification as part of the system labeling requirement.

Additionally, as stated in the Diesel Emission Control Strategy Verification Procedure, DCL International Inc. is responsible for recordkeeping requirements (CCR, Title 13, section 2702), honoring their warranty (CCR, Title 13, section 2707), and conducting In-use compliance testing (CCR, Title 13, section 2709), and complying with the system labeling requirements (CCR, Title 13, section 2706 (j)).

This Executive Order is valid provided that the diesel fuel used in conjunction with the device complies with CCR, Title 13, Sections 2281 and 2282, and if biodiesel is used, the biodiesel blend shall be 20% or less subject to the following conditions:

- The biodiesel portion of the blend complies with the American Society for Testing and Materials International specification D6751 applicable for 15 parts per million sulfur content, and
- The diesel portion of the blend complies with CCR, Title 13, Sections 2281 and 2282.

Other alternative diesel fuels such as, but not limited to, ethanol diesel blends and water emulsified diesel fuel are excluded from this Executive Order.

In addition, CARB reserves the right in the future to review this Executive Order and verification provided herein to assure that the verified add-on or modified part continues to

meet the standards and procedures of CCR, Title 13, Section 2222, et seq and CCR, Title 13, Sections 2700 through 2711.

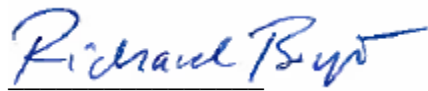
Systems verified under this Executive Order shall conform to all applicable California emissions regulations.

This Executive Order does not release DCL International Inc. from complying with all other applicable regulations.

Violation of any of the above conditions shall be grounds for revocation of this Executive Order.

Executive Order DE-08-002-05 is hereby superseded and is of no further force and effect.

Executed at Sacramento, California, this 26th day of March 2025.



Richard Boyd, Chief, Transportation and Toxics Division