

State of California

CALIFORNIA AIR RESOURCES BOARD

Executive Order G-714-ADF-ST1-01Ext3

Regulation of the Commercialization of Alternative Diesel Fuels
(Alternative Diesel Fuels Regulation)

Stage 1 Pilot Program Executive Order for Optimus Technologies Inc.

Note: This Executive Order (EO) G-714-ADF-ST1-01Ext3 is the third and the last six-month extension to the previously issued EO G-714-ADF-ST1-01 on December 17, 2021. This third extension EO allows Optimus Technologies to continue its Stage 1 Pilot Program another six month until January 6, 2025.

Pursuant to Sections 39600, 39601, 43013, 43018, and 43101 of the Health and Safety Code, the California Air Resources Board (CARB) adopted the Regulation on Commercialization of Alternative Diesel Fuels (ADF regulation) published at title 13, California Code of Regulations (CCR), section 2293 et seq¹. Effective since January 1, 2016, the ADF regulation establishes a comprehensive, multi-stage process administering the commercialization of alternative diesel fuels in California. The ADF regulation governs the introduction and use of innovative alternative diesel fuels in California while preserving or enhancing public health, environmental, and emission benefits of the existing motor vehicle diesel fuel regulations.

The multi-stage process governing the commercialization of new ADFs in California starts with a screening analysis that would allow limited sales of a regulated diesel substitute while it undergoes an initial evaluation (Stage 1); an intermediate stage with expanded sales governed by enhanced monitoring, testing, and a multimedia evaluation (Stage 2); and a final stage with full-scale commercial sales and provisions designed to maintain environmental and public health protections as needed (Stage 3).

An applicant applying for the commercialization of an alternative diesel fuel must submit required information as specified in section 2293.5(a)(1). After the application is deemed complete, it will be posted for public comment on the CARB Alternative Diesel Fuels Resources page for 30 days. The applicant must address all relevant comments received during the comment period and may revise the application before the application is deemed final.

When the application is finalized and approved by CARB, a Stage 1 Executive Order (EO) will be issued. A Stage 1 EO allows limited, small fleet use of innovative fuels while requiring screening tests and assessments to quickly determine whether there will be unreasonable

¹ All subsequent section citations in the EO, unless otherwise specified, are to provisions of the ADF regulation

potential impacts on air quality, the environment and vehicular performance. Such data will help inform more extensive testing and analysis to be conducted in Stage 2. Applicants must also meet all other applicable local, State, and federal requirements. In the event an applicant cannot complete an approved pilot program within the allotted time, the ADF Regulation section 2293.5(a)(4)(D) allows an applicant to request a six-month extension, renewable up to three times.

Optimus Technologies (Optimus), headquarters located at 6901 Lynn Way, Pittsburgh, PA 15208, submitted an ADF Stage 1 application containing the information required in section 2293.5(a)(1) for the use of biodiesel (B99 or B100) with the Optimus Vector System (Vector System) on January 13, 2021. The purpose of the Optimus application is to advance the commercialization of B99 or B100 for fuel use in an on-road setting in conjunction with the Vector System. The ADF Stage 1 application was deemed complete on June 25, 2021. Optimus obtained an ADF Stage 1 EO (EO G-714-ADF-ST1-01) on December 17, 2021.

As a condition of the G-714-ADF-ST1-01, Optimus obtained an Aftermarket Parts Exemption EO D-864 on May 23, 2022, and EO D-864-1 on April 18, 2023. EO D-864-1 expanded fleet vehicle model years including 2010 to 2023.

In the event an applicant cannot complete an approved pilot program within the allotted time, the ADF Regulation section 2293.5(a)(4)(D) allows an applicant to request a six-month extension, renewable up to three times.

Optimus has requested the third six-month extension. The third extension EO G-714-ADF-ST1-01Ext3 allows additional six months to complete the Stage 1 Pilot Program in addition to G-714-ADF-ST1-01Ext2.

The Optimus Stage 1 Pilot Program was originally approved for a fleet of 13 tractors with trailers. The fleet list was revised for the second extension for 8 tractors with trailers provided by Valley Pacific (5) and West Coast Biofuels (3). The fleet list has been revised for this third extension only to include five tractors by Valley Pacific (see Table 1). All tractors are equipped with diesel particulate filter (DPF) and selective catalytic reduction (SCR) technologies.

Five Valley Pacific tractors serving San Joaquin and Fresno counties are expected to use approximately 60,000 gallons of B99 or B100 aggregated over the course of a year or half of that volume over a six-month period. Three Valley Pacific tractors will be operated out of 3550 CA-99, Stockton CA 95215. Two Valley Pacific tractors will be operated out of 4073 S. Maple & Central Ave., Fresno, CA 93725.

Table 1: Fleet Vehicle List

Location 1: 3550 CA-99, Stockton, CA 95215							
Truck #	Year	Make	Model	Engine Make	Engine Model	Estimated Fuel Volume Annually	Estimated Mileage Annually
192517	2019	kw	T880	Paccar	mx-13	13,588 gallons use	87,948 miles
213159	2021	kw	T880	Paccar	mx-13	~10,000 Gallons	~65,000 miles
213160	2021	kw	T880	Paccar	mx-13	~10,000 Gallons	~65,000 miles
Location 2: 4073 S. Maple & Central Ave., Fresno, CA 93725							
Truck #	Year	Make	Model	Engine Make	Engine Model	Estimated Fuel Volume Annually	Estimated Mileage Annually
183835	2018	kw	T880	paccar	mx-13	15,228 Gallons Use	106,357 Miles
183834	2018	kw	T880	paccar	mx-13	10,462 Gallons Use	65,422 Miles

NOW, THEREFORE, (IT IS ORDERED AND RESOLVED) that Optimus has submitted all required information needed for the third extension to the ADF Stage 1 EO G-714-ADF-ST1-01. This third extension EO allows additional six months to complete the Stage 1 Pilot Program until January 6, 2025

Optimus must remain consistent with the estimates and expectations reported in their application as required by section 2293.5(a)(1)(A) to (E) for the duration of the Stage 1 Pilot Program in this EO. Any changes to these estimates and expectations must be approved by CARB prior to implementation.

Optimus shall also update CARB staff if at any point the information submitted in the Optimus application changes or new information becomes available.

Optimus shall provide information on any vehicle fuel, exhaust, and powertrain damage or failure as early as detected.


Optimus shall operate under all terms and conditions in this EO and in section 2293.5(a)(4).

Optimus must meet all other applicable local, State, and federal requirements.

CARB reserves the right in the future to review this ADF Stage 1 Pilot Program EO to confirm that the EO continues to support the requirements, conditions, standards, and procedures of title 13, California Code of Regulations, section 2293, et seq.

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

Executed at Sacramento, California, this 18 day of July, 2024.

 _____ for Carolyn Lozo

Carolyn Lozo
Chief, Oil and Gas and GHG Mitigation Branch