State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-84 Relating to Exemptions under Section 27156 of the Vehicle Code

VK MANUFACTURING INC. "ENVIRONMENTAL FUEL SAVER"

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-45-5;

IT IS ORDERED AND RESOLVED: That the installation of the "Environmental Fuel Saver" manufactured by VK Manufacturing Co, 1068 N.W. 3rd St., Hollandale, Fla. 3309, has been found to not reduce the effectiveness of required motor vehicle pollution control devices and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for 1978 and older gasoline powered vehicles with conventional carburetors.

This Executive Order is valid provided that installation instructions for this device will not recommend tuning the vehicle to specifications different from those listed by the vehicle manufacturer.

Changes made to the design or operating conditions of the device, as exempted by the Air Resources Board, that adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order.

Marketing of this device using an identification other than that shown in this Executive Order or marketing of this device for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

This Executive Order does not constitute any opinion as to the effect that the use of this device may have on any warranty either expressed or implied by the vehicle manufacturer.

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 THE "ENVIRONMENTAL FUEL SAVER" DEVICE.

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

Section 17500 of the Business and Professions Code makes untrue or misleading advertising unlawful, and Section 17534 makes violation punishable as a misdemeanor.

Section 43644 of the Health and Safety Code provides as follows:

"43644. (a) No person shall install, sell, offer for sale, or advertise, or, except in an application to the state board for certification of a device, represent, any device as a motor vehicle pollution control device for use on any used motor vehicle unless that device has been certified by the state board. No person shall sell, offer for sale, advertise, or represent any motor vehicle pollution control device as a certified device which, in fact, is not a certified device. Any violation of this subdivision is a misdemeanor."

Any apparent violation of the conditions of this Executive Order will be submitted to the Attorney General of California for such action as he deems advisable.

Executed at E1 Monte, California, this _____ day of September, 1978.

G. C. Hass, Chief

Vehicle Emissions Control Division

State of California AIR RESOURCES BOARD

August 28, 1978

Evaluation of the VK Manufacturing, Inc.
"Environmental Fuel Saver" Device in Accordance with Section 2222,
Title 13 of the California Administrative Code

I. Introduction

VK Manufacturing Inc., 1068 N.W. 3rd St., Hollandale, Fla. 33009, has applied for an exemption fo the "Environmental Fuel Saver" device from the prohibitions of Section 27156 of the Vehicle Code (See Exhibit A). The applicant is requesting that an exemption be granted for 1978 and older gasoline powered vehicles with conventional carburetors.

II. System Description

The "Environmental Fuel Saver" device consists of a spacer plate containing a wire mesh and a heated element. The spacer plate is installed between the carburetor and the intake manifold. The applicant claims that the system helps atomize the fuel and promotes evaporation.

III. System Evaluation

The applicant submitted CVS-75 data obtained at Olson Engineering, 15512 Commerce Lane, Huntington Beach, California; a recognized vehicle emission laboratory. The tests were run on a 1975 Chevrolet Monte Carlo, 350-V8 engine, with automatic transmission and 55,791 miles. The results were as follows:

	Baseline gm/mi	With Device gm/mi
НС	0.55	0.45
CO	6.77	1.86
NOx	1.65	1.36
Economy	13.57 mi/gal	13.57 mi/ga1

The applicant also submitted Highway Driving Cycle tests on the same vehicle with the following results.

	Baseline gm/mi	With Device gm/mi
НС	0.15	0.06
CO	1.15	0.03
NOx	. -	. - .
Economy	20.9 mi/gal	21.5 mi/gal

The Air Resources Board Laboratory performed confirmatory tests on a 1970 Chevrolet Impala, 350-V8 engine with automatic transmission and 77,400 miles. The results were as follows:

Cold Starts CVS-II

	Baseline gm/mi	With Device gr/mi
НС	3.34	3.50
CO -	51.37	41.97
NOx	3.98	4.20
Economy	13.4 mi/gal	13.4 mi/gal

Highway Cycle

	<u>Baseline</u> gr/mi	<u>With Device</u> gr/mi
НС	2.34	2.39
CO	42.72	44.52
NOx	4.77	4.29
Economy	19.2 mi/gal	19.2 grain migal

Based on the above tests, the staff believes there is no significant increase in emissions or fuel economy.

IV. Manufacturer's Claims

The manufacturer has made unsubstantiated claims regarding vehicle emissions, fuel economy and engine effeciency. He has been advised that he may not use these claims in any of his verbal or written sales efforts.

V. Conclusion and Recommendations

Based on the above tests and prior experience with similar devices, the staff is of the opinion that the device will not result in an increase in emissions when installed on gasoline powered vehicles using conventional carburetors. The staff therefore recommends that VK Manufactoring Inc. be granted an exemption, by Executive Order D-84, for its "Environmental Fuel Saver" device from the prohibitions of Vehicle Code Section 27156 for 1978 and older model gasoline powered vehicles using conventional carburetors.