State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-196 Relating to Exemptions under Section 27156 of the Vehicle Code

FUEL-CAT, INC. "FUEL-CAT TOOL" DEVICE

WHEREAS, Vehicle Code Section 27156 and Title 13 California Code of Regulations (hereafter "CCR") Section 2222(e), authorize the California Air Resources Board (ARB) and its Executive Officer to exempt add-on and modified parts from the prohibitions of Vehicle Code Section 27156.

Fuel - cat, Inc.

WHEREAS, Technologies, Ltd. has applied to the ARB for exemption from the prohibitions of Vehicle Code Section 27156 for the "Fuel-Cat Tool" device.

WHEREAS, pursuant to the authority vested in the Executive Officer by Health and Safety Code Section 39515 and in the Chief, Mobile Source Division by Health and Safety Code Section 39516 and Executive Order G-45-5, the Air Resources Board finds:

- 1. "Fuel-Cat Tool" device is an add-on device that is attached to the fuel line in a motor vehicle.
- 2. "Fuel-Cat Tool" device is intended for use with a required motor vehicle pollution control system.
- 3. "Fuel-Cat Tool" device by being installed in the engine alters the original design of a motor vehicle pollution control system.
- "Fuel-Cat Tool" is a device subject to the prohibitions of Vehicle Code Section 27156 and an add-on part as defined by 13 CCR Section 1900(b)(1).
- 5. "Fuel-Cat Tool" device does not reduce the effectiveness of any required motor vehicle pollution control device.
- 6. The ARB in the exercise of technical judgement, is aware of no basis on which the "Fuel-Cat Tool" device will provide either a decrease in exhaust emissions or an increase in fuel economy.
- 7. It has not been determined what effect the use of "Fuel-Cat Tool" device may have on any warranty, either expressed or implied, by the manufacturer of a motor vehicle on which the device is installed.
 - 8. "Fuel-Cat Tool" device is not a certified motor vehicle pollution control device pursuant to Health and Safety Code Section 43644.
 - 9. The ARB by granting an exemption to Fuel-Cat, Inc. for the "Fuel-Cat Tool" device does not recommend or endorse in any way the "Fuel-Cat Tool" device for emissions reduction, fuel economy, or any other purpose.

Fuel-Cat, Inc. "Fuel-Cat Tool" device

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IT IS HEREBY RESOLVED that "Fuel-Cat Tool" device is exempt from the prohibitions of Vehicle Code Section 27156 for installation on 1989 and earlier model year gasoline and diesel powered vehicles subject to the following conditions:

- 1. This exemption shall not apply to any device, apparatus, or mechanism advertised, offered for sale or sold with, or installed on, a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.
- 2. No changes are permitted to the device as described in the staff report. Any changes to the device applicable model year, or other factors addressed in this Executive Order must be evaluated and approved by the ARB prior to marketing in California.
- 3. 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 ARB. Exemption of this product shall not be construed as an exemption to sell, offer for sale, or advertise any component of the product as an individual device.
- 4. Any oral or written references to this Executive Order or its content by the Fuel-Cat, Inc., its principals, agents, employees, distributors, dealers, or other representatives must include the disclaimer that the Executive Order or the exemption it provides is not an endorsement or approval of any fuel economy or emissions reduction claims for "Fuel-Cat Tool" device and is only a finding that the device is exempt from the prohibitions of Vehicle Code Section 27156.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after ten day written notice of intention to revoke the order, in which period the holder of the 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 order may not be revoked until a determination after hearing that grounds for revocation exist.

Executed at El Monte, California, this $\frac{33}{43}$ day of August, 1989.

K. D. Drachand, Phief

Mobile Source Division

State of California AIR RESOURCES BOARD

EVALUATION OF THE FUEL-CAT, INC.'S "FUEL-CAT TOOL" DEVICE FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

August, 1989

EVALUATION OF THE FUEL-CAT, INC.'S "FUEL-CAT TOOL" DEVICE FROM THE PROHIBITIONS IN VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

by

Mobile Source Division

State of California Air Resources Board 9528 Telstar Avenue El Monte, CA 91731

(This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.)

SUMMARY

Fuel-Cat, Inc. of 10670 North Central Expressway, Suite 200, Dallas, Texas 75231, has applied for exemption from the prohibitions in Section 27156 of the California Vehicle Code for their "Fuel-Cat Tool"(FCT) device. The device is designed for installation on 1989 and older model year gasoline and diesel powered vehicles.

Previously the Air Resources Board (ARB) exempted three similar devices: "Moleculator Fuel Energizer" and "Fuel Dominator" by Internal Energy Management Corp. and "Top Eliminator" by Top Eliminator, Inc. Based on the engineering evaluation of the device and exemption of devices that operate in a manner similar to FCT, the staff believes that FCT will not have any adverse effects on the exhaust emissions from gasoline and diesel powered vehicles.

The staff recommends that the FCT device be exempted from the prohibitions in Vehicle Code Section 27156 and that Executive Order D-196 be issued.

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I. <u>INTRODUCTION</u>

Fuel-Cat, Inc. of 10670 North Central Expressway, Suite 200, Dallas, Texas 75231, has applied for exemption from the prohibitions of Section 27156 of the California Vehicle Code for their "Fuel-Cat Tool"(FCT) device. The device is designed for installation on 1989 and older model year gasoline and diesel powered vehicles.

The applicant submitted drawings and specifications of the device for our evaluation.

II. <u>CONCLUSION</u>

Previously the Air Resources Board (ARB) exempted three similar devices: "Moleculator Fuel Energizer" and "Fuel Dominator" by Internal Energy Management Corp. and "Top Eliminator" by Top Eliminator, Inc. Based on the engineering evaluation of the device and exemption of devices that operate in a manner similar to FCT, the staff believes that FCT will not have any adverse effects on the exhaust emissions from gasoline and diesel powered vehicles.

III. <u>RECOMMENDATION</u>

The staff recommends that Fuel-Cat, Inc. be granted an exemption from the prohibitions in California Vehicle Code Section 27156 for their FCT device and that Executive Order D-196 be issued.

IV. DEVICE DESCRIPTION AND OPERATION

The FCT device is a cylindrical shape device with a core of metal alloy. The metal alloy is composed of aluminum, copper, tin, zinc, iron, antimony, nickel, lead, sulfur, phosphorus, manganese and silicon. The device is narrowed on both ends in order to match the fuel lines. The device consists of two models: 12-T for heavy-duty vehicles and 4-A for medium-duty and light-duty vehicles. The 12-T model is 11" long with the core length of 8", inner core diameter of 3/4" and inner diameter of 1/2" for both ends. The model 4-A is 6" long with the core length of 3", inner core diameter of 0.20" for both ends. The FCT installation instructions and drawings are shown in Appendices A and B, respectively.

The device is installed in series with a vehicle fuel line. According to the applicant when fuel passes through the device, the electrical interaction of dissimilar metals causes ionization of the fuel. The ARB did not perform any testing on the device. It is the staff's opinion that the technical principles underlying the stated function of the device are not capable of producing any effects on emissions and fuel economy.

V. <u>DISCUSSION</u>

Previously the ARB exempted three similar devices: "Moleculator Fuel Energizer" and "Fuel Dominator" by Internal Energy Management Corp. and "Top Eliminator" by Top Eliminator, Inc. Because of the previous exemption of similar devices with the same operating principle and the fact that qualifying for an exemption is based on not adversely affecting exhaust emissions, the staff recommends that Fuel-Cat, Inc. be granted an exemption as requested.

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INSTALLATION INSTRUCTIONS

On vehicles with carburetors, the unit is installed between the fuel pump and the carburetor in the fuel line, as close to the carburetor as possible. Effectiveness diminishes when placed more than 18" from the carburetor. The same applies with fuel injected engines. **G**ài ١D) RIDGED FUEL LINE RUBBER FUEL LINE If fuel line is ridged (metal If fuel line is APPENDIX or plastic) cut rubber, cut line aprox. 8 in. out S and insert both of fuel line and ends of tool into install 1/4 in. fuel line and by 3 in. rubber secure both ends fuel line hose to with metal clamps. ends of tool and ends of cut fuel line and secure all ends with metal clamps. FUEL PUMP INSTALL HERE

