# **State of Hawaii**



## REPORT TO THE LEGISLATURE

# ON THE DISTRIBUTION AND AVAILABILITY OF NON-ETHANOL GASOLINE

As required by Act 130, "Relating to Gasoline" Enacted June 5, 2007

Submitted to
The Twenty-Fourth State Legislature
Regular Session of 2008
By
the Department of Business, Economic Development and Tourism

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## Report to the Legislature on the Distribution and Availability of Non-Ethanol Gasoline As required by Act 130, "Relating to Gasoline" Enacted June 5, 2007

#### **Act 130**

House Bill 791, H.D. 1, S.D. 1, C.D. 1 (Act 130 of 2007) states:

"SECTION 1. The legislature finds that diversification of fuel supplies and a transition towards renewable energy sources is in the long-term interest nationally and for the people of Hawaii. Gasoline containing ten per cent ethanol has been an approved fuel for use in automotive spark ignition engines since 1978. Currently, about fifty per cent of the gasoline in the United States contains ethanol. In some areas of the United States, all of the available motor gasoline contains ethanol. Some of the affected states do not impose labeling requirements for fuels containing ten per cent ethanol.

Hawaii's existing ethanol content statute and implementation rules provide for significant flexibility in allowing the private sector to supply approximately seventy million gallons of nonethanol gasoline per year for old, incompatible, or non-standard equipment that is not listed or tested by Underwriters Laboratory. Nevertheless, there are areas of the State in which the private sector has not taken initiative to address the needs of niche markets, including certain boats, small gasoline-driven tools, and experimental and light-sport aircraft that are in need of nonethanol gasoline.

In 1987, the Coast Guard issued a directive to recreational boat builders to install fuel hoses compatible with gasoline containing aromatics and alcohols. However, some boats have fiberglass fuel tanks that are not ethanol compatible and will cause fiberglass softening or tank leaks. There have been reports of boats with older fiberglass tanks sustaining engine damage due to fiberglass resin compounds being carried by the fuel into the engine and deposited onto intake valves. Although in other states, boat owners with these problems have replaced their tanks, boat owners in Hawaii are seeking another solution.

The Underwriters Laboratory listing and testing for fuel system parts has included compatibility with gasoline containing ten per cent ethanol since the 1980s. However, at the time certain types of power equipment were manufactured, the owner's manuals for the equipment did not explicitly describe or allow the use of ethanol-blended gasoline.

Further, the Federal Aviation Administration has strict regulations in place that require only aviation grade fuels to be used in certificated aircraft. There are supplemental type certificates in use that allow some "properly altered" aircraft to use automotive grade fuels. Federal Aviation Administration Special Airworthiness Information Bulletin CE 07-06, dated October 27, 2006, states that gasoline containing ethanol is not acceptable unless specifically approved by the type certificate or supplemental type certificates. This also affects light sport aircraft that use Rotax engines. Rotax has issued a notice not to use gasoline containing lead or ethanol in their engines. Although the quantity of motor gasoline used in aviation is small, because motor gasoline refueling of aircraft has not generally been available at airfields in the State, the owners of affected aircraft on Oahu and the Big Island do not yet have convenient access to non-ethanol fuel. Additionally, owners of affected aircraft on Maui and Kauai are unable to fly for the foreseeable future unless non-ethanol gasoline becomes available on these islands.

Finally, the legislature finds that non-automobile demand for gasoline that does not contain ethanol may be less than one tenth of a per cent of the total amount of gasoline sold throughout the State. Typically, the Hawaii Before Oxygenate Blend gasoline manufactured conforms to all ASTM base-gasoline standards for automobile use only. Nonetheless, small non-automobile use consumer groups seek gasoline that does not contain ethanol, and an attempt should be made to allow the free market to fill the need for these niche markets prior to the imposition of mandates upon the market. This objective needs to be achieved without appreciably reducing the energy diversification goals of the State.

The purpose of this Act is to require fuel distributors to report to the department of business, economic development, and tourism on the distribution and availability of gasoline that does not contain ethanol in order to provide information to the legislature to be used in determining future policy for these niche gasoline markets.

SECTION 2. On or before December 1, 2007, all distributors shall report to the department of business, economic development and tourism, in a format prescribed by the department, on their distribution and availability of gasoline that does not contain ethanol. The department of business, economic development, and tourism shall report its findings to the legislature no later than twenty days prior to the convening of the regular session of 2008. For the purposes of this section, "distributor" shall have the same meaning as in 486J-1, Hawaii Revised Statutes.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> "Distributor" means: (1) Every person who refines, manufactures, produces, or compounds fuel in the State and sells it at wholesale or at retail; (2) Every person who imports or causes to be imported into the State, or exports or causes to be exported from the State, any fuel; (3) Every person who acquires fuel through exchanges with another distributor; or (4) Every person who purchases fuel for resale at wholesale or retail from any person described in paragraph (1), (2), or (3); provided that "distributor" shall not include a marina, lessee dealer-operated station, owner-operated station, or other retailer that retails fuel only to end users or the public.

### **Distribution and Availability of Non-Ethanol Gasoline**

In accordance with Act 130, fuel distributor reports, due on December 1, 2007, were received and compiled. Additional retail locations were identified through means other than the fuel distributor reporting forms. Retail locations providing non-ethanol gasoline are as follows:

Station	Address	City	Island	Phone	From	То
Heeia Kea Small Boat Harbor	46-499 Kamehameha Highway	Kaneohe	Oahu	235-2192	Feb. 2007	Current
Ala Wai Small Boat Harbor	1651 Ala Moana Blvd	Honolulu	Oahu	955-8160	Mar. 2007	Current
Ko Olina Marina	92-100 Waipahe Place	Kapolei	Oahu	679-1050	Mar. 2007	Current
Rainbow Bay Marina (Pearl Harbor)	57 Arizona Memorial Drive, Slip 101	Honolulu	Oahu	473-0284	Mar. 2007	Current
Keehi Marine Center	24 Sand Island Access Road	Honolulu	Oahu	845-6465	Oct. 2007	Current
Mountain View Gas	18-1314 Highway 11	Mountain View	Hawaii	968-6144	Aug. 2007	Current
Honokohau Boat Harbor	74-381 Kealakehe Pkwy	Kailua-Kona	Hawaii	326-7529	Apr. 2007	Current
Rawlins Chevron	20 Maunaloa Hwy.	Kaunakakai	Molokai	553-3214	before 2006	Current
Kalama Service	53 Ala Malama St.	Kaunakakai	Molokai	553-5586	before 2006	Current
Maunaloa Gas	Waieli St.	Maunaloa	Molokai	552-2627	before 2006	Current
Lanai City Service	1036 Lanai Avenue	Lanai City	Lanai	565-7227	before 2006	Current
Unbranded	2-2525 Kaumalii Hwy	Kalaheo	Kauai	652-9184	Jan. 2008	

#### **Additional Information**

The following additional information was provided by fuel distributors.

Chevron is the sole supplier of non-ethanol mid-grade (89 octane) and non-ethanol regular (87 octane), ex-terminal to Lanai Oil for the island of Lanai, and ex-barge to Island Petroleum for the island of Molokai.

As of July 1, 2007, Tesoro Hawaii Corporation offers and has made available non-ethanol gasoline (UM89 with <1% ethanol) at its rack locations:

- 789 N Nimitz Highway, Honolulu (Oahu);
- 140 Hobron Lane, Kahului (Maui); and
- 661 Kalanianaole Street, Hilo (Hawaii).

Currently, Tesoro does not offer non-ethanol gasoline at any Tesoro branded retail locations in the State of Hawaii.

#### Publicly Available List of Locations Selling Non-Ethanol Gasoline

The new-fuel.com website provides a list of non-ethanol gasoline locations, as reported by industry members or members of the public.

