State Water Resources Control Board



Executive Office

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Dear Interested Party,

On May 5, 2009, the State Water Resources Control Board (State Water Board) demonstrated its commitment to facilitating the use of alternative fuels, such as biodiesel, by adopting emergency regulations to allow for underground storage of biodiesel blends up to B20.

Since the adoption of that variance, the State Water Board and other state agencies have received many letters expressing concern about the Board's rules regarding storage of B99 and B100 biodiesel in underground storage tanks (USTs). This letter addresses those questions and concerns.

Regulations require that an independent testing organization, such as Underwriters Laboratories (UL), test USTs to ensure compatibility with the substances to be stored. Regulations also require that leak detection equipment used at the UST sites is designed to detect a release from the UST. These long-standing regulations act to protect groundwater and drinking water sources from the pollution that can result from leaking USTs.

The State Water Board's decision to limit the emergency variance to blends no greater than B20 is based on documentation by the National Biodiesel Board, National Renewable Energy Laboratory and UL, which indicates that biodiesel blends greater than B20 may damage certain materials used in the construction of USTs.

Because the industry had not yet complied with these testing requirements, and there was an immediate public need to use B20, the State Water Board adopted the emergency regulations which provided a temporary variance from these testing requirements to allow the storage of biodiesel blends up to B20 in USTs. This decision was in keeping with the Water Board's commitment to support alternative fuels wherever they are environmentally appropriate and to facilitate and expedite the use of biodiesel, while minimizing the risk of any harm to the environment.

To prevent releases of regulated substances (e.g., motor vehicle fuel) from USTs, the tank's components must be compatible with the product stored in it. If the stored fuel is not compatible with UST components, the tank could fail and leak, possibly resulting in groundwater pollution. In some cases, the purer the biodiesel blend the more incompatible it is with many of the materials used in the manufacturing of USTs. Among the UST materials that could be compromised by purer biodiesel blends are gaskets, seals, elastomers, nitrile rubber compounds, glues, and plastics.

California Environmental Protection Agency



The presence of any quantity of any regulated substance within the biodiesel makes the entire contents of the UST system a regulated substance, as defined in the California Health and Safety Code. When B100 is manufactured in accordance with accepted standards, it meets the definition of a regulated substance. B100 contains methanol, and in most cases antioxidants, biocides, fungicides and small amounts of diesel petroleum are added to the biodiesel, all of which are regulated substances.

Although State Water Board staff is assisting the biodiesel industry by working with UL to expedite the development of testing protocols, and with manufacturers to encourage them to test UST equipment, it is the responsibility of the biodiesel industry (i.e., National Biodiesel Board and California Biodiesel Association) to coordinate with UL and UST manufacturers to complete the required testing.

We urge you to work with your local biodiesel association to accomplish this very important task as soon as possible. Until appropriate manufacturer testing for blends above B20 has been completed, UST owners/operators must use other storage options such as aboveground storage tanks.

The State Water Board remains firm in its commitment to work with the biodiesel industry on this extremely important issue.

For questions regarding the storage of biodiesel please contact Ms. Laura S. Fisher, Chief of the UST Leak Prevention Technical Unit, at (916) 341-5870 or lifeher@waterboards.ca.gov.

Sincerely,

Dorothy Rice

Executive Director