



**Winston H. Hickox**  
*Secretary for  
Environmental  
Protection*

# Air Resources Board

**Alan C. Lloyd, Ph. D.**  
**Chairman**

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**Gray Davis**  
*Governor*

July 6, 1999

Ms. M'K Veloz  
Californians United For Boating  
30 Jack London Square, Suite 204  
Oakland, California 94607

Dear Ms. Veloz:

Thank you for your recent letter to Secretary Hickox following our May 21 meeting at Cal/EPA. He asked that I respond directly to your continuing concerns about the Air Resources Board's emission control program for spark-ignited marine engines.

Before I speak to your letter, let me just say that I thought our previous discussion was very helpful. We should be able to resolve most of the outstanding issues through a focused working group involving CUB, ARB, the Association of California Water Agencies, the state Water Resources Control Board and other affected parties. I hope your organization will work closely with us as on that effort.

Let me also address a point that has been made in recent correspondence to our office and Cal/EPA from various CUB members. Namely, that engine labeling is no longer needed given the Governor's Executive Order to phase-out MTBE. As you may know, the phase-out of MTBE is scheduled to occur by December 31, 2002. Between now and then, every effort will be made to contain leaking gasoline and thereby prevent water contamination. However, there may still be problems at individual water bodies around the state. The marine engine labels will give water managers a tool for protecting those resources – if needed – on a case-by-case basis. It would be imprudent to take that management tool away before MTBE containing gasoline is fully removed from the California marketplace.

Now, let me turn to the specific concerns in your letter. You raised three main issues: 1) declining boat sales due to labeling, 2) accuracy of the proposed labels and 3) the need for a buy-back program for older engines. As a follow-up to the May 21 meeting, I would also like to address the Lake Tahoe watercraft study data.

### Boat Sales

We recognize ARB's labeling proposal has exacerbated fears of boating bans and that these fears may be affecting boat sales. However, it does not seem to be influencing overall boat registrations. According to DMV data, new boat registrations have not changed dramatically from previous years. February 1999 (the most recent month for which complete data are available) saw more registrations than the same month last year.

Regarding usage restrictions, there are ten lakes in California that have imposed full or partial boating limits. A few more are considering this step. There is no statewide movement to restrict boating activity. In addition, boating limits have only been imposed where deemed necessary to protect drinking water or the ecosystem from excessive contamination.

With any new program of this magnitude there are questions and concerns. ARB is taking a very proactive approach to alleviate consumer and dealership confusion. We are staffing booths and conducting seminars at boat shows to give dealers and consumers the latest information. We are distributing easy to read fact sheets at dealerships, boat shows and on ARB's WEB site ([www.arb.ca.gov](http://www.arb.ca.gov)). I have enclosed an outreach packet for your information. We also have a toll free number, (800) END-SMOG that individuals can call for additional information.

### Labeling

Labels allow consumers to distinguish between the relative emission performance of different engine technologies. We have used this approach with automobiles for years, classifying them as low, ultra-low and zero emitting. There are also "green labeling" programs throughout state, federal and local governments. We believe it is appropriate to treat marine engines the same way. The risk of water contamination from MTBE is a second, very important reason for boat engine labels.

Staff worked closely with CUB and the environmental label working group to establish a label design that is clear and meaningful. The hang tag is intended to explain the purpose, benefits and structure of the program. ARB staff is proposing as part of the 15-day changes that the hang tag describe just the Tier 1 and Tier 2 labels. This will alleviate confusion about the third tier, especially in the higher horsepower outboard and personal watercraft categories where no engines are certified to meet the Tier 3 standard. This change would apply to outboard engines over 135 horse power and to all personal watercraft, until 2001 or until one or more Tier 3 engines in those categories is certified (whichever comes first).

Your letter expressed concern that water agencies will use ARB's labels to restrict access on certain waterways. That is certainly possible in the near term while MTBE contamination is still a pressing concern. But over the longer term, the primary use of the labels will be consumer information as described above. As you pointed out, we will most likely see different requirements for different lakes and reservoirs, since each water body has its own unique characteristics that affect how much human activity it can support without significant degradation. The water agencies that participated in the environmental label working group indicated support for this approach.

As discussed at the May 21, 1999 meeting at Cal/EPA, we would be happy to meet with CUB and representatives from the Association of California Water Agencies and the State Water Resources Control Board to further discuss their plans for using the boat engine labels.

#### Old Engine Buy-Back

During the rulemaking process, staff met with marine industry representatives to discuss the development of a buy-back program for older watercraft engines. Such a program would be very positive if the necessary funding can be identified and obtained. We will continue to explore possible funding sources with CUB; perhaps that could be done in conjunction with manufacturer-supported programs in this area.

#### Lake Tahoe Data

CUB presented data at the May 21, 1999 Cal/EPA meeting regarding the relative air and water emissions from two-stroke carbureted engines, two-stroke direct-injected (DI) engines, and four-stroke outboard engines. Figure 1 reproduces these data. The graph indicates the four-stroke outboard (which is the cleanest with respect to air emissions) contaminates water more than the DI engine (which has higher air emissions). CUB concluded that air emissions are not always indicative of water emissions.

After carefully examining this information, we believe the data and conclusions are incorrect. Due to the constraints of the testing done at Lake Tahoe, the report emphasized that the only constituent that can be fairly compared is toluene. This is due to the differences in test fuels and test procedures (some engines used California certified cleaner-burning gasoline and some engines used Nevada gasoline). Figure 2 clearly shows that – for toluene – the 4-stroke engine is cleaner with respect to water contamination than any of the two-stroke engines. That tracks with the air emissions data we have for 4-stroke versus 2-stroke engine technologies.

Figure 1

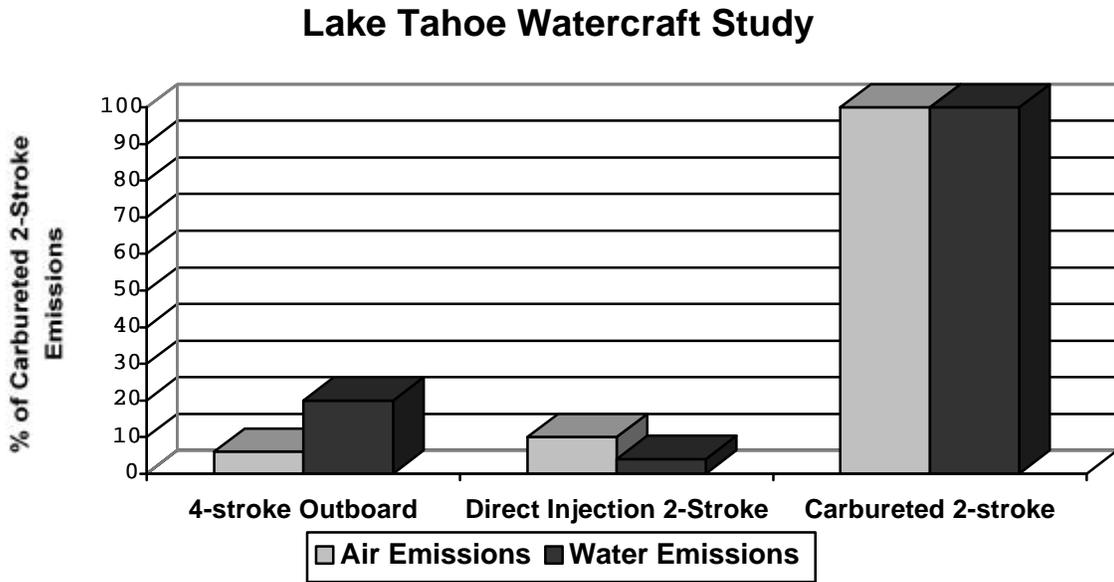
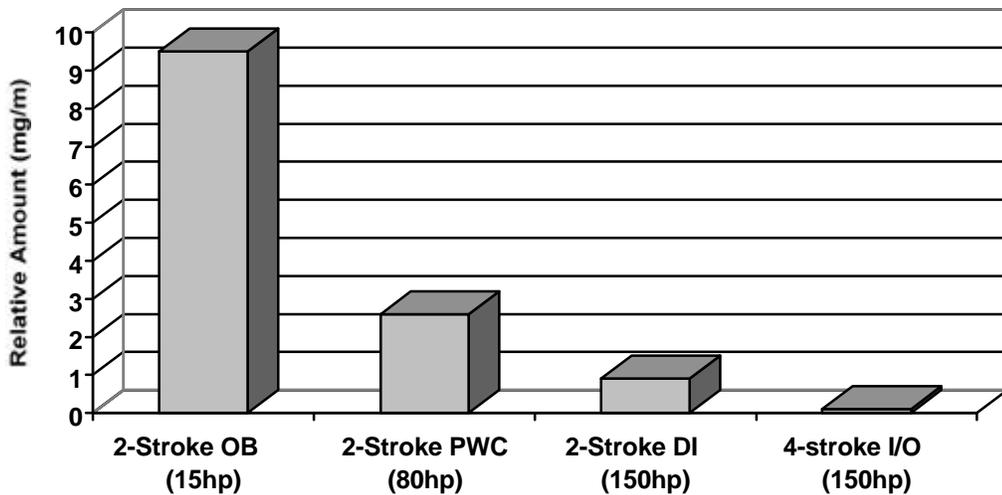


Figure 2

Dissolved fraction of toluene exhausted from different marine engines after a single pass at trolling speed



In closing, I would like to reiterate why the marine engine regulations are so important. Despite decades of progress, California still faces the nation's greatest air quality challenges. Every year, we lose billions of dollars due to air pollution. These costs include health-related problems, losses in worker productivity, plus damage to crops, forests and native vegetation. Our sunny climate, pollution-trapping mountains and valleys, along with the activities of nearly 33 million Californians all contribute to the problem. The marine engine regulations are an important and necessary step toward further environmental improvements.

Thank you for sharing your concerns about ARB's marine engine program. I look forward to meeting with you and water agencies to continue this dialogue in the near future. In the meantime, if you have any questions or need further assistance, please contact Michael P. Kenny, Executive Officer, at (916) 445-4383.

Sincerely,

Alan C. Lloyd, Ph.D.

Enclosures

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