

## UPDATED INFORMATIVE DIGEST

Sections Affected: Amendment to Title 13, California Code of Regulations ("CCR"), Section 2292.1, entitled "Fuel Specifications for M100 Fuel Methanol."

Section 2292.1, adopted by the Air Resources Board (ARB) following a March 12, 1992 Board hearing, sets forth specifications for M100 fuel methanol intended for use in motor vehicles in California. One of the specifications is a requirement that the fuel "shall produce luminous flame, which is visible under maximum daylight conditions, throughout the entire burn duration." This requirement was added because M100 fuel (a nominal 100 percent methanol fuel) burns without a readily visible flame under daylight conditions. As a result there is a safety hazard because a fire may not be immediately noticed. For this reason, ARB regulations prohibit a fuel supplier from selling M100 fuel as a motor vehicle fuel if it does not meet the luminosity requirement. Since there was no flame luminosity additive available at the time of the original rulemaking, the Board instructed staff to investigate potential additives and established a delayed implementation date of January 1, 1995 for the luminosity requirement.

Since the original rulemaking, industry representatives as well as ARB staff have initiated several test programs to find a suitable M100 luminosity additive. However, to date, no additive has been identified which satisfies the luminosity requirements of M100 without sacrificing emission performance. Because of the inherent safety issues involved with a fuel that has no readily visible flame, the staff did not propose that the luminosity requirement be removed from the M100 fuel specification. However, at the December 8, 1994 hearing, the Board approved a staff proposal providing additional flexibility in the requirement which would continue to address safety considerations. Specifically, the staff proposal allows fuel suppliers to sell M100 fuel which does not have a luminosity additive if they can demonstrate the fuel will be used only in vehicles equipped with either a system for automatically detecting and suppressing on-board fires or a system for on-board luminosity enhancement. At the hearing, the Board amended section 2292.1, as proposed.

ARB regulations also establish test procedures which are used in certifying motor vehicles that meet the Board's motor vehicle emission standards. These test procedures contain specifications that apply to M100 fuel used in certification testing. The test procedures provide that this fuel must meet the ARB's specifications for commercial M100 intended for use in California motor vehicles. Adoption of the amendment means that either the certification fuel used in testing an M100-powered engine must contain a luminosity additive, or use of the engine must be limited to vehicles equipped with a system for fire suppression or on-board luminosity enhancement.

At the December 8, 1994 hearing, several commenters urged repeal of the luminosity requirement. Based on the public comments, the Board instructed the staff to evaluate existing risk assessments of the fire safety of M100 motor vehicle fuel compared to other motor vehicle fuels. If the staff concludes that the relative fire safety of M100 shown by the existing data justifies deletion of the M100 luminosity requirement, the staff will return to the Board with a regulatory proposal to repeal the requirement. Otherwise, the staff is to work with the California Energy Commission and others in the preparation of an adequate comparative risk assessment, and to bring before the Board within two years a proposed amendment that would enable the Board to repeal the luminosity requirement if it chooses to do so. The staff currently plans to propose repeal of the requirement for consideration at a September 1995 Board hearing.