

MMT testimony draft
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June 30, 2010

Ichiro Sakai Testimony to the NV Legislative Sub-Committee on Regulation

Good afternoon, Chairman Conklin and Members of Legislative Sub-Committee on Regulation.

I am Ichiro Sakai, Assistant Vice President and Technical Representative in American Honda Motor Co., Inc. As for background, Honda has a significant presence in Nevada, 72 dealerships with more than 800 associates.

We strongly urge you to maintain the existing MMT ban in Nevada because it is not in the best interest of the state's consumers or in promoting clean air in Nevada.

As we have stated in the last hearing held in April, gasoline containing MMT has significant adverse impact on a vehicle's advanced emission system, especially High Cell Density Close Coupled catalyst, called HDCC. HDCC is key component to meet stringent emission standard for all automobile companies. In fact, this technology is now widely deployed to all OEMs. This adverse impact has been well documented in the Sierra Research Report which was conducted as a result of the auto industry's suspicion that MMT was plugging catalysts in Canada where it was widely used. This report summarized the impact of MMT use in unleaded gasoline on vehicle engines, emission control systems, and emissions. This comprehensive technical report includes laboratory tests, controlled fleet tests and a significant amount of market data, all tying MMT use to plugged catalysts. Accordingly, the number of catalyst plugging cases in Canada quickly diminished after MMT use was voluntarily halted by Canadian oil companies. This coupled with the fact that identical vehicles were marketed in the United States where MMT was not used and did not become plugged, proved the catalyst plugging was caused by MMT.

I have with me today a plugged catalyst display so you understand how the most advanced emission system will be impaired. Once it happens, it needs costly catalyst replacement. I will be glad to explain this display to you.

There appeared to be some misunderstanding during testimony in April regarding MMT approval by the U.S. EPA. The fact that MMT has not been disapproved by EPA does not equate to an approval. To explain this, I need to start with the history. In 1977, Congress banned MMT from unleaded fuel, although it gave the EPA Administrator the power to waive the ban if the additive could be shown not to harm the emission control systems of vehicles. In 1990, Congress defined manganese compounds as hazardous air pollutant "known or suspect to cause cancer or other serious health effects..." Between 1978 and 1991, the Ethyl Corporation, the predecessor to Afton Chemical, petitioned EPA four times to waive the MMT ban. The petitions were denied the first two times and withdrawn the third time. With regard to the fourth petition, in 1995 when catalysts were constructed differently because of different stringency in emission standards, EPA concluded that MMT would not "cause or contribute to failure of emission control devices". However, it did not lift the ban over concerns that airborne manganese particles pose a health risk.

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Submitted by: I. SAKAI

Ethyl subsequently sued EPA, arguing that EPA did not have the authority to deny the waiver on the basis of risk to public health. Its authority to deny the waiver extended only to harm to emission control system. Therefore, the court ordered EPA to grant the waiver in July 1995.

It is highly misleading to suggest that EPA "approves" the use of MMT. Data submitted elsewhere in this proceeding demonstrates that MMT does, in fact, harm present day emission control systems employed to meet the more rigorous standards than those in effect 15 years ago. However, EPA has not been asked to rule on that issue since there is almost no MMT used in the United States today.

Regarding the health impact of MMT use, many scientific studies support the use of the precautionary principle* and upholding of the current ban against use of manganese additive in fuels. The Brescia Declaration, contains the following warning "That the addition of organic manganese compounds to gasoline should be halted immediately in all nations. The data presented at the Brescia Workshop raise grave concern about the likelihood that addition of manganese to gasoline could cause widespread development toxicity similar to that caused by the world wide addition to tetra-alkyl-lead to gasoline" This was published in the prestigious American Journal of Industrial Medicine in 2007. Another famous health research institution, the Health Effect Institute, has issued a report that explains manganese would remain and simply accumulate in the brain once it is inhaled. As manganese is a well known neurotoxin, their finding provides grave concern and strongly suggests use of the precautionary principle. Meanwhile, Dr. Kittleson, of the University of Minnesota, has found that vehicle exhaust particles resulting from the combustion of MMT are extremely small. Particles in this size range represent a severe health hazard because they can easily enter the bloodstream through inhalation. The findings in the HEI study combined with the results of Dr. Kittleson's research lead to the conclusion that use of the precautionary principle is necessary to protect human health. Finally, the Asian fuel roadmap supports the application of the precautionary principle for metallic additives, including MMT, and discourages use until and unless the scientific and health studies show that they are safe. It should be noted that the US EPA has not finalized their health study yet.

You should be aware of a recent finding by the European Court of Justice (ECJ), with the ECJ Advocate General upholding the EU's Market Fuel Quality Directive under which manganese additive will essentially be prohibited, by stating that examination of the questions, raised by manganese additive producer, has disclosed nothing which could call into question the validity of Market Fuel Quality Directive¹.

We at Honda believe auto manufacturers (and all business) must serve the end customer to the best of our ability. Using MMT in gasoline is not in the best interests of the customer as it damages vehicle emissions systems, possibly resulting in costly repairs, impacts vehicle durability and imposes a high and reasonably anticipated health risk to customers. Based on this respect and concern for our customer, we strongly urge you to retain the current ban on MMT use in Nevada gasoline.

I am glad to answer any questions you may have.

Thank you.

¹ ECJ Advocate General opinion as published in the EU Official Journal on May 6, 2010 - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:62009C0343:EN:HTML>

* Precautionary principle: When an activity raises threats of harm to the environment or human health, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.