

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

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OFFICE OF RESEARCH AND DEVELOPMENT

The Honorable Ed Whitfield U.S. House of Representatives 2368 Rayburn House Office Building Washington, DC 20515

Dear Congressman Whitfield,

Thank you for your May 3, 2011, letter to the U.S. Environmental Protection Agency (EPA) regarding the draft Integrated Risk Information System (IRIS) assessment for halogenated platinum salts.

To clarify the decisions that led to the development of the IRIS assessment, my office, the Office of Research and Development, was requested to perform an assessment of halogenated platinum salts and platinum compounds to inform the Agency's evaluation of platinum fuel additives for diesel engines in EPA's diesel retrofit program. The Agency has posted a general statement regarding emissions from the use of platinum-based fuel additives at this site:

http://www.epa.gov/cleandiesel/verification/verif-list.htm. The current anticipated date for completion and posting of the final assessment on the IRIS database is September 2011.

The need for an assessment of halogenated platinum salts and platinum compounds was not related to any concerns regarding emissions from catalysts commonly used on automobiles. Rather, the Agency's focus is in regard to a very small segment of the platinum market involving the use of platinum fuel additives. EPA shares the strong desire to continue the production of pollution control technologies that enable significant mobile source emissions reductions.

Researchers at the University of Wisconsin have confirmed the presence of soluble platinum with anionic character (i.e., soluble platinum in the form of a salt) in emissions from combustion engines operating on platinum additives (Shafer et al., 2005). This is the fraction in which halogenated platinum salts would be found. Additional research is underway to identify and quantify the specific chemical forms of platinum salts in exhaust from diesel engines running on platinum fuel additives.

It is important to remember that an IRIS human health assessment is a scientific and technical report. Publication of an inhalation reference concentration does not have immediate regulatory consequences. An IRIS assessment is a hazard identification and dose-response assessment, and it does not include an exposure assessment or estimates of public health risks. Risk assessment information is considered with other information, such as other supporting science, statutory and legal considerations, risk management options, public health considerations, cost/benefit considerations, economic factors, and social factors, when the Agency makes a regulatory or other risk management decision. The bottom line is that an IRIS assessment is one, albeit very important, component of a comprehensive and balanced process to protect our most valuable resources: public health and the environment.

In your letter you mentioned that there is research underway on halogenated platinum salts. There are ongoing studies at the University of Wisconsin that are focused on characterizing emissions of fuel-borne platinum from diesel exhaust and on characterizing platinum in the environment near roadways. These studies do not bear on the evaluation of the health effects of halogenated platinum salts. We understand that other studies have been proposed and may be under development by the halogenated platinum industry, but these health-related studies will not be completed in the near future.

EPA agrees that the continued production of platinum-containing pollution control technologies is a critical component in achieving significant mobile source emission reductions. The use of platinum in three-way catalysts and particle traps are among the most significant contributions to the control of air pollution globally. The use of these technologies has resulted in significant benefits to human and environmental health from the reduction of ozone, carbon monoxide, particulate matter and air toxics. The Agency shares the strong desire for this industry to remain robust in the United States.

Again, thank you for your letter. If you have further questions, please contact me or your staff may call Monica Linnenbrink in EPA's Office of Congressional and Intergovernmental Relations at 202-564-6407.

Sincerely,

Paul T. Anastas

Assistant Administrator

References

Shafer, M., Schauer, J., Copan, W., et al (2005) Investigation of platinum and cerium from use of a FBC. SAE International Technical Papers 06FL-122.