FHWA MSAT Study

US 95 Settlement Agreement

Annual Progress Report, as of June 2010

Introduction

In June 2005, the Federal Highway Administration (FHWA), the Nevada Department of Transportation (NDOT), and the Sierra Club settled an appeal filed to prevent the expansion of US 95 in Las Vegas, NV. In the settlement agreement, the FHWA agreed to conduct a study to characterize the emissions of mobile source air toxics (MSAT) and PM_{2.5} in relation to traffic and meteorological conditions, and measure the dispersion of the emissions from the roadway. This progress report, required by Part 1, Paragraph 5 of the settlement agreement, describes the progress over the past year on the FHWA's fulfillment of its obligations under the agreement.

Funding

Funding was an issue throughout the past year. The efforts to reduce some operating costs were not realized due to equipment, staff, and scientific impediments. We believe that the study conducted in Detroit will be an opportunity to deploy the technology and realize some of the data capture potential we believe the equipment can provide.

All FHWA funds for the existing interagency agreement are now obligated to EPA. All funds sent to the Pooled Fund Program were also placed into the agreement. During this year it was determined the given the funding constraints the study conducted in Southeastern Michigan will employ the use continuous monitoring equipment to collect some of the air toxics data that was being gathered in Las Vegas via canister, and that we will gather canister and cartridge data during three intensive site visits over a nine month period.

FHWA and EPA will also develop a new interagency agreement to conduct the work in Michigan.

Site Operation

Las Vegas

In December 2009, FHWA and EPA ended the MSAT monitoring and non-continuous data collection in the "near roadway environment" in Las Vegas. The three additional gas chromatographs were purchased for installation in the three other trailers, but due to a number of issues were not in place until late in the monitoring regiment. The continuous monitoring, including the GC, remained in operation until February 2010.

Site Selection and Prospects for Further Study

Southeastern Michigan

The Eliza Howell Park along I-96 in Detroit, MI was selected as the location for the next study that FHWA and EPA will conduct. As mentioned above the sampling regime will change in order to collect the data wanted for a long as possible. The monitoring trailers are in place and the EPA consultants will be working to get them operational by the end of this month.

Raleigh

While it would be advantageous to use the in-kind staff and lab support this location would provide, given the lack of funds available at this time it is highly unlikely we'll be able to do Raleigh as a third site without being provided an additional source of funds in the future.

Conclusion

Over the past year, the FHWA has worked extensively with the EPA to complete the monitoring in Las Vegas and collect and analyze data. Securing the monitoring location in Southeastern Michigan, and looking for cost saving measures was also a big part of this effort. We look forward to continued analysis and efforts to present the results at national forums and in scientific journals. EPA is completing the quality assurance on the data collected, analyzing the results and preparing a final report for the Las Vegas data.