Contact Report
Gasoline Area Source Study

From: Julia Cavalier, MACTEC Federal Programs

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Contact: Mr. Ken Kunaniec

Organization: Bay Area Air Quality Management District, San Francisco, CA

Telephone Number: (415) 749-4607

Contact Summary:

Based on previous conversations with representatives of the California Air Resources Board (CARB), I contacted the Bay Area Air Quality Management District to obtain more information on the tank truck vapor tightness test, particularly about the level of compliance among the gasoline cargo tanks in operation and whether any kind of cost effectiveness study had been performed on the certification standard. The air quality officer to whom I spoke referred me to Mr. Ken Kunaniec, stating that he was deeply involved in developing vapor tightness standards.

When Mr. Kunaniec returned my call, he briefly reviewed the history of vapor tightness standards in California. Prior to 1976, individual Air Quality Management Districts (AQMDs) could establish vapor tightness standards. In 1976, CARB established their own certification and testing procedures for tank truck vapor tightness and required all AQMDs to enforce the single state standard. The standards in use were a 1 inch annual vapor tightness standard and a 2.5 inch "daily" standard (the daily standard was not necessarily performed every day but instead could be performed at any time on demand).

Mr. Kunaniec then stated that in the 1980's the US EPA sent a deficiency letter to CARB in reference to the tank truck vapor tightness field test procedure. In response, Mr. Kunaniec worked to develop a field test procedure. He also conducted research that showed that most tank trucks in the Bay Area were capable of meeting a 0.5 inch vapor tightness standard. In 1994, the State of California adopted the 0.5 inch vapor tightness standard. He informed me that CARB would have been required to conduct a detailed cost analysis of the certification and testing procedures.

Gasoline tank trucks must meet the strict vapor tightness test annually. There has been some question of whether trucks will continue to meet the standard reliably in the year before the next test must be conducted. (The most recent study available to us was conducted by PES in the late 1970's. At this time, researchers found that trucks that had met the annual vapor tightness standard might fail the field test 2-4 months later.) I asked Mr. Kunaniec if he had any information available on this subject. He indicated that without maintenance, the vapor tightness of trucks would most likely decline within the months following the test. When questioned as to whether more frequent testing would help to improve performance of gasoline tank trucks, he said that he believed so but that it might be too cumbersome a standard. He said that while they might be effective, quarterly tests would likely be economically infeasible.

Mr. Kunaniec recommended giving tank truck operators a number of options for improving performance. He has considered how best to develop quick inspection techniques (an "under rack" test that could be performed without removing the tank truck from service), but has not published any research on this subject. In his opinion, reasonable options for improving tank truck vapor performance might include semiannual certification, a monthly or quarterly under rack test, or tests in conjunction with maintenance required by the Department of Transportation.

(See record of conversation with Mr. Ray Shaffer of Weld-It in Los Angeles for more information on tank truck maintenance.)