

On The Incorporation Of Diesel Emissions Data Into the CVISN Infrastructure

New Jersey, Massachusetts, Connecticut, Maryland and New York have formed a partnership to share diesel emissions data. The referenced presentations (references 1 and 2) describe the current process in New Jersey for capturing and distributing emissions testing data, and the process the partner States would like to have in place. These are updated versions of the presentations made by Ralph Bitter of New Jersey at the CVISN Eastern States Design Workshop in May 2000.

As a result of the presentations and subsequent discussions, Change Request #1082 was entered for the CVISN Architecture. The objectives and requirements for interstate exchange of diesel emissions data are now understood well enough to define the scope of required system changes.

The objective is to provide a robust and user-friendly data exchange capability for multi-state use of diesel emissions data. Vehicles recently tested in other jurisdictions could be passed over for new inspections. Users of the data are those State staff charged with selecting vehicles for emissions testing, those recording test results and others with legitimate interests in the diesel emissions test results.

Operational Concept and Data Items

Before deciding whether to perform diesel emissions testing on a particular vehicle, State emissions inspection staff would view a vehicle snapshot on ASPEN, ROC or another system to check whether an inspection has been done recently in this or another participating jurisdiction. If so, they would manually review the results. If an emissions test is called for, the test conductor would collect test data as usual, and then enter the data below into the ASPEN inspection collection system. The data would then be uploaded to SAFER, and become available to snapshot users, including emissions inspectors in other jurisdictions.

The snapshot data could be used by electronic screening systems to select vehicles for emissions inspection from the mainline, based on logic set up within a particular screening site. A jurisdiction could develop its own software to populate the diesel emissions data fields from other authoritative sources in their own jurisdictions via a CVIEW-equivalent system.

The data to be exchanged is defined in reference 2 (items marked with * already have defined fields in vehicle snapshots):

- USDOT Number*
- Vehicle Identification Number (VIN)*
- Vehicle Year*
- Vehicle Make*
- State/License Plate Number*
- Gross Vehicle Weight*
- Engine Make
- Mileage
- Sticker Number (diesel emissions inspection sticker, if applicable)

Test Date
Pass/Fail Status of most recent test
Opacity

Existing systems that would be most directly affected are ASPEN and SAFER, and, for certain States, CVIEW and the Roadside Operations Computer (ROC). ASPEN would need to support data entry, retrieval and display for the emissions data. SAFER and CVIEW would need to adapt their databases and interfaces to handle the new data. ROC would need to add the display capabilities.

Current Status

New Jersey (and perhaps others in the partnership) enter emissions violation data into ASPEN "State-Defined" pages. State-defined field data may be reviewed via PIQ by other New Jersey users. The data is available for 45 days via the SAFER mailbox. It was New Jersey's understanding that this data may not be available to other jurisdictions, but there is empirical evidence to the contrary. New Jersey's diesel emissions data is also stored in a Department of Motor Vehicles database, not available to other jurisdictions.

Proposed Next Step

A working group should be formed to propose a schedule and develop an initial work plan. The working group should include representatives from each of the partner states, the CVISN Architecture team, the ASPEN development team, and the SAFER/CVIEW development team. Membership in the working group should be coordinated with State CVISN program managers.

Initial/proposed members:

Name	Affiliation	Email Address	Phone Number
Ralph Bitter	New Jersey DEP??	RBITTER@dep.state.nj.us	
Julie Ross	MA EQE??	[Julie.Ross@state.ma.us	
Tim Sheppard	MD Department of the Environment		
Dave Maestrini	DMV		
Joe Lee-Civilier	NY DEP??		
DJ Waddell	JHU/APL CVISN Architecture	Richard.Waddell@jhuapl.edu	443-778-5878
Alan Mick	JHU/APL SAFER/CVIEW	Alan.Mick@jhuapl.edu	443-778-7386
Carol Gore	FMCSA ASPEN	Carol.Gore@fhwa.dot.gov	

Reference 1: New Jersey Heavy Duty Diesel Emissions Violations: Records Trail and Interstate Data Sharing, R. Bitter,

27 October 2000
DJ Waddell

Reference 2: The Multi-State CVISN Data Sharing Proposal, R. Bitter