



Diesel Fuel Evaluation Pilot Study

**Commonwealth Transportation Board
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Study Proposal

- Evaluate use of standard diesel fuel grade.
- Desirable Outcome – Realize Potential cost savings from use of less expensive grade fuel. (\$400,000 to \$500,000 minimum annually)
- Need to make sure cost savings are not shifted to equipment maintenance.
- Ensure operational reliability.



Study Background Information

- **Approximately 7500 pieces of equipment.**
- **6.5 Million gallons of diesel fuel used in FY13.**
 - **DGS Fuel Contract. (Premium & Standard)**
 - **Some manufacturers recommend the use of premium diesel fuel. Industry use is mixed.**
- **Some preliminary research have been done. No singular conclusion at this time.**
- **No documented studies found to determine if the lower grade fuel reduces operational reliability or increases maintenance costs.**

Study Phases

- **Phase I – Start up/Logistics Base**
 - Establish Framework for testing protocols.
 - Logistical plan to administer remaining premium grade fuel in the piloting Districts.
 - Expected completion no later than September 1, 2014
- **Phase II – Testing and Evaluation**
 - Must be done during a winter season.
 - May include a platform for the evaluation of additives in the fuel.
 - Expected completion no earlier than June 1, 2015.
- **Phase III – Final Documentation and Reporting**
 - Documentation of the results.
 - Expected completion no later than August 1, 2015.



Study Organizational Roles

Project Sponsor: Chief Engineer, Garrett Moore, P.E.. Project Steering Committee Chairs Emmett Heltzel, P.E., State Maintenance Engineer, and Jose Gomez, P.E., PhD, VCTIR Director.

Project Teams: District Maintenance, Equipment, and Business Staffs.

Additional members: Maintenance Division Staff, VCTIR research scientists, Administrative Services Division Procurement/Contract Administration staff. Project team may be supplemented by outside consultants if needed.

Partnering Agencies/Entities: DGS, Department of Environmental Quality, equipment manufacturing community, fuel vendors on contract.