

US EPA ARCHIVE DOCUMENT

Virginia Environmental Results Program for USTs
Assistance Agreement No. EI-97340101-0
28th Quarterly and Final Report
March 2013 – May 2013
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Synopsis of Accomplishments during the Reporting Period

The DEQ-Office of Information Systems (OIS) and DEQ UST staff completed the ERP-Turbotank project as was outlined below.

(The grant was extended by EPA R3 to May 31, 2013—grant closeout to follow.)

DEQ UST staff participated in a Lean Analysis Process to analyze the UST Inspection process for efficiencies and related ERP flow logic—key DEQ Lean staff act as ERP-TurboTank advisors and reviewers. **NOTE: The original ERP Pilot project had been completed and reported to EPA as planned in 2009.** EPA R3 extended the grant period until 5/31/2013 since some \$91,502 of grant funding remained uncommitted and was thus used as agreed to: properly complete the existing TurboTank online software tool after the Pilot Project ended (post Pilot refinements); incorporate the Energy Policy Act of 2005 UST secondary containment requirements that became effective by regulation in VA on September 15th, 2010; make the TurboTank system more robust to accommodate an Operator Training function; and, provide better interfacing with the VA-DEQ CEDs UST database computer systems and enable real time TurboTank tank UST data reviews. These enhancements have been included in the online tool. See it at: <http://www.deq.virginia.gov/TurboTank/> and for example use owner 30159 (VDOT) and pick a VDOT facility as an example to do the tank by tank survey.

Ongoing meetings with key participants better refined the project scope and the planned interfacing of the online UST ERP tool with existing DEQ database, platforms, and programs. The project is complete and grant closeout documentation will follow.

Narrative Discussion

Ongoing meetings with DEQ-OIS staff have helped to refine the project approach and enabled hosting the ERP TurboTank tool within the DEQ-OIS server platform.

Original Pilot ERP-Turbotank Project (2009) - As a quick review of the 2009 pilot project final status, the UST database was randomly sampled for the approximately 100 selected ERP facilities with the 20 UST facility type categories (e.g. airline, gas station, commercial, utility, etc.) being used and samples weighted based on the total active facilities existing within each type. A broad spectrum of owners and facility types are included. The associated UST owners and their association representatives were contacted to begin the process of encouraging them to volunteer for participation in the ERP project. DEQ inspection staff and facility owners made up the key stakeholders for this pilot project. Due to contracting delays with development of the online tool the actual initial UST facility inspections occurred during the spring (March-June 2009) with the online ERP TurboTank tool becoming available at the same time.

Of the facilities contacted only some 50 attempted the online tool and of that group 36 completed the application successfully. Analysis of the 6/30/09 results data for the 36 facilities has proven complex when considering all the variables affecting the data, i.e. most volunteers were compliant willing conscientious computer savvy owners to begin with. A large percentage (~75%) of the online user facilities were already UST compliant and the conscientious owners gladly filled the online questionnaire out. A sample review on 2/2/12 of DEQ CEDs facility data to see if compliance was being maintained showed continued good compliance rates. But you also must factor in the fact that the onsite 3-year inspections by DEQ UST staff have continued to remind owners of their responsibilities and is likely a prime reinforcing agent for continued compliance.

ERP-TurboTank Enhancements (2013) – With funds remaining and EPACT 2005 requirements effective in state regulations, EPA R3 extended the grant period until 5/31/2013. Enhancements are: properly complete the existing TurboTank online software tool after the Pilot Project ended (post Pilot refinements); incorporate the Energy Policy Act of 2005 UST secondary containment requirements that became effective by regulation in VA on September 15th, 2010; make the TurboTank system more robust to accommodate an Operator Training function and include Delivery Prohibition (Red Tag); and, provide better interfacing with the VA-DEQ CEDs UST database computer systems and enable real time TurboTank tank UST data reviews. These enhancements have been included in the online tool. See it at: <http://www.deq.virginia.gov/TurboTank/> and use owner 30159 (VDOT) as an example.

**Project Tasks and Milestones
(Reflecting Accomplishments for this Quarter, and Projection of Activities and Major Expenditures for Next Quarter Report)**

The following is a listing of project tasks, descriptions, milestones, timelines as well as status.

| Table 1: Schedule of Major Project Tasks | | | | |
|--|--|------------|----------|--|
| This project's major tasks and timeline are outlined in the table below. | | | | |
| Task | Task Description | Start Date | End Date | Milestone/Status |
| Stakeholder Outreach | Initial and ongoing outreach to internal and external stakeholders (including Pilot Project facilities) about the project. | 6/1/06 | 6/1/09 | Set up mailing list; letters; emails/phone; Ongoing effort; Complete |
| Goals identification | Finalize the goals of this project, upon which metrics will be based. | 6/1/06 | 7/15/07 | Provide EPA list of goals; Complete |
| Develop Logic Model | Develop a finalized logic model with stakeholder involvement. Logic model can assist in development of metrics and data measurement needs. | 7/15/06 | 10/1/06 | Provide refined logic model; Complete |
| Measures identification | Development of final metrics to be tracked by this pilot project. | 7/15/06 | 8/1/07 | Include metrics in final QAPP; VCU Contractor evaluation; Complete |

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| Request for Proposals (RFP) for Contractor | Develop Request for Proposal (RFP) for CD-ROM/Online UST ERP Self-Certification Workbook development and retain contractor. | 8/1/06 | 6/1/09 ongoing/revised scopes of work | Provide copy of final agreement to EPA; Provided upon request; Complete |
| Quarterly Reports | Provide EPA with quarterly progress. | 10/1/06 | 6/1/11 Revised to 6/2013 | Provide reports; Ongoing; Submit first Quarterly Report to EPA (10/06) (all others follow quarterly through 6/11); Ongoing; Complete |
| Contractor develops Beta version of CD-ROM/Online UST ERP | VA-DEQ with stakeholder input advises and reviews development of Beta version of CD-ROM/Online UST ERP Self-Certification Workbook. | 3/1/08 | 10/1/08- extensions to 8/1/09 | Ongoing based on delays; Complete |
| UST Pilot Program Facility identification | Determine the exact characteristics of pilot facilities to be targeted, and compile a random list of 100 facilities from reliable sources. Selected participants in Pilot Program - major oil, state, federal facilities, etc. | 8/1/06 | 1/1/08 | Provide list; List Provided—List may be revised “randomly” based on other factors as agreed by EPA; Complete |
| Statistical methodology (included in QAPP) | Development of a statistical methodology to drive performance measurement and analytical tasks. | 8/1/06 | 12/1/09 | Develop statistical methods report; VCU contractor; Complete |
| Data input & management | Development and implementation of an approach to cost-effectively inputting and managing ERP data, including primary and secondary data (linking VA-CEDs UST registration database and screens for ERP use/display investigated). Primary data consists of data from audit inspection reports and facility forms (including self-certification forms). Secondary data sources include percentages of compliance under the existing onsite inspections system; Analysis of the percentage of compliance of the Pilot Program facilities prior to ERP and after self certification. | 12/1/07 | 12/1/09 | Review efficacy of data measurement tools; VCU Contractor; Complete |

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| QAPP finalization & approval | Finalize QAPP based upon results of the measures identification, statistical methodology, and data management tasks. Primary data collection will not occur before relevant parts of the QAPP are finalized and approved by EPA. | 8/1/06 | 12/1/09 | Provide final QAPP report to EPA (awaits VCU input under contract—will be delayed) ; Complete |
| Baseline onsite inspections | DEQ inspections conducted at Pilot Program facilities to establish a performance baseline. Facilities selected at random from the entire targeted Pilot Program population, based upon sample design from statistical methodology. NOTE: Any UST violations noted at any ERP stage (and any Return to Compliance Plan) will be handled as would any other facility violation under the VA-DEQ Agency Enforcement Compliance Manual (2001) and applicable DEQ/program guidance memoranda. The VA DEQ developed and delivered mandatory and voluntary training sessions to key parties to ensure quality data collection, to the extent practicable. | 7/1/08 | 05/15/09 | Compile list of sites baseline-inspected; compare with DEQ UST Checklist results and send summary to EPA—delays have pushed inspections to March-May 2009; Complete |
| Workbook and Certification Form Finalization | Finalization of CD-ROM/Online UST ERP Self-Certification Workbook, outreach and assistance materials, web resources, and certification forms. | 6/1/08 | 3/1/09 | Provide final online workbook link to EPA; Decision Tree link provided; Complete |
| Facility assistance/Outreach | Delivery of compliance/technical/online- workbook assistance to pilot facilities/owners, which is expected to take the form of workbooks, fact sheets and/or teleconferences/workshops. | 7/1/08 | 8/1/09 | Provide list of pilot facilities assisted to EPA; Facility List sent to EPA; Complete |

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| Task | Task Description | Start Date | End Date | Milestone/Status |
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| Online Self-certifications performed by owners with deadline for completion | Implementation of a voluntary facility self-certification approach for up to 100 Pilot Program facilities owned by up to 20 entities. Self-certification refers to the submission of a legally binding record of a facility's compliance and beyond-compliance practices. (If statistical methods and staffing time permit, two cycles of testing the online ERP and onsite inspection follow-ups will be considered, e.g., 2 owners of ~10 facilities then 20 owners of ~100 facilities.) | 10/1/08 | 7/1/09 | Report status online use Complete statistics and report issues/problems encountered; Complete |
| Analysis of Self-Certification Data | Analysis of Self-Certification data with primary purpose of identifying opportunities for selective follow-up (next step). | 12/1/08 | 10/1/09 | Performed on a case by case basis as analysis dictates; Complete |
| Selective follow-up | Selective follow-up with self-certifying facilities, based upon analysis of self-certification data. Targeted follow-up may include phone calls, inspections and enforcement. | 12/1/08 | 10/1/09 | Ongoing effort; Complete |
| Post-certification inspections | Inspections at facilities to establish whether sector performance measures (and other measures) have changed since the baseline. Inspection data also used to cross-check self-certification data at inspected facilities. Facilities selected at random from the entire targeted population, based upon sample design from statistical methodology. | 12/1/08 | 10/1/09 | Report on status and findings; Complete |
| Data analysis | Analysis of baseline, self-certification, and post-certification data to understand change in facility performance and overall outcomes of interest. Assessment of project efficiency. | 4/1/09 | 12/1/09 | Ongoing effort; VCU Report; Complete |
| Preparation of Final Project Report | Draft and finalize final project report. The final quarterly report constitutes the final report. | 6/1/09 | 6/1/11 Revised to 5/31/2013 | This final quarterly report constitutes the final project report. |
| Reporting to EPA | Reporting shall include quarterly and final report. | 6/1/09 | 6/1/11 Revised to 5/31/2013 | Initial Grant Period Effort Report sent to EPA and Senior DEQ Management (10/1/09) ; Complete |

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| Extension Granted by EPA to 8/1/11—further extended to 5/31/2013 | EPACT Secondary Containment requirements; Operator Training enhancements; and DEQ UST CEDs database linkage | 8/1/09 | 8/1/11 Revised to 5/31/2013 | Enhancements complete |

Financial Report

The VADEQ made payments for the UST ERP “decision tree” development and Pilot ERP-TurboTank Phase I work with VCU for a total of \$119,041. Of the \$253,500 total grant \$165,998 had been committed with \$87,502 remaining (currently committed and expended via contract). Lean analysis (TurboTank support) staff travel costs have totaled \$3,995.70 state match*

| Budget Category | Approved Budget | Spent This Qtr | Cumulative To Date |
|------------------------|------------------------|-----------------------|---------------------------|
| Personnel | 0 | | 0 |
| Fringe | 0 | | 0 |
| Travel | 1,500 | | -2,495.70* |
| Operating Services | 0 | | 0 |
| Supplies | 2,000 | | 0 |
| Contractual | 250,000 | -87,502 | 250,000 |
| Equipment | 0 | | 0 |
| Total | 253,500 | | 253,500 |
| Less Op Svs & Sup | 0 | | 0 |
| Indirect Costs | 0 | | 0 |
| Total | 253,500 | | 253,500 |

All grant funds have been expended and the grant closeout documents will be submitted to EPA promptly.