#### **ANNUAL UPDATE FOR FISCAL YEAR 2010-2011**

## COLORADO DEPARTMENT OF LABOR AND EMPLOYMENT DIVISION OF OIL AND PUBLIC SAFETY

# SB 89-181 COMPLIANCE WITH WATER QUALITY STANDARDS AND CLASSIFICATION

#### **SEPTEMBER 2011**

This update is offered to the Water Quality Control Commission concerning the activities of the Division of Oil and Public Safety Storage Tank Program for the period ending June 30, 2011.

## **Facility Statistics**

Total number of Active Facilities	4,897
Number of Facilities with USTs	2,967
Number of Facilties with ASTs	2,031
Technical Activities	
Number of releases active during Fiscal Year 2011	1,245
Number of confirmed releases	
Number of active release events (10/31/11)	960
Number of sites issued No Further Action required letters	
Number of Site Characterization Reports reviewed	
Number of Corrective Action Plans reviewed and approved	
Number of Monitoring Reports reviewed	3,111
Number of Notices of Violation sent	1,132
Number of Enforcement Orders sent	
Number of tank closures with OPS oversight (146 locations)	349
Percent of tank closures with confirmed releases (79 locations)	53%
State Fund Information for Fiscal Year 2011	
Number of reimbursement applications heard by the PST Committee Number of supplemental reimbursement applications approved by Dollars reimbursed by the PST Committee (including State Lead	
and LUST Trust)	
Total dollars reimbursed since inception of the Fund (1991)	.\$430,589,980

#### **Program Improvements**

Listed below are improvements made by the Division to the program in order to more effectively investigate and remediate the contamination associated with petroleum storage tank system failures and protect the solvency of the Petroleum Storage Tank Fund.

## Fate and Transport Modeling Training

OPS now offers to facility owners and consultants a free class and workshop on fate and transport modeling which is used to maximize assessment efficiency and evaluate potential risk of exposure to petroleum related contamination. This training allows for increased knowledge of the modeling process and accuracy of submitted models which in turn allows for enhanced protection of human health and groundwater while reducing resources needed for review.

## Agreement with CDPHE Waste Disposal

OPS and CDPHE have an agreement for surface disposal of non-contaminated purged groundwater. The agreement allows for land application of water purged from groundwater monitoring wells that define the extent of contamination but are not themselves contaminated. This reduces the volume of generated waste, disposal costs, and associated materials.

### Electronic Deliverables and Fund Payments

A file transfer protocol (FTP) site is available for uploading monitoring and remediation reports. The creation of this FTP site allows consultants to more easily and efficiently submit reports and reduces the amount of paperwork submitted to OPS. In addition, OPS began electronically submitting reimbursement payments from the Petroleum Storage Tank Fund (PSTF) to responsible parties.

## Above Ground Storage Tank Regulations

Changes to the aboveground storage tank (AST) regulations were effective April 14, 2011. Changes were made to nearly every section of the AST regulations for the purpose of clarification, consistency and adding flexibility in requirements where possible. An example of adding consistency was the update of AST closure requirements to be more consistent with UST closure requirements. Major changes in the regulations included changing requirements to correspond with National Fire Protection Association (NFPA) Codes 30 and 30A, and eliminating the Spill Prevention Control and Countermeasures (SPCC) section and defaulting to U.S. EPA approval of the SPCC plans.

The most significant change was adding a section that describes new requirements regarding annual inspections, to be conducted by a person familiar with the facility operations, and periodic formal external and internal inspections and leak testing, to be conducted by persons certified in the method of inspection (i.e. API 653 or STI SP001) or leak testing. The formal inspection and leak testing frequency increases with the increase of risk associated with the AST based on age, type, secondary containment and condition of the AST.

#### A/B Operator Training

UST operator training is a requirement of the Federal Energy Policy Act of 2005 and is designed to ensure knowledge regarding operating and maintaining UST systems. These requirements apply to UST systems regulated under Subtitle I, except those

excluded by regulation in 7 C.C.R. 1101-14 §2-1-1(b) and those deferred by regulation in 7 C.C.R. 1101-14 §2-1-1(c). The regulations require that each facility designate a Class A and B Operator that has been trained via a curriculum that has been approved by OPS.

A Class A operator has primary responsibility to operate and maintain the UST system. The Class A operator's responsibilities include managing resources and personnel, such as establishing work assignments, to achieve and maintain compliance with regulatory requirements. A Class B operator implements applicable UST regulatory requirements and standards in the field. This individual implements day-to-day aspects of operating, maintaining, and recordkeeping for USTs at one or more facilities. Approximately 92% of active UST facilities have designated a trained Class A and B Operator for the facility.

## Tank Closure Program

OPS Remediation Section provided regulatory oversight during the permanent closure of 349 petroleum storage tanks at 146 locations during FY 2011 and will continue this role in FY 2012. During these closure inspections, OPS staff ensures that proper tank closure methods are utilized and closure assessment sampling of soil and groundwater is conducted to measure for the presence of a release. During FY 2011, 76 site closures (52%) had confirmed petroleum releases. Of the 76 petroleum tank sites, 64 sites (81%) were issue no further action determinations.

## Petroleum Storage Tank Fund - State Lead Cleanups

During FY 2011 the OPS conducted assessment and remediation activities at 123 petroleum impacted sites using State environmental contractors. These sites fall into two classifications innocent property owners or tank owner/operators who are unable to conduct remediation for financial reasons. The State Lead for Responsible Parties (SLRP) program was established to assist these tank owner/operators. Of the 123 active State Lead sites, 69 are in the State Lead for RP program and 54 sites are being addressed for persons bearing no responsibility for the release. In FY 2011 the OPS expended over six million dollars protecting groundwater through soil and groundwater remediation.

#### LUST Trust Fund

OPS has continued to assess and remediate sites where tank owners were unknown or in some cases financially unable to perform the work. The SLRP program now assists many of the financially unable responsible parties, who previously were in addressed utilizing LUST Trust grant monies. During FY 2011, the OPS expended \$912,721.57 at the 22 sites. Work performed at these sites was funded through the USEPA Leaking Underground Storage Tank (LUST) Trust Grant and through costs recovered from the PSTF for eligible sites. At twenty of the sites being addressed the owner is financially unable to perform the work. Of these sites 14 have active remediation systems operating and six are on a quarterly groundwater monitoring schedule. Two subsurface investigation were performed and the responsible party was identified.

In FY 2011 OPS completed investigations and limited remediation at 67 low risk sites utilizing additional Federal funding which expired on June 30, 2011. OPS was able to expend all of the Grant funding (\$923,320.16), which resulted in issuing no further action (NFA) status for 43 of the sites and identifying alternative funding sources for the remaining 14.

### **ARRA Fund**

On July 8, 2009 OPS received \$2,540,000 in ARRA funding to assess and clean up soil and groundwater contamination at sites with leaking underground storage tanks and no viable responsible party. The assessment and clean up of these sites will provide long-term protection from pollution in soil and groundwater as well as economic growth opportunities on properties that are currently abandoned or unused.

The OPS has expended approximately 2.2 million dollars assessing and remediating 32 sites that qualified for ARRA funding. Of the 32 sites 10 have received a no further action status. The ARRA grant expires on December 31, 2011 and OPS anticipates that all of the funding will be spent.

#### Green and Sustainable Remediation

OPS has initiated Green and Sustainable Remediation efforts in order to more thoroughly consider aspects of public health and the environment that have been generally overlooked during past assessment and remediation activities. For example, the current state of the practice for storage tank remediation in the State of Colorado does not heavily weigh the production of greenhouse gases, the consumption of energy, the use of material resources or the generation of fugitive air emissions in the remedy selection process. OPS has developed guidance and best management practices with the goal of minimizing total energy use, air pollutants, and waste associated with petroleum contamination assessment and remediation.

#### Petroleum Brownfields Program

In FY 2011, OPS dedicated resources and is focusing efforts to develop a sustainable Petroleum Brownfields Program. The OPS Petroleum Brownfields Program's goal is to promote environmental protection, provide economic and cultural benefits, create jobs and support community revitalization through the assessment, cleanup and sustainable reuse of abandoned and underutilized petroleum storage and dispensing sites in the State of Colorado.

OPS and CDPHE have an interagency agreement in place that provides financial assistance in the assessment and cleanup of brownfields sites throughout the State. During FY 2011, OPS provided valuable technical and financial support that facilitated Phase I & II Environmental Site Assessments for the Pueblo Cooperative Care Center (PCCC). PCCC is a non-profit organization that provides the community with clothing, food, medical prescriptions, transportation and other services to over 24,000 families and individuals each year. PCCC currently occupies a former gas station site. The results of the site investigation cleared the way for future redevelopment of the property. OPS will continue to pursue similar petroleum brownfields activities in FY 2012.