



Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Matthew H. Mead, Governor

Todd Parfitt, Director

MEMORANDUM

TO: Members, Wyoming Legislature and Other Interested Parties

FROM: Todd Parfitt, Director 
Wyoming Department of Environmental Quality

DATE: October 1, 2014

SUBJECT: Fiscal Year (FY) 2014 Storage Tank Program Annual Report

Pursuant to W.S. 35-11-1414(d), the attached FY2014 Storage Tank Program (STP) Report is respectfully submitted for your information. This report summarizes environmental restoration expenditures and tank compliance activities for the STP during the state fiscal year ended June 30, 2014.



WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
SOLID & HAZARDOUS WASTE DIVISION
STORAGE TANK PROGRAM
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**FISCAL YEAR 2014
STORAGE TANK PROGRAM
ANNUAL REPORT**

October 1, 2014

Prepared by:

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STP Manager**

SECTION A

MAJOR PROGRAM ACCOMPLISHMENTS DURING FY2014

The Wyoming Department of Environmental Quality/Solid & Hazardous Waste Division's Storage Tank Program (STP) has been actively remediating contaminated sites since 1991. During each year, the program has initiated aggressive environmental remedial actions at the highest priority sites using available resources.

The STP has an active inspection program to monitor compliance with Wyoming Water Quality Rules and Regulations (Chapter 17) and the Environmental Quality Act (EQA). An effective notification and enforcement program helps Wyoming maintain one of the highest compliance rates in the country.

STP major accomplishments during FY2014 include:

- A. Environmental remediation management of 45 active projects. At the end of the fiscal year, 417 contaminated source sites were included in these active projects. Remediation at affected third-party sites is also an ongoing activity within most active projects. The majority of this work involved continued operation and maintenance for constructed remediation systems for 43 of the projects. The work also included design of remedial systems for 18 of the projects, subsurface investigation for 14 of the projects, construction of remedial alternatives for 19 of the projects, and decommissioning for 15 of the projects. Four projects were started during FY2014: Rock Springs 4 (11 sites), West Park County (8 sites), Albany County 2 (10 sites), and South Casper (20 sites). Consultant selections for the Dubois Project (10 sites) and the Lander/Hudson Project (28 sites) were completed; however, work had not yet started on these 2 projects.
- B. Work continued on development of a geographic information system (GIS) database to store remediation project information. The database is operational. The system will be migrated to WDEQ servers during fiscal year 2015. The consultant will be retained for continued assistance and maintenance during transition from the consultant's servers to WDEQ's servers. Modifications to the compliance database are ongoing including getting the inspection tablet application running. Ongoing maintenance of both the compliance database and the GIS will continue into FY2015.
- C. Management of tank owner/operator compliance with state rules and regulations continued. As of June 30, 2014, there were 3,855 facilities (gas stations, emergency power generator locations, etc.) with tanks or that had tanks in the past. There were 8,772 permanently out-of-use (POU) tank systems, 1,781 active tank systems, and 145 temporarily out-of-use (TOU) tank systems for a total of 10,698 tank systems regulated by the STP (see Table 3).

- D. During FY2014, the STP conducted 969 on-site visits; 323 of which were EPA-required compliance inspections. This included inspections of USTs, ASTs, and remediation site visits. The STP also reviewed 649 operator annual inspection reports.
- E. EPA recognizes three program performance measurements, which are called Significant Operational Compliance (SOC) measures. By EPA definition, SOCs are calculated over a 12-month period. The compliance rate is based on the number of UST compliance inspections (only) completed during the period and the number of facilities inspected that were out-of-compliance. AST inspections and other inspections that are not considered UST compliance inspections by EPA definition are not included when determining SOCs. The number of UST compliance inspections completed over the past 12 months was 323.

SOC-1 measures how well operators are following UST leak detection requirements. Seven facilities were in SOC-1 violation during FY2014, which is a compliance rate of 98%. SOC-2 measures how well operators are complying with UST corrosion protection requirements. Thirteen facilities were in SOC-2 violation during FY2014, which is a 96% compliance rate. SOC-3 is a combination of SOC-1 and SOC-2. The SOC-3 compliance rate was 94% during FY2014.

EPA's current strategic plan is for a baseline SOC-3 of 68% by federal fiscal year 2015. Wyoming's SOC compliance rates are significantly higher than the rates most other states report to the EPA and well above EPA's goals. As of mid-year EPA reporting (period ending March 31, 2014), the national average compliance rate was 72%; Wyoming's average was 90% (tied for 3rd highest in the nation) at that time. Wyoming's excellent compliance rates have been achieved because:

1. The STP's Compliance Section tracks every required test for every tank. Using this system, operators are notified in writing before a test is due to give them time to have the test done before it becomes past due.
 2. Owner/operators that do not complete the tests required are subject to effective enforcement action. As a goal, the STP initiates enforcement within 6 months of a test becoming overdue.
- F. Corrosion protection systems must be tested once every 3 years. Not all tanks in Wyoming have corrosion protection because some tanks do not corrode when in contact with soil (e.g., fiberglass, clad, and composite tanks).

At the end of FY2014 there were 608 tanks that were protected against corrosion using sacrificial anodes. Within the last 3 years, 12 of these tanks had not been

tested. These tanks were located at 12 facilities. This is a 98% compliance rate. At the end of FY2014 there were 377 tanks that were protected against corrosion using impressed current systems. Only 9 tanks at 9 locations were not current for the required testing. This is a 98% compliance rate.

- G. Twelve formal STP enforcement actions were taken by the department during the year. Four actions resulted in enforcement penalties totaling \$7,700 with \$1,500 stayed for up to 3 years pending future compliance. One red-tag order (fuel delivery prohibition) was issued due to non-compliance; as of the end of the fiscal year, this red tag had not been lifted.

SECTION B PROGRAM ADMINISTRATION

I. STP Organization. The WDEQ/SHWD organizational chart and STP district office information as of June 30, 2014, are attached. The department would not be able to accomplish this ambitious state program without these dedicated professionals.

II. Funding. W.S. 35-11-1414 through 1428 provides that the department's financial obligations for remediation actions are limited to the funds available in the Corrective Action Account (CAA). The department is remediating eligible contaminated storage tank sites as funding in the CAA allows and staff is available to manage new projects.

The State Revolving Fund (SRF) loan program prepared an Intended Use Plan (IUP) for completing STP corrective actions and municipal wastewater treatment system improvement projects in Wyoming for FY2014. This document was the subject of a public hearing process, and projects are being implemented in accordance with the plan. Tables 1 and 2 (attached) present a summary of the STP/SRF cumulative balances as of June 30, 2014.

The Financial Responsibility Account (FRA) provides financial assurance coverage required by federal law for the purpose of compensating third parties for a portion of damages caused by releases from program-eligible leaking USTs and ASTs. The statutes also provide that nothing in the EQA shall be construed to authorize commitments to cover property or personal injury damages in excess of the available balance in the FRA. Since program inception, there have been no claims against the FRA.

Tank owners are required to pay annual tank fees. Contaminated site owners are required to pay contaminated site fees. Fees must be paid for a site to remain eligible for the state-funded program. If fees are not paid, the owner is issued an Order by DEQ to begin cleanup or the DEQ completes the cleanup and seeks cost recovery. The owner also no longer has financial assurance required by federal law and must obtain financial assurance through a private party.

III. Underground Storage Tank/Leaking Underground Storage Tank (UST/LUST)

Program Primacy Application to EPA. Program primacy applications have been submitted to EPA. Primacy for the program has continued to be denied by EPA. The initial (and continuing) concern of EPA was/is timeliness of remedial actions. The program intends to resubmit its primacy application after EPA finalizes proposed changes to the tank laws in the fall of 2014. If Wyoming is granted program primacy, citizens and tank owners and operators will not see any significant changes in the day-to-day program administration. However, the state will receive full responsibility for program administration with a large reduction in direct federal program oversight.

SECTION C STORAGE TANK OVERVIEW

Table 3 (attached) provides an overview of the number of UST and AST facilities and tanks in the state. Tank facilities include any location that has a tank or has had a tank in the past. Many facilities have more than one tank. An active tank is currently dispensing a product. A temporarily out-of-use (TOU) tank has had the product removed to within 1-inch of the bottom and all corrosion protection systems on the tank remain in working order. Tanks that are TOU may be placed back into service at any time with notification to the department. A permanently out-of-use (POU) tank has been taken out of service permanently either by closing the tank in place (cleaning and filling with an inert material) or by removing the tank.

SECTION D STP REMEDIATION ACTIVITIES

I. Summary. W.S. 35-11-1414 through 1428 require that the department remediate contamination caused by program-eligible releases based on a priority ranking score. Four primary factors affect the prioritization ranking score: 1) the degree of immediate adverse health exposure and/or safety hazards to people in nearby buildings or to public utilities, 2) surface and groundwater quality protection, 3) potential for contaminants to migrate, and 4) ecological protection.

As of June 30, 2014, a total of 1,613 contaminated STP source sites, requiring some degree of active environmental remediation, existed in the state. For comparison, the number of contaminated sites requiring remediation in December 1991, when the program was started, was 475. Of these 1,613 contaminated source sites, 1,104 have been remediated or resolved by the STP, leaving 509 unresolved contaminated sites. Of the 509 unresolved contaminated sites, 417 were in corrective action projects. The remaining 92 sites have been scheduled for future projects. See Table 4 attached.

II. Remediation Projects. The STP's goal is to complete subsurface investigations at known contaminated sites on a priority basis and to initiate full remediation actions at the worst sites first. To accomplish these tasks, the STP currently has prequalified 13 consultants to investigate sites, design environmental remediation technologies, and complete operation and maintenance

of the installed systems; 15 construction firms to install the designed remediation systems; 6 equipment companies to supply the remediation equipment and enclosures; 16 contaminated soil excavation firms; and 11 analytical laboratories.

STP projects average about 12 contaminated source sites and affected third party locations that may have been contaminated by a source site. STP remediation projects are completed in five phases: 1) subsurface investigations including drilling and soil and groundwater sampling to determine the lateral and vertical extent of contaminants, 2) design of remedial alternatives to complete remediation, 3) construction and installation of the designed remediation technologies, 4) operation and maintenance of the remediation technologies until STP soil and groundwater standards have been achieved, and 5) project decommissioning to remove equipment and/or permanently seal subsurface remediation system components. In general, tasks associated with each project phase are:

- STP subsurface investigation (SSI) tasks include drilling, drilling oversight, soil and groundwater sampling and analyses, and report preparation. Modified subsurface investigations (MSSIs) have been completed at numerous lower priority sites to determine if natural attenuation has achieved soil and groundwater standards, or if the site(s) must remain on the contaminated site list for future remedial work. These investigations include installation of three to four monitoring wells per site and soil and groundwater sampling and analyses. Based on past experience, approximately 40 percent of these sites can be closed upon completion of the MSSI.
- Design is based on the results of the SSI and includes preparation of the Remedial Action Plan (RAP) and plans and specifications for the selected remediation technologies. Plans and specifications are used by the STP to bid construction and equipment supply of the remedial alternatives selected.
- Construction of the designed systems includes installation of wells and piping, remediation equipment installation, and consultant management of the construction contractor and equipment supplier. The consultant oversees the equipment supplier and construction contractor during installation of the designed remediation systems and represents the STP during construction.
- After the systems are installed, they are operated and maintained until soil and groundwater standards are met. Of all project phases, operation and maintenance of the remediation systems requires the most time.
- Decommissioning sites that have been remediated is the final phase of a project. After soil and groundwater standards have been met, the sites are restored to pre-construction conditions. This includes removing equipment, abandoning wells, plugging pipelines, and surface restoration.

Table 5 (attached) provides project cost summaries, including project name, number of sites in the project, and the total project cost-to-date for all work phases. Not all sites are included in all phases of a project. For example, a project may have included 20 sites in the original SSI, but only 12 of those sites may have been included in the design phase. This is because, based on information collected during the SSI, some sites may not require active remediation.

In an effort to reduce staff time and contract administration costs, the STP has begun combining projects that are in the same geographical area and managed by the same engineer. More projects will be combined in the future as the opportunity arises. To date, the following projects have been combined:

- One remaining site in the West Laramie project was moved into the Laramie 3rd Street project during FY2008.
- The Glenrock/Douglas sites were put into the S. Converse County Project in FY2009.
- The Riverton, Riverton 2, and Wind River projects were combined with the Riverton 3 project during FY2013.
- The Hulett and Sundance projects were combined with the NE Wyoming project during FY2013.
- The Green River project was combined with the Rock Springs 3 project during FY2013.
- The Rock Springs 2 project was combined with the North Elk Street project during FY2013.
- The Buffalo project was combined with the Sheridan project during FY2013.
- The Central Cheyenne project was combined with the SW Cheyenne project during FY2013.
- One remaining site in the Baggs project was moved to the Rawlins #1 project in FY2013.
- The South Central Casper and SW Casper projects were moved to the Central Wyoming project in FY2013.
- The Pinedale 2 project was moved to the Lincoln/Sublette Counties project in FY2013.
- The Upper Platte Valley project was moved to the Laramie East Grand project in FY2014.
- The Lovell project was moved to the North Big Horn Basin project in FY2014.
- The North and South Evanston projects were combined in FY2014.
- The Casper Flying J site and the South Converse County projects were combined with the West Casper project in FY2014.
- The Ten Sleep project was moved into the Worland 2 project in FY 2014.

III. Immediate Response. STP immediate response actions are taken at program-eligible sites when imminent contamination of a water supply is threatened. Immediate response actions are also taken when complaints of petroleum vapors inside homes, businesses, or occupied confined spaces are received and an on-site evaluation confirms an imminent potential environmental health problem may exist. These immediate response actions are taken to contain the subsurface plume, to determine the extent of any imminent health and/or safety hazards, and to take necessary action to stabilize the site.

During FY2014 the STP completed an emergency response at the Hoback Market on South Highway 89 south of Jackson. In January 2014 EPA received a complaint of gasoline odors in the bathroom sink at the facility. The STP has completed sampling of the water supply well at the facility and drinking water wells downgradient of the facility. Contaminants associated with gasoline were only found in the facility's well. The STP has moved this site into the Jackson remediation project and is currently completing additional investigation.

IV. Laboratory Certification. A significant portion of STP remediation costs involve laboratory chemical analyses. Associated with laboratory analyses are potential quality control issues and standardized procedures to maintain consistency between projects and contractors. Analytical data are used extensively to justify spending millions of taxpayers' dollars to remediate leaking tank sites. If laboratory data results are questionable, management decisions to spend state funds to remediate sites may also be in question.

In an effort to maintain the highest quality control and to standardize chemical analyses procedures, a laboratory certification program was implemented at no cost to the STP. This certification program is administered by the American Association for Laboratory Accreditation (A2LA). A2LA performs laboratory inspections and audits to ensure the laboratories maintain the high degree of performance required to retain certification. Eleven laboratories have achieved and maintained A2LA certification for the Wyoming STP.

FIGURES AND TABLES

Solid and Hazardous Waste Organizational Chart

STP District Office Information

Table 1. Storage Tank Program (STP) State Revolving Fund Balances as of June 30, 2014

Table 2. Storage Tank Program (STP) State Revolving Fund (SRF) Account Activity as of June 30, 2014

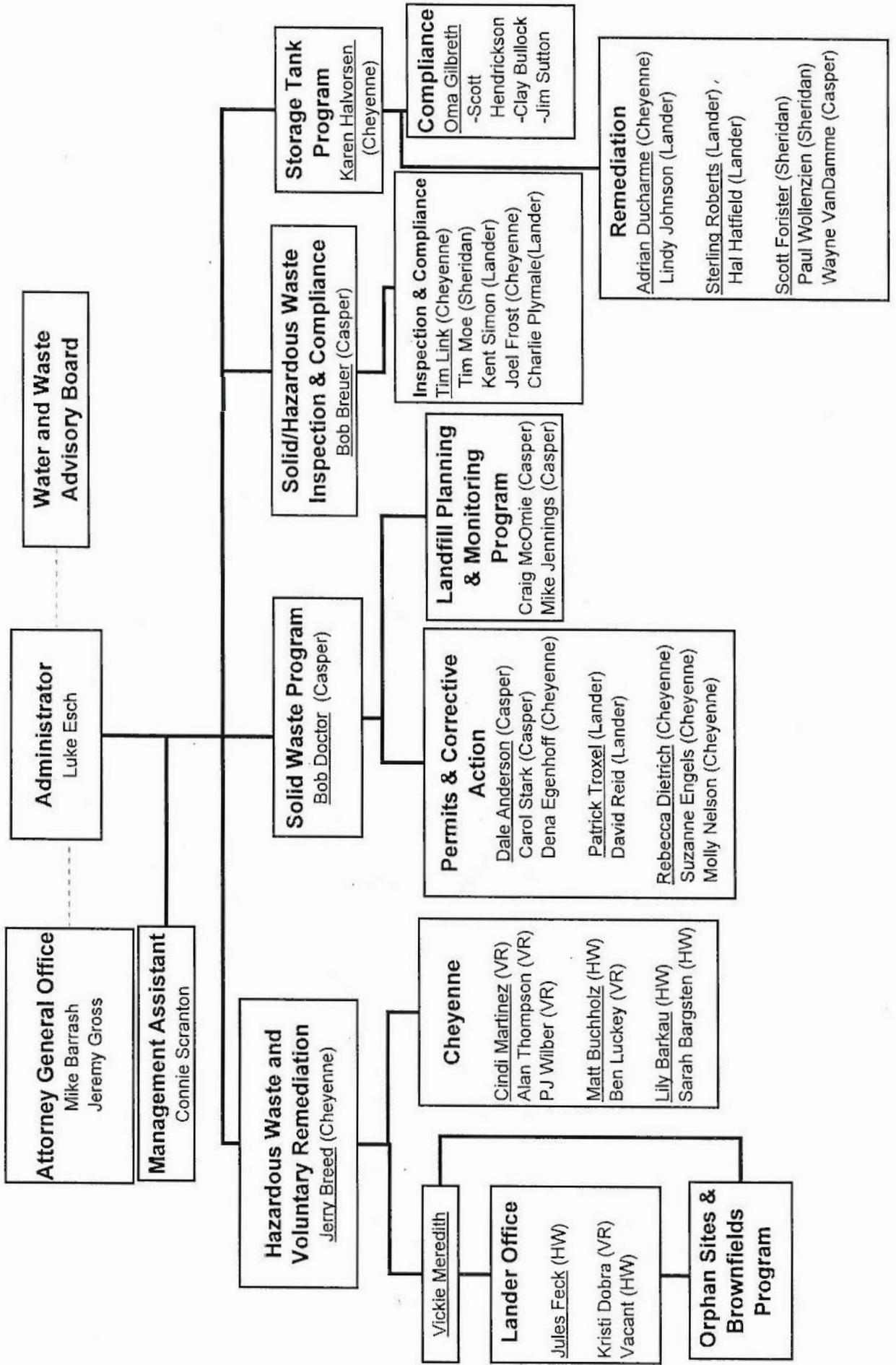
Table 3. UST and AST Overview as of June 30, 2014

Table 4. Remediation Overview as of June 30, 2014

Table 5. Project Cost Summary Through Fiscal Year 2014

Solid and Hazardous Waste

06/2014



**WDEQ/SHWD STORAGE TANK PROGRAM
DISTRICT OFFICES**

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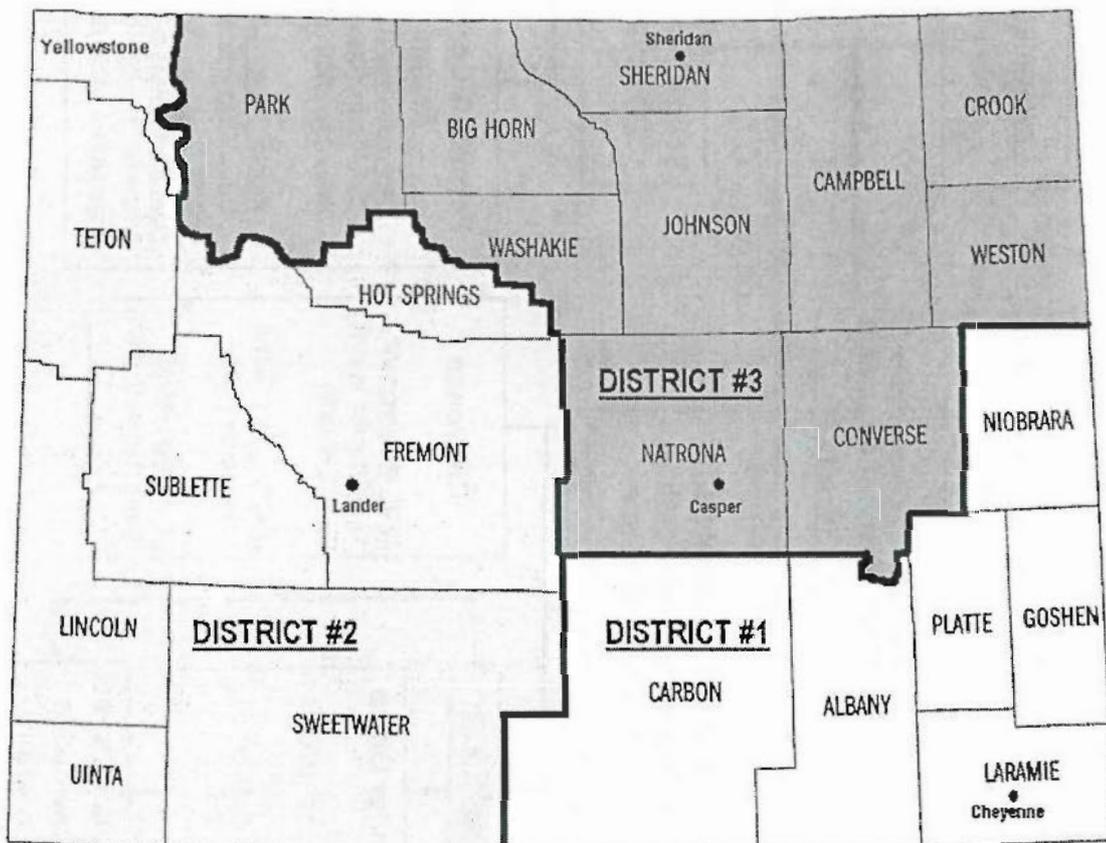
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**TABLE 1
STORAGE TANK PROGRAM
STATE REVOLVING FUND BALANCES
AS OF JUNE 30, 2014**

FUNDING SOURCE	BALANCE
State Corrective Action Account (Available for STP Remediation Projects)	\$9,027,394
State Financial Responsibility Account (Available for Court-Awarded STP Third Party Damages)	\$1,000,000

**TABLE 2
STORAGE TANK PROGRAM
STATE REVOLVING FUND (SRF) ACCOUNT ACTIVITY
AS OF JUNE 30, 2014**

PROGRAM ACTIVITY	AMOUNT
Loan Authority Available to STP	\$195,114,088
Loan Authority Encumbered and/or Disbursed	
SRF Loans Paid	\$99,365,137
SRF Loans Payable	\$73,347,909
SRF Encumbrances	\$13,381,151
SRF Available Loan Authority	\$9,019,891

**TABLE 3
UST AND AST OVERVIEW
AS OF JUNE 30, 2014**

Description	Number
Total STP Facilities – Active, TOU, and POU Facilities	3,855
Total Tanks of all Types	10,698
Total UST Tanks	10,116
Total AST Tanks	582
Total UST Active-and TOU Facilities	684
Total Active USTs	1,653
Total TOU USTs	140
Total POU USTs (includes 43 non-federally regulated pre-law tanks)	8,323
Total AST Active and TOU Facilities	63
Total Active ASTs	128
Total TOU ASTs	5
Total POU ASTs	449

Note: Many facilities have both USTs and ASTs.

UST- Underground storage tank
 AST – Aboveground storage tank
 TOU – Temporarily out-of-use
 POU – Permanently out-of-use

**TABLE 4
REMEDIATION OVERVIEW
AS OF JUNE 30, 2014**

DESCRIPTION	FY 2009*	FY 2010*	FY 2011*	FY 2012	FY 2013	FY 2014
Contaminated Source Sites	1,659	1,625	1,599	1,600	1,606	1,613
Source Sites Remediated/Resolved	902	899	955	1,006	1,067	1,104
Unresolved Source Sites	757	726	644	594	539	509
Unresolved Source Sites in Active Remediation ¹	348	350	341	399	397	417
Source Sites Awaiting Remediation	409	376	303	195	142	92

* Error in database accounting. The program underwent an extensive database review and cleanup from 2009-2011. Errors were found and corrections made to some of the data provided in this table.

¹ Does not include third-party site properties contaminated by the known source site.

**TABLE 5
PROJECT COST SUMMARY THROUGH FISCAL YEAR 2014**

Project Name	Number of Sites	Cumulative Total Expended
Albany County/Tie Siding	4	\$ 433,289
Albany County 2	10	\$ 8,528
Basin SSI	2	\$ 47,194
Big Horn Basin	39	\$ 199,433
CAA Dig/Haul/SSI/IR		\$ 1,780,943
Casper Sampling SSI	33	\$ 42,290
Casper Yellowstone Highway	3	\$ 97,467
Central Wyoming/SW Casper/S Central Casper	30	\$ 2,930,118
East Casper	15	\$ 254,421
East Gillette	22	\$ 3,145,314
Ft Bridger Old and New Projects	4	\$ 510,017
Gillette Stonepile Creek	1	\$ 44,861
Green River 2	7	\$ 461,206
Greybull AST	1	\$ 64,538
Greybull Emergency Response	1	\$ 382,072
Greybull/Basin	19	\$ 6,961,804
Greybull/Basin 2	6	\$ 113,264
Jackson	34	\$ 7,703,003
Jackson Quality Cleaners	1	\$ 86,321
Jeffrey City/Bairoil	6	\$ 250,920
Kemmerer	18	\$ 2,117,589
Kemmerer Old	1	\$ 217,617
Laramie 3rd Street	32	\$ 12,115,632
Laramie East Grand/Upper Platte Valley	30	\$ 3,549,401
Lincoln/Sublette Counties/Pinedale 2	21	\$ 2,617,138
Lyman/Mountain View	21	\$ 5,409,967
Niobrara/Goshen Counties	6	\$ 2,789,518
North Big Horn Basin/Lovell	27	\$ 2,943,511
North Evanston/South Evanston	30	\$ 2,714,079
North Modified SSI	74	\$ 220,697
Northeast Central Modified SSI	38	\$ 208,042
Northeast Groundwater Sampling	22	\$ 55,834
Northeast Modified SSI	32	\$ 176,821
Northeast Wyoming/Hulett/Sundance	37	\$ 7,148,950
Northwest District	19	\$ 209,210
Opal	3	\$ 1,497,397
Pinedale	13	\$ 7,054,653
Platte County	18	\$ 5,578,072
Powell	20	\$ 5,972,845
Ranchester/Leiter	3	\$ 264,449
Rawlins #1/Baggs	12	\$ 4,168,246
Rawlins #2	13	\$ 1,389,875

**TABLE 5
PROJECT COST SUMMARY THROUGH FISCAL YEAR 2014**

CONTINUED

Project Name	Number of	Cumulative Total
Riverton 3/Riverton/Riverton 2/Wind River	73	\$ 12,295,997
Rock Springs North Elk Street/Rock Springs 2	28	\$ 8,668,031
Rock Springs 3/Green River	27	\$ 4,887,036
Rock Springs Pilot Butte	20	\$ 2,281,438
Rock Springs 4	11	\$ 271,791
Sheridan/South Sheridan/Buffalo	48	\$ 8,245,474
South Casper	20	\$ 850
South Central Modified SSI	40	\$ 208,701
South Modified SSI	80	\$ 287,330
Southeast Modified SSI	50	\$ 202,745
Southeast II Modified SSI	58	\$ 226,779
Southwest Cheyenne/Central Cheyenne	41	\$ 12,970,665
Statewide Mon Well Abandonment	29	\$ 4,628
Sweetwater County/Tablerock	38	\$ 2,190,491
Teton County	6	\$ 3,494,270
Thermopolis	16	\$ 1,950,181
Waste Disposal Feasibility Study		\$ 55,624
West Casper/Casper Flying J/S. Converse County/Glenrock/Douglas	65	\$ 9,906,434
West Laramie	6	\$ 4,956,268
West Park County	8	\$ 149,346
Weston County	19	\$ 74,392
Worland	15	\$ 4,959,229
Worland 2/Ten Sleep	26	\$ 1,152,819
Yellowstone National Park	12	\$ 2,385,077
Correction (costs not coded to a project)		\$ 488
Through FY 2014 Totals	1,464	\$ 175,762,633
Through FY 2013 Totals	1,410	\$ 164,414,000
During FY 2014 Totals	54	\$ 11,348,633

NOTES:

1. Projects that have been combined for cost-effective contract administration have been combined on this table.
2. Upper Platte Valley was combined with Laramie East Grand in 2014.
3. Lovell was combined with North Big Horn Basin in 2014.
4. North and South Evanston were combined in 2014.
5. Ten Sleep was combined with Worland 2 in 2014.