

MEMORANDUM

TO: Members, Wyoming Legislature and Other Interested Parties

FROM: John V. Corra, Director
Wyoming Department of Environmental Quality 

DATE: September 9, 2009

SUBJECT: Fiscal Year (FY) 2009 Storage Tank Program Annual Report

Pursuant to W.S. 35-11-1414(d), the attached FY2009 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, 2009.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
SOLID & HAZARDOUS WASTE DIVISION
STORAGE TANK PROGRAM
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HERSCHLER BUILDING - 4W
CHEYENNE, WY 82002

**FISCAL YEAR 2009
STORAGE TANK PROGRAM
ANNUAL REPORT**

September 9, 2009

Prepared by:

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STP Manager

SECTION A MAJOR PROGRAM ACCOMPLISHMENTS IN FY2009

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 within each district office 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 for FY2009 include:

- A. Environmental remediation management of 36 active projects involving 348 contaminated source sites continued. 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. The work also included design of remedial systems for 11 of the 36 projects and construction of remedial alternatives for 11 of the projects. Three projects were started during FY2009. These were Kemmerer (18 sites), Riverton #2 (15 sites), and South Central Casper (8 sites).
- B. Work continued on development of a geographic information system (GIS) database to store remediation project information. The database is operational and training by the contractor was extended into FY2009 due to lack of STP staff resources. Modifications to the compliance database were also started. The database was fully functional by the end of fiscal year 2009. Minor modifications to both the GIS and compliance database will continue into fiscal year 2010.
- C. The STP finalized revisions to Chapter 17 to bring the program into compliance with the Energy Policy Act of 2005. The new rules were signed by the Governor in November 2008.
- D. Management of operator compliance with state rules and regulations for tank owners and operators continued. As of June 30, 2009, there were 3,840 facilities (gas stations, emergency power generator locations, etc.) with tanks or that had tanks in the past. There were 8,451 permanently out-of-use (POU) tank systems, 1,991 active tank systems, and 148 temporarily out-of-use (TOU) tank systems for a total of 10,590 tank systems regulated by the STP.

- E. EPA recognizes three measurements of program performance. These are called Significant Operational Compliance (SOC) measures. The first of these, SOC-1, measures how well operators are following leak detection requirements. A compliance rate of 90.3% for SOC-1 was reported to EPA on June 30, 2009. SOC-2 measures how well operators are complying with corrosion protection requirements. The compliance rate reported to EPA for SOC-2 was 94.8%. SOC-3 is a combination of SOC-1 and SOC-2. The SOC-3 compliance rate reported to EPA was 86.7%. Wyoming's SOC compliance rates are significantly higher than the rates most other states report to the EPA. EPA's baseline for SOC-3 was 63% in federal fiscal year 2005. EPA's goals are for a compliance increase of 1% per year. Therefore, EPA's national goal for federal fiscal year 2009 was 67%. Wyoming's excellent compliance rates have been achieved because:
1. The STP, Compliance Section, tracks every required test for every tank. Using this system, operators are notified in writing before the 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 tries to initiate enforcement within 6 months of a test becoming overdue.
- F. At the end of FY2008 there were 687 tanks that were protected against corrosion using sacrificial anodes. Within the last 3 years, 30 of these tanks had not been tested. These tanks are located at 14 facilities. This is a 95.6% compliance rate. There were 462 tanks that were protected against corrosion using impressed current systems. Only 33 tanks at 11 locations were not current for the required testing. This is a 92.9% compliance rate.
- G. During FY2009, the STP conducted 382 on-site inspections and reviewed 683 operator annual inspection reports.
- H. Twenty formal enforcement actions were taken by the department. Fourteen actions resulted in enforcement penalties totaling \$156,000, with \$84,500 stayed for up to 3 years pending future compliance. Eleven red-tag orders were issued, and seven of these have been lifted.

SECTION B PROGRAM ADMINISTRATION

I. STP Organization. The WDEQ/SHWD organizational chart and STP district office information 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 fiscal year 2009. 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, 2009.

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.

Owners of tanks are required to pay annual tank fees. Owners of contaminated sites are required to pay contaminated site fees. Fees must be paid for a site to remain eligible for the state STP.

With current program resources, the time required to complete remediation of all known contaminated storage tank sites will extend into the year 2031. Additional time will be required to address future releases. Present day STP remedial actions are based on state-limited funding established during the 1990 legislative session. Eighteen years of inflation, resulting in increased costs for professional services, equipment, construction, materials, fuel, etc., have severely limited the STP's ability to accelerate remedial actions at eligible contaminated sites.

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

Program Primacy Application to EPA. A program primacy application package was prepared and submitted by the department to EPA, Region VIII, Denver, Colorado, in March 1999 with supplemental information provided to EPA in July 1999. A follow-up letter was sent to the EPA Regional Office on July 9, 2003, requesting reconsideration of an informal decision by EPA not to delegate full responsibility of the federal UST/LUST program to Wyoming. The initial concern of EPA was timeliness of remedial actions; an aspect that the department cannot control due to resources allocated by the state legislature.

Additional information was sent to EPA on March 17, 2004, which clarified issues discussed during a primacy application meeting held February 25, 2004. A follow-up letter was sent to EPA on January 19, 2007, requesting response to the information submitted in March 2004. During the All-States meeting held in April 2007, STP personnel discussed the primacy issue with EPA.

The department continues to wait for a final determination of the state's primacy application to EPA. 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 underground storage tank (UST) and aboveground storage tank (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 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, 2009, a total of 1,659 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 1,659 contaminated source sites, 902 have been remediated or resolved by the STP, leaving a balance of unresolved contaminated sites of 757. Of the 757 unresolved contaminated sites, 348 were in corrective action projects. The remaining 409 sites have been scheduled for future projects. Remediation of the remaining sites is projected to require an additional 22 years to complete with current funding and staff resources. See Table 4 attached.

II. Remediation Projects. The goal of the STP 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 17 contractors for the subsurface investigation and drilling work, 10 consultants to design environmental remediation

technologies, 14 construction firms to install the designed remediation systems, 6 equipment companies to supply the remediation equipment and enclosures, 42 contaminated soil excavation firms, and 21 remediation system operation and maintenance firms to operate constructed remediation systems.

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 petroleum 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 state soil and groundwater standards have been achieved, and 5) project decommissioning to remove 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 investigation (MSSIs) have been completed at numerous lower priority sites to determine if natural attenuation has achieved state 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 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 state 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 phases. Not all sites are included in all phases of a project. For example, a project may have included 32 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. The one remaining site in the West Laramie project was moved into the Laramie 3rd Street project and the West Laramie project was closed during FY2008. This will reduce staff time administering the West Laramie project contract. The Glenrock/Douglas sites were put into the S. Converse County Project for O&M; again to reduce staff time administering the contract.

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. The STP did not complete any immediate response work during the fiscal year. The Ham's Fork Station in Kemmerer, which underwent immediate response during fiscal year 2008, was moved in the Kemmerer remediation project in 2009.

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. Five 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, 2009

Table 2. Storage Tank Program (STP) State Revolving Fund (SRF) Account Activity as of June 30, 2009

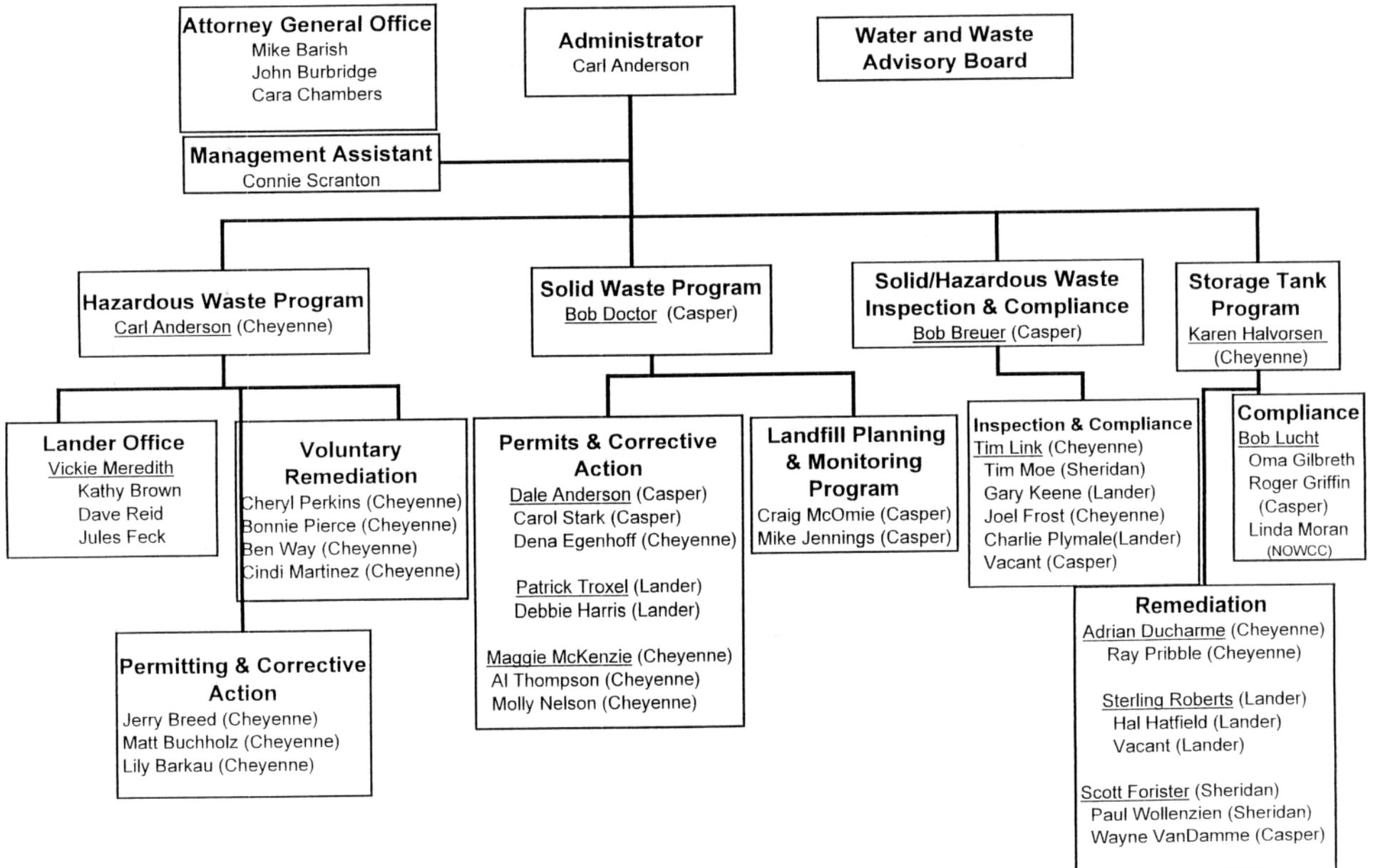
Table 3. UST and AST Overview as of June 30, 2009

Table 4. Remediation Overview as of June 30, 2009

Table 5. Project Cost Summary Through Fiscal Year 2009

Solid and Hazardous Waste

07/09



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

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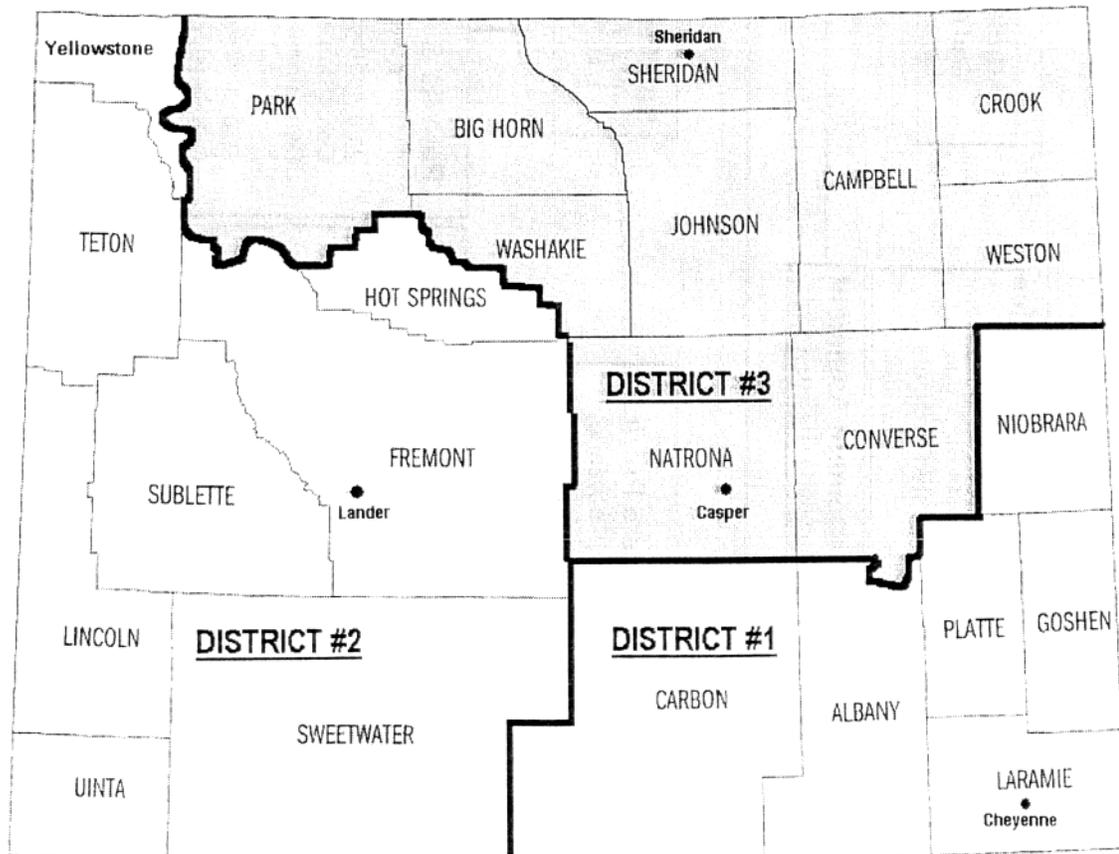
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**TABLE 1
STORAGE TANK PROGRAM
STATE REVOLVING FUND BALANCES
AS OF JUNE 30, 2009**

FUNDING SOURCE	BALANCE
State Corrective Action Account (Available for STP Remediation Projects)	\$10,007,827
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, 2009**

PROGRAM ACTIVITY	AMOUNT
Loan Authority Available to STP	\$146,014,088
Loan Authority Encumbered and/or Disbursed	
SRF Loans Paid	\$80,485,606
SRF Loans Payable	\$45,327,968
SRF Encumbrances	\$11,989,070
SRF Available Loan Authority	\$8,211,444

**TABLE 3
UST AND AST OVERVIEW
AS OF JUNE 30, 2009**

Description	Number
Total STP Facilities – Active, TOU, and POU Facilities	3,842
Total Tanks of all Types	10,590
Total UST Tanks	10,030
Total AST Tanks	560
Total UST Active and TOU Facilities	751
Total Active USTs	1,939
Total TOU USTs	130
Total POU USTs (includes 43 non-federally regulated pre-law tanks)	7,961
Total AST Active and TOU Facilities	88
Total Active ASTs	200
Total TOU ASTs	18
Total POU ASTs	342

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, 2009**

DESCRIPTION	CY 2004	CY 2005*	FY 2006*	FY 2007	FY 2008	FY 2009
Contaminated Source Sites	1,541	1,556	1,566	1,555**	1,561	1,659
Source Sites Remediated/Resolved	635	730	753	813	831	902
Unresolved Source Sites	888	826	813	742	730	757
Unresolved Source Sites in Active Remediation ¹	385	325	423	334	307	348
Source Sites Awaiting Remediation	503	501	390	408	423	409

* The STP began reporting on a fiscal year basis in FY 2006. Therefore, some of the data in this Table for FY2006 are also included in the column for CY2005.

** Error in database accounting; 12 sites included in years previous to FY2007 that should not have been included

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

CY – Calendar Year

FY – Fiscal Year

TABLE 5
PROJECT COST SUMMARY THROUGH FISCAL YEAR 2009

Project Name	Number of Sites*	Cumulative Total Expended
Baggs	3	\$ 1,563,337
Basin SSI	2	47,194
Big Horn Basin	39	199,433
Buffalo	19	2,644,467
CAA Dig/Haul/SSI/IR		1,238,732
Casper (West)	35	3,823,591
Casper Flying J	1	950,940
Casper Sampling SSI	33	42,290
Casper Yellowstone Highway	3	97,467
Cheyenne (Central)	20	4,029,197
Cheyenne (Southwest)	21	6,256,326
Evanston (South)	11	1,287,700
Ft Bridger	1	357,755
Gillette (East)	22	2,576,286
Gillette Stonepile Creek	1	44,861
Glenrock/Douglas	18	2,164,633
Green River	16	3,175,627
Greybull AST	1	64,538
Greybull Emergency Response	1	382,072
Greybull/Basin	19	5,761,629
Hulett	4	1,102,835
Jackson	34	6,782,549
Jackson Quality Cleaners	1	86,321
Kemmerer	18	399,655
Kemmerer Old	1	217,617
Laramie (West)	6	4,956,268
Laramie 3rd Street	32	10,002,631
Laramie East Grand	5	1,135,779
Lovell	15	1,382,735
Lyman/Mountain View	21	4,452,203
Niobrara/Goshen Counties	6	2,536,558
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	26	2,720,429
Northwest District	19	209,210
Opal	3	1,497,397
Pinedale	13	7,054,653
Platte County	18	4,313,549
Powell	20	5,352,757

TABLE 5
PROJECT COST SUMMARY THROUGH FISCAL YEAR 2009

Project Name	Number of Sites*	Cumulative Total Expended
Riverton	11	4,210,611
Riverton 2	16	40,146
Rock Springs Pilot Butte SSI	20	537,170
Rock Springs/N Elk Street	16	6,623,124
S. Central Casper	8	1,503
Sheridan/South Sheridan	29	4,442,830
South Central Modified SSI	40	208,701
South Converse County	11	1,401,420
South Modified SSI	80	287,330
Southeast II Modified SSI	58	226,779
Southeast Modified SSI	50	202,745
Statewide Mon Well Abandonment	29	4,628
Sundance	7	2,509,781
Sweetwater County	38	1,595,779
Tablerock	1	326,393
Ten Sleep	6	103,005
Teton County	6	2,821,748
Thermopolis	16	1,513,986
Tie Siding	1	121,477
Upper Platte Valley	25	1,514,594
Waste Disposal Feasibility Study		40,607
Weston County	19	74,392
Wind River	30	2,372,240
Worland	14	4,532,850
Yellowstone Nat'l Park	11	597,087
TOTALS	1,216	\$ 127,883,541