



The State
of Wyoming



Department of Environmental Quality

Dave Freudenthal, Governor

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MEMORANDUM

TO: Members, Wyoming Legislature & Other Interested Parties

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

DATE: December 9, 2003

SUBJECT: **2003 LAUST Remediation Program Report**

Pursuant to W.S. 35-11-1414(d), the attached 2003 Leaking Aboveground and Underground Storage Tank (LAUST) Remediation Program Report is respectfully submitted for your review and information. This report summarizes environmental restoration expenditures for the Aboveground and Underground Storage Tank (AUST) Remediation Program during the current year ending in December 2003.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
LAUST REMEDIATION PROGRAM
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CHEYENNE, WY 82002

2003 LAUST REMEDIATION PROGRAM REPORT

December 9, 2003

Prepared by:

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UIC/AUST Compliance Program Principal

SECTION A

MAJOR PROGRAM ACCOMPLISHMENTS FOR 2003

I. Summary. The department's LAUST remediation program has been actively cleaning up contaminated sites since 1993. During each year, the program has initiated aggressive environmental remedial actions at the highest priority sites within each district office using resources available to the program. Although the reporting and/or discovery of new sites has decreased dramatically, except for a few rare instances of releases on un-contaminated sites, work in this program will continue for years. Remediation of the remaining sites is projected to require at least an additional twenty years with current resources. The major accomplishments for 2003 include:

- a. Wyoming owners/operators achieved 100% compliance with the 1998 upgrade requirements. There were several instances discovered last year of facilities which lacked one or more upgrades. A referral was made to the Attorney General's Office, and a stipulated settlement including a significant penalty has been negotiated. Five other facilities have also been discovered that have not ever been registered and upgraded. Those facilities will be the subject of an enforcement referral if the owners fail to bring them into compliance by 31 December 2003.
- b. The compliance section tracks every required test for every tank. Using this system, operators are being notified before the test is due in order to give them time to have the test done before it becomes past due. We have achieved a very high level of compliance with the rules concerning cathodic protection systems. These rules are perhaps the most important of all tank requirements since they are the only rules which actually may prevent a release. There are two types of cathodic protection systems for steel tanks and steel lines. There are 760 tanks in Wyoming where sacrificial anodes are used to protect the tank against corrosion. Of these, all but 21 systems have been tested, and passed within the required three year time frame. This is a 97% compliance rate. There are also 539 tanks in Wyoming which use impressed current systems for corrosion protection. All but 23 of these systems have been tested, and have passed within the past three years. This is an operational compliance rate of 95.7%.
- c. All tanks are required to have one leak detection system in place except those used only to fuel emergency power generators. Every tank other than emergency power generator tanks, must have at least one leak detection system in place, some are required to use more than one leak detection system, and some companies have more than one system when they are not required to. We track every system for every tank. At this time, we have 39 tanks that are monitored using Manual Tank Gauging, 164 tanks using tank tightness testing, 1488 using inventory control, 1542 using automatic tank gauging, 17 using vapor monitoring, 4 using groundwater monitoring, 229 using statistical inventory reconciliation, 188 using double wall tank monitoring, 7 using secondary containment monitoring, and 10 using other approved methods. Each method has monthly requirements, but each also has its own requirements with different threshold detection limits. A total of 1,792 tanks require leak detection in Wyoming. We believe that we have approximately 85% compliance, although an exact compliance rate is difficult to determine.

- d. All pressurized lines except those used only to fuel emergency power generators are required to have some form of leak detection. There are 1,642 pressurized line systems in Wyoming and all except 239 are in compliance with annual tests. This is a compliance rate of 85%. The true compliance rate is probably higher than this, but there is a delay in collecting this information for annual tests. If we do not have a copy of the test it shows as not being in compliance even if the test has been done.
- e. Compliance inspections are being focused on facilities with known non-compliance issues as shown by our file reviews, facilities which have recently changed hands, and facilities where there are regulatory issues which cannot be resolved without an inspection. A few inspections are done on a random basis for facilities which have no known problem, but most are focused on large throughput stations. Using this criteria, there were 196 inspections conducted this calendar year.
- f. Several outreach presentations have been made this year. Presentations about cathodic protection requirements have been made to the Wyoming Water Quality Pollution Control Association and to the Rock Springs section of the Wyoming Corrosion Committee. General presentations about the underground storage tank program have also been made to several organizations.
- g. There are also 488 above ground storage tanks located at 158 locations which are covered by this program. There are presently no state rules requiring any form of leak detection on either tanks or lines, even though this department pays for the cleanup of releases from these facilities. However, these aboveground storage tank facilities are governed solely by the EPA Spill Prevention, Control, and Countermeasures Plan (SPCC) program administered by the EPA, Region 8, Office in Denver. The federal SPCC program is responsible for ensuring that all regulated above ground storage tank facilities have adequate spill containment structures/devices in place and immediate response plans in the event of a release.
- h. National analytical chemistry laboratory certification by the American Association for Laboratory Accreditation (A2LA) for laboratories completing chemical analyses for the LAUST remediation program has been a major enhancement concerning high data quality maintenance and laboratory dispute resolution. After identifying program requirements, A2LA provides the mechanism for initial laboratory accreditation and followup management of any reported problems related to chemical laboratory procedures and quality control without direct department oversight.
- i. Continuing environmental remediation project management for 2004 includes continuation of 44 active LAUST cleanup projects, which include 417 contaminated sites with an estimated equal number of affected third party locations. This work will include subsurface investigations at the Platte County (19 source sites) and Casper Yellowstone Highway (3 source sites) projects; engineering design projects at the Central Cheyenne (12 source sites), Wind River (7 source sites), Glenrock/Douglas (15 source sites), Northeast Wyoming (25 source sites), Sweetwater County (10 source sites), and the South Evanston (11 source sites) projects; construction of designed remedial systems at the Teton County (6 source sites), expanded Buffalo (3 source sites), East Gillette (18 source sites) projects; and continuing operation

and maintenance contracts with the other 33 LAUST remedial projects. No new remedial projects are scheduled for 2004.

- j. Department efforts to obtain program primacy from EPA to manage both the UST leak prevention and LUST environmental remediation programs without direct federal oversight continues to be a high priority. It is unknown presently when EPA will grant Wyoming primacy for these programs.

SECTION B PROGRAM ADMINISTRATION

I. **General Overview.** As of December 2003, a total of 1,535 contaminated LAUST sites, which require some degree of active environmental remediation, existed in the state. For comparison, the number of contaminated sites requiring cleanup in December 1991, when the program was started, was 475. Of these 1,535 contaminated sites, 617 have been cleaned up by the department, which leaves a balance of unresolved contaminated sites at 918. Of the 918 unresolved contaminated sites, 417 are in active corrective action for cleanup. The remaining 501 have been tentatively scheduled for future year projects based on present program resources.

Of the current 918 unresolved contaminated LAUST sites, the department has initiated 44 major environmental restoration projects during the past twelve years involving 746 contaminated sites in various remediation project phases. Of the 746 contaminated sites in these 44 projects, 329 contaminated sites were scheduled for modified subsurface investigations or other limited site work activities to verify the degree of soil or groundwater contamination and the associated remediation prioritization for future remedial actions. This number of contaminated sites in active projects (417) does not include a near equal number of affected third party properties which have not been added into this accounting, but which have become contaminated by these source sites. Although many of these sites have been re-prioritized for remediation work based on updated on-site technical information, many have experienced a year's delay in advancing to the next remedial phase due to limited program resources.

State statutes 35-11-1414 through 1428 require the department to clean up the contamination caused by program eligible LAUST 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 occupied buildings or to public utilities; (2) surface and ground water quality protection; (3) potential for LAUST contaminants to migrate; and, (4) ecological protection. These statutes also provide that the department's financial obligations for remediation actions are limited to the funds available in the corrective action account. The department is remediating eligible contaminated LAUST sites as funding in the corrective action account allows. Given the statutory limitation on the department's financial obligation for LAUST remediation, costs beyond the amounts held in the corrective action account have not, and will not, be incurred.

The financial responsibility account is intended to provide for 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 tanks. The statutes also provide that nothing in the Wyoming Environmental Quality Act shall be construed to authorize commitments to cover property or personal injury damages in excess of the available balance in the financial responsibility account. Since program inception, there have no claims against the financial responsibility account.

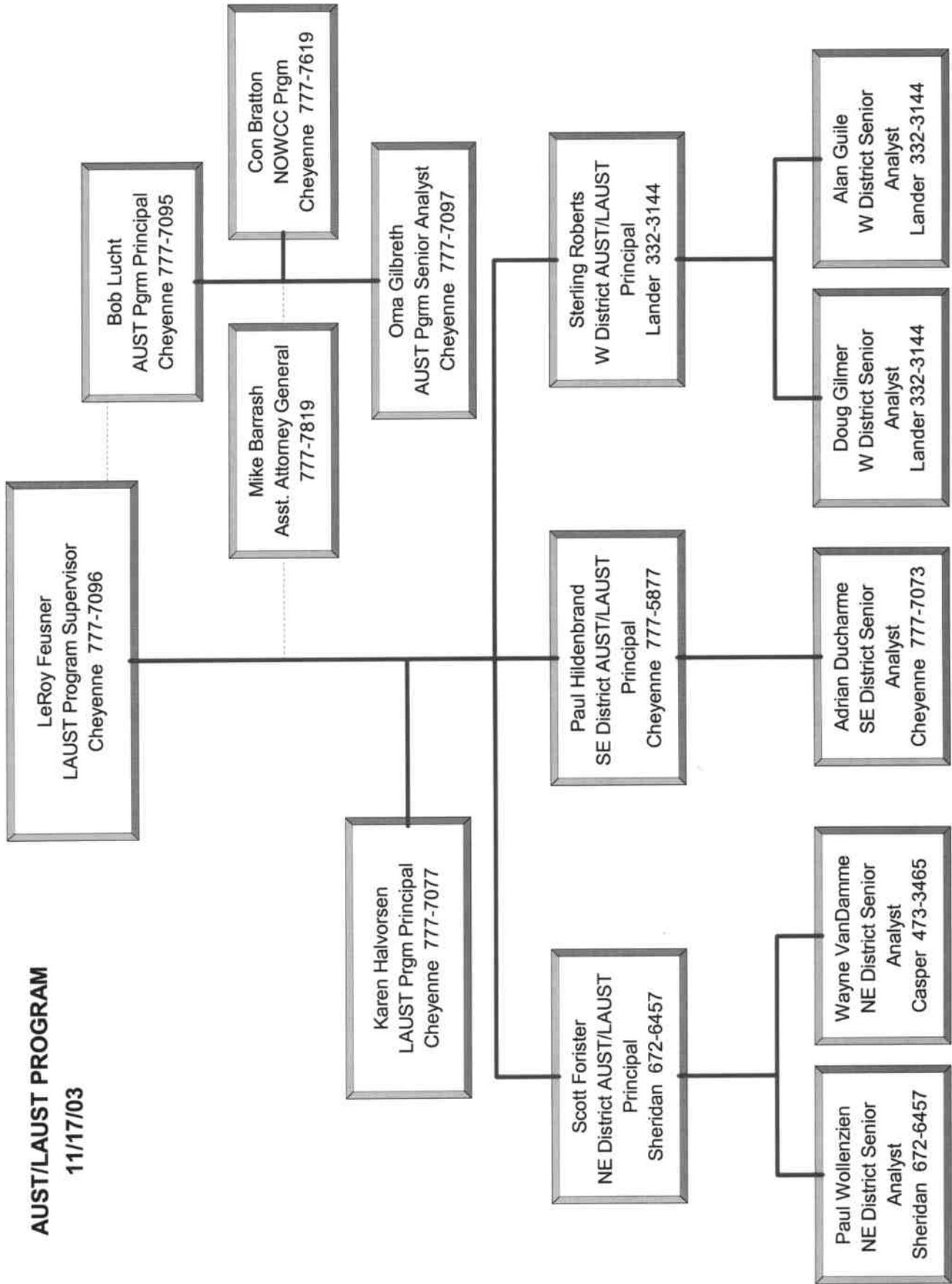
II. **UST/LUST Program Primacy Application to EPA.** A program primacy application package was prepared and submitted by the department to the EPA, Region VIII, Office in Denver, CO, in March 1999 with supplemental information provided to EPA in July 1999. A followup letter was sent to the EPA Regional Office on July 9, 2003 requesting re-consideration 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 which the department cannot control due to state resources allocated by the state legislature. The department continues to wait for the

results of the re-consideration review process and a final determination of the State's primacy application to EPA. If Wyoming is granted program primacy, citizens and tank owners/operators will not see any day-to-day changes; however, the state will receive full responsibility for program administration with a reduced federal oversight role.

III. **WDEQ AUST/LAUST Program Organization.** The WDEQ organizational charts on pages 6 and 7 indicate program/project management responsibilities. The department would not be able to accomplish this ambitious state program without these dedicated professionals.

AUST/LAUST PROGRAM

11/17/03



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December 9, 2003

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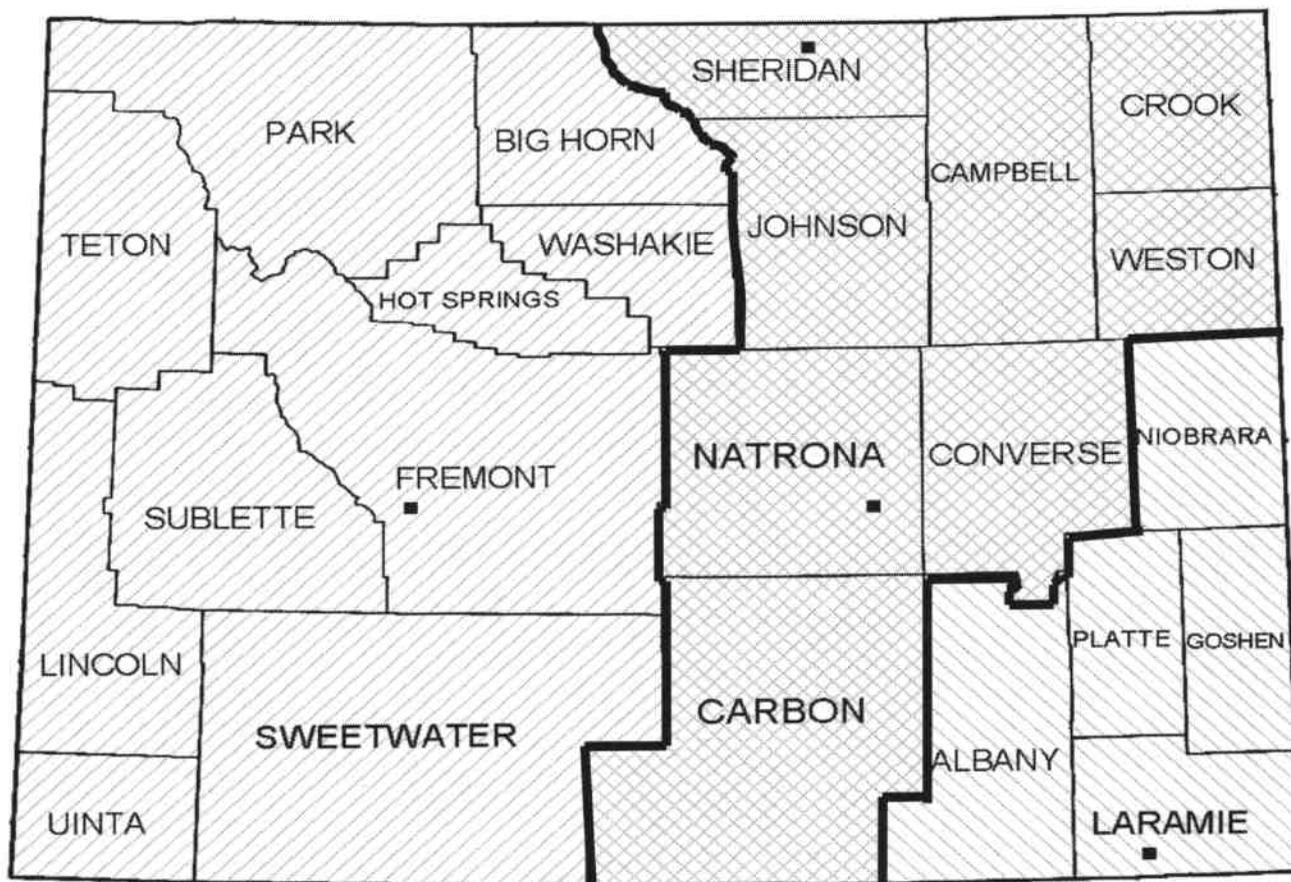
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DISTRICT #3

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SECTION C PROGRAM STATISTICS

I. **State UST/LUST Database Information.** TABLE 1 summarizes major Underground Storage Tank (UST) statistics for the past four years. The statistics represent **total** counts for *each* year.

**TABLE 1
UST PROGRAM STATISTICS**

CATEGORY	2000	2001	2002	2003
Total USTs	9,689	9720	9774	9788
Permanently Closed	7,604	7643	7686	7687
Active USTs ¹	2,085	2077	2088	2101
Total Facilities	3,611	3720	3666	3669

¹ Includes temporarily out-of-service USTs.

Based on the above four year programmatic data, the following conclusions may be made:

✓ Taking into account the present number of tanks and the number of USTs permanently closed, 78.5% of the USTs in Wyoming are no longer in use.

✓ The number of active USTs have shown a 0.67% increase over the past four years, while the total number of facilities have also shown an average 1.6% increase over the same period.

Program financial and contaminated site information is presented in TABLE 2.

**TABLE 2
PROGRAM OPERATIONAL STATISTICS**

CATEGORY	2000	2001	2002	2003
Total LAUST Source Sites	1,504	1,511	1,518	1,535
Source Sites Remediated	421	499	534	617
Unresolved Source Sites	1,083	1,012	984	918
Sites in Remediation Projects ²	292	371	493	417
Source Sites Awaiting Remediation	791	641	491	501
UST Tank Fees Payable ³	\$417	\$415	\$417	\$414
AST Tank Fees Payable ³	\$43	\$43	\$48	\$48

² Does not include numerous third party site properties contaminated by the known LAUST source site(s) in current remediation projects. Estimated number of third party affected site properties is nearly equal to the number of LAUST contaminated sites in a particular project.

³ \$1,000 dollars.

The following conclusions may be made about the above four year data concerning contaminated LAUST sites:

✓The number of unresolved LAUST contaminated sites continues to show a declining trend since 1991 when the department began the program.

✓Cleanups completed during tank removal operations have been drastically reduced because the 1998 mandatory tank upgrade date has come and gone and because fewer tanks are being replaced today. Also there is a reduced availability of acceptable contaminated soil disposal options when current tanks are removed from the ground. Removal, transport, and disposal of petroleum contaminated soils at department authorized solid waste landfill treatment areas has been the primary state-wide option. If groundwater has not been extensively impacted by a LUST release at the time of tank removal and if the soil contamination is confined to the UST excavation, the department has experienced limited success in cleaning up some contaminated sites during tank removal operations. When this option is available, it has had a favorable impact on program costs for environmental restoration actions.

II. **Database Information.** Aboveground storage tanks (AST) required by the Environmental Quality Act to be registered with the department and eligible for the state correction action program include those ASTs whose owners are dealers that sell, or offer to sell, gasoline or special fuels directly to the public. TABLE 3 summarizes the AST statistics.

**TABLE 3
AST PROGRAM STATISTICS**

CATEGORY	2000	2001	2002	2003
Number of ASTs	414	418	463	488
Active ASTs	288	289	322	323

SECTION D LAUST REMEDIATION PROGRAM ACTIVITIES

I. Immediate Response Actions. LAUST immediate response actions are taken at program eligible sites by the department when imminent contamination of a water supply is threatened, or when complaints of high indoor petroleum vapors in homes, business establishments, or occupied confined spaces are received and an on-site evaluation confirms an imminent potential environmental health problem. These immediate response actions are taken to contain the subsurface plume, to determine the extent of any imminent health and/or safety hazards caused by the LAUST release, and to take whatever actions are necessary to stabilize the site. TABLE 4 indicates the projects and total costs associated with LAUST immediate response actions taken by the department during the past twelve years.

II. Remediation Program Laboratory Certification. A major portion of LAUST remediation program contract costs involve laboratory chemical analyses. Associated with laboratory analyses are potential quality control issues and standardized chemical analyses procedures to maintain consistency between projects and contractors. In an effort to maintain the highest quality control and to standardize chemical analyses procedures and because analytical data are used extensively to justify spending millions of taxpayers dollars to cleanup leaking tank sites, the program implemented a laboratory certification program at no cost to the program. If laboratory data results are questionable, management decisions to spend state funds to remediate sites may also be in question. This certification program is administered by the American Association for Laboratory Accreditation (A2LA). A2LA provides one contact for program management when a problem with a certified laboratory is discovered. A2LA handles the dispute and ensures that the proper corrective action(s) are taken by the laboratory to maintain its certification. To date, six laboratories have achieved A2LA certification which meet the Wyoming LAUST remediation program requirements.

III. Remediation Projects. The goal of the LAUST remediation program is to accomplish subsurface investigations at known contaminated sites on a priority basis and to initiate full remediation actions following a remediation priority system for the worst sites first. To accomplish these tasks, the department currently has pre-qualified 37 contractors for the subsurface investigation and drilling work, 12 engineering design consultants to design environmental cleanup technologies, and 27 remediation system operation and maintenance firms to operate constructed remediation systems.

All program remediation costs in the following tables include those costs associated with remediation of not only the source sites, but also all affected third party locations contaminated by the LAUST release site(s).

**TABLE 4
LAUST IMMEDIATE RESPONSE ACTIONS**

RESPONSE	CONTRACT COST	SPENT TO DATE
Gillette (Stonepile Creek)	\$44,861	\$44,861
Greybull (Miller's Garage)	\$253,389	\$253,389
Greybull AST (McIntosh Oil)	\$64,538	\$64,538
Hulett (Ted's Service)	\$14,835	\$14,835
Kemmerer (Storm Drain)	\$168,263	\$151,083
Laramie (North, Pizza Hut)	\$98,200	\$59,423
Laramie (ACPE FCU)	\$64,472	\$64,472
Lusk (Trail Side Store)	\$46,507	\$46,507
Lyman	\$16,918	\$16,918
Moorcroft (Coffee Cup)	\$14,065	\$14,065
Newcastle (Library)	\$42,307	\$42,307
Sheridan (Philtown)	\$73,407	\$73,407
Sheridan (5th & Main St)	\$86,284	\$86,284
Table Rock	\$121,388	\$121,388
Wind River (Crowheart Store)	\$59,109	\$59,109
TOTALS	\$1,168,543	\$1,112,586
AVERAGE COST/RESPONSE	\$77,903	

LAUST remediation projects are completed in five phases; namely, (1) subsurface investigations with soil drilling work to determine the extent both laterally and vertically of the petroleum contaminants in soil and groundwater, (2) engineering design of the remediation systems to complete the cleanup work, (3) construction and installation of the designed remediation technologies, (4) operation and maintenance of the constructed remediation corrective action systems until state soil and/or groundwater standards have been achieved, and (5) project closeout to remove and/or permanently seal subsurface remediation system components. One LAUST project averages about 12 contaminated sites along with all affected third party locations which may have been contaminated by the release. A typical project life is about 7 years from start to finish to complete the remedial work activities. The longest time phase is the operation and maintenance phase where cleanup systems are operated and maintained until satisfactory has been completed.

Remediation project cost data information are presented on the following pages. These program activities are summarized as follows:

- TABLE 5 summarizes LAUST subsurface investigation with drilling costs incurred to the program. Included in this category are all costs associated with subsurface investigation, i.e., engineering oversight, drilling, etc., as appropriate, and limited modified subsurface investigations unique to a project's location.

- Costs associated with completing separate, major modified subsurface investigation contracts is presented in TABLE 6. Modified subsurface investigations have been accomplished at numerous lower remediation priority number sites to determine if natural attenuation has achieved state soil and/or groundwater standards, or whether the site(s) must remain on the contaminated site listing for future remedial work activities. These investigations only include 3-4 monitoring wells/site with soil and groundwater samples.
- Remediation design project information is summarized in TABLE 7 below.
- TABLE 8 presents information concerning LAUST remediation engineering Phase II, System Construction and Design Engineer Construction Oversight Administration. The construction phase includes the costs associated with the purchase of the actual LAUST remediation equipment/enclosures, installation of that equipment, and costs for the Phase I design firm to oversee and represent the department during construction work.
- TABLE 9 tabulates the current annual LAUST remediation Operation & Maintenance costs with current contractors and consultants for operating and maintaining constructed LAUST remediation treatment systems until acceptable WDEQ remediation standards have been achieved in soil and/or groundwater.
- Table 10 summarizes current cost data to closeout certain projects/sites which are either approaching cleanup completion for soil and groundwater remediation, or for projects/sites which have been provided estimated closeout costs by the design engineer.

**TABLE 5
SUBSURFACE INVESTIGATIONS**

PROJECT	SITES	CONTRACT COST	SSI COST/SITE
Baggs	3	\$53,691	\$17,897
Basin	5	\$47,194	\$9,439
Buffalo	18	\$143,393	\$7,966
Central Cheyenne	20	\$411,715	\$20,586
East Gillette	22	\$142,163	\$6,462
Glenrock/Douglas	16	\$396,658	\$24,791
Green River	11	\$95,280	\$8,662
Greybull	12	\$81,784	\$6,815
Jackson	34	\$312,330	\$9,186
Lyman/Mt. View	21	\$204,823	\$9,753
Newcastle	2	\$94,855	\$47,428
Opal	3	\$42,069	\$14,023

Pinedale	6	\$129,123	\$21,521
Platte County	18	\$299,732	\$16,652
Rock Springs, N. Elk St.	14	\$228,834	\$16,345
Rock Springs, Pilot Butte	20	\$266,837	\$13,342
Sheridan	11	\$86,284	\$7,844
South Evanston	11	\$117,621	\$10,693
South Sheridan	18	\$104,316	\$5,795
Southwest Cheyenne	21	\$121,675	\$5,794
Sundance	7	\$47,491	\$6,784
Sweetwater County	38	\$410,140	\$10,793
Teton County	6	\$144,940	\$24,157
Tie Siding	1	\$38,765	\$38,765
Upper Platte Valley	25	\$202,598	\$8,104
West Casper	35	\$150,481	\$4,299
Weston County	19	\$74,392	\$3,915
Wind River	30	\$123,553	\$4,118
Worland	1	\$13,298	\$13,298
TOTAL	448	\$4,586,035	
AVERAGE COST/SITE		\$10,237	

**TABLE 6
MODIFIED SUBSURFACE (MSSI) INVESTIGATIONS**

PROJECT	SITES	CONTRACT COST	MSSI COST/SITE
North Modified	74	\$225,697	\$3,050
South Modified	80	\$293,705	\$3,671
Northeast Modified	32	\$124,895	\$3,903
Southeast Modified	50	\$198,143	\$3,963
Big Horn Basin Modified	39	\$199,433	\$5,114
TOTAL	275	\$1,041,873	
AVERAGE COST/SITE		\$3,789	

TABLE 7
LAUST REMEDIATION, PHASE I, ENGINEERING DESIGN

PROJECT	SITES	COST TO DATE	COST TO DATE/SITE
Baggs (design/build)	3	\$105,486	\$35,162
Buffalo	19	\$301,816	\$15,885
Casper Flying J	1	\$79,130	\$79,130
Central Cheyenne	12	\$270,088	\$22,507
East Gillette	18	\$262,651	\$14,592
Ft. Bridger	1#	\$314,480	\$314,480
Glenrock/Douglas	16	\$450,990	\$28,187
Green River	14	\$458,690	\$32,764
Greybull/Basin	19	\$503,164	\$26,482
Hulett (design/build)	4	\$155,840	\$38,960
Jackson	20	\$830,833	\$41,542
Laramie Third St	32	\$917,740	\$28,679
Lyman/Mt. View	13	\$557,505	\$42,885
NE Wyoming	26	\$378,977	\$14,576
Niobrara County	4	\$261,395	\$65,349
Niobrara/Goshen Counties	7	\$181,657	\$25,951
Opal	1#	\$247,134	\$247,134
Pinedale	13	\$833,209	\$64,093
Powell	20	\$806,634	\$40,332
Riverton	11	\$490,467	\$44,588
Rock Springs, N Elk St	16	\$530,812	\$33,176
Sheridan	40	\$1,350,524	\$33,763
South Evanston	11	\$298,524	\$27,139
Southwest Cheyenne	28	\$941,341	\$33,619
Sundance	7	\$326,327	\$46,618
Sweetwater County	10	\$386,072	\$38,607
Table Rock	1#	\$204,826	\$204,826
Teton County	6	\$330,217	\$55,036
Upper Platte Valley	13	\$155,722	\$11,979
West Casper	23	\$897,681	\$39,030

West Laramie	6	\$671,903	\$111,984
Wind River	7	\$346,484	\$49,498
Worland	14	\$518,031	\$37,002
TOTALS	436	\$15,366,350	
AVERAGE COST/SITE		\$35,244	

Since this project involved only one contaminated site, the cost to accomplish remedial work activities has not achieved the economy of scale as compared to other projects which include multiple contaminated sites.

TABLE 8
LAUST REMEDIATION SYSTEM CONSTRUCTION AND EQUIPMENT PROJECTS

PROJECT	TOTAL SITES	MNA* SITES	CONSTRUCTION CONTRACT COSTS			TOTAL COST
			Construction	Equipment	Engineering Oversight	
Baggs	3	0	\$642,395	\$114,772	\$118,154	\$875,321
Buffalo	3	14	\$418,370	\$103,520	\$369,561	\$891,451
Casper Flying J	1	0	\$189,206	Included	\$33,533	\$222,739
East Gillette	9	2	\$1,308,517	\$210,600	\$163,957	\$1,683,074
Green River	7	1	\$569,322	Included	\$240,013	\$809,335
Greybull/Basin	17	2	\$1,886,458	Included	\$428,661	\$2,315,119
Hulett	3	0	\$159,000	\$139,000	\$127,205	\$425,205
Jackson	9	10	\$999,947	\$450,920	\$1,104,090	\$2,554,957
Laramie, 3 rd St.	25	3	\$2,810,750	Included	\$465,619	\$3,276,369
Niobrara	1	1	\$139,833	Included	\$95,992	\$235,825
Opal	1	0	\$675,526	Included	\$159,465	\$834,991
Pinedale	13	0	\$1,128,195	Included	\$391,863	\$1,520,058
Powell	14	1	\$1,811,060	Included	\$376,677	\$2,187,737
Riverton	7	4	\$1,490,475	Included	\$199,988	\$1,690,463
Rock Springs, North Elk Street	13	3	\$2,136,798	Included	\$337,281	\$2,474,079
Sheridan	5	17	\$1,371,988	\$210,551	\$135,070	\$1,717,609
Sundance	2	2	\$932,049	Included	\$175,167	\$1,107,216
SW Cheyenne	16	6	\$1,843,112	\$589,213	\$462,374	\$2,894,699
Teton County	4	5	\$674,806	\$361,688	\$259,657	\$1,296,151

West Laramie	6	\$671,903	\$111,984
Wind River	7	\$346,484	\$49,498
Worland	14	\$518,031	\$37,002
TOTALS	436	\$15,366,350	
AVERAGE COST/SITE		\$35,244	

Since this project involved only one contaminated site, the cost to accomplish remedial work activities has not achieved the economy of scale as compared to other projects which include multiple contaminated sites.

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PROJECT	TOTAL SITES	MNA* SITES	CONSTRUCTION CONTRACT COSTS			TOTAL COST
			Construction	Equipment	Engineering Oversight	
Baggs	3	0	\$642,395	\$114,772	\$118,154	\$875,321
Buffalo	3	14	\$418,370	\$103,520	\$369,561	\$891,451
Casper Flying J	1	0	\$189,206	Included	\$33,533	\$222,739
East Gillette	9	2	\$1,308,517	\$210,600	\$163,957	\$1,683,074
Green River	7	1	\$569,322	Included	\$240,013	\$809,335
Greybull/Basin	17	2	\$1,886,458	Included	\$428,661	\$2,315,119
Hulett	3	0	\$159,000	\$139,000	\$127,205	\$425,205
Jackson	9	10	\$999,947	\$450,920	\$1,104,090	\$2,554,957
Laramie, 3 rd St.	25	3	\$2,810,750	Included	\$465,619	\$3,276,369
Niobrara	1	1	\$139,833	Included	\$95,992	\$235,825
Opal	1	0	\$675,526	Included	\$159,465	\$834,991
Pinedale	13	0	\$1,128,195	Included	\$391,863	\$1,520,058
Powell	14	1	\$1,811,060	Included	\$376,677	\$2,187,737
Riverton	7	4	\$1,490,475	Included	\$199,988	\$1,690,463
Rock Springs, North Elk Street	13	3	\$2,136,798	Included	\$337,281	\$2,474,079
Sheridan	5	17	\$1,371,988	\$210,551	\$135,070	\$1,717,609
Sundance	2	2	\$932,049	Included	\$175,167	\$1,107,216
SW Cheyenne	16	6	\$1,843,112	\$589,213	\$462,374	\$2,894,699
Teton County	4	5	\$674,806	\$361,688	\$259,657	\$1,296,151

Upper Platte Valley	4	3	\$329,582	\$71,171	\$139,350	\$540,103
West Casper	8	0	\$615,956	\$163,969	\$63,928	\$843,853
West Laramie	5	1	\$1,675,985	Included	\$362,389	\$2,038,374
Worland	5	5	\$2,300,127	Included	\$326,711	\$2,626,838
TOTALS	172	80	\$25,467,062	\$2,300,632	\$6,418,551	\$34,186,245
Average Cost per Site			\$148,064	\$13,376	\$37,317	\$198,757

* Monitored Natural Attenuation. A form of active environmental remediation that requires periodic soil and/or groundwater monitoring to confirm when state soil and/or groundwater standards have been achieved.

TABLE 9
ANNUAL LAUST REMEDIATION OPERATION & MAINTENANCE PROJECTS COSTS

PROJECT	TOTAL SITES	MNA SITES	ANNUAL O & M COSTS					ANNUAL O&M COST
			Contractor	Engineer	Electrical	Gas	Sewer	
Baggs	3	0	Engineer	\$68,184	\$13,361	\$0	\$0	\$81,545
Buffalo	3	14	\$72,386	\$48,331	\$70	\$0	\$0	\$120,787
Casper Flying J	1	0	Engineer	\$22,790	\$156	\$0	\$0	\$22,946
Green River	7	1	\$53,896	\$64,720	\$11,598	\$0	\$0	\$130,214
Greybull/Basin	17	2	\$65,550	\$166,649	\$19,048	\$276	\$0	\$251,523
Hulett	3	0	Engineer	\$111,327	\$1,410	\$0	\$0	\$112,737
Jackson	9	10	\$139,519	\$209,228	\$16,651	\$0	\$0	\$365,398
Laramie 3 rd St	25	3	\$306,236	\$72,464	\$72,861	\$9,277	\$0	\$460,838
Lyman/Mt. View	9	4	Engineer	\$12,467	\$2,644	\$0	\$0	\$15,111
Niobrara County	1	1	\$33,380	\$46,212	\$75	\$0	\$39	\$79,706
Opal	1	0	\$14,767	\$30,963	\$202	\$0	\$0	\$45,932
Pinedale	13	0	\$93,769	\$76,947	\$7,308	\$0	\$0	\$178,024
Powell	14	1	\$86,820	\$33,480	\$20,366	\$0	\$0	\$140,666
Riverton	7	4	\$69,465	\$23,551	\$34,021	\$0	\$9,620	\$136,657
Rock Springs, North Elk Street	13	3	\$245,840	\$66,928	\$1,269	\$0	\$0	\$314,037
Sheridan	5	17	\$153,406	\$37,818	\$0	\$0	\$0	\$191,224
Sundance	2	1	\$47,775	\$22,012	\$9,682	\$0	\$105	\$79,574

SW Cheyenne	15	6	\$164,328	\$135,966	\$79,437	\$0	\$0	\$379,731
Tie Siding	1	0	\$7,514	\$0	\$0	\$0	\$0	\$7,514
Upper Platte Valley	4	3	\$231,602	\$160,580	\$4,074	\$0	\$0	\$396,256
West Laramie	5	1	\$100,740	\$85,344	\$7,338	\$0	\$0	\$193,422
Worland	5	5	\$91,740	\$30,550	\$53,275	\$0	\$0	\$175,565
TOTALS	163	76	\$1,978,733	\$1,458,328	\$341,485	\$9,553	\$9,764	\$3,797,863
Average Annual Cost per 239 Sites for O&M Projects	163	76	\$8,279	\$6,102	\$1,429	\$40	\$41	\$15,891
Average Annual Cost for 22 O&M Projects	22	N/A	\$89,942	\$66,288	\$15,522	\$434	\$444	\$172,630

**TABLE 10
PROJECT/SITE CLOSEOUT COSTS**

PROJECT	SITES	ACTUAL CONTRACT COST, TO DATE	ACTUAL CONTRACT COST/SITE, TO DATE
Casper Flying J	1	\$15,136	\$15,136
Laramie 3 rd St.	8	\$47,160	\$5,895
Opal	1	\$63,839	\$63,839
Pinedale	13	\$76,174	\$5,860
SW Cheyenne	22	\$43,025	\$1,956
West Laramie	3	\$50,091	\$16,697
TOTALS	48	\$295,425	\$109,382
Average Cost/Site		\$6,155	\$2,279

IV. State Revolving Loan (SRF) Account Activities. The SRF program has prepared an Intended Use Plan (IUP) for accomplishing LAUST subsurface investigations, LAUST remediation actions, and municipal wastewater treatment system improvement projects in Wyoming for calendar year 2003. This document was the subject of the public hearing process, and it is being implemented in accordance with the quarterly schedule identified in the IUP.

TABLES 11 and 12 present a summary of the various LAUST/SRF fund cumulative balances, as of 3 December 2003.

**TABLE 11
LAUST PROGRAM SRF FUND BALANCES**

FUNDING SOURCE	BALANCE
State Corrective Action Account (Available for LAUST Remediation Projects)	\$4,911,301
State Financial Responsibility Account (Available for Court Awarded LAUST Third Party Damages)	\$1,000,000

Table 10 summarizes the total remediation program activity of the SRF funding account, since it was initiated in 1991.

**TABLE 12
LAUST PROGRAM SRF ACCOUNT ACTIVITY**

PROGRAM ACTIVITY	AMOUNT
Loan Authority Available to LAUST Program, to date	\$90,904,423
Loan Authority Currently Encumbered and/or Disbursed, to date	
SRF Loans Paid \$69,956,492	
SRF Loans Payable \$1,508,894	
SRF Encumbrances \$16,122,344	\$87,587,730
SRF Fund Available Loan Authority	\$3,316,693