

DRAFT
FY 2009 JOINT END-OF-YEAR REPORT OF
THE STATE OF UTAH'S HAZARDOUS WASTE PROGRAM

by
The U.S. Environmental Protection Agency - Region 8
Solid and Hazardous Waste Program
and
The Utah Division of Solid and Hazardous Waste

INTRODUCTION

This report presents the results of a joint end-of-year (EOY) review of the Hazardous Waste Program (HWP or Program) as administered by the Utah Department of Environmental Quality (UDEQ). Utah is an authorized state under the Resource Conservation and Recovery Act (RCRA), and the Utah Division of Solid and Hazardous Waste (the Division) within UDEQ is the principal implementer of the program. EPA Region 8 conducts oversight of the program and provides program and technical assistance to the state.

UDEQ and the Region 8 office of the Environmental Protection Agency (EPA) entered into an annual agreement, the Utah Performance Partnership Agreement (PPA), for administration and implementation of its authorized hazardous waste program during FY 2009 (October 1, 2008 - September 30, 2009). The PPA includes the annual grant work plan for the hazardous waste program of the Division.

This report has been prepared, as provided in 40 CFR 35.150, as a means to evaluate the State's efforts to fulfill that work plan. The report also serves as the EPA's overall review of the authorized program in Utah, and includes an analysis of the program's progress toward addressing long-term state and national RCRA program goals and objectives.

This report also contains some information on Utah's waste minimization activities relating to the Resource Conservation Challenge (RCC). Many of these activities relate to non-hazardous solid waste, and are both voluntary in nature and not part of the state's authorized hazardous waste program. They are discussed here to provide a more complete picture of the state's waste programs. Please note that compliance monitoring and enforcement (CM&E) information has been entered into RCRAInfo throughout FY 2009. This report and its findings are based on the State's data in the RCRAInfo database and other information provided by the State.

This review is based on the Program Standards and Oversight Procedures (PSOP). Under these standards, a state Hazardous Waste Program is evaluated for 19 program criteria organized under four key program areas: Program Management, Pollution Prevention and Hazardous Waste Minimization; Safe Waste Management; and Corrective Action. The Compliance/Enforcement self assessment for FY09 is also included in this report. A table summarizing EPA's findings for the program's performance, as measured against the program standards for the 19 program criteria is included as an attachment.

SUMMARY OF FINDINGS

Utah's FY 2009 PPA included commitments in the areas of Waste Minimization, Permits, Closure, Corrective Action, and Training and Technical Assistance.

During FY 2009, the Division met or exceeded the standards for all of the 19 program criteria that were applicable (see Attachment at end of this report). The Division continued its commitment to a high level of activity for Pollution Prevention and Hazardous Waste Minimization, particularly with its programs for recycling waste tires and used oil. In the areas of Safe Waste Management and Corrective Action, the Division continued to make significant progress toward national program goals.

PROGRAM MANAGEMENT

1. ***Adoption of Hazardous Waste Regulations (Criterion 1.1 of the Program Standards and Oversight Procedures (PSOP))***

Utah has adopted all required rules under the RCRA program.

During FY 2009, the Division submitted the Addendum 13 application to EPA on 4/30/09.

The state met the standards for this criterion.

2. ***Authorization (PSOP Criterion 1.2)***

According to data in StATS, as of June 30, 2009, Utah is authorized for 96% of the required rules under RCRA. Once addendum 13 is approved by EPA, Utah will be current on all required authorized rules.

The state met the standards for this criterion.

3. ***Memorandum of Agreement (PSOP Criterion 1.3)***

The MOA signed in February 2008 is still valid.

The state met the standards for this criterion.

4. ***Resource Levels and Skill Mix (PSOP Criterion 1.4)***

For the 2009 state fiscal year (July 1, 2008 to June 30, 2009) the Utah Legislature appropriated \$8,049,700 to the Division for its solid and hazardous waste programs. The majority of the funding for the hazardous waste program in Utah comes from state funding sources. For state FY 2009, revenues generated by state hazardous waste disposal fees comprised 35% of the Division program budget. Additionally, both hazardous and non-hazardous waste disposal fees account for 52% of the FY 2009 the Division budget. Program funding from EPA remained unchanged for FY 2009 at \$772,958, representing

10% of the total program budget. The appropriated funds and the FTEs were spread across the primary areas of the Solid and Hazardous Waste Program as follows:

Program Area	\$	% of budget	FTE
P2/Compliance Asst.	\$804,970	10%	6
Safe Waste Mgmt	\$1,690,437	21%	12
Corrective Action	\$1,529,000	19%	10
Inspection, Enforcement	\$2,656,401	33%	18
Administration	\$1,368,449	17%	10
Total	\$8,049,700	100%	56

The Division operates a mature program with experienced staff. The staff includes engineers (civil, chemical, environmental, mechanical), environmental scientists (geologists, chemists, biologists, geo-hydrologists, hydrologists), GIS Specialist, and PhDs, as well as support staff.

Professional staff has a mix of advanced education with bachelors, masters, and doctoral degrees. Five of the engineers are registered professional engineers and thirty of the geologists are registered professional geologists. The Division lost one section manager and toxicologist in FY 2009.

The state met the standards for this criterion.

5. ***State Training Program (PSOP Criterion 1.5)***

In recognition of the high level of experience the Division staff has in the hazardous waste program, each year staff members continue to receive a mix of professional and leadership development training opportunities. During FY 2009, the following list of professional courses and conferences is representative, but not all inclusive, of those attended by the Division staff:

- 2009 Waste Management Symposium (Staff presented a paper on air sampling at the VTD unit at EnergySolutions)
- NORA Conference
- RCC Workshop sponsored by EPA
- National Enforcement Association Membership Training Conference
- RCRA Info National Users Conference
- ARAMS/SADA Technology Transfer Workshop
- ITRC Meetings
- ASTSWMO Meetings
- Hydrologic Engineering Center GW Model updates to TEAD
- Monitored Natural Attenuation Workshop

E-Manifest System Development
National Corrective Action Training
Florescent Lighting Dialogue Meeting #3
Sanitary Landfill Design
Partners in Environmental Technology Symposium
Environmental Technology Technical Symposium and Workshop
E-Scrap 2009

Additionally, the Division continues to provide leadership development training to its staff. This program exists in recognition of the need to prepare future leaders in the various environmental programs. Utah DEQ has developed a leadership development program to meet that need. The following types of courses are part of that ongoing effort:

DEQ 101 is a seminar that provides a brief overview of the roles and responsibilities of each office and division within the department.

Total Quality Advantage – A summary course that introduces participants to quality improvement concepts and provides a rudimentary understanding of the Five Pillars of Quality in an organization.

Getting Work Done With Others – This course focuses on interpersonal communication, presentation, conflict management, problem solving, team building skills, and cultural and diversity awareness.

Adapting to Change – This course focuses on personal learning styles, visioning, assessing potential, implementing change, using creativity, being resilient, handling stress, and empowering others.

Excellence in Supervision – This course is designed to hone people skills, including resource management, leadership, coaching, managing for diversity, and conflict resolution necessary to be an effective leader.

High Conflict Conversations – This course helps participants develop interpersonal communication skills that will help them deal with conflict and difficult communication situations in a constructive manner.

Leadership Development Course – Participants meet monthly to discuss a variety of topics that are relevant to DEQ. The curriculum is designed to apply many of the competencies related to activities within DEQ. Classes consist of a selected representative from EDO and each of the divisions in DEQ and are mentored by a DEQ senior manager. Participants also complete leadership/employee development classes, independent studies, prepare a brown bag presentation, participate in a rotation through DEQ divisions and offices, and complete a group project. Completion of the program takes two years. New classes begin in January of every year. The fourth class of this program began in January 2007.

The state met the standards for this criterion.

6. ***Information Management (PSOP Criterion 1.6)***

The Division has entered data for the Safe Waste Management, Corrective Action, and Compliance/Enforcement elements of the program in RCRAInfo in accordance with EPA requirements and policies.

The State meets the standards for this criterion.

7. ***Records Management (PSOP Criterion 1.7)***

The Division has used an electronic documents management system for several years. This system has shown, and continues to demonstrate, an increase in the efficiency of handling both incoming and outgoing documents while reducing the amount of paper used. Incoming documents are scanned, creating an electronic version which is then distributed via the Division's email system. Similarly, outgoing documents are created electronically and distributed among the appropriate technical, management, and/or legal staff for review and approval prior to printing and signing.

The Division continued to provide access to key program documents for the appropriate EPA Region 8 staff, particularly compliance and enforcement documents. Specifically, a password-protected area on the Division web site exists where documents are posted for EPA's exclusive review and use. This allows EPA staff immediate access to these documents at anytime, rather than wait for delivery by traditional mail or e-mail.

The state met the standards for this criterion.

THE RESOURCE CONSERVATION CHALLENGE, WASTE MINIMIZATION, POLLUTION PREVENTION AND COMPLIANCE ASSISTANCE

The Division addresses waste minimization and pollution prevention primarily through a non-regulatory approach with an emphasis on compliance assistance. To bring these kinds of efforts into sharper focus, EPA established the Resource Conservation Challenge (RCC) in 2002 to serve as a way in which waste program activities could emphasize conserving natural resources and energy—an overall objective of the federal law which governs federal and, in a general sense, state waste programs. The RCC currently has four primary national focus areas in which voluntary activities are being planned and reported:

- Municipal Solid Waste Recycling
- Industrial Materials Recycling
- Priority and Toxic Chemicals Reductions
- Electronics Recycling

During FY 2009, the Division participated in all four of the national focus areas and established specific priorities to target areas where significant accomplishments can be achieved. Significant resources were dedicated to the waste tire and used oil-recycling programs. Additionally, in FY

2009, the Division participated in meetings and activities associated with the development of recommendations for the Utah Legislature's consideration of an electronics recycling program. These three program areas are highlighted below within the Industrial Materials Recycling, Priority and Toxic Chemicals, and Electronics Recycling focus area sections, respectively.

35% MSW Recycling

The Division participates in a statewide recycling coalition called the "Recycling Coalition of Utah" (RCU). The RCU is a coalition of municipalities, businesses, institutions and individuals committed to promoting and improving recycling in Utah. As a leading resource for recycling in Utah, the RCU provides value to existing and new members committed to increasing and improving recycling, resource conservation, and solid waste reduction. More details are located at <http://www.utahrecycles.org/>.

Electronics Recycling

The Division continued to supply funds to the Recycling Coalition of Utah to maintain the ongoing activities of the Electronic Recycling Steering Committee, and Division employees were active committee members. The Committee's main focus in FY09 was to broaden the scope of electronic recycling in Utah by promoting creation of a statewide program. Committee members worked with members of the Utah Legislature to write and sponsor a Joint Resolution supporting electronic recycling, asking for a study of Utah specific issues, and requesting a recommendation be provided to the Utah Legislature. This Joint Resolution was passed by the Utah Legislature in January 2009. The Committee members meet regularly throughout the spring and summer to research issues and develop a recommendation. A report of the findings was written, and a presentation was given to the Utah Legislature's Natural Resources, Agriculture, and Environment Interim Committee in September 2009. The recommendation suggested a statewide legislated program, following a product stewardship model and similar to programs in other states, be implemented. Sponsorship of a proposed bill has been discussed with various members of the Utah Legislature, and a bill may be presented during the next legislative session.

The Division assisted in funding one-day electronic collection events in cooperation with Salt Lake, Tooele, and Summit (combined event for Summit and Wasatch Counties) Counties. These Division funds were given to the Recycling Coalition of Utah to be distributed as grants.

Division employees also continued to participate in EPA Region 8's Western Region Electronics Stewardship Council (WRESC) conference calls. This Council was formed in October 2007 as a forum for individuals and organizations to promote responsible electronics reuse and recycling within EPA Region 8 and surrounding states.

Industrial Materials Recycling

A continuing priority of the RCC is the recycling of secondary industrial materials into beneficial uses. Nationally, the effort is focused on three principal materials: coal combustion products, foundry sands, and construction and demolition materials. In Utah, the Division has focused its efforts on the recycling of waste tires.

In Utah, over 2 million waste tires were generated during FY 2009. Through the combined efforts of the Division, the waste tire recycling industry, and local health departments, there currently are recycling markets for all these tires and all major waste tire piles in the state have been cleaned up. This has been the result of a successful partnership in establishing a network of waste tire transporters, processors, and end users.

More specifically, the Division's role in the management of waste tires in Utah consists primarily of two components. First, the agency serves as a regulatory/enforcement agency. The Division monitors waste tire transporters and recyclers to ensure that all are operating in compliance with applicable statutes and regulations. Second, the Division oversees the activities to clean up and remove waste tire piles—those considered abandoned as well as those created at municipal landfills. The waste tire recycling program is funded by a \$1.00 per tire recycling fee collected from new tire sales, as established by the Utah Legislature.

From the inception of the program through FY 2009, the Utah waste tire program has removed all abandoned tire piles and is removing, on a periodic basis, waste tire piles created at landfills as the waste tires are separated from the other waste and new piles when they are located. One abandoned tire pile that was recently located is currently being cleaned up.

A successful waste tire recycling program exists when a viable recycling industry is readily available. The Utah program has successfully accomplished this throughout the years of program operation. Three waste tire recyclers are currently operating in Utah:

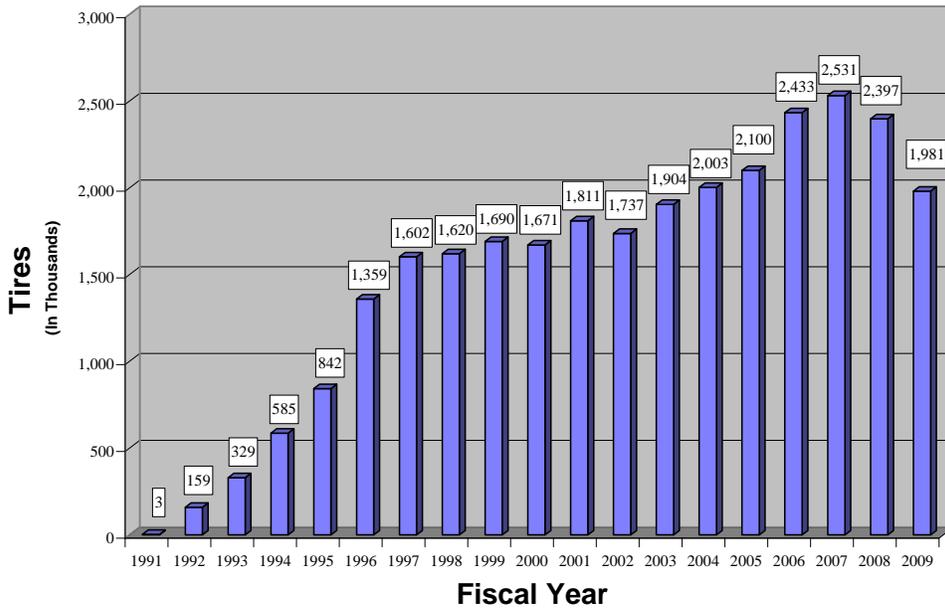
- One cement kiln (use waste tires as fuel).
- One crumb rubber manufacturer.
- One municipal landfill (uses chipped tires for daily cover material).

During FY 2009, the Utah waste tire program has continued to achieve success. The following are the statistics for the waste tire recycling and cleanup programs during the past fiscal year.

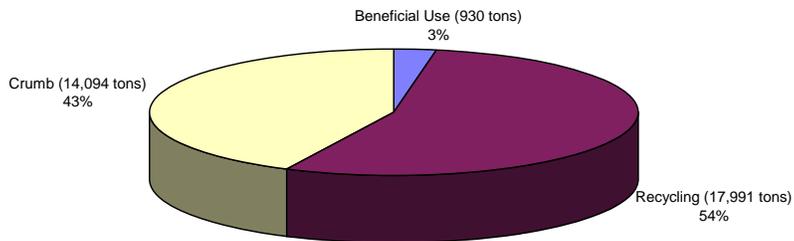
Waste Tire Recycling in Utah:

1. Estimated new tires sold: 2,739,000
2. Estimated tires recycled: 1,981,000 (based on a general conversion factor of 60 tires/ton)
3. Waste Tire Recycling: 33,015 tons of tires recycled (see Figure 2)
 - 14,094 tons used in crumb,
 - 17,991 tons used in recycling, and
 - 930 tons used in beneficial use.
4. Due to low fund balance, no tire pile cleanups were done in FY09

Utah Waste Tires Recycled



FY09 Waste Tire Recycling by Category



Waste Tire Pile Cleanups:

Waste Tire Pile Cleanups

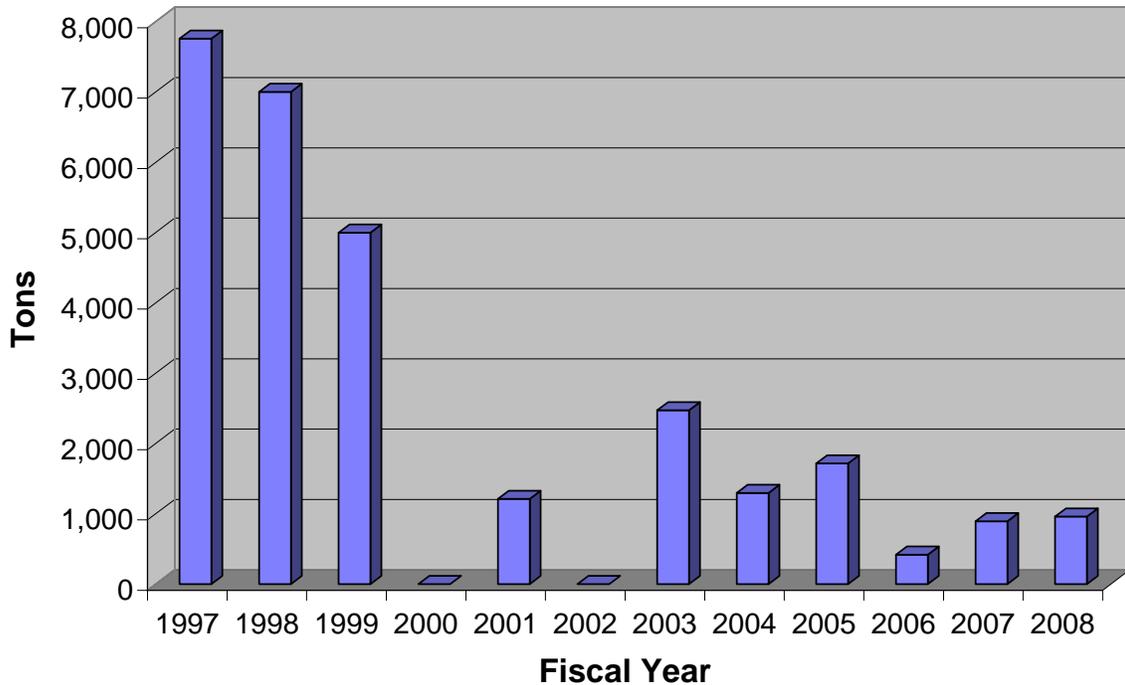


Figure 3

In March Ralph Bohn, Solid Waste Program Manager, attended the RCC Workshop sponsored by EPA and held in EPA headquarters.

The 2009 session of the Utah legislature passed SB224, “Reuse of Industrial Byproduct.” The bill authorizes the Utah Solid and Hazardous Waste Control Board to make rules to allow and regulate the use of industrial byproducts and for the review of application for reuse.

Utah helped to facilitate the successful redevelopment of the former Geneva Steel site during FY 2009. The industrial materials recycling activities relevant to the site included reuse of slags and furnace sludges from former steel operations as construction materials. Slags are mined, processed, and sold for use as aggregates in concrete, structural fill for mechanically stabilized earth (MSE) walls for roadways, and as drainage materials. Sands and sludges have been employed as general fill in roadway projects and for grade improvements for civil works on the site. Iron rich sludges are sold for resource recovery by commercial enterprises (principally as a feedstock for other steel making processes, as well as for soil amendments).

Priority and Toxic Chemicals

During FY 2009, the Division worked on a number of activities designed to minimize the generation or improper disposal of hazardous wastes.

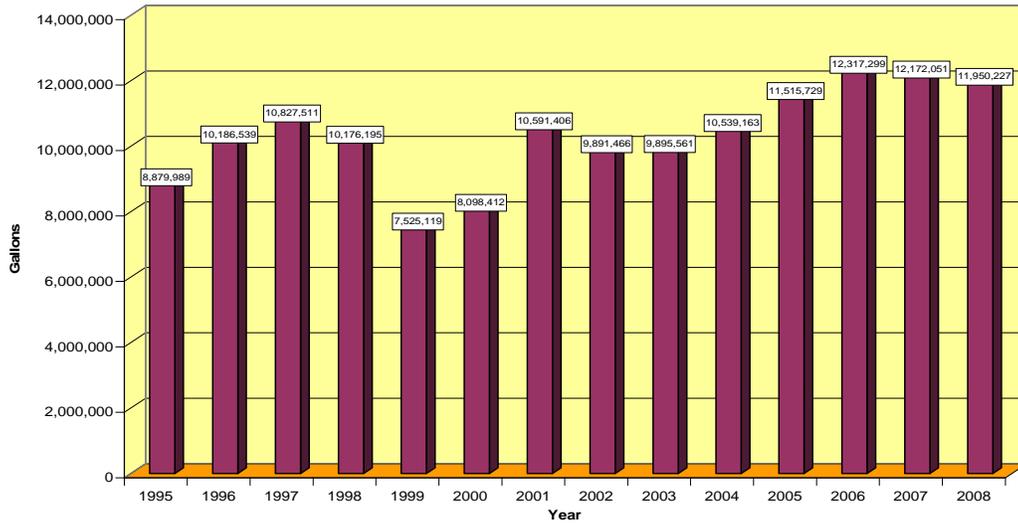
- The Division continued to work with auto salvagers to educate them on the removal of mercury switches for automobiles. As of September 11, 2009, the End of Life Vehicle Solutions Corporation (ELVS) had 127 participants in the Mercury Switch Recovery Program and had collected 27,903 switches, which is equal to 61.39 pounds of mercury.
- Both UDEQ and the Division staff continued to utilize and distribute a Best Management Practices poster for auto recyclers and repair shops as part of ongoing educational outreach efforts.
- The Division provided technical assistance to businesses and the public through fact sheets, newsletters, and electronic media. The Division Web Site and P2 Library were maintained with information regarding waste minimization, source reduction and recycling.

Used Oil Recycling Program

One of Utah's priorities for addressing recyclable materials is the Used Oil Program. UDEQ established this program in 1993, and has had significant success in the collection and recycling of used oil in an environmentally responsible manner. There are two principal elements of the Utah Used Oil Program in Utah: Oil from businesses and the Do-It-Yourself (DIY) program.

Figure 4 shows the total amount of used oil recycled from both elements of the program from 1995 through 2008. The data indicate that the amount of used oil recycled in the subject period ranged from about 8,880,000 to a high in 2006 of 12,320,000 gallons per year.

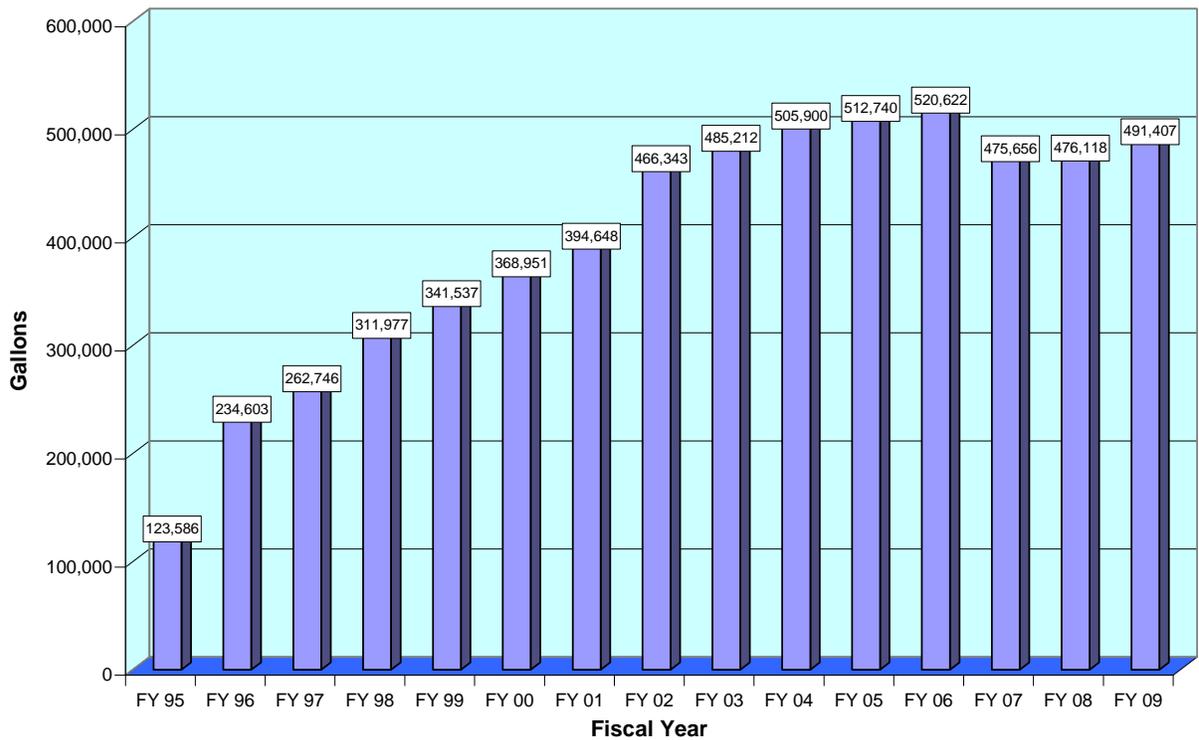
Figure 4 - Total Used Oil Recycling in Utah, 1995-2008
(Includes DIYer Used Oil)



A closer look at the DIYer element of the program is presented in Figure 5. The data show steady growth in the amount of DIYer used oil collected for recycling over a 13-year period, although there has been a slight decrease in the collection amounts for the past three fiscal years. In FY 2009, approximately 491,000 gallons of DIYer used oil were collected. The slight decrease in collections for the past three years can be explained by the national decline in DIYer used oil generation and collection due to:

- extended motor oil drain intervals approaching 7,000 to 10,000 miles, versus the old recommended 3,000 miles per oil change;
- advances in motor oil formulations and additives extending the life of motor oils;
- the ever increasing number of conveniently located Do-It-For-Me oil change facilities expanding into rural areas; and
- the recent down turn in the economy.

Figure 5 - Utah Do-It-Yourselfer Used Oil Collections FY 1995-2009



The Used Oil Program continues to develop partnerships with cities and counties throughout the state to coordinate public education activities as a result of the storm water run-off permit regulations. One of the requirements of the storm water permits is to develop and distribute information to the public to educate them about chemicals and products, including used oil that should not be discharged into storm drains. The Division continues to work with these local agencies to incorporate used oil recycling educational material and messages promoting proper used oil recycling, including locations where to take used oil generated by do-it-yourselfers (DIYers) in order to have it collected and recycled at no cost.

Utah has also invested much into education and outreach for the used oil program as described in the following highlights:

1. The Division developed and published individualized DIYer used oil recycling articles in 34 local newspapers to kick off a month long used oil recycling education campaign in April 2009. The articles provided the locations of the free, DIYer used collection centers in the local communities and general info about how to properly recycle DIYer used oil.
2. During FY 2009, the Division staff continued to visit high school automotive classes and vocational/technical schools throughout Utah to educate students on the proper management of used oil and used oil filters, in addition to where to take oil to be recycled. At the end of the presentation, the students were provided with a survey to complete. The results of the surveys will assist the Division in

3. All charts depicting DIYer used oil (state-wide totals and county totals) and total used oil (DIYer and business) collected in the state since the program began in 1993 under the Division, continue to be updated on the Web to reflect current information. The latest edition of the Used Oil Drip, the used oil program newsletter, is also available on the Web. Annual report information for calendar year 2008 provided by all permitted used oil facilities has been summarized and is available on the Web. The Web site lists each permitted facility in Utah and how much used oil each facility processed, burned and/or transported.
4. Used oil recycling information and promotional materials provided by the Division continue to be distributed by numerous local health departments throughout the state. The promotional material is distributed at many local community events such as county fairs, demolition derbies, natural resources fairs, and various Earth Day events, and especially at sporting events at college campuses. The Used Oil Drip, the Division's used oil recycling newsletter, is still being published and distributed to city and county officials, collection centers, local health department officials, state legislators, and other state and federal agencies. The newsletter is also requested by and mailed to environmental program staff from other states that are considering establishing or have an existing DIYer used oil recycling program.
5. Boy Scouts of America Eagle Scout projects are ongoing. A popular project is to coordinate the labeling of garbage containers with stickers related to used-oil recycling as a reminder to keep used oil from being disposed of in private dumpsters.

The State meets the standards for this criterion.

SAFE WASTE MANAGEMENT

Utah has a significant number of facilities that manage hazardous waste, and the FY 2009 PPA supports the State's and EPA's goal of safe management of hazardous waste through the use of approved controls (closure plans, permits, operating permits, and other similar type of approved controls). The PPA includes performance measures for progress towards closure of facilities, controls for facilities closing with waste in place, and initial and renewed operating permits for facilities that manage hazardous wastes.

Universe of Treatment, Storage and Disposal Facilities (TSDFs)

As indicated by the data that the Division maintains in the RCRAInfo database and based on the legal and operating status of the hazardous waste management units (HWMUs), Utah has 59 current and past RCRA Treatment Storage and Disposal Facilities (TSDFs). As noted in Table 1, by FY 2009, many of the 59 TSDFs either have been referred to the CERCLA program for remediation or are no longer active because they have closed all units.

Table 1 - Summary of TSDFs for Utah¹

Historical ² Utah TSDF Universe	59
TSDFs with all HWMUs referred to CERCLA	7
TSDFs with RCRA as lead authority	52
TSDFs with all HWMUs clean closed and terminated permit or interim status	37
TSDFs with active ³ HWMUs	15
TSDFs established as Baseline Universe under GPRA	26

1 - Data based on EPA Region 8 Universe Report (UND02) dated February 5, 2008.

2 - The Historical TSDF Universe includes all TSDFs that manage or managed hazardous waste in regulated hwmus, either currently or in the past.

3 - Active hwmus are those regulated units that are still managing hazardous wastes or have not yet completed the closure process to the point where the Operating or Post-Closure Permit, or Interim Status has been terminated.

1. ***Progress toward Closure Plan Approvals and Closure Verifications (PSOP Criterion 3.1)***

As presented in Table 2, there are 49 RCRA-lead TSDFs with closed or closing HWMUs, including 17 with closing land disposal units (LDUs), 42 with closing treatment and storage units (TSUs), and three with closing combustion units (CUs). There are 199 total units on the closure track.

As detailed in Table 2 and in the FY 2009 Commitments Table in the Attachments section, the Division completed one unplanned accomplishment: one closure plan approval (CL360) for CUs. The Division completed two closure plan verifications (CL380) for TSUs in FY 2009.

As a result of these actions, the Division continued to make significant progress in addressing hazardous waste units on the closure track. Closure plans have been approved for 188 out of 199 (94%) of all closing units, and closure has been verified for 88% (175 of 199) of all closing units.

Table 2 - Status of Closing Units in Utah¹

Status, Activity	LDUs	TSUs	CUs	Total ²
TSDFs on Closure Track with appropriate units ¹	17	42	3	49
Units on Closure Track	52	142	5	199
Units with Closure Plan Approved at start of FY 2009	52	131	5	188
Closure Plans Approved in FY 2009	0	0	0	0
Units with Closure Plan Approved at end of FY 2009	52	131	5	188
Units with Closure Verified at the start of FY 2009	51	121	3	171
Unit closures verified in FY 2009	0	0	0	0
Units with Closure Verified at end of FY 2009	51	121	3	173

1 – Includes only those managed by RCRA, not those referred to CERCLA. **Does not include the french drain.**

2 – Total number of TSDFs differs from the sum of the three facility columns because some facilities have more than one type of unit.

The following table summarizes the closure activities (CL360, CL370, and CL380) in FY 2009:

Table 3 – FY 2009 Closure Activities in Utah

Facility	Activity	Date
ATK Launch Systems Promontory	Closure Verification (CL380) – Sludge Trays Closure #5 (M-136 Partial Closure)	08/24/09
Deseret Chemical Depot	Closure Plan Approval (CL360) – CAMDS MPF	12/16/08
Ensign-Bickford Company	Closure Verification (CL380) – Laboratory Trough and Sump (SWMU 21)	11/19/08

The State meets the standards for this criterion.

2. **Quality of Closure Plans and Verifications (PSOP Criterion 3.2)**

The State meets the standards for this criterion.

3. **Progress toward Controls for Post-Closure and Operating Facilities (PSOP Criterion 3.3)**

In FY 2009, there are 27 RCRA-lead TSDFs that require controls for management of hazardous wastes in either post-closure (PC) LDUs or operating HWMUs: 13 require PC care, 19 have operating units, and six (6) have both. Starting in 2005, these 27 facilities have been consolidated into a baseline universe for approved controls to track progress toward national goals.

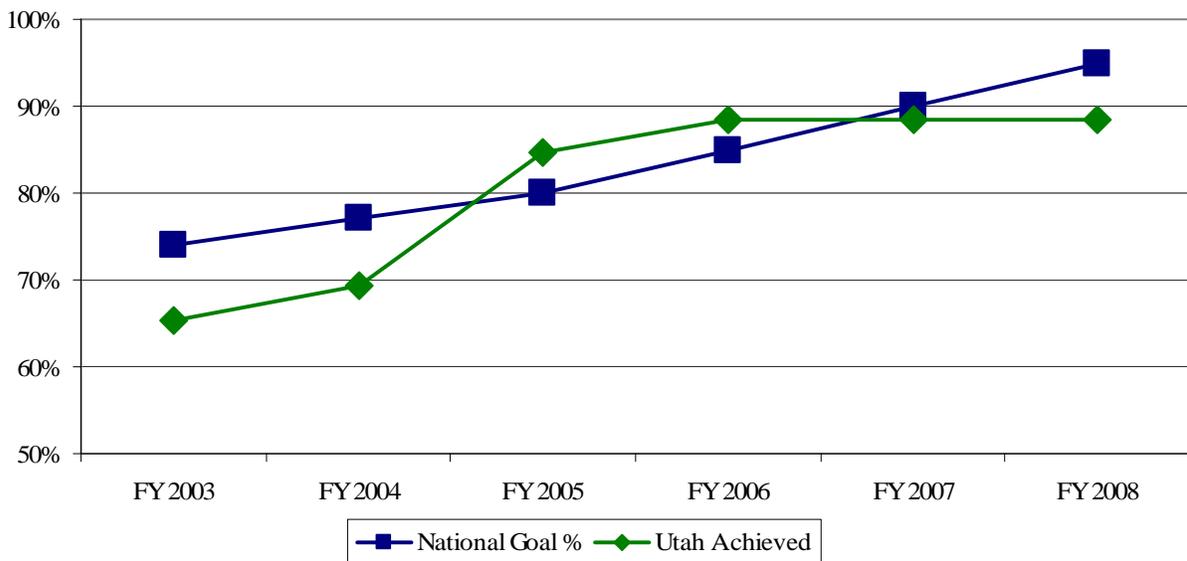
In FY 2008, the ATK Launch Systems – Bacchus was split into two separate facilities, Plant 1 owned by ATK and the Naval Industrial Reserve Ordnance Plant (NIROP) which

is owned by the Navy. The number of baseline universe facilities increased to a total of 27 RCRA-lead TSDFs that require controls.

As presented in Figure 6 below, at the beginning of FY 2009, Utah had placed the appropriate post-closure or operating controls for all units at 25 93%) of the 27 facilities in the baseline universe. The national goal for FY 2009 was 95%. The Division completed two Approved Controls (OP200)) for ATK Launch Systems- NIROP.

Figure 6

**Utah Progress on Controls at 26 Baseline Universe Facilities
(includes both Post-Closure and Operating Controls)**



For FY 2009, the Division had a target of one (1) permit renewal. One permit renewal was achieved for Hill Air Force Base. In addition, one new permit was issued to ATK Launch Systems – Bacchus Facility, NIROP. Table 4 lists the achievements.

Table 4 – FY 2009 Safe Waste Management Activities in Utah

Facility	Activity	Date
ATK Launch Systems – Bacchus Facility, NIROP	TSU Permit Issuance – Two storage units – ES-2 and Ash Gondola and one Subpart X unit – NIROP Burning Grounds	09/30/09
Hill Air Force Base.	Storage Permit Renewal-	9/30/09

Table 5 indicates the status of the Baseline Facilities and their units as of the end of FY 2009.

Table 5 – Permit Status for Utah TSDFs Needing Controls						
TSDF and Unit Categories	PC LDU	OP LDU	OP TSU	OP CU	OP TOT	TOT¹
Facility Level measures for Baseline Universe						
TSDFs on 2005 Consolidated Baseline Universe	17	3	17	3		27
TSDFs with all units controlled at start of 2009	10	3	16	3		25
TSDFs with all units controlled in 2009	0	0	0	0		0
TSDFs with all units controlled at end of 2009	10	3	16	3		25
Facility Level Percentage	65%	100%	93%	100%		93%
Unit Level measures for Baseline Universe						
Units in 2005 Consolidated Baseline Universe	38	6	129	6	144	182
Units with controls in place at start of 2009	32	6	119	6	134	166
Units with controls in place during 2009	3	0	5	0	5	8
Units with controls in place at end of 2009	35	6	124	6	139	174
Unit Level Percentage	92%	100%	96%	100%	97%	96%

1 – Total number differs from the sum of the three facility columns because some facilities have more than one type of unit.

The Division also received 103 permit modification requests (including temporary authorizations) during FY 2009 and completed 101 modifications as follows:

1. Class I – 58
2. Class Ia – 19
3. Class II – 16
4. Class III – 3
5. –Temporary Authorizations - 5

During FY 2009, the Division issued 36 Emergency Permits. Two (2) trial burns were performed at TEADand TOCDF.

The agency also notes that the Division has issued permits to a vast majority (173 out of 179 or 97%) of regulated units at its facilities by the end of FY 2009. Three operating units and three PC units require final permit determinations.

The Division intends to complete a Class 3 permit modification to add two Subpart X units, M-136 and M-225, to the ATK Launch Systems – Promontory facility Hazardous Waste Storage Permit by September 30, 2010.

The State meets the standards for this criterion.

4. ***Quality of Permits or other controls for Post-Closure and Operating Units and Facilities (PSOP Criterion 3.4)***

The State meets the standards for this criterion.

CORRECTIVE ACTION

1. *Completion of RCRA Facility Assessments (PSOP Criterion 4.1)*

According to data in RCRAInfo, all 39 Utah TSDFs subject to corrective action have been assessed through a RCRA Facility Assessment (RFA, CA050) or equivalent, and most have been given a Corrective Action rank (high, medium, low). After the assessment, 23 TSDFs were identified as needing corrective action beyond the assessment stage. Of the 23 facilities needing corrective action, 11 were ranked “high” for their potential or actual releases of hazardous contamination. In 1997, these 11 facilities were established as the Utah Corrective Action Baseline Universe. Stabilization evaluations (CA225) have been completed for the 11 high-ranked facilities.

The State meets the standards for this criterion.

2. *Quality of RCRA Facility Assessments (PSOP Criterion 4.2)*

Not applicable since the state previously met the standards for this criterion, and no additional work is anticipated.

This criterion is not applicable.

3. *Completion of Investigations (PSOP Criterion 4.3)*

The PPA target at the area level was five RFI Approvals (CA200). The Division met the target by completing 77, as listed in Table 8 below.

The State meets the standards for this criterion.

4. *Quality of Investigations (PSOP Criterion 4.4)*

This criterion is not applicable.

5. *Completion of Cleanup (PSOP Criterion 4.5)*

The FY 2009 PPA had the following targets in this area: four Remedy Selection (CA400) at the area level; and four Construction Completes (CA550) at the area level. The Division did not complete any (CA400) this year. However, the Division exceeded the target of (CA550) by completing 148. The Division also completed 146 corrective action complete (CA999) at the area level.

The following table summarizes the corrective action activities in FY 2009:

Table 8 – FY 2009 Corrective Action Activities in Utah

Facility	Activity	Date
Anderson Geneva Development, INC.	CMS Work plan Approved (CA300) 4 SWMU’s (2.02-MS-15, 2.03-SP-11, 2.17 Sinter Plant, 3.16-BOP-1)	11/10/08
	CMS Work plan Approved (CA300) 5 SWMU’s (1.02-OR-10, 1.02-OR-12A, 1.02-OR-12B, 1.02-OR-12C, 1.02-OR23)CMS Work plan	11/19/08

Facility	Activity	Date
	<p>Approved (CA300) 6 SWMU's(1.02-OR-21A, 1.02-OR-21B, 1.02-OR-22A, 1.02-OR-22B, 2.10-SI-5B, 2.12-SI-5C)</p> <p>Construction Complete (CA550RC) 2 SWMUs Construction Complete (CA550RC) 1 SWMU Construction Complete (CA550NR) 9 SWMUs Construction Complete (CA550NR) 2 SWMUs Construction Complete (CA550RC) 2 SWMUs Construction Complete (CA550RC) 1 SWMU Construction Complete (CA550RC) 3 SWMUs Construction Complete (CA550RC) 13 SWMUs Construction Complete (CA550RC) 35 SWMUs</p> <p>CA Complete (CA999NF) 2 SWMUs CA Complete (CA999NF) 1 SWMU CA Complete (CA999RM) 9 SWMUs CA Complete (CA999NF) 2 SWMUs CA Complete (CA999NF) 2 SWMUs CA Complete (CA999NF) 1 SWMU CA Complete (CA999RM) 3 SWMUs CA Complete (CA999NF) 13 SWMUs CA Complete (CA999NF) 35 SWMUs</p>	<p>1/28/09</p> <p>12/22/08 10/8/08 2/12/09 3/30/09 5/14/09 6/16/09 6/25/09 7/7/09 9/21/09</p> <p>12/22/08 10/8/08 2/12/09 3/30/09 5/14/09 6/16/09 6/25/09 7/7/09 9/21/09 9/21/09</p>
Dugway Proving Ground	<p>RFI Approved (CA200) (SWMUs 173, 209, 210)</p> <p>Construction Complete (CA550) (SWMUs 17,) Construction Complete (CA550) (SWMUs 173,) Construction Complete (CA550) (SWMUs 197,) Construction Complete (CA550) (SWMUs 209,) Construction Complete (CA550) (SWMUs 210,) Construction Complete (CA550) (SWMUs 52,)</p> <p>CA Complete (CA999) SWMU 17 CA Complete (CA999) SWMU 173 CA Complete (CA999) SWMU 197 CA Complete (CA999) SWMU 209 CA Complete (CA999) SWMU 210 CA Complete (CA999) SWMU 52</p>	<p>09/10/2009</p> <p>8/8/09 9/10/09 9/10/09 8/28/09 8/28/09 9/10/09</p> <p>9/10/09 9/10/09 8/28/09</p>
Ensign-Bickford Company	<p>CMI Construction Complete (CA550) – 8 areas (SWMUs 4, 11, 20, 29, 37, 38, 40, and 44 CA Complete (CA999NF) – 8 areas (SWMUs 4, 11, 20, 29, 37, 38, 40, and 44</p>	<p>9/22/09 9/22/09</p>
Ninigret Construction (formerly Engelhard)	<p>CMI Construction Complete (CA550) – SWMU 20E (Phase 3) Bangerter B 25 acres CMI Construction Complete (CA550) – 31 areas (SWMUs 3-19, 21-34) CA complete (CA999) – 31 areas (SWMUs 3-19, 21-34)</p>	<p>9/17/09 12/23/08 12/23/08</p>
Tooele Army Depot	<p>CMI Construction Completed (CA550) – SWMU 10 CA Process Terminated (CA999) – SWMU 10</p>	<p>04/15/09 9/9/09</p>
Western Zirconium	<p>RFI Approved (CA200) – 70 areas (SWMUs 1, 2, 9-33, 37-43, 45-63, AOCs 1-12, 14-18)</p> <p>CMI Construction Complete (CA550) – 27 areas (SWMUs 11-16, 19, 23-25, 28, 32, 43, 47, 51, 53, 55, 56, AOC 3, 6-11, 18) CA complete (CA999) – 27 areas (SWMUs 11-16, 19, 23-25, 28, 32,</p>	<p>1/14/09</p> <p>1/14/09 1/14/09</p>

Facility	Activity	Date
	43, 47, 51, 53, 55, 56, AOCs 3, 6-11, 18)	
Safety-Kleen	CMI Construction Completed (CA550)	12/24/08
Clean Harbors Aragonite	CMI Construction Completed (CA550)	12/24/08
Clean Harbors Clive	CMI Construction Completed (CA550)	12/24/08
Clean harbors Grassy Mountain	CMI Construction Completed (CA550)	12/24/08
Ashland Chemical Co	CMI Construction Completed (CA550)	12/24/08
EnergySolutions	CMI Construction Completed (CA550)	12/24/08

The Division also continued to conduct oversight of the following voluntary corrective action sites:

- Autoliv (former Volvo GM facility) – The Division conducted oversight and split samples on the 3rd quarter of groundwater monitoring.
- Rocky Mountain Power (UP&L) Jordan Substation – Approved an Ecological Risk Assessment Report on April 1, 2009.
- Varian Medical Systems – Approved a proposal on December 17, 2008 to install an additional groundwater monitoring well in the northeast area of the contamination plume. The Division approved a proposal in May of 2009 to reevaluate the potential vapor intrusion pathway.

Ongoing oversight of groundwater monitoring as required through approved site management plans was conducted at Northrup Grumman (Litton Defense Systems), Mosquito Abatement SLCC, Box Elder Mosquito Abatement, Aero Tech Manufacturing, Farmers Grain COOP, Univar SLC, Mark Miller Toyota, Western Pipe Coaters and Engineers and Brickyard Square Property.

Figure 7 illustrates progress in achieving the Corrective Action national goals for Construction Completion. The regional target for FY 2009 was 30%; Utah has achieved remedy selection at 11 of 23 facilities or 46%.

Figure 7: Utah Progress on Construction Completion (CA550) at 11 High-Ranked Facilities

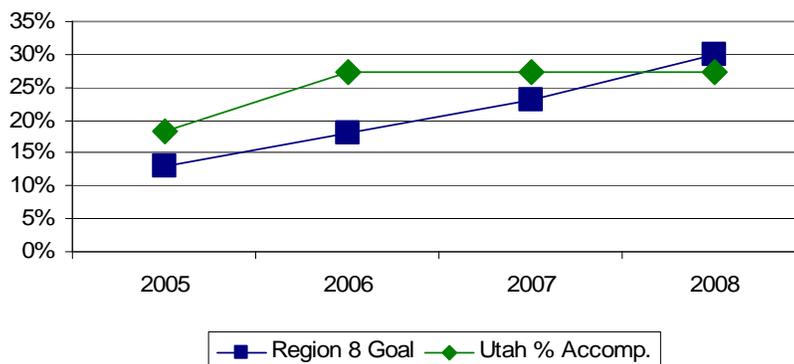


Figure 8 presents the status and progress of cleanup for the 828 areas at Utah's 23 GPRA facilities over the past several years. The agencies note that incremental progress toward cleanup goals is most clearly demonstrated when area level data are used. In Figure 9, the data indicate how many of the 828 areas at the 23 GPRA CA facilities there were in the workload universe, and how many had at least reached each of the following three primary phases of cleanup by the beginning of FY 2009:

Figure 8 presents the status and progress of cleanup for the 828 areas at Utah's 23 GPRA facilities over the past several years. The agencies note that incremental progress toward cleanup goals is most clearly demonstrated when area level data are used. In Figure 9, the data indicate how many of the 828 areas at the 23 GPRA CA facilities there were in the workload universe, and how many had at least reached each of the following three primary phases of cleanup by the beginning of FY 2009:

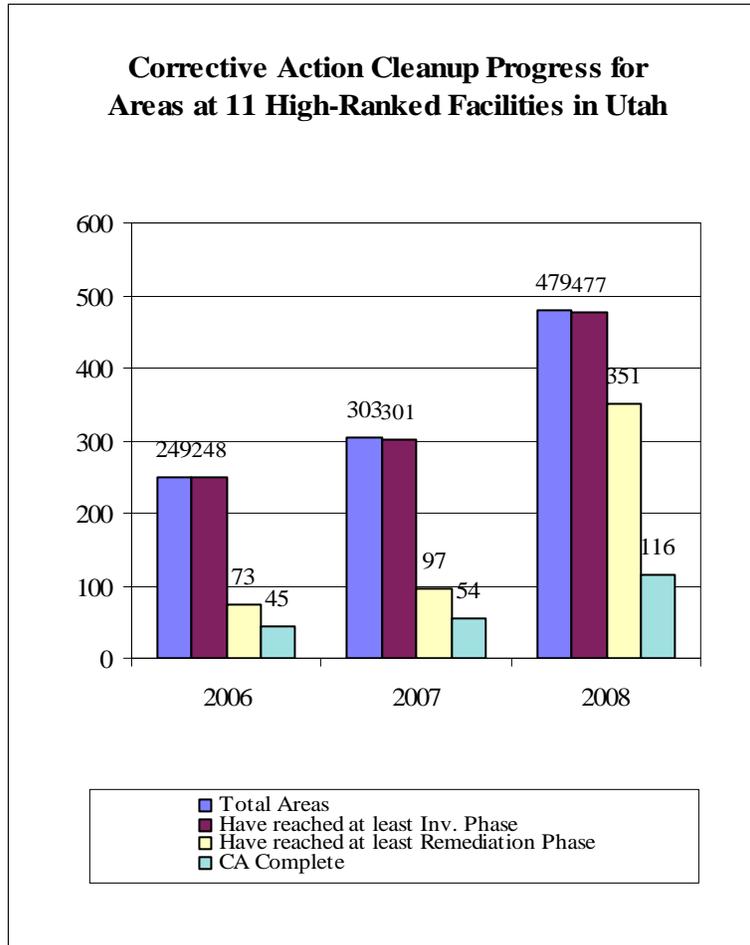
1. The Investigation Phase (includes all investigation events, such as RFI imposition, RFI completion, Risk Assessment, etc.);
2. The Remediation Phase (includes all cleanup events, such as Remedy Selection, CMI Construction Completion, Stabilization Measures Imposed, etc.); and
3. The Completion of CA, Termination (all cleanup goals achieved).

The data in Figure 8 indicates a significant growth (from 496 in 2008 to 828 in 2009) in the number of areas that have been designated at the 23 GPRA facilities. This is due primarily to the breaking out of individual areas that are proceeding through CA at different rates. The Division expects that further breakouts of CA areas will occur in the future.

The data in Figure 8 also indicate that:

1. Almost all of the areas have reached at least the investigation phase;
2. There has been significant progress in the number of areas that have reached the remediation phase (397 in 2008 to 453 in 2009, and
3. The number of areas that have completed the CA process has increased (from 153 in 2008 to 299 in 2009).

Figure 8



The State meets the standards for this criterion.

6. **Quality of Cleanup and Remediation Activities (PSOP Criterion 4.6)**

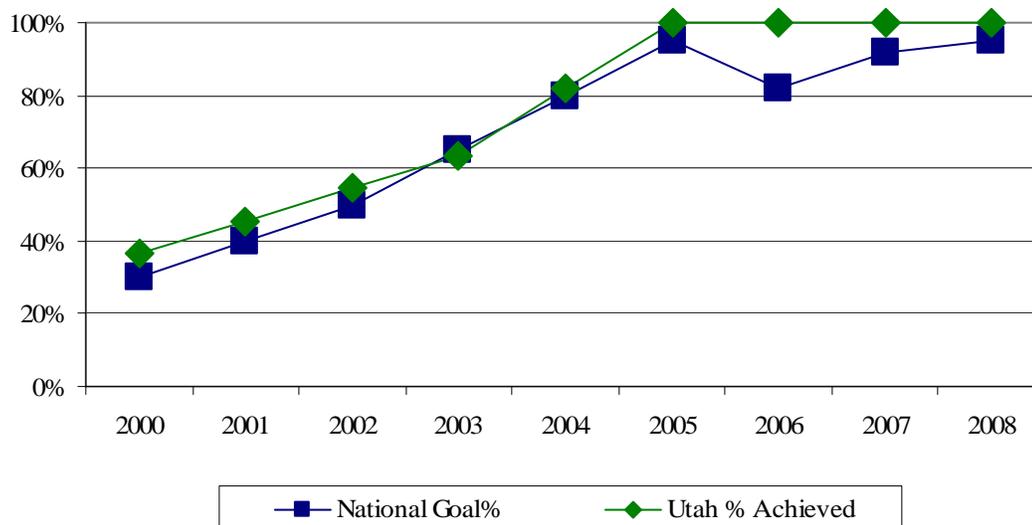
The State meets the standards for this criterion.

7. **Progress in Achieving Environmental Indicators (PSOP Criterion 4.7)**

Having current Human Risks and Migration of Contaminated Ground Water under control at GPRCA CA facilities is a high priority of the national RCRA program. The Division supports this priority by focusing efforts on the 23 GPRCA facilities in Utah and tracking progress toward the national goals for the two measures.

Current Human Exposure Under Control (CA725): Utah has achieved this Environmental Indicator for 91% of its GPRCA facilities.

Figure 9- Utah Progress on Current Human Exposures Under Control at 11 High-Ranked Facilities



Migration of Contaminated Ground Water Under Control (CA750): During FY 2009, the Division continued to work to complete the EI's at ATK-Bacchus, Vertellus (formerly Reilly Industries), and Western Zirconium. The current completion percentage of 67% (16 of 23 GPRA corrective action baseline facilities) is unchanged from the previous fiscal year.

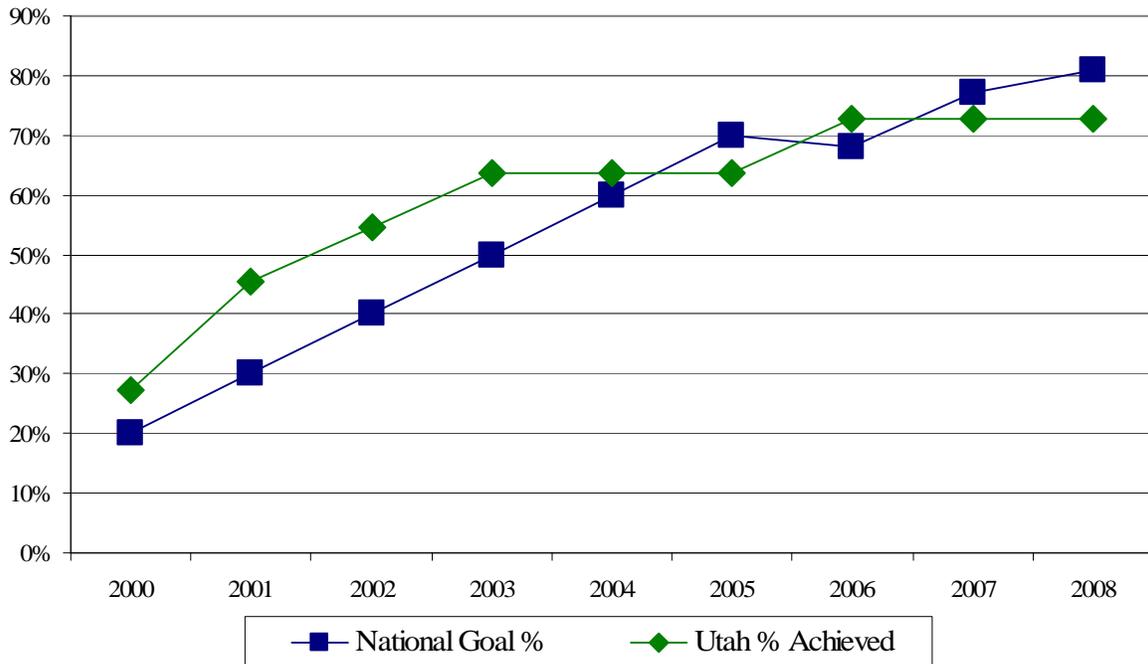
ATK-Bacchus has eliminated the original sources of contamination, continues to monitor the groundwater contamination plume, and has an operational remediation pilot plant. The facility is now struggling to find the right amendment to stimulate in-situ remediation of the perchlorate contamination.

Reilly (Vertellus) continues to delay taking action on any source area interim measures. The Division is evaluating its options for compelling Vertellus to conduct these activities.

During FY2009 Western Zirconium and the Division decided on a barrier wall design. The Army Corp of Engineers has expressed concerns over the positioning of the wall and its impact on a wetlands area. Until this issue is resolved, the installation of the wall is being delayed.

The effort to address the groundwater EI at all of these facilities is ongoing.

**Figure 10 - Utah Progress on Ground-Water Migration
Under Control at 11 High-Ranked Facilities**



The State meets the standards for this criterion.

RCRA ENFORCEMENT PROGRAM SRF Review Year

I. Inspections

The following is the Division's self-assessment for compliance and enforcement.

- During FY09, the Region scheduled six oversight inspections.

Utah conducted 102 inspections during FY09. These inspections included TSDFs, LQGs, SQGs, CESQGs, Transporters, and Used Oil facilities. All inspection data has been entered into RCRAInfo.

- Utah inspection reports document inspection findings, including accurate identification of violations.
- Of the 25 large quantity generators inspections completed in 2009 there were 16 in EJ areas for a total of 64%. Of the 7 used oil inspection 5 were in EJ areas for a total of 71%.

II. Enforcement

The Division took appropriate enforcement actions as follows.

- Enforcement actions are taken in a timely manner. There were 19 enforcement actions completed in FY09.
- Enforcement actions were appropriate for the violations, including proper and timely designation as a SNC, where appropriate.
- Enforcement actions included appropriate injunctive relief that returned facilities to compliance in a specific time frame.
- Gravity and economic benefit calculations were included for all penalties as appropriate. Utah negotiated \$178,880.25 in penalties in FY09.
- Final enforcement actions stipulated appropriate gravity and economic benefit portions of a penalty.

III. Annual Agreements

Utah met all commitments in the PPA.

IV. Data Management

No concerns have been identified.

V. Summary

Program Strengths

- Inspections: Coverage for operating TSDFs and LQGs is above the national average. Utah generally accomplishes all planned inspections within time frames. Inspection reports accurately reflect findings and provide required detail.
- SNC Identification Rate: Formal designation of SNCs is above the national average and generally occurs in a timely manner.
- Formal Enforcement Actions: Enforcement actions, including penalty collection, routinely occur within agreed upon time frames.
- Used Oil Program: The program is a national model for effective compliance monitoring, recycling activities, and enforcement actions against violators.

ATTACHMENTS

Performance Standards and Measures Summary Table
 FY 2009 Commitments Sheet
 SRF Data Metrics report for FY 09 (OTIS State Review Framework Results, RCRA Data for Utah.

SIGNATURES

Steve Burkett, Director
Solid and Hazardous Waste Program
U.S. Environmental Protection Agency – Region 8

Date

Dennis R. Downs, Director
Division of Solid and Hazardous Waste
Utah Department of Environmental Quality

Date

ATTACHMENTS

PSOP Program Review Summary Table

FY 2009 Commitments Table

FY 2009 EOY Review Summary for the Utah Solid & Hazardous Waste Division

Criterion	Std Met?	Comments
PROGRAM MANAGEMENT		
1.1 <i>Adoption of federal rules by the state</i>	YES	
1.2 <i>Authorization</i>	YES	
1.3 <i>Memorandum of Agreement</i>	YES	
1.4 <i>Resources and Skill Mix</i>	YES	
1.5 <i>State training program</i>	YES	
1.6 <i>Data Timeliness, Accuracy and Completeness</i>	YES	
1.7 <i>Records Management</i>	YES	
HAZARDOUS WASTE MINIMIZATION		
2.1 <i>Resource Conservation Challenge</i>	YES	
SAFE WASTE MANAGEMENT		
3.1 <i>Progress toward Closure</i>	YES	Utah completed 8 closure verifications .
3.2 <i>Quality of Closure Plans and Verifications</i>	YES	The closure of unit "I-10 CL8" at ATK Thiokol Promontory met all appropriate standards.
3.3 <i>Progress toward Controls for PC/OP Facilities</i>	YES	
3.4 <i>Quality of PC/OP instruments</i>	YES	The renewed Ashland Distribution permit met all performance standards.
CORRECTIVE ACTION		
4.1 <i>Completion of RFAs</i>	YES	
4.2 <i>Quality of RFAs</i>	N/A	
4.3 <i>Completion of Investigations</i>	YES	
4.4 <i>Quality of Investigations</i>	N/A	
4.5 <i>Completion of Cleanup</i>	YES	
4.6 <i>Quality of Cleanup and Remediation</i>	YES	
4.7 <i>Progress in Achieving EIs</i>	YES	

FY 2009 Hazardous Waste Program Commitments for UTAH					
Event	# of Facilities or Units	Achieved by EOY FY2008	FY 2009		
			Committed	Achieved	EOY
Closure Activities (all at unit level)					
Closure Plan Approval (CL360) for LDUs	52	52		0	52
Closure Verification (CL380) for LDUs	52	51	1	0	51
Closure Plan Approval (CL360) for TSUs	141	131		0	131
Closure Verification (CL380) for TSUs	141	117	1	2	119
Closure Plan Approval (CL360) for CUs	6	4		1	5
Closure Verification (CL380) for CUs	6	3		0	3
Closure Plan Approvals Total (LDUs + TSUs + Cus)	199	187		1	188
Closure Verifications Total (LDUs + TSUs + Cus)	199	171	2	2	173
Permit Activities at GPRU Universe Facilities (all at facility level)					
Permitted Facilities under Approved Controls (Manual counts at facility level)	27	23		2	25
Permit Renewal due this FY (Manual counts at facility level)	4	0	1	1	1
Permit Activities Total			1	3	
Permit Activities for GPRU Universe Facilities (at unit level)					
Controls in Place for LDUs on Closure Track	38	35		1	36
Controls in Place for LDUs on Operating Track	5	5		0	5
Controls in Place for TSUs on Operating Track	130	124	3	4	128
Controls in Place for CUs on Operating Track	6	6		0	6
Corrective Action Activities at GPRU Universe Facilities (activities are at facility level, unless specified at area level)					
RCRA Facility Assessments (CA050)	23	22		0	22
Overall Facility NCAPS Ranking (CA075)	23	23		0	23
Facility Stabilization Assessment (CA225)	23	23		0	23
Facility Remedy Selection (CA400) (GPRU measure)	23	9		3	12
Facility Construction Completion (CA550) (GPRU measure)	23	8		3	11
Human Health Exposures Controlled Determination (CA725) (GPRU measure)	23	21		0	21
Groundwater Migration Controlled Determination (CA750) (GPRU measure)	23	16		0	16
RFI Imposed (CA100) (area level)	828	758		0	758
RFI Approved (CA200) (area level)	828	496	5	77	573
Remedy Selection (CA400) (area level)	828	397	4	56	453
Construction Completion (CA550) (area level)	828	174	4	142	316
Corrective Action Completed (CA999 area level)	828	153	4	146	299