

**FY 2007 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 (DSHW, or 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 2007 (October 1, 2006 - September 30, 2007). The PPA includes the annual grant work plan for the hazardous waste program of the Division of Solid and Hazardous Waste (DSHW).

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.

This report and its findings are based on the State's data in the RCRAInfo database and information provided during the end-of-year meeting held on February 7, 2008, 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 (4) key program areas: Program Management, Pollution Prevention and Hazardous Waste Minimization; Safe Waste Management; and Corrective Action. 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 2007 PPA included commitments in the areas of Waste Minimization, Permits, Closure, Corrective Action, Training and Technical Assistance, and Environmental Justice.

During FY 2007, the Utah DSHW met or exceeded the standards for all 19 program criteria (see Attachment.) EPA notes that, for FY 2007, Utah met the standards for all 19 program criteria. The DSHW 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 DSHW made significant progress toward national program goals.

## **PROGRAM MANAGEMENT**

### ***Legislation and Regulation - 2007 Utah State Legislature, Utah Solid and Hazardous Waste Control Board***

The chairman of the Solid and Hazardous Waste Control Board reported to the Utah Legislature's Natural Resources, Agriculture, and Environment Interim Committee in follow up to last year's report addressing the issue of perpetual care (beyond the post-closure period) of commercial hazardous waste facilities in Utah. The chairman reported that the Board continues to support its initial recommendations and does not believe that any changes to those recommendations are currently necessary. The Board will likely not need to report to the Legislature regarding this matter until 2011—five years from the initial report, as required by state statute (see 19-1-307, UCA).

As a brief review, in 2005, the Utah Legislature enacted a statutory provision that requires the Board to report to the Legislature every five years the following information:

- The adequacy of the amount of financial assurance required for closure and care of a commercial hazardous waste TSD facility;
- Whether funds or financial assurance are necessary and, if necessary, the adequacy, for perpetual care and maintenance of a commercial hazardous waste TSD facility; and
- The adequacy of any funds or financial assurance required to cover certain costs;

In its first report, the Board issued the following conclusions and recommendations to the Utah Legislature:

- The amounts of financial assurance required and provided for closure and post-closure care of commercial hazardous waste treatment, storage, and disposal facilities under Utah law are judged to be adequate at current levels and with current rules, controls, and practices.
- No financial assurance or funds are currently required by rule for perpetual care beyond the post-closure period.
- A perpetual care fund should be created and funded to provide for ongoing monitoring and maintenance of commercial hazardous waste land disposal facilities after termination of the post-closure permit.
- The creation of any such fund should take into account the financial impact on current facilities.
- Additional funds should not be required to cover potential catastrophic failure of the landfill cells, ground water corrective action or major maintenance at commercial hazardous waste land disposal facilities. This determination is based on the engineering controls employed to build the landfill cells to current regulatory standards. All phases of landfill construction are reviewed, monitored, and approved by the State. The design and construction of landfill cells provide reasonable assurance that wastes are contained as a means to prevent additional Superfund sites. Other factors include the remote location of current facilities, the lack of a nearby population center, the location of the facilities in the Tooele County Hazardous Waste Corridor—which prevents residential development in the area, the non-potable groundwater, the lack of precipitation, and the restricted access to the facilities.

A copy of the Board's report is available on the DSHW Web site:

[http://www.hazardouswaste.utah.gov/Board/Adobe/PerpCareFnl\[1\].pdf](http://www.hazardouswaste.utah.gov/Board/Adobe/PerpCareFnl[1].pdf)

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

According to data in StATS, EPA's rule adoption tracking system, Utah has adopted 206 (97%) of 213 required rules under the RCRA program. However, during FY 2007, Utah adopted required rules 156, 200, 206, 206.1, 207, and 207.1 and optional rules 202, 204, and 205. These rules became effective on December 1, 2006, but their adopted status is not yet reflected in StATS. Therefore, Utah has adopted 212 of the required 213 rules (only SR1 remains un-adopted).

Hazardous waste regulation adoption information for the EPA StATS reports was maintained by EPA.

During FY 2007, Utah completed the necessary rule adoption to address some of the adoption issues that were presented in the FY 2004 EOY Report. An authorization application (Addendum 13) will be prepared to incorporate these rule changes. The Addendum 12 application was reviewed by EPA in 2006 and will be included in the docket for EPA's upcoming Immediate Final Rule (IFR) for Addendum 12.

The state met the standards for this criterion.

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

According to data in StATS, as of September 30, 2007, Utah is authorized for 197 (92%) of 213 required rules under RCRA. As noted above, Utah has adopted required rules 156, 200, 206, 206.1, 207, 207.1 and will submit a final authorization application (Addendum 13) that covers these rules to EPA in FY 2008.

An IFR for final authorization for the following rules has been signed by EPA and will be published soon: Checklists 188, 188.1, 188.2, 189, 192A, 192B, 193, 194, 195, 196, 197, 198, 199, and 201.

The state met the standards for this criterion.

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

During FY 2007, the DSHW and EPA conducted an annual review of the current Memorandum of Agreement (MOA) (dated June 1, 2006). Utah signed an annual certification in August 2007 stating that the MOA was still valid and sent it to EPA for signature. EPA signed the recertification in February 2008, and will transmit the signed recertification to the State.

The state met the standards for this criterion.

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

For the 2007 state fiscal year (July 1, 2006 to June 30, 2007), the Utah Legislature appropriated \$6,932,233 to the DSHW for the 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 2007, revenues generated by state hazardous waste disposal fees comprised 34% of the DSHW program budget. Additionally, both hazardous and nonhazardous waste disposal fees account for 56% of the FY 2007 DSHW budget. Program funding from EPA remained unchanged for FY 2007 at \$772,958; representing 11% of the total program budget. The funds and the FTE were spread across the primary areas of the RCRA Program as follows:

<b>Program Area</b>	<b>\$</b>	<b>% of budget</b>	<b>FTE</b>
P2/Compliance Asst.	\$693,223	10%	6
Safe Waste Mgmt	\$1,247,802	18%	11
Corrective Action	\$1,247,802	18%	11
Inspection, Enforcement	\$2,218,315	32%	19
Administration	\$1,525,091	22%	13
<b>Total</b>	<b>\$6,932,233</b>	<b>100%</b>	<b>60</b>

The DSHW operates a mature program with experienced staff. The staff include engineers (civil, chemical, environmental, mechanical), environmental scientists (geologists, chemists, toxicologist, biologists, geohydrologists, hydrologists), GIS Specialist, and PhDs, as well as support staff.

Professional staff has a mix of advanced education with bachelors, masters, and doctoral degrees. Some of the engineers have a Professional Engineer license and the geologists hold a Professional Geologist license.

Additionally, an agency organization chart listing staff by general professional discipline is provided in the Attachment Section (see Attachment 1).

The number of DSHW staff and professional skill mix remained unchanged during FY 2007.

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 DSHW 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 2007, the following list of professional courses is representative, but not all inclusive, of those attended by DSHW staff:

- Alternative Covers for Landfills, Waste Repositories, and Mines
- Risk Assessment Forums
- Incineration Conference / Incineration Stack Testing Methods Training
- Ground Water Conference
- PCBs Training
- CSEPP/Emergency Response Training
- Unexploded Ordnance (UXO) Conferences
- FEMA / NIMS Training

National RCRA Corrective Action Conference  
North American Electronics Recycling Conference  
National Recycling Coalition Conference  
Product Stewardship Institute National Forum  
EPA/States/Tribes Regional Solid Waste Conference  
ASTSWMO Solid Waste Conference  
EPA/NGWA Fractured Rock Conference  
EIS Processes  
CFF- OSHA 8-hr Refresher Training  
DEQ training on Problem-Solving in High Conflict Conversations  
State of Utah's Security Awareness Training Course  
Stack Testing and Observation and Verification of Emission Rates  
International Conference on Incineration and Thermal Treatment Technologies  
Advanced Polychlorinated Biphenyls workshop  
Applied groundwater statistics  
Isotope methods for groundwater investigation course  
Alternative covers for landfills  
2007 Waste management symposium (Staff presented a paper on treatment at EnergySolutions)  
ASCE Geotechnics

Additionally, the DSHW 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 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 5 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 the 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 directly 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)***

EPA reviewed Utah data in the RCRAInfo national database for accuracy, completeness and timeliness. This review of data for the Safe Waste Management and Corrective Action elements of the program determined that DSHW data in RCRAInfo were in accordance with EPA requirements and policies.

The State meets the standards for this criterion.

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

For several years the DSHW has used and maintained an electronic documents management system, 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.

DSHW 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 DSWH 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 even email.

The state met the standards for this criterion.

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

The DSHW 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:

- Achieve a 35% Municipal Solid Waste (MSW) recycling rate
- Industrial Materials Recycling
- Priority and Toxic Chemicals Reductions
- Electronics Recycling

During FY 2007, the DSHW 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 2007, the DSHW 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 DSHW participates in a statewide recycling coalition called the "Recycling Coalition of Utah" (RCU). 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, 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/>.

### ***Industrial Materials Recycling – Waste Tires***

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 debris. In Utah, the DSHW has focused its efforts on the recycling of waste tires.

In Utah, over 2.7 million waste tires were generated during FY 2007. Through the combined efforts of the DSHW, 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 DSHW'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 DSHW monitors waste tire transporters and recyclers to ensure that all are operating in compliance with applicable statutes and regulations. Second, the DSHW 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 per tire recycling fee collected from new tire sales, as established by the Utah Legislature.

From the inception of the program through FY 2007, the Utah waste tire program has removed all but one abandoned tire pile and is removing, on a periodic basis, waste tire piles created at landfills as the waste tires are separated from the other waste. The one existing abandoned tire pile is currently under review and removal is expected within the next one to two years.

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. Five (5) waste tire recyclers are currently operating in Utah:

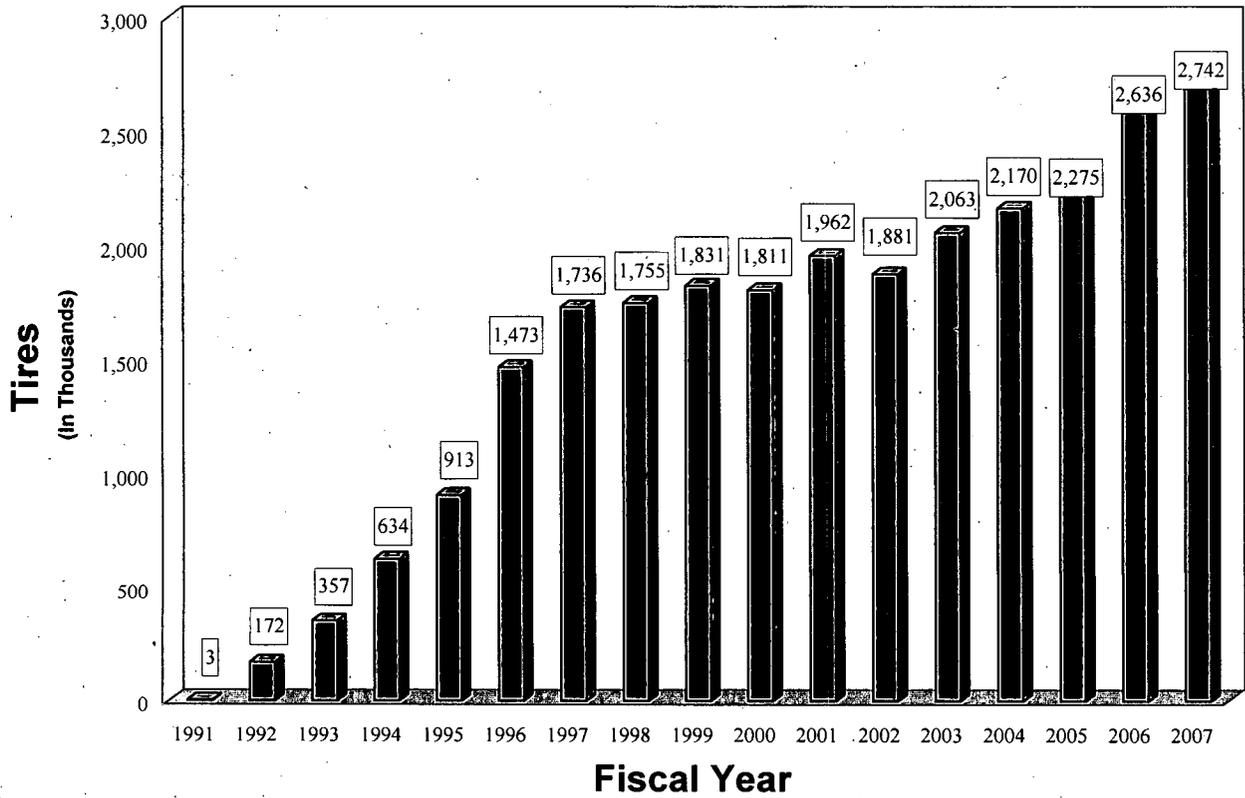
- Three industrial kilns use waste tires as fuel.
- One crumb rubber manufacturer.
- One municipal landfill uses chipped tires for daily cover material

During FY 2007, 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.

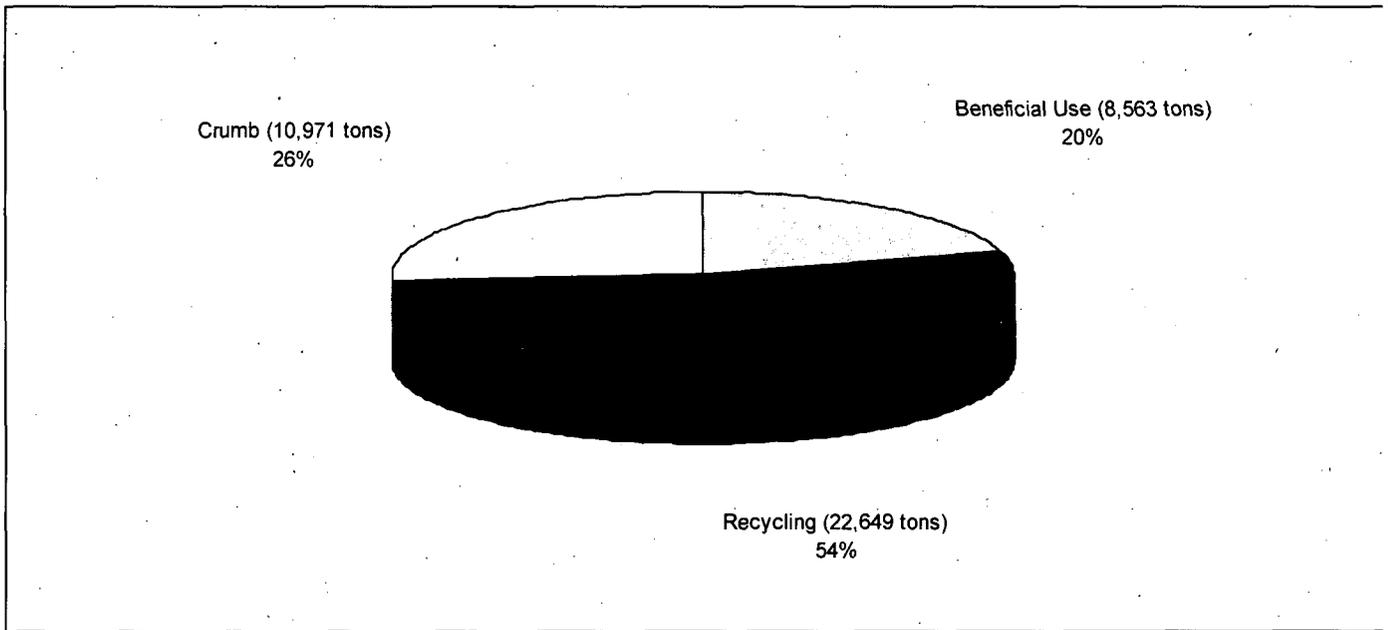
***Waste Tire Recycling in Utah:***

1. Estimated new tires sold: 3,100,039
2. Estimated tires recycled: 2,742,000 (based on a general conversion factor of 65 tires/ton)
3. Waste Tire Recycling: 42,183 tons of tires recycled (see Figure 2)
  - 10,971 tons used in crumb,
  - 22,649 tons used in recycling, and
  - 8,653 tons used in beneficial use

**Figure 1 – Utah Waste Tire Recycling, 1991-2007**



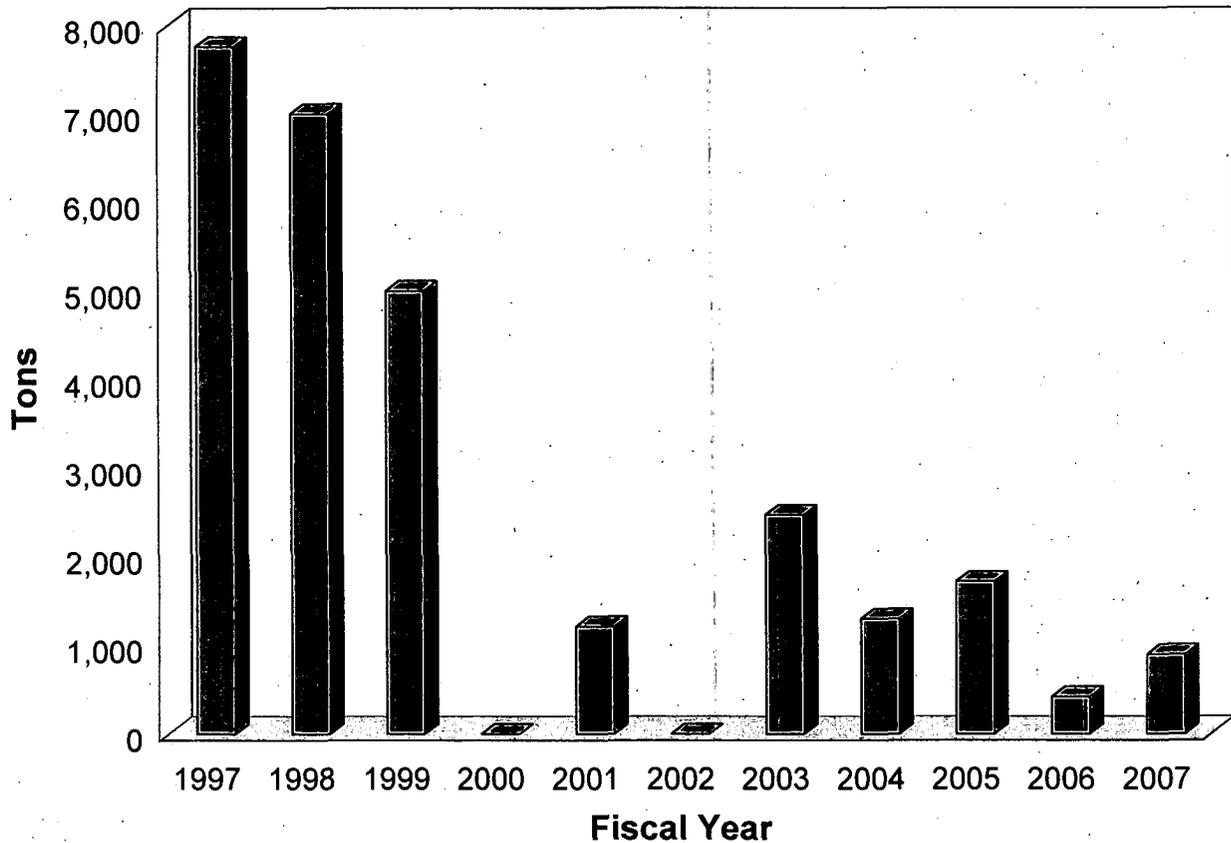
**Figure 2 - FY 2007 Utah Waste Tire Recycling by Category**



***Waste Tire Pile Cleanups:***

1. Two waste tire piles (one at a municipally operated landfill and the other an abandoned pile in Salt Lake County) were cleaned up in FY 2007, for a total of 919 tons of waste tires at a total cost of \$52,572.
2. As presented in Figure 3 below, the declining tonnage of waste tire piles cleaned up since 1997 reflects the fact that all of the major abandoned waste tire piles have been addressed. For the future, most of the focus will be on waste tire piles accumulated at landfills as tires are separated from other wastes.

**Figure 3 – Utah Waste Tire Pile Cleanups, FY 1997 - 2007**



***Priority and Toxic Chemicals:***

During FY 2007, the DSHW worked on a number of activities designed to minimize the generation or improper disposal of hazardous wastes:

- The DSHW continued to work with auto salvagers to educate them on the environmental requirements and the removal of mercury switches. The Mercury Switch Removal Act passed by the Legislature in 2006 required the development of state rules as well as the submission by auto manufacturers of a statewide collection plan. This plan requires the approval of the Executive Secretary of the Utah Solid and Hazardous Waste Control Board and is to address the safe removal, collection, and recycling of automotive mercury switches. A collection plan prepared and submitted by the End of Life Vehicle Solutions Corporation (ELVS) on January 5, 2007. ELVS represents many of the major automobile manufacturers on environmental matters and has been very active in national efforts to establish proper management techniques for the collection and recycling of automotive mercury switches. Approval by the Executive Secretary was issued on June 27, 2007. Rules implementing provisions of the state mercury switch

removal statute were approved by the Solid and Hazardous Waste Control Board on November 6, 2006. (See R315-17, End of Life Automotive Mercury Switch Removal Standards, Utah Administrative Code.)

- Both DEQ and DSHW 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 DSHW provided technical assistance to businesses and the public through fact sheets, newsletters, and electronic media. The DSHW Web Site and P2 Library were maintained with information regarding waste minimization, source reduction and recycling.
- The pollution prevention (P2) electronic newsletter continued to be used during FY 2007. The newsletter provides information for DSHW staff to use with industry as a means to promote and support industry-based P2 activities.

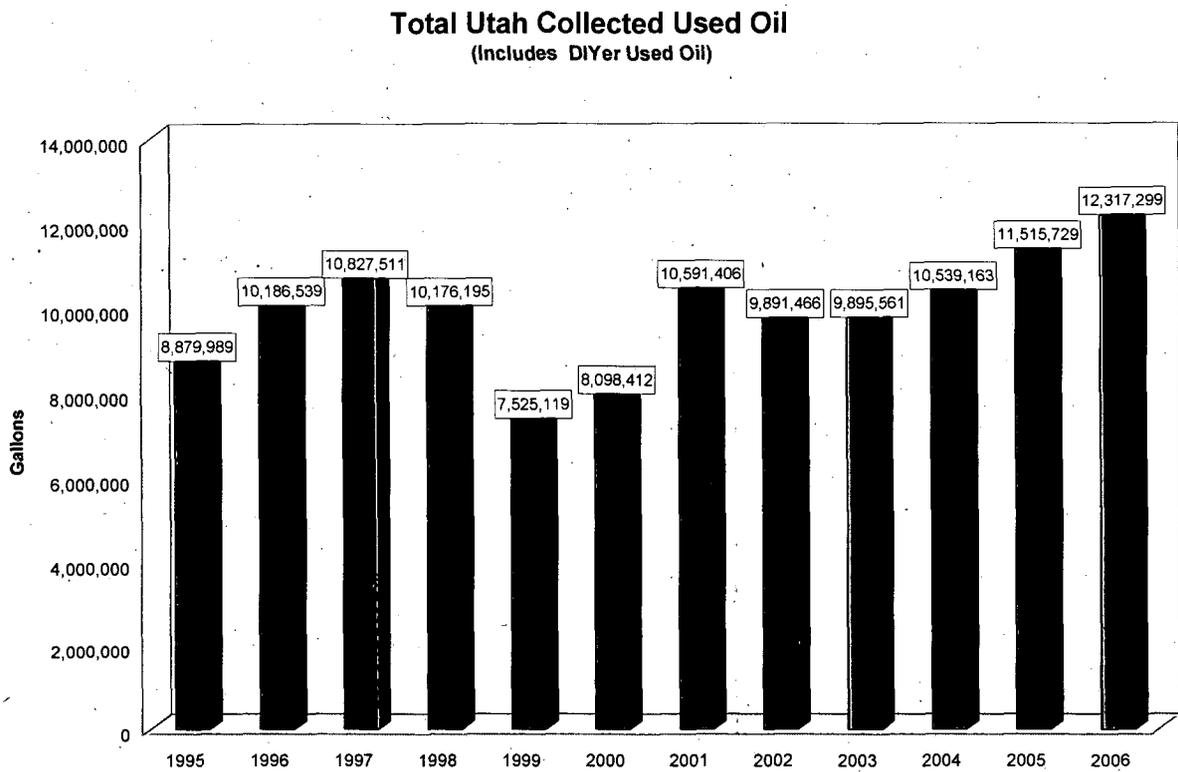
### ***Used Oil Recycling Program***

Utah's highest priority 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 2006. The data indicate that the amount of used oil recycled in the subject period ranged from about 7,500,000 to 12,320,000 gallons per year.

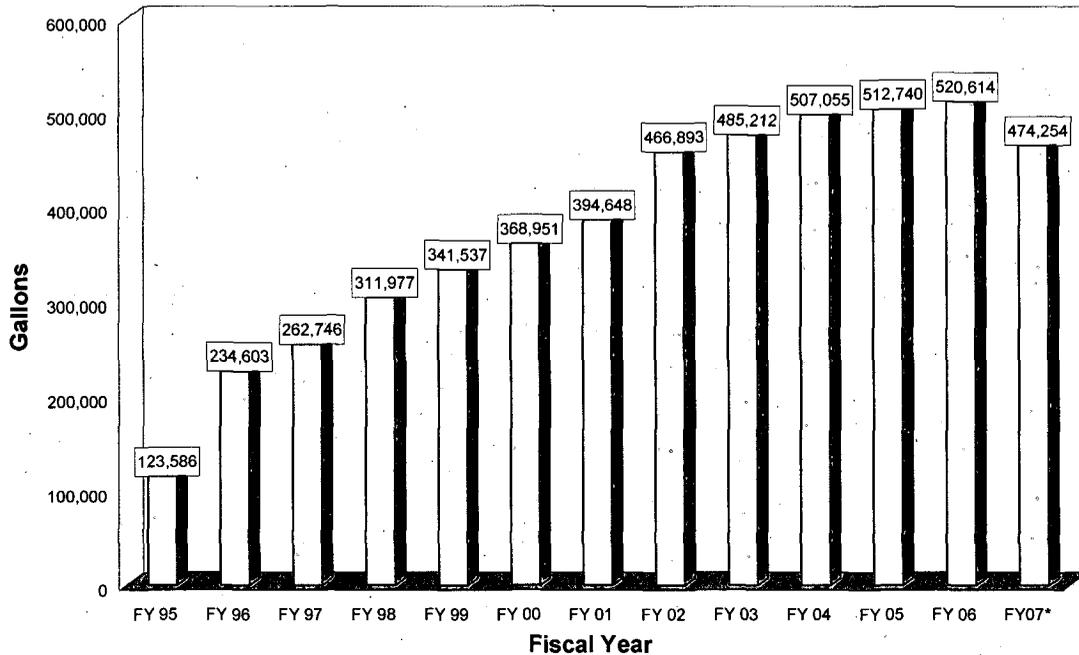
A closer look at the DIY element of the program is presented in Figure 5. The data show a steady growth in the amount of DIYer used oil collected for recycling over a 12-year period although there was with a slight decrease this past fiscal year. In FY 2007, nearly 475,000 gallons of DIYer used oil were collected, which was a decrease of about 8.9% from the previous fiscal year. One of the major DIYer collection centers in Weber County did not submit its annual report for the fiscal year and therefore, was not included in the year end total. A conservative estimate for this collection center would add an additional 10,000 gallons that will be reflected later in a revised FY 2007 chart. The decrease in collections is also 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; and the ever increasing number of conveniently located Do-It-For-Me oil change facilities expanding into rural areas.

**Figure 4 – Total Used Oil Recycling in Utah, 1995 – 2006**



**Figure 5 – Utah DIYer Used Oil Collection 1995 – 2007**

**Utah DIYer Used Oil Collection**



\* Not all DIYer collection centers have reported to the DSHW for FY 2007. However, with all DIYer used oil collections reporting for FY 2007, the DSHW anticipates that the total amount will be less than the previous two to three fiscal years. The DSHW believes the reason to be that fewer individuals are actually changing their own vehicle oil even accounting for an increase in the population over this period.

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 DSHW 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. For FY 2007, the DSHW sponsored a used oil recycling promotional program targeting farmers and ranchers statewide. Newspaper ads were placed in all rural newspapers across the state. Articles were also included in the Utah Farmer Bureau newsletters and the Utah State University Extension newsletters. Signs were also developed and displayed at participating DIYer used oil collection centers. During a 5 month period, farmers and ranchers could bring in up to 55 gallons of used oil to be recycled at a registered used oil collection center and receive a free pair of leather gloves. The campaign also educated the farmers/ranchers about the proper management and recycling of used oil; to store it in smaller quantities and bring it in more often to collection centers. These management practices help prevent releases and the problems associated with the handling of 55 gallons drums. This campaign resulted in approximately 2,422 gallons of used oil being collected and 42 pairs of gloves being awarded.
2. The DSHW co-sponsored with NAPA Auto Parts and the new Miller Motor SportsPark, a used oil recycling promotion in FY 2007. For a limited time, a DIYer could bring in their used oil to a registered collection center and receive an upgrade on a general admission ticket to Grand Stand seating—a savings of \$24 per ticket. The promotional also included used oil recycling advertisements printed in the racing programs that were distributed to all attendees and the airing of the DIYer recycling commercials on the large screen TVs located throughout the SportsPark.
3. The DSHW also co-sponsored with NAPA Auto Parts and the Rocky Mountain Raceway, a used oil recycling promotion in FY 2007. During the month of August 2007, the public could bring their DIYer used oil to any NAPA Auto Parts Store located along the Wasatch Front and receive a pair of free admission tickets to the NASCAR race scheduled for August 24, 2007. The promotional package also included the airing of TV ads promoting used oil recycling that were shown on FOX 13.
4. During FY 2007, DSHW staff continued to visit high school automotive classes and vocational/technical schools through out Utah to educate students on the proper management of used oil and used oil filters, in addition to where to take your oil to be recycled. At the end of the presentation, the students are provided with a survey to complete. The results of the surveys will assist the Division in developing new ways to reach the public and educate them on used oil recycling and the proper management of used oil and filters.

5. 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 DSHW, 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 2006 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.
6. The Division worked with a local TV channel to produce new 15, 30 and 60 second TV commercials promoting used oil recycling. The new commercials were aired on the three major TV stations in Utah over a five week period. A Spanish commercial was also created working with Utah's major Spanish TV station. The new Spanish commercial aired on the Spanish TV station for a five week period, too.
7. This year, the Division put forth a renewed effort into creating new articles and press releases on used oil recycling that were published in every newspaper in Utah during the spring of 2008. The articles were also published in the Utah Farm Bureau newsletter and the Utah State University Extension newsletters. Almost \$20,000 was spent on publishing costs for this promotional activity alone. Used oil recycling information is still being included in Salt Lake County's recycling insert included annually in *The Salt Lake Tribune*.
8. The DSHW continues to support and participate in radio spots promoting used oil recycling. Again, the DSHW created individual radio spots which aired on the four major radio stations in Utah. The radio stations with the largest audiences of country music, rock and roll, easy listening and alternative music were selected and aired the individualized used oil recycling advertisements. Again this year, the DSHW also produced a Spanish radio spot with the major Spanish-speaking radio station in Utah (Bustos Media). All of the radio spots received considerable air time.
9. Used oil recycling information continues to be distributed at many 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 DSHW'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.

The used oil program still maintains and coordinates the educational and promotional activities of the 17 used oil steering committees located statewide. The committees, made up of local representatives from businesses, schools, colleges, county and federal agencies provide information on how well the program is working within their area and ways to improve it to make sure the public is informed about the benefits of used oil recycling and where to take their oil to be recycled.

10. Boy Scouts of America Eagle Scout projects are on going. 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.

#### ***Electronics Recycling:***

The DSHW and the Recycling Coalition of Utah are being proactive in efforts to bring business and government together to determine ways to address e-waste issues and concerns in Utah. This collaborative effort has resulted in a wide variety of suggestions and recommendations to promote and improve e-waste recycling in Utah. Specifically, the recommendations were prepared as part of a presentation to be given before an interim study committee of the Utah Legislature in early FY 2007. A bill addressing E-waste recycling was introduced during the 2007 General Session. The bill did not pass and focused on electronics manufacturers as having the primary responsibility for the collection and recycling of their products.

#### ***Other State efforts:***

Supplemental Environmental Projects (SEPs) were considered as a part of compliance actions for waste minimization and pollution prevention opportunities. One SEP was proposed by respondents to enforcement actions during FY 2007. Approval and implementation are pending for the Clean Harbors Aragonite facility.

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 2007 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 DSHW 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 2007 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 Utah<sup>1</sup>**

Historical <sup>2</sup> 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	38
TSDFs with active <sup>3</sup> hwmus	14

1 - Data based on EPA Region 8 Universe Report (UND02) dated August 7, 2006.

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 (3) with closing combustion units (CUs).

As detailed in Table 2 below and in the FY 2007 Commitments Table in the Attachments section, the DSHW target for closure plan approvals (CL360) for FY 2007 was two (2), and the DSHW accomplished a total of six (6) approvals, three each at Deseret Chemical Depot (CAMDS) and Dugway Proving Ground. The target for closure verifications (CL380) was four (4), and eleven (11) were accomplished, six at Deseret Chemical Depot (CAMDS & TOCDF), two at Dugway Proving Ground, two at ATK-Promontory, and one at ATK-Bacchus.

The DSHW continued to make significant progress in addressing hazardous waste units on the closure track. Closure plans have been approved for 178 out of 196 (91%) of all closing units, and closure has been verified for 84% (165 of 196) of all closing units.

**Table 2 - Status of Closing Units in Utah<sup>1</sup>**

Status, Activity	LDUs	TSUs	CUs	Total <sup>2</sup>
TSDFs on Closure Track with appropriate units <sup>1</sup>	17	42	3	49
Units on Closure Track	53	138	5	196
Units with Closure Plan Approved at start of FY 2007	49	125	4	179
Closure Plans Approved in FY 2007	3	4	0	7
Units with Closure Plan Approved at end of FY 2007	53	128	4	185
Units with Closure Verified at the start of FY 2007	45	104	3	152
Unit closures verified in FY 2007	3	8	0	11
Units with Closure Verified at end of FY 2007	48	112	3	164

1 – Includes only those managed by RCRA; not those referred to CERCLA.

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 2007:

**Table 3 – FY 2007 Closure Activities in Utah**

Facility	Activity	Date
Deseret Chemical Depot (CAMDS, TOCDF)	Closure plan approval (CL360) – CAMDS -MDM Conveyor – 1 TSU	01/12/2007
	Closure plan approval (CL360) – CAMDS-MDC2-A - 1 TSU	01/03/2007
	Closure plan approval (CL360) – CAMDS –MDC2-B – 1 TSU	10/26/2006
	Closure plan approval (CL360) – CAMDS ECC#2 – 1 TSU	12/15/2006
	Closure Certification (CL370) – CAMDS-SEG T1 & T2 - 1 TSU	10/23/2006
	Closure Certification (CL370) – CAMDS-LIC T5 - 1 TSU	10/23/2006
	Closure Certification (CL370) – TOCDF –Brinevap - 1 TSU	01/18/2007
	Closure Certification (CL370) – TOCDF – Brinedry1,2 - 1 TSU	01/18/2007
	Closure verification (CL380) – CAMDS-SEG T1 & T2 - 1 TSU	11/03/2006
	Closure verification (CL380) – CAMDS-LIC T5 - 1 TSU	11/03/2006
	Closure verification (CL380) – TOCDF-Brinevap - 1 TSU	02/08/2007
	Closure verification (CL 380) – TOCDF-Brinexch - 1 TSU	02/08/2007
	Closure verification (CL380) – CAMDS-Brine evap - 1 TSU	09/18/2007
Closure verification (CL380) – CAMDS-Brinedry 1,2 - 1	09/18/2007	

Facility	Activity	Date
	TSU	
Dugway Proving Ground	Closure plan approval (CL360) – HWMU55 - 1 LDU	05/23/2007
	Closure plan approval (CL360) – HWMU58 - 1 LDU	05/23/2007
	Closure plan approval (CL360) – HWMU9 - 1 LDU	04/17/2007
	Closure verification (CL380) – HWMU14 – 1 LDU	08/01/2007
	Closure verification (CL380) – HWMU51 – 1 LDU	02/23/2007
ATK Launch Systems – Bacchus	Closure Verification (CL380) – BW-1 1 LDU	04/13/2007
ATK Launch Systems – Promontory	Closure Verification (CL380) – M-39 CLO1 1 TSU	10/10/2006
	Closure Verification (CL380) – M-636 CLO1 1 TSU	10/10/2006

The State meets the standards for this criterion.

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

EPA has reviewed the closure verification for Dugway's HWMU 51, and found that the closure of this unit had been accomplished in accordance with the approved closure plan.

The State meets the standards for this criterion.

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

In Utah, there are 26 RCRA-lead TSDFs that require controls for management of hazardous wastes in either post-closure (PC) LDUs or operating humus: 13 require PC care, 20 have operating units, and seven (7) have both. Starting in 2005, these 26 facilities have been consolidated into a revised baseline universe for approved controls to track progress toward national goals.

As presented in Figure 6 below, at the beginning of FY 2007, Utah had placed the appropriate post-closure or operating controls for all units at 23 (88%) of the 26 facilities in the baseline universe. The national goal for FY 2007 was 85%. DSHW did not have any FY 2007 PPA targets for facilities under Approved Controls (OP200, PC200).

**Figure 6**  
**Utah Progress on Controls at 26 Baseline Universe Facilities**  
**(Includes both Post-Closure and Operating Controls)**

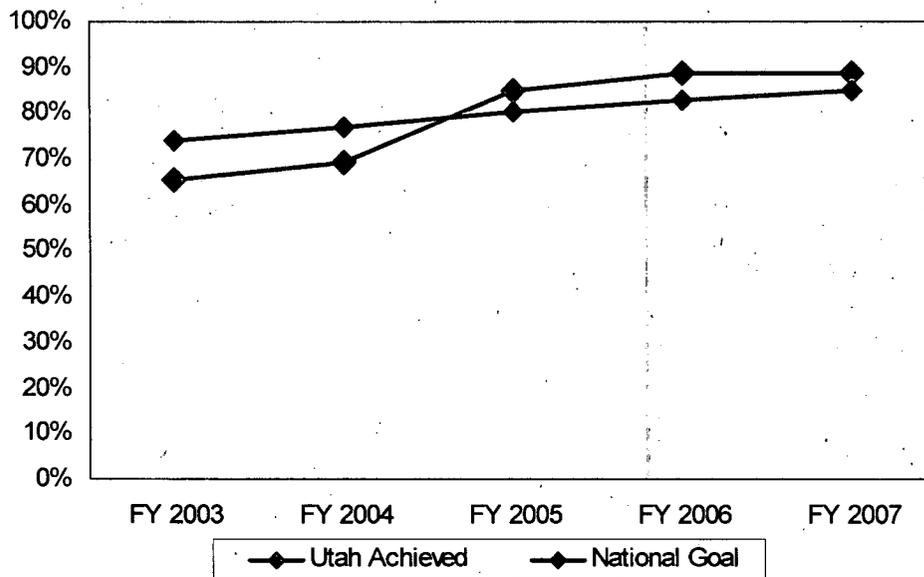


Table 4 below lists FY 2007 post-closure activities in Utah, while Table 5 indicates the status of the Baseline Facilities and their units as of the end of FY 2007.

**Table 4 – FY 2007 Safe Waste Management Activities in Utah**

<b>Facility</b>	<b>Activity</b>	<b>Date</b>
ATK Launch Systems – Promontory	Permit renewal – PC LDU, FM -136	09/20/2007
Chevron Salt Lake Refinery	Permit renewal—facility-wide	08/31/07

<b>Table 5 – Permit Status for Utah TSDFs Needing Controls</b>						
<b>TSDF and Unit Categories</b>	<b>PC LDU</b>	<b>OP LDU</b>	<b>OP TSU</b>	<b>OP CU</b>	<b>OP TOT</b>	<b>TOT<sup>1</sup></b>
<b>Facility Level measures for Baseline Universe</b>						
TSDFs on 2005 Consolidated Baseline Universe	17	5	16	4		26
TSDFs with all units controlled at start of 2007	10	5	14	4		23
TSDFs with all units controlled in 2007	0	0	0	0		0
TSDFs with all units controlled at end of 2007	10	5	14	4		23
Facility Level Percentage	59%	100%	88%	100%		88%
<b>Unit Level measures for Baseline Universe</b>						
Units in 2006 Consolidated Baseline Universe	38	6	128	7	141	179
Units with controls in place at start of 2007	27	6	118	7	131	158
Units with controls in place during 2007	1	0	0	0	0	1
Units with controls in place at end of 2007	29	6	118	7	131	159
Unit Level Percentage	74%	100%	92%	100%	93%	89%

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

DSHW had a target of two (2) Permit Renewals. A post-closure permit was reissued for both ATK Launch Systems – Promontory and Chevron Salt Lake Refinery.

The DSHW also received 119 permit modification requests (excluded temporary authorizations) during FY 2007 and completed 132 modifications as follows:

1. Class I – 86
2. Class Ia – 16
3. Class II – 23
4. Class III – 7
5. Agency initiated - 0

Also, during FY 2007, the DSHW issued 49 Emergency Permits. Additionally, 25 permit modification requests received during FY 2006 were completed in FY 2007. Two trial burns were performed at TEAD and Clean Harbors Aragonite. Additionally, the DSHW required Clean Harbors Grassy Mountain to abandon and reinstall groundwater monitoring well MW-58 due to a turbidity problem.

The agencies also note that DSHW has issued permits to a vast majority (159 out of 179 or 89%) of operating and post-closure units at its facilities. Only four open burning/open detonation (OB/OD) units at three facilities remain.

The three facilities with outstanding operating permits at the end of FY 2007 are ATK Thiokol Propulsion – Bacchus, ATK Thiokol Propulsion – Promontory, and Dugway Proving Ground. The DSHW has developed its own OB/OD permit guidance to address these facilities and has made considerable progress with interim activities:

- **ATK Launch Systems - Bacchus:** During FY 2007, the DSHW and ATK completed work on the permit application for the six hazardous waste storage units and the OB/OD unit. However, due to an oversight by the DSHW and ATK, the owner of the NIROP property, the Navy, had not been involved in the permitting process. The ATK and NIROP properties are contiguous. The government owned and contractor operated NIROP property includes the OB/OD unit. Based on this development, the DSHW will need to issue two permits. One permit to ATK for the four hazardous waste storage units on their property and a co-permit to ATK and the Navy for the two hazardous waste storage units and the OB/OD unit on the NIROP property. The DSHW will move forward to issue ATK's storage permit in FY 2008 and has instructed them to modify the existing application for that purpose. The DSHW has initiated discussions with a local Navy representative to determine how involved the Navy wants to be in evaluating the portions of the permit application that pertained to their property and who within the Navy would be responsible for signing the final permit application for NIROP. A schedule for issuance of the co-permit will depend on how discussions with the Navy proceed.
- **ATK-Launch Systems - Promontory:** The DSHW is waiting for ATK to submit the ODOBi emission factors report. The report provides the data for the OB/OD test that was conducted at Dugway Proving Grounds in June 2006. The DSHW will need to review and approve of the report before ATK moves forward with their permit application.
- **Dugway Proving Ground -** The draft modification was made available for a 30-day public comment period. Due to data gaps in the risk assessment, the quantities of waste munitions to be treated were significantly scaled back to ensure the treatment would remain protective of human health and the environment. The modification was approved early in FY 2008. Dugway has indicated they intend to submit a class 3 permit modification with an updated risk assessment to increase the annual quantity of waste that can be treated.

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)***

EPA has reviewed the re-issued post-closure permit for 3 units (M-136, M-508, M-636) at the ATK Launch Systems Inc. (Promontory) facility. EPA has found that the permit conditions found in this permit are consistent with the authorized state program.

The State meets the standards for this criterion.

## **CORRECTIVE ACTION**

### **Assessment, Ranking and Universe Identification**

#### **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 an RCRA Facility Assessment (RFA, CA050) or equivalent, and most have been given a CA rank (high, medium, low). After the assessment, 21 TSDFs were identified as needing CA beyond the assessment stage. Of the 21 facilities needing CA, 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.

The State meets the standards for this criterion.

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

The PPA target at the area level was four (4) RFI Approvals (CA400). The DSHW exceeded the target by completing 21, as listed in Table 8 below.

The State meets the standards for this criterion.

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

Although, EPA did not complete a qualitative review of an investigation activity EPA finds that the state meets the standards for this criterion.

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

The FY 2007 PPA had the following targets in this area: one (1) Remedy Selection (CA400) at the facility level, Anderson Geneva Development, INC., four (4) Remedy Selections at the area level; and four (4) Construction Completes (CA550) at the area level.

The following table summarizes the corrective action activities in FY 2007:

**Table 8 – FY 2007 Corrective Action Activities in Utah**

<b>Facility</b>	<b>Activity</b>	<b>Date</b>
Anderson Geneva Development, INC.	CMS Work plan Approved (CA300) – 7 areas (2.09 Open Hearth LUST Area, 2.18 Coke by-prod. Benzol/Sinter Plants, 3.04B Waste Oil & Grease & Solvent Storage; 3.08 Waste Oil, 3.09 Waste Oil, 3.13 Skull Cracker Area, 3.17 Bead Blast Area)	10/10/2006
	CMS Work plan Approved (CA300) – 2 areas (2.13 Wastewater Collection (Exc. Pipe Mill), 2.15B Wastewater Collection)	05/11/2007
	CMS Work plan Approved (CA300) – 4.00 Facility Groundwater	08/31/2007
	Remedy Decision (CA400) – Entire Facility	11/01/2006
	CA Complete (CA999NF) – 3.02B Coke Plant	05/9/2007
	CA Complete (CA999NF) – 2 areas (2.04B Open-Hearth Blast Furnace & Bop Shop, 3.10 Wastewater Treatment)	05/11/2007
	CA Complete (CA999NF) – 2 areas (3.05 Ash Storage, 3.17 Bead Blast Area)	06/07/2007
	CA Complete (CA999NF) – 2.07 Blast Furnaces	06/11/2007
ATK Launch Systems – Bacchus	RFI Approved (CA200) – HWMU BW-1	04/13/2007
Dugway Proving Ground	RFI Approved (CA200) – 7 areas (SWMUs 133; 150; 154; 183; 201; 8; 97)	09/27/2007
	RFI Approved (CA200) – 2 areas (SWMU 197; 206)	11/02/2006
	CMS Work plan Approval (CA300) – 1 area (SWMU197)	11/02/2006
	CMS Approved (CA350) – 6 areas (SWMUs 188; 19; 212; 23; 254; 115)	04/13/2007
	CMS Approved (CA350) – 2 areas (SWMUs 197; 199)	05/11/2007
	Remedy Decision (CA400) – 1 area (SWMU 206)	11/02/2006
	Remedy Decision (CA400) – 6 areas (SWMUs 18; 19; 212; 23; 25; 115)	06/21/2007
	Remedy Decision (CA400) – 1 area (SWMU 197)	05/11/2007
	Remedy Decision (CA400) – 6 areas (SWMU 133; 150; 154; 201; 8; 97 per CA999)	09/27/2007
		06/21/2007
	CMD Approved (CA450) – 8 areas (SWMUs 118; 18; 188; 19; 212; 23; 25; 115)	05/31/2007
	CMD Approved (CA450) – 1 area (SWMU 197)	05/29/2007
	CMD Approved (CA450) – 1 area (SWMU 79)	06/21/2007
	CMI Work plan Approved (CA500) – 8 areas (SWMUs 118; 18; 188; 19; 212; 23; 25; 115)	05/31/2007
	CMI Work plan Approved (CA500) – 1 area (SWMU 197)	05/29/2007
	CMI Work plan Approved (CA500) – 1 area (SWMU 79)	08/01/2007
Construction Complete (CA550) – 12 areas (SWMUs 194A; 194B; 194C; 200; 207; 21; 213; 215; 54; 56; 56B)	11/02/2006	
Construction Complete (CA550) – 1 area (SWMU 206)		

Facility	Activity	Date
	CA complete (CA999NF) – 11 areas (SWMUs 194A; 194B; 194C; 200; 207; 21; 213; 215; 54; 56; 56B)	08/01/2007
	CA complete (CA999NF) – 7 areas (SWMUs 133; 150; 154; 183; 201; 8; 97)	09/27/2007
	CA Complete (CA999 %) – 1 are (SWMU 206)	11/02/2006
Ninigret Construction (formerly Englehard)	RFI Work Plan Addendum Approval (CA150) – 29 areas (SWMUs 3-19, 21-34)	09/27/2007
	RFI Approved (CA200) – SWMU 20E (Phase 3) 17 acres	03/29/2007
	RFI Approved (CA200) – SWMU 20W Area of Trench 1	07/06/2007
	CMI Construction Complete (CA550) – SWMU 20E (Phase 3) 17 acres	02/22/2007
	CMI Construction Complete (CA550) – Area of Trench 1	5/14/2007
	CMI Construction Complete (CA550) – SWMU 20E (Phase 3) 10 acres	5/15/2007
	CA complete (CA999RM) SWMU 20E (Phase 3) 17 acres	03/29/2007
	CA complete (CA999RM) SWMU 20W Area of Trench 1	07/06/2007
The Ensign-Bickford Company	Stabilization Measures Completed (CA650) – 20 areas (SWMUs 1, 2, 5, 6, 11, 12, 15, 17-19, 24, 26-31, 33, 40-42)	02/02/2007
Tooele Army Depot	CMI Work plan Approval (CA500) – SWMU 10	11/21/2006
	CMI Construction Completed (CA550) – SWMU 20	01/19/2007
	CMI Construction Completed (CA550) – SWMU 21	03/02/2007
	CMI Construction Completed (CA550) – SWMU 42	12/13/2007
	CMI Construction Completed (CA550) – SWMUs 52 (d)	12/15/2006
	CA Process Terminated (CA999) – SWMU 52 (d)	12/15/2006
	CMI Construction Completed (CA550) – SWMU 10	11/21/2006
	CMI Construction Completed (CA550) – SWMUs 12; 15	12/01/2006
	CMI Construction Completed (CA550) – SWMU 11	07/20/2007
	CMI Construction Completed (CA550) – SWMU 25	04/03/2007
	CMI Construction Completed (CA550) – SWMU 27 ***	12/27/2006
	CMI Construction Completed (CA550) – SWMU 34	12/12/2006
Utah Test and Training Range	Stabilization Measures Implemented (CA600) – 3 areas (SWMUs 2,34E, 34W)	02/02/2007
	Stabilization Measures Completed (CA650) – 3 areas (SWMUs 2., 34E, 34W)	04/23/2007

In addition to the above, the following corrective action activities were approved in FY 2007:

- A sub-slab soil gas sampling and analysis plan for SP-4 at the ATK Launch Systems – Bacchus facility on August 27, 2007;
- A Supplemental Pilot Test Work Plan (using a change of amendment) for in situ remediation of perchlorate contamination in the groundwater at ATK Launch Systems – Promontory facility on November 21, 2006.
- Verification of the closure of the Storage Corrective Action Unit at The Ensign-Bickford Company on June 25, 2007; and
- A Closure Plan for a Treatment Corrective Action Unit at The Ensign-Bickford Company on September 17, 2007;

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

- Praxair – approved a site management plan on May 9, 2007.
- Rocky Mountain Power (UP&L) Jordan Substation – approved a technical impracticability evaluation on November 3, 2006.
- Varian Medical Systems – approved a plan for installation of a full-scale Dual Phase Soil Vapor Extraction System on July 2, 2007.
- UNIVAR Chemical – Groundwater investigation and construction of a collection system.

Ongoing oversight of groundwater monitoring as required through approved site management plans was conducted at MOOG, Detroit Diesel, Litton Defense Systems, Mosquito Abatement SLCC, and La-Z-Boy Tremonton.

Figure 7 illustrates UDEQ progress in meeting the Corrective Action national goal for Remedy Decisions. The regional target for FY 2007 is 42%; Utah has achieved remedy selection at 4 of 11 facilities or 36%.

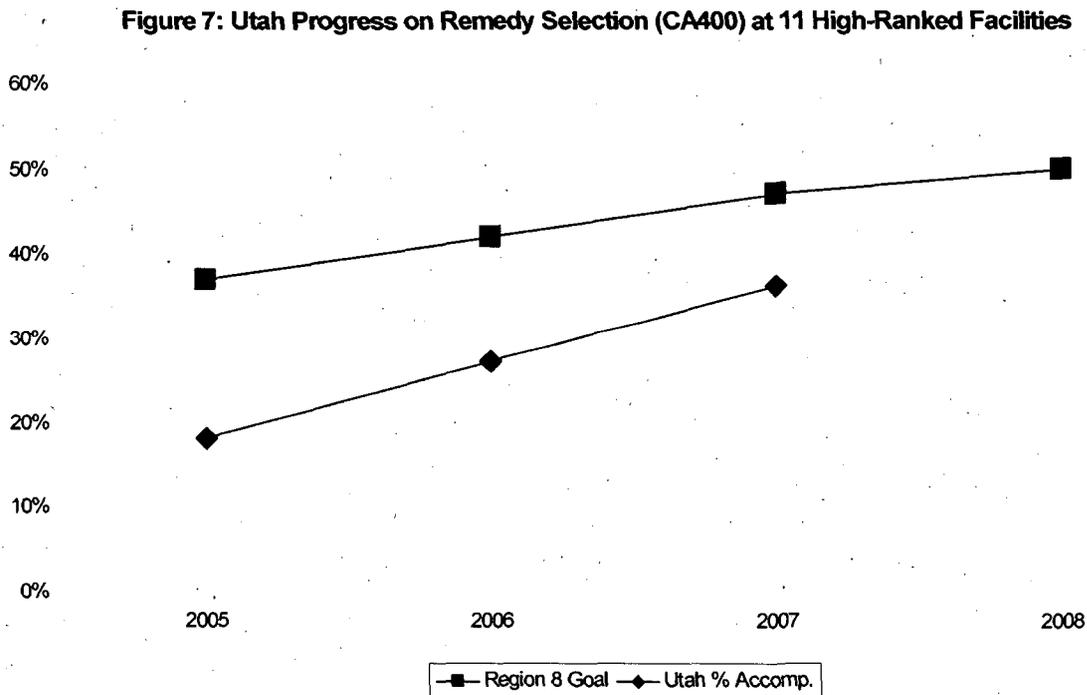


Figure 8 illustrates UDEQ progress in achieving the Corrective Action national goals for Construction Completion. The regional target for FY 2007 is 23%; Utah has achieved remedy selection at 3 of 11 facilities or 27%.

**Figure 8: Utah Progress on Construction Completion (CA550) at 11 High-Ranked Facilities**

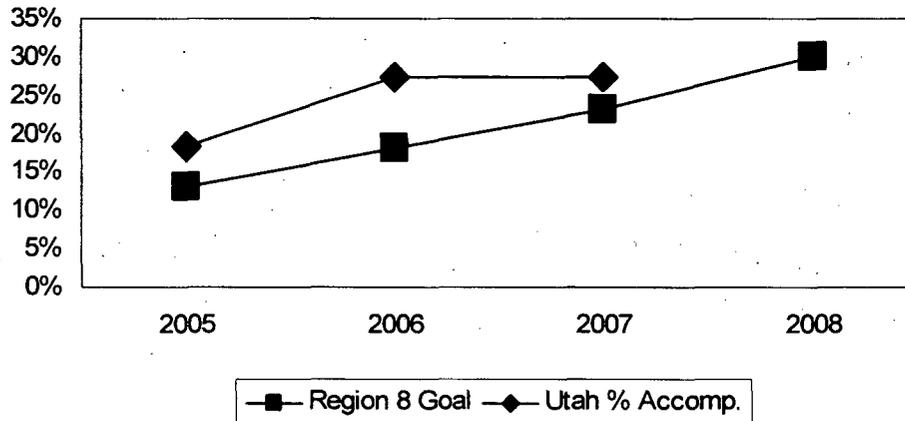


Figure 9 presents the status and progress of cleanup for the 249 areas at Utah's 11 high-ranked facilities over the past several years. The agencies note that incremental progress toward cleanup goals is most clearly demonstrated when area level data are used. In Figure 9, the data indicate how many of the 249 areas at the 11 high-ranked 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 2007:

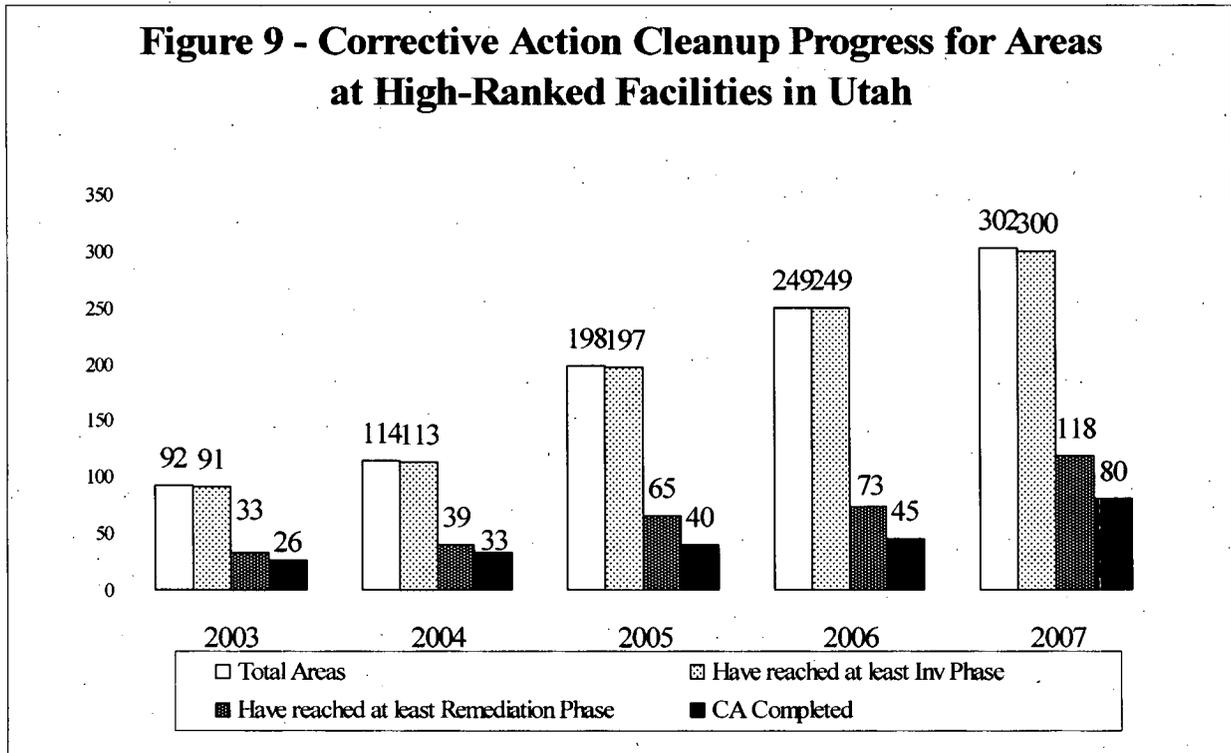
1. The Investigation Phase (includes all investigation events, such as RFI imposition, RFI completion, Risk Assessment, etc.);
2. The Remediation Phase (includes all cleanup events, such as Remedy Selection, CMI Construction Completion, Stabilization Measures Imposed, etc.); and
3. The Completion of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

The data in Figure 9 indicate a significant growth (from 249 in 2006 to 302 in 2007) in the number of areas that have been designated at the 11 high-ranked 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 9 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 (73 in 2006 to 118 in 2007, and
3. The number of areas that have completed the CA process has increased (from 45 in 2006 to 80 in 2007).

**Figure 9 - Corrective Action Cleanup Progress for Areas at High-Ranked Facilities in Utah**



The State meets the standards for this criterion.

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

EPA performed a review of corrective action activities conducted by the Division of Solid and Hazardous Waste at the Tooele Army Depot (TEAD) in Tooele, Utah. The review focused on the approval of a Corrective Measure Remedy Construction Completion on January 30, 2006.

EPA determined that DSHW successfully implemented Criterion 4.6 (Quality of Cleanup and Remediation) of EPA Region 8’s Program Standards and Oversight Procedures for SWMUs 20 and 21 at the TEAD. DSHW corrective action oversight was technically sound and proficient. DSHW oversaw the remedy construction process and ensured the construction was adequately completed. There were two positive findings of note. First, significant numbers of Munitions and Explosives of Concern (MEC) were discovered at SWMU 21, resulting in a manual sifting of 500 cubic yards. The resurfacing operations staff was shifted to work on an alternate site, so they were not idle on project time. The result was no overall project schedule extension. Second, the state’s project manager is providing feedback on draft reports to the Army Corps of Engineers before final reports are submitted. This practice reduces the number of iterations of write, review, comment and edit between the facility, contractors, and regulators.

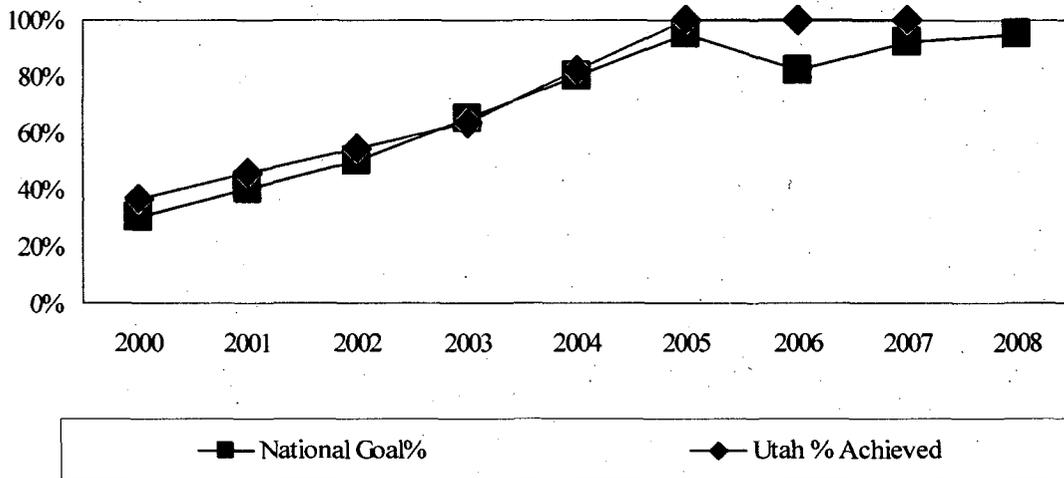
The State meets the standards for this criterion.

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

Having current Human Risks and Migration of Contaminated Ground Water under control at high-ranked CA facilities is a high priority of the national RCRA program. The DSHW supports this priority by focusing efforts on the 11 high-ranked 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 100% of its high-ranked facilities, exceeding the 2005 national goal of 95%.

**Figure 10 - Utah Progress on Current Human Exposures Under Control at 11 High-Ranked Facilities**



**Migration of Contaminated Ground Water Under Control (CA750):** During FY 2007, the DSHW continued to work to complete the EI's at ATK-Bacchus, Vertellus (formerly Reilly Industries), and Western Zirconium. The current completion percentage of 73% (8 of 11 GPRC corrective action baseline facilities) is unchanged from the previous fiscal year.

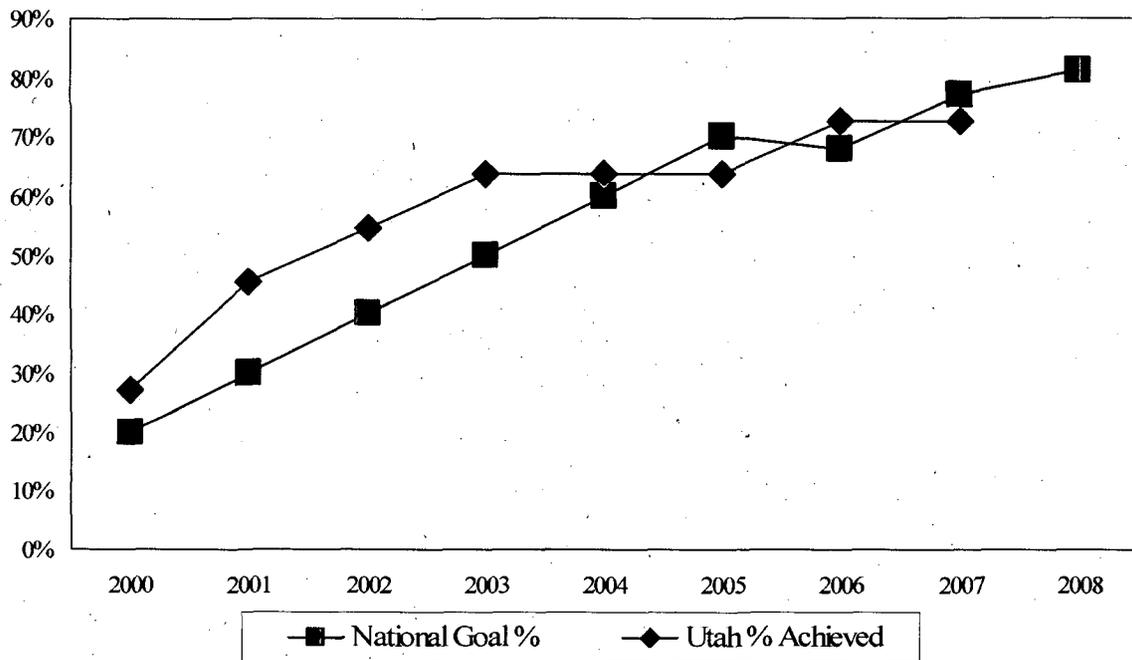
ATK-Bacchus has eliminated the original sources of contamination, continues to monitor the groundwater contamination plume, and has constructed a pilot plant that when fully operational, will treat the perchlorate contamination in-situ.

Reilly (currently Vertellus) is proposing interim measures for several sources areas at their property prior to finalizing their groundwater monitoring network. The Division has instructed them to conduct these activities concurrently.

Western Zirconium is working with international experts on the design of a barrier wall to contain leakage from their wastewater ponds. Based on the various types of wastewater being discharged to their respective ponds, the design team has had difficulty coming up with a barrier wall that can contain the mixed contamination.

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

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



The State meets the standards for this criterion.

**KEY ACTION ITEMS FOR FY 2008**

EPA and the State will work together to promote achievement of the goals of the Resource Conservation Challenge.

**ATTACHMENTS**

Division of Solid and Hazardous Waste Organization Chart  
Performance Standards and Measures Summary Table  
FY 2007 Commitments Sheet

**SIGNATURES**



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

5/12/2008  
Date

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

\_\_\_\_\_  
Date

# **ATTACHMENTS**

**Division of Solid and Hazardous Waste Organization Chart**

**PSOP Program Review Summary Table**

**FY 2007 Commitments Table**

**UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY**

**DIVISION OF SOLID AND HAZARDOUS WASTE**

**DIVISION DIRECTOR**

**DENNIS R. DOWNS**

**UTAH SOLID & HAZARDOUS WASTE CONTROL BOARD**

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Jeff Coombs	Kory Coleman	Craig Anderson
R. Ryan Dupont	Scott Bruce	Dennis Riding
Gary Mossor	John Newman, Vice Ch	Rick Spratt

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**Jay Richardson**

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**Susan Toronto**

**Env. Prog Coordinator**

**Delene Stevenson**

**Contract Analyst**

**Kathy Barker**

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Environmental Scientist  
Environmental Scientist  
Environmental Scientist  
Environmental Engineer

**PLANNING/USED OIL SECTION**

**Cheryl Prawl**

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Environmental Scientist  
Environmental Scientist  
Environmental Scientist

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**Allan Moore**

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Environmental Scientist  
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Environmental Scientist  
Environmental Scientist  
Environmental Engineer

**CHEMICAL DEMIL SECTION**

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Toxicologist  
Environmental Scientist  
Environmental Engineer  
Environmental Scientist  
Environmental Engineer  
Environmental Scientist  
Environmental Scientist

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Environmental Scientist  
Environmental Engineer  
Environmental Engineer  
Environmental Engineer  
Environmental Scientist

**District Engineers**

David Ariotti	SE
Roger Folsy	Central
Scott Hacking	Uintah Basin
Randy Taylor	SW/St George
John Chartier	SW/Cedar City

FY 2007



**FY 2007 EOY Review Summary for the Utah Solid & Hazardous Waste Division**

<b>Criterion</b>	<b>Std Met?</b>	<b>Comments</b>
<b>PROGRAM MANAGEMENT</b>		
<b>1.1 Adoption of federal rules by the state</b>	YES	
<b>1.2 Authorization</b>	YES	
<b>1.3 Memorandum of Agreement</b>	YES	
<b>1.4 Resources and Skill Mix</b>	YES	
<b>1.5 State training program</b>	YES	
<b>1.6 Data Timeliness, Accuracy and Completeness</b>	YES	
<b>1.7 Records Management</b>	YES	
<b>HAZARDOUS WASTE MINIMIZATION</b>		
<b>2.1 Haz Waste Min/P2 Activities</b>	YES	
<b>SAFE WASTE MANAGEMENT</b>		
<b>3.1 Progress toward Closure</b>	YES	
<b>3.2 Quality of Closure Plans and Verifications</b>	YES	
<b>3.3 Progress toward Controls for PC/OP Facilities</b>	YES	
<b>3.4 Quality of PC/OP instruments</b>	YES	
<b>CORRECTIVE ACTION</b>		
<b>4.1 Completion of RFAs</b>	YES	
<b>4.2 Quality of RFAs</b>	YES	
<b>4.3 Completion of Investigations</b>	YES	
<b>4.4 Quality of Investigations</b>	YES	
<b>4.5 Completion of Cleanup</b>	YES	
<b>4.6 Quality of Cleanup and Remediation</b>	YES	
<b>4.7 Progress in Achieving EIs</b>	YES	

FY 2007 Hazardous Waste Program Commitments for UTAH					
Event	# of Facilities or Units	Achieved by EOY FY2006	FY 2007		
			Committed	Achieved	EOY
<b>Closure Activities (all at unit level)</b>					
Closure Plan Approval (CL360) for LDUs	52	49	2	3	52
Closure Verification (CL380) for LDUs	52	45	4	3	47
Closure Plan Approval (CL360) for TSUs	138	125		3	128
Closure Verification (CL380) for TSUs	138	104		8	112
Closure Plan Approval (CL360) for CUs	5	4		0	4
Closure Verification (CL380) for CUs	5	3		0	3
<b>Permit Activities at GPRA Universe Facilities (all at facility level)</b>					
Permitted Facilities under Approved Controls (Manual counts at facility level)	26	23		0	23
Permit Renewal due this FY (Manual counts at facility level)	6	3	2	2	5
<b>Permit Activities for GPRA Universe Facilities (at unit level)</b>					
Controls in Place for LDUs on Closure Track	38	27	3	1	28
Controls in Place for LDUs on Operating Track	6	6		0	6
Controls in Place for TSUs on Operating Track	128	118		0	118
Controls in Place for CUs on Operating Track	7	7		0	7
<b>Corrective Action Activities at GPRA Universe Facilities (activities are at facility level, unless specified at area level)</b>					
RCRA Facility Assessments (CA050)	11	11		0	11
Overall Facility NCAPS Ranking (CA075)	11	11		0	11
Facility Stabilization Assessment (CA225)	11	11		0	11
Facility Remedy Selection (CA400) (GPRA measure)	11	3	1	1	4
Facility Construction Completion (CA550) (GPRA measure)	11	3		0	3
Human Health Exposures Controlled Determination (CA725) (GPRA measure)	11	11		0	11
Groundwater Migration Controlled Determination (CA750) (GPRA measure)	11	8		0	8
RFI Imposed (CA100) (area level)	303	301		0	301
RFI Approved (CA200) (area level)	303	210	4	11	221
Remedy Selection (CA400) (area level)	303	97	4	66	163
Construction Completion (CA550) (area level)	303	63	4	34	97
Stabilization Measures Implemented (CA600) (area level)	289	54		0	54
Stabilization Construction Completed (CA650) (area level)	289	48		5	53
Areas at least to Investigation stage (CA100+)	303	301		0	301
Areas at least to Remediation stage (CA400+)	303	97		66	163
Corrective Action Completed (CA999) (area level)	303	54		26	80



