DEQ Looks Back on 20 Years of Success

In his 1990 State of the State address, Governor Norm Bangerter proposed the formation of a Utah Department of Environmental Quality (DEQ), wherein it would be formed largely by consolidating the five bureaus that were housed under the State Department of Health.

"A healthy environment is essential to Utah's future," he said. "To be short-sighted in our management of the environment is to short-change the next generation. In order to highlight the importance of this issue and in the interest of expediting the resolution of the many environmental issues facing the state, I am requesting the creation of a Department of Environmental Quality."

The late Sen. Steve Rees sponsored the bill that created DEQ—officially inaugurated on July 1, 1991, with the mission of "safeguarding human health and quality of life by protecting and enhancing the environment."

Ken Alkema became the first director of DEQ, to be replaced by Dianne Nielson who served 18 years under Governors Mike Leavitt, Olene Walker and Jon Huntsman Jr. When Huntsman appointed Nielson as his Energy Advisor, Rick Sprott took the helm, retiring a year later. Deputy Director Bill Sinclair served until a permanent replacement was named. In 2009, Amanda Smith became DEQ's fourth executive director, serving also as the Energy Advisor under current Governor Gary Herbert.

Throughout the years, DEQ's six Divisions—Air Quality, Solid and Hazardous Waste, Environmental Response and Remediation, Radiation Control, Water Quality and Drinking Water—have played key roles in protecting and enhancing Utah's environment. It does so through partnerships with the local health departments and other stakeholders, community leaders, legislators and the public.

For example, DEQ cleared the way for cleanup of the Atlas uranium mill tailings near Moab and led the State's opposition against a nuclear waste storage site proposed for the Skull Valley Goshute Indian Reservation. Under DEQ's oversight, the cleanups of Geneva Steel, Midvale Slag and Murray Smelter led the way for redevelopment; and the safe destruction of stockpiled chemical weapons. DEQ helped formed plans to reduce regional haze in national parks, provided grants to retrofit school buses, diesel trucks and farm equipment with cleaner technology. DEQ has provided millions of
people with safe drinking water and communities with grants to improve sewer systems while establishing the first-ever numeric standard for the Great Salt Lake.

What follows includes a synopsis of the "success stories" on displayed throughout July in the lobby where DEQ has its offices at the Multi State Office Building, 195 S. 1950 West. These achievements are the result of DEQ's dedicated workforce committed to protecting and enhancing Utah's environment.

**Regional Haze**
Utah's plan to improve regional haze is implemented through a Regional Haze State Implementation Plan (SIP). The SIP is the product of 20 years of work, beginning with the Grand Canyon Visibility Transport Commission in 1991. It was developed through a consensus-based regional stakeholder process that led the nation in protecting the vistas of western areas, including the five national parks in Utah.

**Air Quality Grants**
The Division of Air Quality (DAQ) received $1.2 million to purchase about 26 school buses with cleaner technology. It also received $750,000 in federal stimulus grants to replace 9 agriculture vehicles and equipment, repower 22 engines and install 32 auxiliary power units on agriculture vehicles. Working with the Utah Trucking Association, DAQ acquired funds totaling $588,235 for use in local trucking projects intended to increase fuel efficiency and improve air quality.

**Atlas Mill Tailings**
In June of 2011, the Atlas Mill Tailings Project reached a milestone—one quarter of the uranium mill tailings pile located in Moab, representing 4 million tons of the 16-million ton-pile, was relocated to a permanent disposal site at Crescent Junction—just two years after the first rail car shipment began in April 2009. But the work began decades ago when the Utah Department of Environmental Quality (DEQ), with the help of Utah's Congressional Delegation, refused to accept the federal government's plan to simply leave the uranium tailings where it was, threatening the Colorado River—a source of drinking water for 25 million people downstream.

**Nuclear Waste Storage**
In 1997, Private Fuel Storage LLC (PFS), a limited liability consortium of eight nuclear power companies, proposed to store 44,000 tons of commercial spent nuclear fuel (SNF) on the Reservation of the Skull Valley Band of Goshute Indians (Band) in Tooele County. The State, with DEQ taking the lead in the state's opposition, dug its heels and successfully has blocked the project.

**Radon Education**
Radon is the second leading cause of lung cancer death, next to smoking. The only way to prevent radon is to do home testing. The Division of Radiation Control, which oversees the Utah Indoor Radon Program, has seen an increase in radon kits, due to outreach efforts.

**Murray Smelter**
The Murray Smelter Site is the former location of a large lead smelter in Murray City. It was proposed for Superfund National Priorities List in 1994, primarily because of lead and arsenic contamination. DEQ had oversight of cleanup that began in 1998 and completed in 2001. Since then, the site has undergone significant revitalization.

**Midvale Slag**
The Midvale Slag Site, located in Midvale City, with a small portion extending into Murray City, is a former smelting facility along the Jordan River and covers about 446 acres. The site was placed on
the Superfund National Priorities List in 1991. Cleanup began in 1996 and has included the removal of contaminated soil in affected residential properties at the northern end of the site, capping of contaminated soil and smelter waste in the southern 180 acres, and the installation of a groundwater monitoring system to verify that surface water in the Jordan River remains unaffected by groundwater contaminants.

**Eureka Mills**
The Eureka Mills Site is located in Utah’s historic Tintic Mining District. In 2000, DEQ and EPA began investigating impacts of mining activities in Eureka. High concentrations of lead and arsenic in soil, combined with elevated blood-lead levels in children were found. Cleanup work began in 2001 and the site was placed on the Superfund National Priorities List in 2002. Cleanup was completed in 2009. Approximately 700 residential properties were addressed through removal of contaminated soil and replacement with soil or rock covers.

**Voluntary Cleanup Program**
The Utah State Legislature passed the Voluntary Release Cleanup Program statute during the 1997 legislative session. The legislation created the Voluntary Cleanup Program (VCP) under the direction of DEQ, effective May 5, 1997. To date, numerous sites have been assessed and/or cleaned up from the Uinta Basin to Wendover, Cache to Washington counties. Since the inception of the VCP, 72 applications have been received, 35 Certificates of Completion and three No Further Action Letters have been issued. In addition, eight sites have been designated No Further Remedial Action Planned by EPA over 850 acres of impacted property have been returned to a state of beneficial reuse.

**Underground Storage Tanks**
Over DEQ's 20 years of existence, over 5,000 old underground tank facilities have been closed, remediated, and brought back into re-use. This has enhanced thousands of acres within communities across the state and has benefited them both economically and aesthetically. In addition, nearly 1,500 of these sites also had groundwater contamination that posed potential impact to our state's underground drinking water resources. Through the cleanup activities this risk has been alleviated.

**Geneva Steel**
The Geneva Steel Facility was a steel mill located in Vineyard, covering about 1,800 acres of land. It was constructed with US federal funds by Columbia Steel Company and US Steel Corporation (USS) in December 1941. In 2002, Geneva Steel declared bankruptcy and permanently ceased operation. In 2005, Geneva Steel sold all assets to Anderson Geneva Development. Anderson Geneva's intent was to dismantle the steel making facilities and redevelop the property into a mixture of light industrial, commercial and residential components. Cleanup and remediation of the contamination at the property is being done under a permit issued to USS in November 1989 by Utah Division of Solid and Hazardous Waste. To date, the Division has reviewed and approved work plans and site remediation standards for the cleanup of approximately 1,120 acres of the total 1,800 acres of land.

**Chemical Weapons Storage**
The State has stored 42 percent of the United States' stockpile of chemical agents since the 1940s at the Tooele Army Depot—South Area, later renamed Deseret Chemical Depot (DCD). A chemical agent destruction facility, the Tooele Chemical Agent Destruction Facility (TOCDF), was constructed at DCD specifically for the incineration of the agents. In August 1996, destruction of rockets filled with the nerve agent GB began under a hazardous waste treatment permit issued by the Utah Division of Solid and Hazardous Waste. By March 2002, the entire stockpile of GB was destroyed. Destruction of the VX stockpile followed and was completed in June 2005. In August 2006, TOCDF began destroying the mustard stockpile. On May 16, 2011, the last mustard filled ton container was
destroyed, completing the destruction of over 99 percent of the total stockpile of chemical agent stored in Utah.

**Used Oil Program**

In 1993, the Utah Legislature created Utah's Used Oil Program in response to new federal regulations and to provide a regulatory structure for the handling and management of used oil. About 400 Used Oil Collection Centers have been set up in every county across Utah as part of the Division of Solid and Hazardous Waste Do-It-Yourselfer Program (DIYers) service to allow people to recycle their used oil for free. Since 1995, approximately 160 million gallons (including DIYer used oil) of used oil has been recycled.

**Great Salt Lake**

Great Salt Lake is of hemispheric importance to migratory birds and to industry for mineral extraction. However, it is due to the uniqueness of GSL that the Division of Water Quality (DWQ) was better able to protect it when the first numeric water quality standard for selenium was established in 2008. Establishing this standard required a comprehensive, $2.6 million, 4-year process led by a Selenium Steering Committee comprised of prominent stakeholders who were advised by an international scientific panel of selenium experts.

**Animal Feeding Operations**

The Animal Feeding Operations (AFOs) Committee is a partnership of the Division of Water Quality (DWQ), Utah Department of Agriculture and Food (UDAF), Utah Farm Bureau, Utah Association of Conservation Districts (UACD), Utah State University (USU) Extension, United States Department of Agriculture Natural Resources Conservation Service, United States Environmental Protection Agency Region 8, and Utah's animal producer groups. In 2001, the AFO Committee developed the Utah Strategy which is an agreement to help AFOs with compliance to environmental regulations to improve water quality. While the original Utah Strategy expired in 2008, the AFO Committee wants to continue to build on past success and has prepared a working draft of a new Utah Strategy to continue the work and partnerships of the original strategy.

**Water Quality Hardship Grants**

The Hardship Grant Program was creatively financed principally by charging Hardship Grant Assessments (HGA) in lieu of interest on CWSRF loans, supplemented by interest charged on State loans, and interest earnings in the State loan and hardship grant funds.

Since its inception, the Hardship Grant Program has provided $3.7 million to 71 communities to prepare project plans, and $9.9 million to 23 communities to perform project design. The Hardship Grant Program has also provided $25.4 million in construction grants to 32 communities to make their projects affordable. Recently, the role of the Hardship Grant Program expanded significantly when non-point source (NPS) projects became eligible for grants, with the program providing over $7.4 million of direct grants to 97 non-point source (NPS) just within the last four years.

**Consolidating Community Water Systems**

With financial and technical assistance provided by the Division of Drinking Water (DDW) a number of county water conservancy districts have been able to consolidate and absorb non-viable water systems. The resultant consolidations involved construction of adequately sized source, storage and distribution systems which are managed by capable and well qualified staff. This effort is a part of DDW's providing approximately $240 Million in grants and low interest loans to communities to improve their drinking water systems throughout the State.
Safe Drinking Water
In 1994, DDW implemented a comprehensive compliance strategy which covers all of the Division's rules. This strategy encourages water systems to voluntarily comply with the Division's rules and an overwhelming majority of water systems have favorably responded. The strategy also provides a very defensible priority ranking of water systems needing escalating enforcement.

Twenty Things About Utah 20 Years Ago

1. Utah's population reached 1.77 million people on July 1, 1991—an increase of 2.7 percent over the 1990, the fastest growth since 1982. Since that time Utah experienced net immigration of 19,000—highest level in more than a decade.

2. Utah's per capita GSP (Gross State Product) was $16,492 while the U.S. average was $20,925.

3. Utah's mining industry made up the smallest of the 10 major industries has been hard hit by changes in the world's market. Services contributed the largest—17.5 percent—of Utah's economy, with manufacturing making up 16.5 percent and government 15.5 percent.

4. Construction on the Delta Center (now EnergySolutions Arena) was completed on October 4, 1991 at a cost of $93 million. The arena replaced the since—demolished Salt Palace area under the leadership and private financing of Utah businessman Larry H. Miller. Delta pays for naming rights.

5. In July 1991, the Utah state legislature approved legislation requiring the construction industry in Utah to comply with the OSHA lead standard for general industry.


7. In 1991, the Utah Department of Environmental Quality (UDEQ) established a new pollution prevention program that initiated activities designed to maximize private sector initiatives, including: establishing an industrial task force; developing a small business environmental assistance program; and providing environmental training.

8. The settlement in Utah v. Babbitt sets aside the reinventory which had proposed to preserve wilderness characteristics of some 2.6 million acres in addition to the 3.2 million designated as wilderness study areas ("WSAs") in 1991 on Bureau of Land Management lands.

9. In 1991 Kennecott Utah Copper (KUC) approached the Environmental Protection Agency and DEQ to propose an accelerated clean up of its land in the Salt Lake Valley. The collaborative approach with the EPA and DEQ meant that most of the money was spent on the actual clean up, as opposed to administrative or legal costs. The EPA agreed it would remove the sites, the South Zone and the North Zone, from the Superfund National Priorities List upon KUC's completion of its clean up projects. Removal of the South Zone was achieved in September 2008.

10. DEQ is charged with administering a $11.7 million fund established under a consent decree, under which Kennecott is recompensing the state for damage to water quality in southwestern Salt Lake County.
11. Democrat Deedee Corradini is elected mayor of Salt Lake City, the first woman in the city's history to claim the post.

12. The International Olympic Committee picks Nagano, Japan, to host the 1998 Winter Games, once again sidestepping Salt Lake City as host but later wins the bid to host the 2002 Olympics.

13. Hundreds of Utah reservists and National Guard members participate in the Persian Gulf war.

14. Three fans are crushed to death at a concert at the Salt Palace featuring the heavy metal rock band AC/DC. The incident leads to a ban on festival seating.

15. The Legislature meets in a four-day special session to redraw Utah's state and federal political boundaries. A House plan wins easy approval and a Senate proposal is hotly debated but also passes. Contrary to earlier plans by the Republican majority, the 2nd Congressional District is left within Salt Lake County.

16. Utah's national health ranking plummets from third to 26th when environmental components were figured in, according to a Northwestern National Life Insurance Co. The drop is blamed on "extremely high" per capita release of toxic chemicals and community water systems that don't meet federal standards. State environment health officials disputed the findings.

17. Office of the Medical Examiner building is completed.

18. Deaths caused by unintentional drug overdoses skyrocketed, according to data compiled from the Utah Department of Health and Centers for Disease Control. The number of Utahns dying from drug poisoning increased fivefold, from 79 deaths in 1991 to 391 in 2003. (Today's prescription drop-off programs are aimed at safe disposal of drugs)


20. The Nuclear Regulatory Commission begins an environmental assessment on Envirocare's (now EnergySolutions') plans to dispose of Class A low-level radioactive waste.