



# Newsletter

## Environmental Connection

September – October 2010

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Donna Kemp Spangler, Editor

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### Radiation Works to Improve Efficiencies

The Division of Radiation Control (DRC) is taking a hard look at its regulatory process to determine how it can become more efficient and transparent. In doing so, it has adopted the "Lean Six Sigma" process, a powerful business management strategy that successful companies use to eliminate waste and improve their bottom line.

"This rigorous tool will enable the Division to utilize information and statistical analyses to measure and radically improve its organizational performance, practices, and system processes," said Rusty Lundberg, director of DRC who anticipates changes could come as early as October as a result of the group's work.

At the heart of the issue is the Division's rigorous and highly technical process of reviewing or amending applications for low-level radioactive waste disposal in Utah. In an effort to improve the permitting and licensing process, the Division sought expertise from other DEQ managers, business leaders, and stakeholders to draw from diverse viewpoints to pinpoint logjams.

"Improving our permitting and licensing process will not only help to sustain and stabilize our funding resources, but it will allow us to work more effectively with stakeholders in safeguarding public health and our quality of life," said Amanda Smith, executive director of DEQ.

A key player in the evaluation process is EnergySolutions, a waste disposal facility licensed and regulated by the Division since 1988.

"The Lean Six Sigma process is off to a good start; I appreciated the honesty, creativity, and critical thinking brought to the sessions and look forward to continuing the work of implementing the necessary changes the group has identified," said Sean McCandless, director of compliance and permitting for EnergySolutions and project team member.

The Lean Six Sigma process began as a three-day marathon session focused on the permitting and licensing of EnergySolutions. This three-day session held in August is what's termed as a "Kaizen" event. Kaizen is a combination of two Japanese words that mean "to take apart" and "to make good." Kaizen implies that small, incremental changes routinely applied and sustained over a long period result in significant improvements.

Participants said it was an eye-opening experience.

"I was pleased with the openness of the process for identifying problems and surprised that participants were so flexible," DRC Project Team Member Mario Bettolo said. "There was no judgmental communication, creativity was not stifled, and I felt no repercussions for honesty."

Project team members also said the outcome will foster improved public participation.

"With a more transparent licensing and permitting process, members of the public will have earlier opportunities to participate in the process," Lundberg said.

Healthy Environment Alliance of Utah (HEAL Utah) couldn't agree more.

"It surprised me how much was accomplished during the three-day Kaizen event," said Bob Archibald, co-president of HEAL Utah Board. "Our suggestions were taken very serious. In the old process, citizen input was relegated to a final stage, making it an adversarial interruption. In the recast process, citizens are invited to be early contributors, ensuring that different interpretations of standards and statutes will receive thoughtful broader consideration, and hopefully will contribute, as appropriate, to final definitions and resolutions. As a result, I believe that citizens, citizen groups and corporate citizens will all benefit."

This article was written by Christine Keyser, the radon coordinator for the Division of Radiation Control.

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## **DEQ Helps a Northern Utah Irrigation Company Go Lean**

North Salt Lake, Utah — Orbit Irrigation, the manufacturers of irrigation systems and watering products headquartered in Davis County, is hoping to slow the flow of its environmental footprint by undergoing an extensive review of its business operations.

Earlier this year, the company turned to the Department of Environmental Quality's Business Assistance Program for help.

In 2009, DEQ focused on providing assistance to companies in Davis County that are interested in making improvements that lessen their impact on the environment.

"We don't require companies to participate, but we're excited to help them achieve their environmental improvement goals," said Renette Anderson, director of DEQ's Office of Planning and Public Affairs.



Orbit Irrigation's Eco-Lock sprinkler system that is free of PVCs and toxic glues

As one of 100,000 global suppliers to Walmart, Orbit Irrigation stepped up its efforts to track its emissions by participating in a survey Walmart sent to them in 2009. The "Sustainable Product Index Survey" asked the company to measure their sustainability in four areas: energy and climate; natural resources; material efficiency; and people and community.

"The evaluation process has been a learning experience for the 300—employee company," said Jeannie Clement, Orbit's vice president of Quality and Sales Support.

Conservation of natural resources is not a new concept to Orbit as the company has adopted several environmental improvement projects in the past, such as upgrading to a closed-loop water system in its product testing room to reducing water use, and employing lean manufacturing principles to reduce raw material use.

Orbit is also launching a new sprinkler system, known as Eco-Lock and Blu-Lock, which is free of PVC and toxic glues. But, the process of evaluating the environmental impacts of a product throughout its lifecycle from raw materials to end disposal, has been a challenge, noted Clement, especially when two of Orbit's manufacturing plants are located in China and information on raw materials is not as accessible.

As the world's largest retailer, Walmart is making a commitment to provide its customers with product information in an easy to understand rating system, so they can make informed choices to consume in a more sustainable way.

"Customers want products that are more efficient, that last longer and perform better," Mike Duke, Walmart's president and CEO said on Walmart's Web site:

<http://walmartstores.com/pressroom/news/9277.aspx> "And increasingly they want information about the entire lifecycle of a product so they can feel good about buying it. They want to know that the materials in the product are safe, that it was made well and that it was produced in a responsible way."

In response to Walmart's Sustainable Product Index survey, Orbit is in the process of determining its greenhouse gas emissions which translates to calculating emissions from boilers, electricity use, and mobile sources, including company owned cars, employee commuting, and product transport. The company is also upgrading its lighting system in addition to implementing other energy efficiency projects, after taking advantage of Rocky Mountain Power's energy audit program.

Other efforts include researching PVC—free packaging alternatives that can be recycled and pursuing Energy Star certification for their new Light—emitting diode (LED) powered landscape lighting line, which requires less energy and has a longer lifetime, compared to conventional landscape lighting.

"The environmental improvement projects completed by Orbit are examples of what can be accomplished when a company takes a serious look at its long-term sustainability," said Clement.

This article was written by Frances Bernards who provides assistance to businesses. She can be reached at [fbernards@utah.gov](mailto:fbernards@utah.gov).

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## **DEQ Employees Take the Clear the Air Challenge**

Jeff Studenka, a scientist for the Division of Water Quality, made participation in the 2010 Clear the Air Challenge a personal goal — beat last year's results. He succeeded by limiting his driving during the month of July and thereby reducing his emissions by 1,791 pounds and saving over 1,000 miles of wear-and-tear on his Toyota Corolla.

"I just wanted to do my best," said Studenka, who was among the 53 Department of Environmental Quality (DEQ) employees to participate in the 2010 month-long challenge. Although pleased with his efforts, Studenka is already setting his sights on next year. "I think we all can do even better next year and I hope more people participate."

Gov. Gary Herbert kicked off this year's Clear the Air Challenge by encouraging all state workers to help improve the air quality by reducing their driving.

Studenka took the message to heart. He cut down on driving, limiting it to his 44—mile roundtrip commute from his West Jordan home to DEQ's Salt Lake City office. Once at the office, he walked to lunch or carpooled. The four-day workweek eliminated the need to drive to the office on Fridays. On weekends he carpooled, consolidated errands or used other means of transportation to get him where he needed to go.

DEQ was among the many state agencies who participated in this year's challenge, signing up to track their mileage and saved emissions. The challenge originated in 2008 from discussions between DEQ, the Utah Department of Transportation and Utah Transit Authority about creating a program to help change the traveling habits of Utahns. A coalition of partners, including mayors along the Wasatch Front, began promoting the Clear the Air Challenge in hopes of drawing attention to Utah's air quality challenges — wintertime inversions that trap pollution and heat-inducing summertime smog.

The 2010 Challenge exceeded last year's goals in both numbers of participants and emissions saved. Nearly 9,000 Utahns participated by driving less in July. During a ceremony on Aug. 7, Governor Herbert joined Salt Lake City Mayor Ralph Becker and Salt Lake County Mayor Peter Corroon to recognize participants who collectively cut out: more than 100,000 vehicle trips, 1.2 million miles traveled and 2.1 million pounds of emissions.

Herbert was pleased, saying "it raises awareness of our environmental issues and the fact that we all breathe the same air, and we want it clean and so everybody can contribute. We just have to be conscious of it and change some of our habits."

Amanda Smith, executive director of DEQ, echoed Herbert's sentiment.

"DEQ has a great group of people working professionally and personally to improve Utah's air quality. It's impressive that 53 DEQ employees can collectively remove almost 26,000 pounds of emissions from our air in one month and goes to show that individuals can make a difference."

Thus far, the Challenge has been a time—fixed initiative, taking place only during the summer months. As support for the project increases and more resources are made available by the partner agencies, a second round of Challenge is being designed to help tackle Utah's wintertime particulate pollution that can get trapped in the lungs.

To learn more about how to reduce your vehicle emissions, visit: [www.cleartheairchallenge.org](http://www.cleartheairchallenge.org).

This article was written by Stacey Adams, environmental planning consultant with DEQ's Office of Planning and Public Affairs.

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## DEQ Scientist Receives Utah Energy Award

Sam Schroyer, a scientist in the Division of Solid and Hazardous Waste, received the Excellence in Utah Energy Award for his work to promote recycling of Used Oil and Electronic Waste for the past 10 years.



Left to right: Alan Moore, DSHW; Scott Anderson, DSHW; Sam Schroyer, DSHW; Rick Ombach, DERR; Lori Walker, OPPA, Dianne Nielson, Energy Advisor

"Sam is very deserving of this award for his work with recycling and promotion of resource conservation," said Lori Walker, education and outreach coordinator for DEQ's Office of Planning and Public Affairs who nominated Schroyer for the award.

Energy Advisor Dianne Nielson recognized Schroyer and others at a ceremony held at the state Capital in July.

Schroyer works to promote recycling issues to both businesses and communities throughout the state by making used oil collection centers more convenient to the public. He also has been working closely with stakeholders to assist in the development of possible electronic recycling legislation.

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Most recently, he initiated a "Recycling Summit" held at Weber State University, partnering with the Weber State Environmental Club. The Summit drew widespread attendance from state and local governments, businesses, health departments and college students to learn more about recycling issues.

"I'm very pleased to receive this award," said Schroyer. "Recycling in Utah has come a long way and I believe DEQ can play an important role in helping this trend continue."

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## **Bousfield Featured in Drinking Water Association's Newsletter**

Ken Bousfield, director of the Division of Drinking Water at the Utah Department of Environmental Quality has helped guide the Association of Drinking Water Administrator's activities, serving on the ASDWA Board of Directors and Data Management Committee, as well as Chair of the ASDWA Drinking Water Security Committee.

Despite growing up in Los Angeles, Ken's roots are in Utah as three of his four grandparents were born in Utah in the 1890's, descendants of pioneers who settled in Utah. One of his ancestors, Charles Shumway, was part of the crew that diverted water from City Creek Canyon to Pioneer Park in Salt Lake City as a source of drinking water and water for agricultural use. This was the first non Indian water diversion in the state.

Ken accepted his appointment as the Director of the Utah Division of Drinking Water in February 2007. When taking the appointment, he particularly looked forward to unifying the various programs administered by the Division. Ken has a Bachelor of Engineering Science Degree from Brigham Young University and has been employed by the Division of Drinking Water and its predecessor agencies since March 1976. Prior to that, he worked for a Consulting Engineering Firm in Salt Lake City.

When asked about the most interesting aspect of his job, Ken said he likes implementing new ideas and looking for ways to improve the Division's operation. "One example of this", Ken notes, "is our current effort to use MCL non-compliance and data-based physical deficiencies as a way to electronically backfill an auxiliary physical facility needs list. We then plan on making the auxiliary list available to consultants. Our intent is twofold: one to help promote the use of federal SRF funds to achieve compliance and two, to encourage consultants to develop the needed projects."

When asked about the funniest thing that happened to him since he took the job as Director, he told us about the time that he had a very late start in traveling to a remote location in southeastern Utah to present some training. "Because of the lateness of the hour I made an unplanned stop in Hanksville, to spend the night before finishing my journey to the training site the next morning. In the process of registering for a room I completed a card with my name and address. The clerk behind the desk looked at the card and commented that she recognized my name. After comparing notes we concluded that as a former Town Clerk she probably had seen my name on letters sent to the community. Upon arising the next morning and proceeding with the morning tasks including shaving, showering and brushing, I noticed a distinct smell of chlorine in the water — and, this was on a water system that did not chlorinate. I concluded that the phone lines in Hanksville must have been buzzing the night before!"

Outside of work Ken says that as a senior citizen he has given up participatory sports and is now just a spectator. He enjoys watching college football, Baseball's World Series and college and pro basketball. He is an avid BYU Cougar fan and because he was born and raised in Los Angeles, he is

also a Dodgers fan though, definitely not a Lakers fan. He cheers for the Utah Jazz instead. Besides sports, Ken also enjoys reading books and magazines; especially history and adventure themes.

Regarding his family, Ken and his wife and will celebrate their 40th wedding anniversary this September. They have four grown children that are all college graduates, married and living in their own homes. Two live in Utah, another in Colorado, and one lives in Washington. They also have five grandchildren that are the joy of their lives.

The following article appeared in Association of Drinking Water Administrator's Newsletter, spotlighting a member. It is reprinted here with permission.