



# Newsletter

## Environmental Connection

September-October 2011

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### ***Clean School Bus Project Completed*** **It's Back to School With Cleaner Buses**

The Division of Air Quality (DAQ) recently wrapped up a three-year project to retrofit and replace aging buses in school districts throughout Utah, just in time for kids to head back to school.

In all, 33 Utah school districts participated, resulting in the retrofit of 1,200 buses and the replacement of 27 older buses.

"This is a great achievement for the benefit of the health of our children," said Amanda Smith, executive director of the Department of Environmental Quality.

The project began after the 2008 Legislature passed House Bill 146 that provided state funding to DAQ to be matched with federal Environmental Protection Agency grant dollars for retrofit of school buses. DAQ was able to raise over \$6 million for the project by partnering with local governments and organizations that included: Mountainland Association of Governments, Salt Lake City, Salt Lake County, Utah County, Utah Department of Transportation, Utah Moms for Clean, Utah State Office of Education, Wasatch Clean Air Coalition, and the Wasatch Front Regional Council.

The funds allowed DAQ to contract with Cummins Rocky Mountain and Instrument Sales and Service to install Diesel Oxidation Catalysts and Closed Crank Ventilation systems for buses. These technologies reduce particulate matter by up to 30 percent and carbon monoxide by up to 50 percent. These reductions mean cleaner cabin air for children riding the bus and less pollution emitted into the community.

"Having the opportunity to improve children's health in a meaningful way is a powerful motivator," said Dr. Michelle Hofmann who is a pediatrician at Primary Children's Medical Center and clean air activists. "All of the stakeholders rose to the occasion, leveraging resources we didn't even know existed. This is truly a gift to little lungs across the State."

The Clean School Bus project resulted in air pollution reductions that amount to the following:

- Particulate Matter: 343.65 tons
- Hydrocarbons: 897.85 tons
- Carbon Monoxide: 4,978.84 tons
- Nitrogen Oxide: 844.86 tons

Former Rep. Christine Johnson (D-Salt Lake), chief sponsor of the bill, is thrilled with the success.

"Congratulations to everyone who took a very humble bill, with \$150,000 fiscal note and turned it into something amazing that will impact the air quality for generations to come. It's just wonderful and I am so proud to have been a small part of something so tremendous!" Johnson said.

Officials will celebrate the project's success at the kick off of September's Idle Free Awareness campaign held at 10 a.m. Sept. 1 at Mountain View Elementary, 1380 Navajo Street in Salt Lake City.

Get more information about the project and the Clean Diesel programs for agricultural equipment and long-haul trucks.

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

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### ***Post-Oil Spill*** **Scientist to Test Red Butte Creek For Long-Term Health Impacts; Liberty Lake Deemed Clean**

Division of Water Quality scientists are evaluating the potential health impacts related to last year's Red Butte oil spills. In the case of Liberty Lake Park, the local health department reopened it in May after an assessment gave it a clean bill of health.

Water Quality Toxicologist Chris Bittner said it will take a couple of months to determine the results of water and soil samples taken two weeks ago along a stretch of Red Butte Creek where two separate oil spills occurred: In June, a quarter-sized hole in a Chevron pipeline poured about 33,000 gallons of oil near Red Butte Garden and in December, another 21,000 gallons of oil spilled near Red Butte Garden's amphitheater.

At Red Butte, scientists are looking at two things—human health and the ecology. Though oil residue is still in the creek, Bittner anticipates the samples will show minimal potential for long term health effects from the remaining residues of the spill. The Utah Department of Health did a health assessment at the time of the spill and concluded no immediate health risks associated with the spill.

"Based on review of the sampling data, the EEP (Environmental Epidemiology Program concludes that although surface water samples were detected above comparison values for benzene, dose exposure calculations were not above Minimal Risk Levels, and therefore do not present a health hazard to the community from ingestion or dermal absorption," the report stated.

The Department of Environmental Quality's (DEQ) study will focus on samples taken at 14 locations with one above the spill and others between the 3.5-mile spill site at the University and Liberty Park where oil residues have accumulated. In addition, four samples will each be taken in urban areas along Mill Creek, Parleys Creek, Emigration Creek and City Creek for comparison to Red Butte.

"We hope the study will serve to provide the public with some comfort that the cleanup was adequate and the creek is safe," Bittner said.

Residents near oil-contaminated sites have complained about odors that occur at times and make it unpleasant to go outside. Air samples have been collected and show no detectable health problems associated with the odor but DEQ officials are empathetic to the complaints.

"We understand resident's concerns, which is why we are committed to the health assessment study to make sure there are no long-lasting health issues associated with the spills," said Amanda Smith, executive director of DEQ who also lives near Red Butte Creek.

Smith is pleased with the latest results at Liberty Park Lake where 37 sediment samples were collected. The Human Health Risk Assessment or HHRA looked at the exposure scenario of people unintentionally swallowing water while swimming in the lake every day for 30 years.

Liberty Park Lake reopened in May following the study whereby the agencies overseeing the cleanup effort—Salt Lake City and DEQ—partnered with Salt Lake Valley Health Department to evaluate if exposure to the oil residues remaining in the sediment could pose a potential health risk.

The results determined that the cancer risks associated with residential and recreational use of the lake are below or within what the federal Environmental Protection Agency considers the safe range. "Based on the methods used to clean the Lake and the results of the HHRA, Liberty Park is safe for recreational activities," the report said.

Chevron is funding both studies.

"We are happy to give residents back Liberty Lake Park," Bittner said. "It was a good cooperative effort between DEQ, Salt Lake City, Chevron and Salt Lake Valley Health Department."

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### ***DEQ Welcomes Office of Energy Development Staff Puts Governor's Energy Plan to Work***

In the 90 days since the Office of Energy Development (OED) has been co-located here at the Utah Department of Environmental Quality (DEQ), the office is emerging as one of the powerhouses of state government.

Energy Office Director Samantha Mary Julian is working with a mostly federally-funded staff of 20 that's expected to downsize to about nine by next April when the federal stimulus money runs out. In the meantime, one of her main focuses has been to seek out partners and grants to better coordinate energy development in Utah.

"We are being more strategic about what we ask for, and who we partner with," Julian said. For instance, she is looking at a pool of grants that meet Utah's current needs: feasibility studies that pave the way for transmission lines in rural communities, training and education programs for energy efficiency of urban centers, and helping farmers find financing mechanisms to put up solar panels.

Consequently, Utah gains more control over its energy future while keeping utility costs low and energy abundant, Julian added. "Energy independence is about self determination—it's about keeping Utah's economy strong."

The 2011 Legislature, under HB 475 by chief sponsor Rep. Roger Barrus (R-Centerville) and co-sponsor Sen. Kevin Van Tassell (R-Vernal), created the Energy Office to implement the state's energy policy that is highlighted in Governor Gary Herbert's 10-Year Strategic Energy Plan.

Energy is one of Herbert's key initiatives, or top four "cornerstones" of his administration, and he appointed Amanda Smith to head that charge as the Energy Advisor while serving as director of DEQ. The Office of Energy Development is independent of DEQ—however reports to the Energy Advisor.

"Energy and environment can work together to create a more sustainable economy," Smith said. "Having the Energy Office here at DEQ makes sense in that it allows us to better coordinate with government, industry and the public to ensure responsible energy development."

The newly-created Office of Energy Development comes at a time when Utah is making its mark nationally. Most recently, Forbes crowned Utah the country's most fiscally fit state government, citing low-cost energy as a factor.

Utah's Energy Plan calls for diversifying the state's energy portfolio but recognizes that coal continues to fuel the economy; ranking 13th in the nation in the production of coal that makes up nearly 50 percent of Utah's total produced energy resources (2009). Utah ranked as the 8th largest onshore producer of natural gas in 2007.

Ten years from now the outlook could change as Utah works to overcome the challenges of meeting its renewable energy potential.

Currently, many financially-strapped rural communities don't have the resources to make investments in energy infrastructure. On the flip side, investors' contend that overburdened regulations hamstringing efforts to develop new projects.

The Office of Energy Development is here to overcome those obstacles under the direction of the Legislature and the Governor.

"Our job is to bridge that divide," Julian said. "This office can be a bridge-builder between industry and government."