

DOE Sustainability Assistance Network (SAN) Notes
Thursday, January 17, 2013

1. Sustainability Performance Office Highlights

Paul Estabrooks, SPO

The Department's comprehensive greenhouse gas (GHG) inventory, compiled from data submitted via site Consolidated Energy Data Reports (CEDRs), is undergoing DOE concurrence. The inventory is due to the Office of Management and Budget (OMB) on 31 January 2013.

2. Server Virtualization at Sandia National Laboratories/New Mexico

Phillip Cox, Sandia/NM

Experiencing very low server utilization rates (10 to 15 percent) but facing ever increasing energy demands and running out of space led Sandia to embark on virtualizing its servers. As a result, with Sandia's current hardware technology it is possible to achieve up to 100 virtual servers on each individual physical host server. Virtualization has increased server utilization rates to 60 to 70 percent, reduced power and cooling needs, increased application availability, improved business continuity and operational flexibility, and reduced the cost of infrastructure replacement. Sandia estimates energy savings of \$270,000 annually and hardware savings of over \$4 million to date. Lessons learned from the server virtualization are that a master plan is a better approach than taking small, relatively uncoordinated steps and standards for all equipment should be established.

3. Migratory Bird Treaty Act: Lessons Learned

Theresa Aldridge, Pacific Northwest Site Office

Topsoil excavated and piled during the construction of the Physical Sciences Facility at the Pacific Northwest National Laboratory (PNNL) became a habitat for bank swallows which are protected during the migratory season by the Migratory Bird Treaty Act of 1918. Subcontractors removing soil from the pile disrupted nests in the pile which violated the law. When eventually brought to the attention of a PNNL biologist, the site contractor ordered its subcontractors to cease all hauling of topsoil from the pile and the U.S. Fish and Wildlife Service was notified. The contractor agreed to a payment to mitigate ecological impacts at a site in the State of Washington.

As a result of the incident, the contractor embarked on a program to raise staff awareness of the Migratory Bird Treaty Act, update the manual developed for subcontractors, and modified contractors' procedures. For instance, workers must review the areas they worked in after each shift for the presence of any birds or wildlife. The Pacific Northwest Site Office took measures to ensure its contractor was aware of federal laws and observant of birds and any signs of nesting – which can occur in natural and manmade areas – and that it revise its own procedures and those of its subcontractors. Quarterly assessments of the contractor were also initiated.

The over-arching lesson learned was to stay aware of changing field conditions because cultural and natural resource areas must be protected throughout the life of the project.

4. Pantex Migratory Bird Program

Jim Ray, Pantex

The 18,000 acre Pantex site hosts shortgrass prairie, playa wetlands, and cropland – all of which can be nesting areas for migratory birds. Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, spurred Pantex to pursue a migratory bird protection program that is a mixture of habitat protection, outreach, research, and collaborations. The purple martin banding and outreach project provided valuable research data on bird colonies, involved members of surrounding communities, and resulted in 13 publications and seven major presentations to professional groups.

With the burrowing owls project, Pantex collaborated with Texas Tech and the Texas Cooperative Fish and Wildlife Research Unit of the U.S. Geological Survey to study the effects of radio-transmitter necklaces on burrowing owls, the owls' nest-site selection, their productivity, and the behavioral

differences between urban and rural owls and wintering and summering owls. This project also resulted in publications and major presentations.

Pantex is presently involved in a project with West Texas A&M University on the effect of wind turbines on Swainson's hawk. This involved working with a master falconer and, among other things, noticing that the traditional body count method to determine bird morbidity may not be accurate due to the role predators can play in removing carcasses before they are counted.

5. Sustainability and Compliance Reporting

Electronic Stewardship Activities

Cate Berard, EPA/HS-21

DOE is in the process of completing the QA/QC of the submitted Pollution Prevention Tracking and Reporting System (PPTRS) data prior to submittal to the OMB for its scorecard ranking. It appears that 98 percent of DOE's purchases in the reporting year were EPEAT-registered as opposed to 97 percent in the prior year and that 99.9 percent of the Department's end of life equipment was recycled or reused. Power management was implemented in 79 percent of displays and 75 percent of computers which are a drop from the previous year.

Federal Electronic Challenge award nominations are due on 31 January 2013; sites are requested to apply early. Please contact Cate if assistance with the application would be helpful.

The EPEAT registry for imaging equipment and televisions will open soon. Reporting of these purchases might be required in 2013 so it would be very helpful to keep track of your purchases of these items.

PPTRS

Jerry DiCerbo, HS-21

The PPTRS was used by 48 sites in this last round of reporting. The workgroup to suggest modifications to the PPTRS will meet soon so please contact Jerry with your ideas and your willingness to join the workgroup.

HS Website

Jerry DiCerbo, HS-21

The HS website is undergoing substantial changes. The new format will more closely resemble the <http://energy.gov/> site and the content will be more geared to use by the public. Guidance documents and network assistance materials presently on the HS website will be placed on PowerPedia and accessible by DOE personnel and contractors. Please contact Jerry if you need assistance with gaining access to PowerPedia.

Contact Information:

Theresa Aldridge – (509) 372-4508 – Theresa.Aldridge@pnso.science.doe.gov

Cate Berard – (703) 402-3428 – Cate.Berard@hq.doe.gov

Phillip Cox – (505) 844-2577 (on behalf of Laura Lenberg, (505) 844-3995 – llenbe@sandia.gov)

Jerry DiCerbo – (202) 586-5047 – Gerald.DiCerbo@hq.doe.gov

Paul Estabrooks – (202) 586-2674 – Paul.Estabrooks@ee.doe.gov

Jim Ray – (806) 477-5161 -- JDRay@pantex.com

Beverly Whitehead – (202) 586-6073 – Beverly.Whitehead@hq.doe.gov

Next SAN Conference Call: February 21, 2013

Contact Beverly Whitehead (HS-21), (202) 586-6073, Beverly.Whitehead@hq.doe.gov, with issues you would like to raise and/or presentations you would like to make.