Y-12: a good environmental steward

The Y-12 National Security Complex was recognized for its environmental stewardship and received “Honorable Mention for Environmental Achievement” in Environmental Protection magazine’s 2007 Facilities of the Year competition.

Y-12’s commitment to the environment is not a one-time occurrence, but the result of continued improvement; being recognized as an environmental steward is a great accomplishment for Y-12, its employees and surrounding communities.

In its entry form to Environmental Protection, a variety of Y-12’s award-winning, environmental-related activities from improving a film processor to reduce associated wastes to refurbishing a fire training tower with recycled products were explained. During the year, Y-12 continued to rack up highlights while supporting the site’s modernization and transformation.

One of those environmental highlights was reducing the number of outdoor low-level waste areas. Brad Skaggs of Environmental Compliance said, “Reducing outdoor storage of low-level radioactive waste reduces the potential for releases of material to the environment and reduces the amount of environmental surveillance and radiological monitoring required.”

FY 2007 highlights also involved project ingenuity. Steve Field, also of Environmental Compliance, worked on reducing the low-level waste areas by...
A job well done

The Y-12 National Security Complex has met a significant goal—the deadline for the last of a series of crucial safety documents that allow Y-12 to operate its most important production facilities. The last of these reports (called Documented Safety Analysis reports) was implemented in July for Building 9212.

Scott Underwood, manager of Production Facilities, spoke with great pride and satisfaction about the people who spent many hours to make the DSA reports for Building 9212 a reality. “This was a huge undertaking,” he remarked, pointing out that the DSA reports were not created in a vacuum.

In one capacity or another, approximately 400 people took part in developing and implementing the documents. The scope of the effort included the revision to nearly 800 documents, modifications to the facility and training of hundreds of the individuals who work in the 9212 complex. “Teamwork was an essential part of the success of this effort,” Underwood said. Facility Safety; Nuclear Criticality Safety; Facilities, System and Design Engineering; Safeguards and Security; Facilities, Infrastructure and Services; Production; Environment, Safety and Health; the Y-12 Site Office—all these and more took part to make these documents a success.

While all of this work was undertaken, the 9212 facility continued to operate safely and securely. Even though controls were in place to ensure safe operations, the new DSA reports reevaluated all of the controls. This analysis resulted in improved controls and safer, more efficient operations.

Instead of being involved with two sets of safety documents (the original approved set and the new set awaiting approval), the 9212 facility is now operating under one consolidated set of approved safety documents. “We’re successfully balancing our commitment to safety of operations and our need to manage our fiscal resources,” Mike Ritchie, the 9212 operations manager, said. “The scale of this task was immense, but we met every challenge and have a product that will serve us well for years to come.”

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identifying “outdoor areas …, obtaining northings and eastings so we could place them in a Web-based geographic information system and making database connections. By leveraging existing technologies to produce a new tool, we increased value without major capital expenditures.”

Another FY 2007 highlight was shipping cans of legacy mixed-waste residue offsite. Gary Person of National Security Programs said, “Besides meeting program objectives, getting rid of the low-equity materials freed up storage space, supported infrastructure reduction, reduced costs and got rid of a legacy of hazards.”

Reducing wastewater was achieved by using an evaporation process. Production’s Stacy Jollay said, “Through this process, we have reduced the handling, sampling, personal protective equipment, transporting and the need for treatment of wastewater. These reductions have benefited Y-12 financially and environmentally, resulting in a win-win for the Complex and our environment.”

While many environmental challenges were met in FY 2007, several more are on tap for FY 2008.
The Y-12 National Security Complex recently completed a major upgrade of compressed air system.

The Compressed Air Upgrades Line Item Project provides a modern compressed air system to supply instrument and plant air to Y-12 production and support facilities. The project replaced nine compressed air trains located in five different locations with a centralized system. The new system is centrally controlled and integrated to optimize air supply and to allow maintenance without system impacts.

Theodore Sherry, manager of the NNSA's Y-12 Site Office, said, “Completion of this project is another major step towards completing the modernization of Y-12. This also enables us to avoid an estimated $13 million in future maintenance costs.”

CAUP is the first of three FIRP utility line item projects at Y-12 to achieve approval for operations by YSO. The $21.4 million project was completed ahead of schedule and under budget.

CAUP was managed by Anna Beard, Federal project director; Frank McHenry, BWXT Y-12 project manager; and Rebecca Spiva, BWXT Y-12 project engineer. CAUP subcontractors included TPG Construction and Pro2Serve who performed the design and equipment procurement for the project.

—Condensed from The Oak Ridger, Sept. 27

Upgrade of compressed air system completed

Y-12 expertise brings funding, recognition to minority schools

ATLC and United Way partner for our common good
It's no secret that Y-12's Fire Department consists of the cream of the crop. What may come as a surprise to the plant population, however, is how hard these men and women work behind the scenes to maintain that status.

One such example of that hard work is biannual vehicle extrication training. This three-day training consists of two days in the classroom and one day applying that instruction.

“We actually bring ‘wrecked’ cars onto the site to perform this training,” said Roger Paul of Fire Protection Operations. “During this year’s training, our department cut 20 cars. We also trained to the safety features found in newer cars, such as multi-location air bags.”

Time is a challenge in responding to vehicular accidents. Advances in materials have made car doors stronger. While these improvements greatly enhance the survivability of the occupants, they may also impede the efforts of rescuers. And time, in these situations, can mean the difference between life and death.

As instructor Captain Sam Oldham noted, “[Only] three things can save an accident victim—God, time and a trauma surgeon.” For emergency response, he stressed personnel need to concentrate on time.

If the responders are able to pop the door open to quickly access the victim, time is on their side. When traditional techniques fail, however, the second hand seems to tick with frightening clarity. For this reason, Assistant Fire Chief Scott Yowell explained, the firefighters were initially working with techniques that would be the third or fourth line of defense. Working these difficult scenarios during training prepares staff for any unusual situations they may face.

In a field where swift and decisive action is so terribly crucial, Y-12’s firefighters ensure they are up to the challenge.

Y-12 is a leader in the use of the Nuclear Materials Control and strong reputation across the Nuclear Community. One reason for that reputation is applied each year—the total is in the outstanding employees like Kim Jeffers program for Y-12, with more than strong control and accountability.

“TIDs are an essential part of take my responsibility for the program. With her and Y-12’s recognized expertise is in demand for training, assessment NWC.

A recent rave review came from Smith, where Jeffers trained availability Group in new TID technologies. I completely delighted with the training, said Ehart, the project lead there.

Jeffers's presentation included TID. She taught the group how to use the devices! said Ehart. “Now we see ourselves.”

In addition to assessing programs, Vнапример Test Site, Jeffers has provided training in Russia.

Sherri Redmon, who is Jeffers, is proud of Y-12’s strong program to facilitate stronger programs at other places, proud of Kim’s role.”
The STAR Award recognizes those employees outside of Safeguards and Security whose efforts enhance the site’s security. Julie Gamble, George Swinler and Bob Spence (all of Production) were instrumental in the preparation and approval of security plans.

All security areas with Categories I and II special nuclear material must operate under a Y-12 Site Office-approved security plan. Obtaining that approval involves significant coordination with the operating areas and a walkthrough with YSO personnel.

According to John Woods of Program Analysis and Evaluation, Spence was “instrumental in facilitating communication between Safeguards and Security and Production to ensure development and approval of these crucial plans.” Spence’s efforts included meeting weekly with S&S to keep the plans on track.

Spence said he enjoys his work as a liaison with S&S and noted, “It enables me to interface with extremely talented people in both organizations.” He further acknowledged that “integrating security into our daily routine in Production requires rigor and formality, which is the definition of good conduct of operations.”

Spence further highlighted the tremendous strides made in many areas, especially security plan development. “The progress made in security at Y-12 is recognized throughout NNSA [National Nuclear Security Administration] and it is in no small part because of the joint efforts of our two organizations.”

Gamble and Swinler’s intimate knowledge of the security plan and postulated scenarios for their area garnered praise from S&S and YSO staff. Jim Bowers of Physical Security specifically noted their responsiveness to queries from YSO during the walkthrough of the area.
Ever wonder why Manhattan Project acronyms are unusual? Many were intended to disguise the purpose of the facilities. For example, “C.E.W.” stands for Clinton Engineer Works. That was the name assigned to the overall Oak Ridge portion of the Manhattan Project. It was first designated Kingston Demolition Range, but that sounded too ominous and obviously had something to do with weapons. They sought another, more nondescript name.

The Manhattan Project was named for its first office, the Manhattan Engineer District, located in the Manhattan portion of New York City. The Los Alamos site was designated “Project Y” and named Los Alamos Laboratory. The Hanford, Wash., site was named the Hanford Engineer Works and code named “Site W.”

As for the Y-12, S-50, X-10 and K-25 sites at the Clinton Engineer Works, only K-25 has any meaningful connection to the activities going on then. The “K” might refer to the Kellex Corporation, the company that designed the gaseous diffusion equipment. The “25” was a thinly disguised reference to uranium-235. The Y-12, X-10 and S-50 designations were selected to be meaningless to any observer.

The “Y” in Y-12 might connect to the “Project Y” designation assigned to the Los Alamos laboratory, because Y-12 was to provide the feed material for the first atomic bomb being designed there.

Do you have a story to tell? Contact Ray Smith (srd; 576-7781) with suggestions for future stories of Y-12’s unique history and heritage.
The Recognition Continues:
WINNERS OF PHOTO CONTEST

For the next few months, this feature will highlight the 30 honorable mention photograph winners of the Y-12 photo contest. Photos are shown in no particular order.

Left to right: “Burgess Falls Overlook” was taken near Cookville, Tenn. by Scott Hackler of Fire Protection Operations.
“Smokies Stream” was taken in the Great Smoky Mountains National Park by Milton Triplett, father-in-law of Karen Triplett, formerly of Planning, Integration and Control.
“Morning Tree” was taken in Cades Cove in May 2006 by Gene Stevens of Fire Protection Operations.
“Dogwood and Granite” was taken in the Great Smoky Mountains National Park by Bob Slaughter of Projects.

What you do counts

Candice Fraker, executive assistant to the director of Campaigns, is one of those key Y-12 employees who work to make a division run smoothly.

“The most challenging part of the job is just keeping everybody on track,” she said. “We have our whole day planned, but one e-mail or call can change everything.

“Calendars are a big thing,” she said. “We meet every morning and go over what we need to do that day and make sure we have all of our meetings covered.”

The demands of Fraker’s job require her to wear many hats. She is the computer security officer, the security officer and the training officer for Campaigns, as well as the Human Capital and Human Reliability Program representatives. She works with the Y-12 travel agency to book travel for Campaigns staff.

“If we have any visitors from NNSA [National Nuclear Security Administration] Headquarters, I’m the one who helps set up the meetings and conference rooms and gets their passes,” she said.

Though Fraker is excellent at working within today’s fast-paced environment, she recalls a much different world. Thirty-one years ago, when she began work on the Oak Ridge Reservation, “you had to wait until they delivered something to you. Now,” said Fraker, “everything is immediate. No waiting for mail. Just hit send.”

Away from the job, Fraker loves cooking, baking, swimming and the beach. “My biggest passion,” she said, “is my grandchildren and helping the elderly.”

It was Fraker’s father who encouraged her to come to Y-12. “He was a chemical operator,” she said. “He transferred to Y-12 from Tennessee Eastman. I know he would be proud that I will retire from Y-12, as he did.”
Y-12 wins NSC awards

BWXT Y-12 recently received nine National Safety Council awards.

The NSC Occupational Excellence Achievement Award recognized Y-12 as a participant that had reported injuries and illnesses that involved days away from work equal to or less than 50 percent of the Bureau of Labor Statistics rate for comparable industries. Y-12 also received a Significant Improvement Award, which acknowledged NSC member companies, units and/or facilities that demonstrate a minimum of 20 percent reduction in injuries and illnesses that involved days away from work.

Seven other individual NSC awards were received for Outstanding Safety Practices. These awards included Target Zero implementation practices in six divisions and performance of the 2006 Safety Expo.

Dave Neubauer of Safety said, “It’s great to see others outside our organization recognize Y-12 employees’ achievements. These awards are recognition of these organizations and their employees for working safely every day and achieving our plant goal for zero injuries. Other Y-12 organizations can use the performance of these groups as the foundation to reach our goal of Target Zero for the entire company.”

At the September President’s Environment, Safety and Health Forum meeting, President and CEO George Dials presented six Y-12 organizations with National Safety Council awards for achieving Target Zero during 2006. Congratulations to Construction; Chief Financial Officer Division; Information Technology; National Security Programs; Planning, Integration and Control; and Projects. Shown above from left to right: Dials, Teresa Hensley and Jennifer Bates of Planning, Integration and Control.