In March, B&W Y-12 provided the National Nuclear Security Administration with its plan to address a significant fiscal 2013 funding reduction related to federal budget cuts known as the sequester. Throughout the year, Y-12 has been limiting procurements, travel and hiring. In response to the sequester, Y-12 implemented additional spending reductions.

B&W Y-12 has worked to minimize the impact of these reductions to its mission and employees. Although the company no longer expects that furloughs will be necessary, some of the cuts being made still impact employees.
Another security positive is the Central Alarm Station has been redesigned, and Y-12 continues to improve capabilities, and reduce false and nuisance alarm rates.

As for recent trespassing events at Y-12, Johnson explained the site's 229 boundary fence is not meant as a denial barrier. “The fence surrounding the site is there to denote the property line of the site,” he said. “Signs on the fence clearly state that unauthorized entry to the site is prohibited, but our security is not designed to repel anyone at the 229 boundary. Our mission is to secure one of the nation's largest collections of special nuclear materials, and we have successfully done that for 70 years.”

Johnson said he envisions Y-12 having the best equipped, led and trained security and emergency services organization in the NNSA complex. He quickly added that this estimation is not one that he can make.

“I believe we have made great strides in building a solid security program at Y-12,” said Johnson. “But we can’t determine when we have reached our goal. We will only be the best when others say we are the best.”

The Uranium Processing Facility project has received approval to begin field work. This portion of the work, known as the UPF Site Readiness Subproject, includes some utilities work, roadwork and excavation.

Managed by B&W Y-12, relocation of electrical lines is scheduled to begin in spring, with development of a wet spoils area planned for spring and summer. The U.S. Army Corps of Engineers, or USACE, will then hit the road, so to speak, with work on Bear Creek Road and extension of the Haul Road.

Laurie Folden of the National Nuclear Security Administration Production Office said, “We are ensuring the project's team members are ready for execution of the important first steps of making UPF a reality.”

The relocation of Bear Creek Road, which includes construction of potable water lines, is the longest scheduled task. The estimated completion date is October 2014. Haul Road extension construction and Portal 10 excavation should be complete in the summer of 2014.

So, there is now an answer to the west end population's burning question. Parking will be affected in the late summer/early fall timeframe when work at Portal 10 begins. A cross-functional team has been working for months to ensure employees will be adequately informed of site changes.

While the Site Readiness Subproject Construction proceeds, UPF will be pursuing approval of site preparation. That scope of work, which should commence in mid-2014, includes long lead procurements, excavation for the main building, mass fill and demolition of Building 9107.

“These activities are certainly exciting for Y-12,” Robert Spurling with the UPF project management said. “We are working to minimize disruptions to the site with early coordination between the UPF Project, the Y-12 site and USACE.” The UPF team and Captain Allen Stansbury with USACE advise employees to be aware of changing conditions in and around the construction area, including following all posted signs and directions.

Employees should watch YSource for the latest updates about road closures during the construction on Bear Creek Road.
Engineers Week volunteers pitch tech careers to students

A total of 116 Y-12 volunteers from engineering and a few science disciplines participated in Engineers Week activities in February.

"Each year our program continues to grow and we increase the number of students reached," said Acting Vice President of Engineering Ken Keith. "The numbers are really amazing, considering that we started this and maintain it as a grassroots, volunteer effort. It is really a credit to our engineers."

Some of Y-12's Information Technology staff dropped in on about 190 eighth-graders at Jefferson Middle School in Oak Ridge to talk up software engineering. And most of the volunteers never left their office building. Videoconferencing technology enabled slides to be shown on a screen, together with five webcam shots. To familiarize the students with the voice-activation, IT's Rick Shipp led them in a school colors' cheer. When half the class shouted "Blue!," their voices activated their section's camera, flashing the students onscreen. When the other half shouted "Gold!," their camera activated, and they appeared onscreen.

One presenter used a Facebook-like application, a hit with the students, to demonstrate the software engineering life cycle of analysis, design and implementation.

"We wanted to show them that engineering is fun, it solves real-world problems, you get to work with smart people and technical careers make decent money," said Shipp.

One student, carrying a book on cyberkinetics, harbored "a lifelong goal" to create computer-controlled prosthetics. Another asked what program language had been used in a presentation and if he could see some of the underlying code. The startled volunteers displayed some code, said Shipp, and he joked with the teacher, "Can I sign him up with a letter of intent and have him come work at Y-12 someday?"

Also part of Engineers Week, Y-12 held its second annual Introduce a Girl to Engineering event during which some 400 girls in grades 9–12 from area schools were encouraged to pursue careers in science, technology, engineering and mathematics.

The attendees interacted with women working in the engineering field and experienced hands-on activities at exhibits hosted by organizations such as the University of Tennessee, Women in Nuclear and the Society of Women Engineers. In one such activity, students used an ultrasonic detector to "listen" to their eyes and learned how ultrasonic testing can be used to characterize materials.

Jamie Porter, the first African-American female to receive a Ph.D. in nuclear engineering from the University of Tennessee, was the event's guest speaker.

A surge in support

Y-12's Nuclear and Radiological Field Training Center recently designed a first-of-its-kind training course to improve the way the U.S. Department of Homeland Security's Federal Emergency Management Agency responds to nuclear and radiological emergencies.

"FEMA needed someone with in-depth knowledge and experience regarding radiological materials," said Frank Waller, NRFTC manager. "Y-12 is the best in the world at designing scenarios for chemical, biological, radiological and nuclear training, offering hands-on programs with real sources."

Y-12 and FEMA worked together to create a training program designed to increase, or "surge," the number of federal employees nationwide who can use the appropriate equipment, terminology and tactics in response to a radiological or nuclear emergency.

The first FEMA surge training program was conducted in mid-October at FEMA's Center for Domestic Preparedness. It included both classroom and field sessions, with all scenarios based on the specific environments in which DHS organizations operate.

The pilot course was lauded by all who participated, including trainees from various DHS agencies, the FBI, National Nuclear Security Administration and other Department of Energy elements. "Of all the radiological/nuclear organizations I visited in developing this surge, Y-12 understood boots on the ground," said Chuck Huthmaker, FEMA project manager for the program. "The Y-12 team, staff and everyone I have met 'gets it.'"

FEMA plans to move forward with the program and conduct future sessions. "This is a wonderful partnership, with different parts of DOE and DHS working together on a radiological/nuclear course that can impact the country in a positive way," Waller said. "I truly believe that this program will change the way the nation responds to a threat."

Moreover, Waller sees this program as a model for why Y-12 does Work for Others: "It allows critical experience and capabilities to be shared with other government agencies that can help enhance the security of our country."
T.E.C. BULLETIN
A NEWSPAPER FOR THE MEN AND WOMEN OF THE CLINTON ENGINEER WORKS—TESSON EASTMAN CORPORATION

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Copyright 1946 Tennessee Eastman Corp.
OAK RIDGE, TENNESSEE

Monday, April 1, 1946

TEC Employees Enthusiastically Open Clean-Up Week

Clean-Up Drive Gives Y-12 Area Face Lifting

Brooms, soap and water and fresh paint were used liberally throughout the Y-12 area last week as Fire Protection Clean-Up Week was inaugurated. With the campaign continuing through Saturday of this week, the entire premises will have received a face-lifting operation that will leave it shining like the proverbial new dollar.

Conducted under the direction of TEC Fire Department Capt. R. Ray Wilkins, the campaign is directed at both tidying up the plant area and eliminating fire hazards. Cooperation of employees has been excellent, the fire captain declared.

Reminders To Be Given

Throughout this week, employees will be further reminded of the clean-up movement through announcements over a mobile public address system, signs at each portal, directives sent to each department and posters placed throughout the plant. Announcements of the campaign will be made at all supervisory conferences and all supervisors will be asked to place particular emphasis on cleaning up their areas during the week.

Special attention is urged to carry out the following provisions:
1. Keep that plant premises are free from rubbish and trash.
2. Clean up all lockers.
3. Clean up all work benches.
4. Remove oily rags and waste.
5. Clean out all closets and storage rooms and remove all salvage material no longer needed.

Safety Department Cooperating
The Safety Department is participating in the clean-up movement with the particular objective of removing fire and accident hazards.

In urging continued cooperation toward cleaning up the plant area, it is pointed out that every employee is more interested and contented when working in clean, light and fresh surroundings as dark work rooms lead to inefficient work and discontent. Captain Wilkins points out that the majority of the 25,000 factory fires occurring annually in the country could have been prevented by good housekeeping methods in the plants affected.

Captain Wilkins, who is supervisor of the TEC Fire Prevention Bureau, has announced that additional fire inspections will be made this week and that guards on overlooks will aid in eliminating fire hazards.

SPOONS VANISHING FROM CAFETERIAS

Diners in Y-12 may have to stir their coffee and tea with knives in the near future if spoons continue to disappear from cafeterias and canteens.

Pointing out that the shortage of stainless steel spoons remains critical, Cafeteria Manager Edward Rentz said that 45 dozen spoons were placed in the new cafeterias on a recent Friday and only seven dozen remained three days later. Employees are reminded that the equipment is United States Government property.

FARMERS’ MARKET WILL OPEN MAY 11

Pottery and craft products, as well as farm produce, will be sold at the Oak Ridge Farmers’ Retail Market which will open May 11. Plans for a “bigger and better” market were discussed at a recent meeting of the Market Association.

House rent in Oak Ridge is due in cash after April 20 for May. Will you be ready? Start saving now so when the deductions stop the cash will be available.

BE CAUTIOUS IN CONVERSATION.

SAFETY FIRST!!

Always keep up with your badge.

Leave no classified information unattended.

SHARE the RIDE

Phone 729 or go to Share The Ride headquarters in Bidg. 7946-2 if you want to share vacant seats in your automobile or want a ride.

Rides Available Off Area

Group 1: Knoxville, Moodly Ave., via Western Ave and Middlebrook Pike, 1.
Group 2: Clinton, Marshall St., 1.
Group 3: Byington, Beaver Ridge Road, 4, Lenoir City, 2.
Group 4: Byington, Route 1, via Solway and New Highway, 3.
Group 5: Lenoir City, Round 2, 3.
Group 6: Powell Station, Wells St via Emory Road and Clinton Pike, 3.

Straight Shifts

8:15 a.m. to 5 p.m., Clinton, 3.
8:15 a.m. to 5 p.m., Corryton, Route 1, via Emory Pike through Powell Station, 4.

Inskip, Route 1, via Knoxville, Avondale Road, via Fairmount Blvd., Broadway and Cedar Lane, alternate driver wanted.

Rides Available On Area

Group 1: Hoyt Lane, via Highland Ave. and Groves Center, 2.
Group 2: Hillside Road, via Highland Ave., 3.
Group 3: Salina Hall, via Louisiana Cafeterias, 1.
Group 4: Sanford Lane, via Robertsville Road, 4.
Group 5: Lawrence Lane, via Lake City Boulevard, 3.

Share The Ride

Phone 729 or go to Share The Ride headquarters in Bidg. 7946-2 if you want to share vacant seats in your automobile or want a ride.

Security Comes First

Allow only authorized persons to see your classified documents.

CHECK THAT SAFE
You never know what you'll find when you start cleaning. “We were cleaning out a building and came across an old issue of the employee newsletter,” Jan Jackson of Sustainability and Stewardship explained. “I loved the fact that several of the topics in this 1946 issue had to do with sustainability.”

When reflecting on Y-12’s early years, you likely don’t think about housekeeping programs similar to those we have today: Pollution Prevention, Clean Sweep or PrYde. But the April 1946 newsletter Jackson and her crew found suggests these topics were as important then as they are now. [Partial image at left; you can view the entire newsletter at http://www.y12.doe.gov/about/history/historical_media.php.]

The newsletter, T.E.C. Bulletin, was published for the Clinton Engineer Works (Tennessee Eastman Corporation) employees. According to the newsletter, employees throughout the site participated in a “Fire Protection Clean-Up Week,” with the entire site receiving “a face lifting operation that will leave it shining like the proverbial new dollar.” The goal was to tidy up the plant and eliminate hazards, similar to today.

Jackson said, “Our programs are here because of the people in the plant. If we can make their jobs easier, then we have succeeded.”

The Manhattan Project generation was one that didn’t waste items, and 20 years ago, that was more evident at Y-12 than it is now, partly because of the intense reduce, reuse and recycle theme Y-12 and other agencies have adopted. Jackson said, “The Sustainability and Stewardship program has evolved along with the site. Everything we do now is P2 — pollution prevention. Twenty years ago, if you drove around the site you would see junk everywhere, sitting next to buildings, in any open spaces. You can’t drive around today and not see that the processes we have in place to take care of that problem.”

Today, we even have a Sustainability Team that works with the many programs to make Y-12 a cleaner, greener site. Jane Nations, Energy Management program manager, said, “Personnel have participated in identifying energy reduction initiatives that helped us make the Jack Case Center Y-12’s first High Performance and Sustainable Building.”

This hardworking team also ensures we maintain a highly rated environmental management system. Environmental Compliance’s Wayne McMahon said, “Our last assessment score was 525.5 out of 530.0. You can’t get this type of grade without teamwork and dedication.”

From 1946 until 2013, cleaning up has been a priority for Y-12 employees.
Y-12 = “can-do!”

Paul Wasilko, a Y-12 employee since 1975, has seen how quickly the environment can change, causing the site to jump into action. Weather events from Feb. 21 and March 14, 1993, stand out as examples. Wasilko said, “We commonly refer to Y-12 as having a ‘can-do’ attitude, and I have participated in many activities that demonstrate this behavior.”

Wasilko said the February day started out unusually warm and sunny. By mid-afternoon, the weather changed to dark rolling clouds and high winds. “By 4:30 p.m., I heard the sound of a train rolling down the tracks behind our house. The only problem was there were no train tracks — a tornado was passing overhead.”

The tornado touched down on the north side of Pine Ridge, across the east end of Y-12. “The path was estimated to be between 50 and 100 yards wide, and the total length was approximately 13 miles. Fallen trees were all over the north side of Bear Creek Road with many left in dangerous positions. Pole mounted speakers, cameras and fire protection sprinklers were damaged. All told, more than $500,000 in damage was caused by the tornado.

“Y-12’s emergency response group along with maintenance and utility personnel were called into action. Emergency stand-by generators were put into service. Structural engineering personnel evaluated buildings for damage/safety concerns,” he said.

That year was unusual in terms of weather. The region had just recovered from the tornado when the most intense snow storm in more than a century hit the area. By March 14, there were more than 18 inches of snow. Once again, the Y-12 emergency group was called into action with freeze protection for various systems and potential roof damage from the heavy snow being the primary concerns.

As was the case with the tornado, no environmental or safety issues developed, and the plant returned to normal operations in a few days.

No matter the season, be aware of weather changes and alert to possible safety hazards.

Mercury cleanup

Roughly $26 million saved on American Recovery and Reinvestment Act projects at Y-12 has been scoped for remediation efforts in fiscal 2013, picking up where the Mercury Reduction project left off in 2012.

This year’s efforts include continued removal of mercury from key locations in site storm drains, a process made easier after the recent installation of Y-12-designed mercury traps in nine storm drains. These traps capture mercury before it can reach the various outfalls that discharge to East Fork Poplar Creek, which originates on site and flows through the City of Oak Ridge. A related change — installing graded surfaces to ensure rainwater runoff is routed to storm drains — reduces mercury percolation through the soil.

“We are working to solve mercury contamination on a much larger scale than other industrial sites,” said John Frost, Program Management. From 1953 to 1962, millions of pounds of Mercury were required to support Y-12’s post–World War II mission of separating lithium isotopes. Through process spills, system leaks and surface runoff, some 700,000 pounds of mercury were lost to

Mercury recovered from new mercury traps installed in storm sewers is placed in a storage drum for disposal by DOE Environmental Management.
the environment. Cleaning up the toxic heavy metal poses many challenges, but what Y-12 is learning could help conquer mercury pollution worldwide.

Ultimately, the plan is to remove legacy mercury from contaminated facilities, isolate the structures before they are dismantled and demolished, and then remediate the underlying soil.

A recent press release from the office of U.S. Sen. Lamar Alexander outlined the senator’s May 3 announcement of a new water treatment facility planned for Y-12 at the head of East Fork Poplar Creek. According to the press release, the treatment facility will filter water to prevent further mercury contamination. As other cleanup projects wrap up, like the demolition of K-25 and K-27 at East Tennessee Technology Park, Alexander wants to see more cleanup resources going toward mercury contamination.

“This isn’t just about Y-12; mercury is recognized internationally as a toxic contaminant. With our cleanup and remediation experience, there's a real opportunity for us to share our work and findings,” said Diane McDaniel, Legacy Program manager.

Y-12's Occupational Health Services’ clinic wants you to be proud of its accomplishments. It was recently reaccredited by the Accreditation Association for Ambulatory Health Care (AAAHC) for the fourth time, marking 12 years of accreditation. OHS is one of more than 5,000 health facilities in the U.S. with such accreditation. Stan Roberts, physician assistant, said, “We always strive to make the clinic better. Literally everyone in the clinic is involved.”

Consider joining the B&W Y-12 team at the 2013 Relay for Life event June 7 at Oak Ridge High School. There will be multiple teams set up and a variety of entertainment and fun throughout the time of event. All proceeds go to the American Cancer Society. See the YSource announcement to register or donate to the B&W Y-12 team. For additional information, contact Anna Lisa Conover at conoveral@y12.doe.gov.

Human Resources is looking for people who can provide a ride to visiting National Nuclear Security Administration Intern Program participants working at Y-12 this summer. Students will be staying in Oak Ridge and would need a ride to/from work June 3 to Aug. 8. Schedules may vary, generally Monday–Thursday from 6 a.m. to 4:30 p.m. Please e-mail your contact information and work schedule to Rachel Carvell at carvellrc@y12.doe.gov.
Duling chairs Light the Night Walk

“My aunt was an amazing woman — she flew airplanes in the late 1930s and early 1940s, rode motorcycles, hunted and drove fast cars. She had a willingness to get involved and try new things,” said Joel Duling, vice president of Production.

“My Aunt Tillie was a true inspiration to me and an influence in my life,” Duling said. In fact, Matilda Jane Porteus greatly influenced Duling’s decision to accept the role of Light the Night Corporate Walk Chair for the Leukemia and Lymphoma Society of East Tennessee this year.

Duling’s aunt and his stepfather died from lymphoma in recent years. After their diagnoses, Duling developed greater awareness and understanding of the disease. “I was amazed at the number of people diagnosed, particularly young people,” Duling said. “Talking with others and hearing their stories opened my eyes to how big the problem is. That kindled my interest to become involved.”

An estimated 1,012,533 people in the United States are living with, or are in remission from, leukemia, Hodgkin lymphoma, non-Hodgkin lymphoma or myeloma, according to LLS. For children and adolescents under 20, leukemia is the most common cancer. Another disturbing fact is that most blood cancers cannot be prevented or detected early. The good news, however, is that LLS focuses on finding cures, and since the early 1960s, the survival rate from these cancers has doubled, tripled, even quadrupled.

Y-12 employees are strong supporters of the Light the Night Walk, and Duling will further strengthen their overall mission. As chair, he hopes to guide the executive committee toward continued growth and participation in the walk. He wants to encourage more businesses to form corporate teams, because the majority of funds raised by the walk come from team participation and volunteer donations. Donations to LLS fund research, education and patient support.

The Light the Night Walk is scheduled for Oct. 24, and it appears Duling has started on the right foot with a commitment from Oak Ridge National Laboratory to form a team.