Y-12 continues to green

After eight years of hard work and dedication, the Y-12 National Security Complex now flies a green flag, showing it is a performer-level member of the Tennessee Pollution Prevention Partnership. Members of the Tennessee Department of Environment and Conservation presented Y-12 with the flag on March 17.

"The green flag is a symbol of the years of hard work by hundreds of people," said Environmental Compliance's Terry Cothron. "It's a milestone testament to a long journey. We should all feel a degree of pride when we see it."

Brad Skaggs of Environmental Compliance wants co-workers to know, “The flag is more than a recycle award. The flag shows that Y-12 is a recognized leader in environmental protection and pollution prevention."

The numbers support Skaggs' claim:
Since 1993, Y-12 has completed more than 802 pollution prevention projects. Ongoing recycling projects have resulted in the elimination of more than 1.87 billion pounds of waste at an estimated cost avoidance of more than $53.37 million.

See GREEN, pg. 8

Above: The Y-12 National Security Complex and the National Nuclear Security Administration’s Y-12 Site Office celebrate receiving the Tennessee Pollution Prevention Partnership (TP3) green flag.

Right: Jan Jackson (left), Danny Nichols and Aprell Patterson proudly display the TP3 performer-level certificate.
Reaching students

Y-12 engineers visited 14 area schools as part of National Engineers Week, held in February, and spoke to almost 1,600 students. This is the third year Engineering has organized the activity as a way of introducing students to technical careers.

Positive comments came from the visiting engineers: Kevin Alexander, Nick Antonas, Jerry Bouchillon, Lynn Chapman, Preston Cloud, Eric Covington, Brandon Davis, Beth Green, Kevin Lamb, David Linney, Steven Mead, Tom Moczadlo, Randi Peterson, Bob Sadlowe, Michael Sandstrom, Ed Stubbs, Crystal Swafford and Angie Temples.

Randi Peterson spoke at the Technical School at Anderson County High. “It was a lot of fun interacting with the students,” she said. “I encouraged them to take advantage of the hands-on courses offered, such as welding and machining, in addition to theory courses.”

Brandon Davis said the chemistry students at Central High seemed genuinely interested in the type of education needed for technical careers and the potential hiring opportunities at Y-12. “It was an experience I hope to be able to repeat for many years to come,” he said.

Teachers sent positive feedback as well: “My students are still talking about how much they learned” and “I think the presentation caused some students to lean more toward an engineering career.”

Schools visited were Anderson County High, Austin-East High, Central High, Clinton High, Farragut High, Gibbs High, Greene County Center for Technology, Hardin Valley Academy, Karns High, North Knox Technical Center, Oak Ridge High, Roane County High and Robertsville Middle.

Visiting schools isn’t limited to one week. Y-12 engineers interact with students and teachers throughout the year to increase the knowledge base and better prepare them for tomorrow’s challenges.

Using a headset and handheld control, users can manipulate computer-generated images in a “virtual” environment.

Seeing is BELIEVING

If a picture says 1,000 words, then a three-dimensional simulation should represent a novel. A 3-D simulation can accurately depict the appearance and functionality of manufacturing equipment, resulting in improved understanding of design intent. For the Uranium Processing Facility (UPF), the new 3-D Design Visualization Center means the project’s multidisciplinary, integrated team can interactively evaluate and modify the new facility’s design in real time.

The large format, high-resolution, interactive digital visualization room has been set up at the UPF project offices. The 14-feet-wide by 6-feet-tall screen allows 3-D stereo and interactive viewing of computer-aided design (CAD) models of the facility and process equipment, creating a virtual factory for walk-throughs and making sure all the pieces fit together before construction begins. The ability to see and manipulate CAD images in 3-D also reduces the need to invest in physical prototypes, a potential cost savings to the project. Through this new technology, the CAD designs will be more detailed, and being able to see the detail will make construction safer.

The interactive viewing session starts by donning a wired headset. The system tracks the user's movements, creating an immersive “virtual” environment. The user manipulates the images using a handheld device while other participants share in the session by wearing specially designed glasses that facilitate 3-D viewing.

Potential uses include project reviews, technical reviews, vulnerability analysis, value engineering, maintenance strategies, constructability reviews, virtual training and ergonomic analysis.

The system was provided through the Integrated Collaborative Prototyping Environment project to develop a modernized information technology infrastructure in support of an enhanced collaborative environment. The hardware, software, system integration and technical support were purchased from Virtalis Limited. Additional mock-up software is provided by Parametric Technology Corporation. The Y-12 implementation team consisted of Terry Domm, Rich Bell, Henry Bell, Rhonda MacIntyre, Elaine Allen and Jack Dixon.
‘Old Medical’ gets a second shot

Y-12’s original medical building, 9706-2, is seeing an all-new kind of action these days. Built in 1948 and used by the medical organization until 2007 when it moved to the Jack Case Center, many areas of the facility sat vacant, awaiting demolition in 2011. That all changed, though, in the fall of 2008 when Science, Technology & Partnerships identified the area as a perfect match for its new hands-on radiological training course, which simulates terror attacks in a medical or research environment to instruct response forces.

The National Nuclear Security Administration’s Global Threat Reduction Initiative (GTRI) established this unique course to train hospital and university response forces to mitigate radioactive source theft and to rehearse attacks. Worldwide, millions of radioactive sources are used for cancer treatments, sterilization of blood and food, oil exploration and scientific research. GTRI focuses on protecting radiological materials from theft and sabotage, ensuring the bad guys don’t get access to the materials necessary to fabricate radiological dispersal devices.

The old medical facility was flipped in short order and readied for the January pilot course. Thirteen cameras record the good guy–bad guy skirmishes as observers watch and evaluate the action in a 30-seat room fitted with large-screen televisions and radios. “Y-12’s training facility allowed us to create and work through real-world scenarios. Our department is grateful for the opportunity to train at Y-12,” said Philadelphia Police Department Lieutenant Edward Baldini.

Classroom sessions cover using security equipment effectively and refining response procedures to allow the participants to better protect themselves and their communities. Y-12 will deliver this one-of-a-kind hands-on course six times this fiscal year.

Tanker cars find new home

Two 1941-vintage tanker cars that left the complex last year, thanks to the hard work of many and the Unneeded Materials and Chemicals initiative, were dedicated in February at the Southern Appalachia Railway Museum (SARM) located at the East Tennessee Technology Park.

“We started the process more than five years ago,” Cindy Hartsell of Waste Management said. “There were a lot of logistical issues to be worked out along the way.”

The Y-12 landmarks were instrumental for transporting materials and goods during World War II. “The tank cars are reportedly among only a handful of units of this particular type remaining in the U.S.,” said Bill Becker of Waste Management.

Jennifer Dixon of Environmental Compliance is instrumental in helping Y-12 comply with the National Historic Preservation Act (a requirement of all federal agencies). Dixon said, “Donating the tanker cars to SARM is a great opportunity for Y-12 employees to take pride in complying with the National Historic Preservation Act, preserve and protect one of its historic resources, and partner with a local organization to convey the history of Y-12 to the community.”

By donating these tanker cars to the museum, Y-12 not only preserved historic items, but also helped the environment by keeping more than 47 tons of metal from waste disposal.
NEW HOPE CENTER: 
Prime Real Estate

With its easy access, plentiful open space, high-tech audiovisual equipment and 400-seat auditorium, the New Hope Center has quickly become a popular venue, recently hosting a Department of Homeland Security conference for 200 people from 40 states and 260 people from 63 organizations for the 2008 Security Summit.

Y-12’s first priority is to use the center, opened in 2007, to conduct daily operations. When not in use by Y-12, though, the facility is available to other federal entities at no cost. With a deposit and hourly fee, 501C(3) organizations also may use the center for occasional meetings.

“Having New Hope outside the fence allows us to do work we couldn’t do before, and we can offer other qualifying groups a low-cost alternative for space. We further our mission by doing so,” said Mike Monnett, manager of Public Affairs and Communications.

In May, the center will open its doors to the Tennessee Valley Corridor 2009 National Summit, the largest event to be booked. Congressman Zach Wamp started this regional initiative in Oak Ridge in 1995. “Congressman Wamp wanted the Summit to return to Oak Ridge in 2009,” said Bridget Correll, Y-12’s government and business relations manager. “We’re proud to host this four-state regional economic development effort.”

Johns recognized

Judith Johns of Science, Technology & Partnerships recently received two awards—a certificate of achievement from the governor and a certificate of achievement from the Tennessee Office of Homeland Security director.

Johns served as a loaned professional to the Tennessee Office of Homeland Security for four years, where she was special assistant to the director. She had a direct, positive influence on the success of the office and the continued development of Tennessee’s Counterterrorism Program.

Rick Shipkowski of the Tennessee Office of Homeland Security said, “The value to Y-12 from this partnership was that Judy was able to significantly raise the understanding of Y-12’s missions and capabilities, through her diligence, at the state, federal and local levels.” Because of her service, government officials and several directorates of the U.S. Department of Homeland Security became more knowledgeable about Y-12.

Johns spearheaded the implementation of the U.S. Department of Homeland Security Buffer Zone Protection Program in Tennessee, a program that provides funding for protection of the state’s most vulnerable sites. She was co-leader of Tennessee’s Critical Infrastructure Protection Program, where her contributions included planning, assessment team organization, vulnerability reduction planning, equipment recommendations and executive-level briefings.

“Y-12 provides unique capabilities and experience to the state of Tennessee from its years of meeting national security requirements,” said Kevin Smith, the Y-12 Site Office deputy manager. “Judy Johns was the ideal Y-12 leader to share that expertise with our state’s organizations in Nashville.”

“It was a once in a lifetime opportunity,” Johns said.

Y-12’s New Hope Center is not a conference center but a community venue. It’s one of a kind in the federal government.”

Mike Monnett
Public Affairs and Communications.
A daily dose of HEALTH AND SAFETY

As a radiological control technician (RCT) in the Dosimetry Operations section of the Radiological Control (RADCON) organization, Debbie Pacheco's job is to review bioassay appointments, assist with questions and problems, track and trend results, initiate requests for incident investigations, make arrangements for special sampling and provide an interface with the laboratory. In addition, she ensures routine, incident, baseline and job-ending samples are submitted. When samples are not submitted, she tracks the radiological restriction and works with the customer to facilitate compliance.

Technicians like Pacheco are highly skilled and trained. They participate in RCT training every quarter, and they must pass the U.S. Department of Energy Laboratory Accreditation Program, referred to as DOELAP, accreditation every three years. Pacheco said, "This training really keeps us on our toes." RCTs must be up-to-date on procedures and answer questions from auditors, but they are so well prepared that they have always passed.

RCTs are challenged to provide the best in customer service. To help each customer understand the program requirements and come away with a positive experience are Pacheco's goals.

Pacheco also provides back-up support for the lung counter, which is a unique machine used to detect radioactive material in the lungs. The subject reclines in a "dentist's chair" with detectors placed over the lungs for 30 minutes. Detecting photons emitted through the individual's chest wall determines whether an intake of radioactive material has occurred.

Pacheco, who has 16 years of company service, noted that the RADCON organization is "here for the health and safety of employees."

A FAMILY TRADITION

Eric (James E.) Stutts is following in his father's footsteps—and in those of his grandparents. His grandfather, James C. Stutts Sr., worked at Y-12 from 1952 until he passed away in 1970. His grandmother, Nancy Stutts, also worked at Y-12.

Stutt's father, James C. Stutts Jr., started working at Y-12 in 1967, the year Stutts was born. He was an outside machinist and worked in the Pump Shop until he retired in 1994.

Last April, Stutts came to Y-12, also as an outside machinist, and took over the Pump Shop. The shop had been idle for a while, and Stutts quickly got to work to put it back in order. It looked like a storage area when he got here; he found thousands of dollars worth of equipment that could be re-used. He has begun rebuilding the large number of vacuum pumps that can be put back in use.

Stutts said that he feels his dad's presence as he works. "I hear him in my head," he said. He said he follows his dad's advice to think before he acts.

Steven Little of Facilities, Infrastructure and Services, said that Stutts is "very organized. He has turned the shop into a well-oiled machine."

Many folks remember his father, grandfather and grandmother, but Eric Stutts himself has made significant contributions to Y-12 in the short time he's been here. He has picked up where his dad left off and continued the legacy.
Planning for ES&H Expo

It’s easy being green! That’s the theme for this year’s ES&H Expo, scheduled for June 10 at the New Hope Center.

Open to the public, the event will focus on environmental stewardship and what we can do to be energy conscious, while focusing on the safety and health aspects of our lives.

To schedule a booth for your organization, contact Ryan Hay (h5q; 241-8635). Awards for Y-12 organizations’ exhibits will be given based on how well they relate to the theme.


Gregory S. Jenkins, a process engineer in Engineering, passed away March 12. He had one year of company service.

“Greg was very personable and outgoing,” co-worker Rob Richmond said. “Through daily interaction and personal conversations, it didn’t take long to consider him a good friend. He will be missed.” Officemate Wimp Shoopman said, “He enjoyed his work and was always willing to help. He touched a lot of lives.”

Gregory C. Rawls, a field engineer in Construction, passed away March 7. He had two years of company service.

“Gregg was a trusted and talented co-worker, was always willing to help and maintained a positive outlook. He had a great love of the outdoors, music, and his family and friends,” said co-worker Don Hayes. “I’ll always remember his fun-loving spirit and his ability to tell some of the funniest stories I’ve heard.”

Gregory S. Jenkins, a process engineer in Engineering, passed away March 12. He had one year of company service.

“Greg was very personable and outgoing,” co-worker Rob Richmond said. “Through daily interaction and personal conversations, it didn’t take long to consider him a good friend. He will be missed.” Officemate Wimp Shoopman said, “He enjoyed his work and was always willing to help. He touched a lot of lives.”

Gregory C. Rawls, a field engineer in Construction, passed away March 7. He had two years of company service.

“Gregg was a trusted and talented co-worker, was always willing to help and maintained a positive outlook. He had a great love of the outdoors, music, and his family and friends,” said co-worker Don Hayes. “I’ll always remember his fun-loving spirit and his ability to tell some of the funniest stories I’ve heard.”

Years of employee company service

Source: Y-12 Human Resources
Going into overdrive

We all care about transportation because we have to get to and from our jobs. But there’s a group of Y-12 employees who go beyond thinking about simple transportation and collect, restore and nurture their vehicles.

Bill Power (Safeguards, Security, & Emergency Services) has five cars plus several hundred scale models of historic racing cars. His Caterham is a British lightweight sports car. Power said his interest in cars “is probably the main reason I work.”

Lance Lowe (Engineering) has three cars, including a 1972 Chevrolet Nova Super Sport in cranberry red. He sees similarity in working on his car and his job as an engineer at Y-12. Basically, he said, a vehicle is like a project: you need a schedule, a plan and resources to be successful.

Lowe’s Engineering co-worker David Wease has three cars, including a 1978 Chevrolet Corvette in Lemans Blue. He also sees similarity between working on his car and his job at Y-12. He said, “Learning how to work on my car helps me get hands-on information on how things work.”

Melanie Ball (Programs and Quality) has a 1999 red VW New Beetle that won Best of Show in Chattanooga. She also was the winner in the Modern/Custom category in Y-12’s 2008 Traffic Safety Expo.

Doug Lawson (Facilities, Infrastructure and Services), also a winner in the Traffic Safety Expo, has two 1969 Camaros. He said, “Thanks to my job I have the opportunity to enjoy my hobby.”

Hobbies can be relaxing and give a sense of accomplishment. For Y-12 car enthusiasts, the pride in ownership can be seen in the smiles on their faces—and in the shine on those cars.

Volunteer spirit needed
MORE NOW THAN EVER

Clearly, it is tough economic times for U.S. workers, but it is even tougher for charitable organizations, which have seen a dramatic downturn in contributions. This year, more than ever, participating in Y-12’s Day of Volunteering May 2 is a way to give back to area communities.

Eunice Hobbs of the Chief Financial Officer Division has volunteered over the past few years at Briarcliff Nursing Home and Habitat for Humanity. “I volunteered at the nursing home because one of my neighbors and several of my church members were there,” she said. “Plus, the patients always seem to enjoy having a little extra attention given to them.

“It’s important for Y-12 employees to participate in the Day of Volunteering because when a group of us gets together, it makes a big difference. If I can help someone else by volunteering a small amount of time, then that’s a good thing. It also gives me an opportunity to meet other Y-12 employees with the same interests,” said Hobbs.

Y-12 employees have a proud record of donating their time, energy and talents to work in local communities. For this year’s Day of Volunteering, employees and their families can choose from about 30 non-profit agency projects. Participants must be 18 or older and will receive a T-shirt and box lunch from Oliver’s Catering. For the project list or more information, visit YSource.
Y-12 Employees’ Society Egg Hunt
(Walking to 10 years)

April 9
Cedar Hill Park, Oak Ridge
6 p.m. (until all eggs are gone)
Contact Rashaun Williams
241-4210

Y-12 continues to green
GREEN, cont. from pg 1

Skaggs added, “We need to build on our accomplishments by looking for ways to improve, such as reducing energy and water use, reducing consumption of materials and reducing the amount of waste we create.”

To achieve performer status, the Y-12 team, led by Jim Donnelly (National Nuclear Security Administration), Cothron, Wayne McMahon (Environmental Compliance), Jan Jackson and Aprell Patterson (both of Waste Management) and Sara Cornwell (Strata-G), developed and completed a five-project plan to help prevent pollution of air, land and water, while reducing waste and conserving natural resources. Performers also implement community outreach and mentoring as part of their programs.

What can you do? McMahon said, “Be accountable. Help ‘green’ Y-12 by practicing responsible environmental stewardship in your daily work activities.” Employees are encouraged to continue supporting the recycling, reducing and reusing programs. Look for pollution prevention possibilities throughout the site.

Y-12 was mentored by Denso Manufacturing. Now as a performer-level member, Y-12 is mentoring the Oak Ridge National Laboratory.

TP3 is a statewide network of households, schools, government agencies, organizations, businesses and industries working together to prevent pollution. Y-12 is the 14th performer-level member and only the second government facility in Tennessee to fly this flag.

Environmental Compliance’s Wayne Carlton summed it up: “We are a contributor to helping meet environmental goals locally, regionally and globally.”

The green flag belongs to every Y-12 employee who has collected cans for recycle or worked to change how we do business as a company.”

Arlin Yeager
Waste Management