Y-12 and UT Prevention through Design Collaboration

The number of people and vehicles on Bear Creek Road will increase by 20% during construction of the Uranium Processing Facility. This includes an estimated 172,000 trips by heavy construction vehicles to haul dirt, concrete, and other construction materials. Mixing these vehicles with the 4,600 light vehicles already on-site could result in work delays, vehicle-related injuries, and property damage.

Continuing their partnership, Y-12 and the University of Tennessee, Knoxville, performed a Prevention through Design (PtD) study on the ways to mitigate these increased risks. The study confirmed that building a new overpass and utilizing a haul road would increase safety and reduce vehicle-related injury and property damage costs by as much as 300% during UPF construction.

The goal of PtD is to prevent or reduce occupational injuries, illnesses and fatalities by including prevention considerations into designs that impact workers. UPF Construction Specialist Len Harley developed the foundational work for the study, providing key concepts and safe design alternatives. The Y-12/UT team considered three options for how to manage traffic flow during the 10-year construction of UPF before ultimately deciding on option C, which involved extending the existing haul road and constructing an overpass for light vehicles over Bear Creek Road at the UPF site.

"Separating heavy trucks from light vehicles was a safety no-brainer," said Senior Nuclear Safety Specialist Gary Hagan, UPF Environment, Safety and Health (ES&H) manager. In fact, option C will prevent an estimated 125 property damage incidents and vehicle-related injuries each year while also allowing workers to move dirt and concrete more efficiently.

UT Liaison Debbie Reed helped get UT involved to expand the analysis and quantify the safety benefits to create a more comprehensive picture. “This collaboration gives both Y-12 and UT the

Manager’s Message

Great news for the UPF project came on February 13th with the President’s budget request. An increase in funding to a planned $340M from a planned $190M reflects NNSA’s recognition of the importance of UPF. The project is busy preparing a plan and evaluating impacts resulting from this change in response to the 30-day plan, which includes transition out of 9212. We expect this new funding profile will accelerate getting into the field.

As you continue to do your jobs, please focus on safety on the project. We encourage everyone to complete the VPP Roadmaps and be prepared for the upcoming VPP status assessment April 9-20 (see VPP Roadmap, pg. 2).

The project is also rolling out the new ‘UPF Project Quality Dashboard,’ which tracks quality of performance and eliminates rework (see Quality Corner, pg. 3). The dashboard should be useful in your daily activities and reminds us to be diligent.

——Tony
Many of you have received a copy of the Voluntary Protection Program (VPP) Roadmap and might be thinking: “Why? What do I do with this?”

The roadmap is designed to contribute to our strong safety culture by engaging employees in safety and health excellence, with the core of VPP being a cooperative effort among all employees. While completing this booklet, you are encouraged to look up information, discuss what you find, and, in the process, get a better understanding of VPP activities and our safety culture at Y-12 and the UPF project.

Employees should complete a total of 20 activities listed in the booklet (four are mandatory) and have these verified by a supervisor, line manager, or VPP Champions Committee member.

Y-12 and the UPF project will undergo VPP status assessment April 9-20 to become a VPP star site. Please support this initiative by completing your roadmap as soon as possible. Questions can be addressed by visiting the VPP website or by a member of the VPP Champions Committee.
Welcome Brant Morowski

If Brant Morowski had to pick a new occupation after more than four decades of successful large domestic and international Engineering, Procurement and Construction (EPC) projects he might go in a completely different direction — golf course greenskeeper and wine taster are on his list. Luckily, he is with us instead as the new engineering manager for UPF. Morowski has joined our team after completing his last assignment with the Waste Treatment Plant (WTP) in Hanford, Washington, as the deputy manager of engineering.

Morowski already enjoys working with our group of talented, creative people and looks forward to the challenges a robust project like UPF will bring. He feels our top priority is “working together to deliver a safe and quality product that meets customer expectations.” Commitment to nuclear safety and quality, meeting commitments, managing change, and remaining adaptable are key for us going forward, he said.

Morowski defines near term success as working safely and achieving our FY 2012 goals — reaching 90% design maturity, baselining total project cost, and being ready to take the project to the field. “As we move beyond FY 2012 and complete final design, engineering will refocus to support the goals of procurement, construction, and ultimately commissioning. The success of the completed project is our ultimate goal,” said Morowski.

In the people he works with, Morowski values integrity, professionalism, commitment, and teamwork. “With the wide range of skill and diversity of the workforce here at UPF, I believe our goals are achievable by looking out for each other and focusing on the things that matter,” said Morowski. If you haven’t already, please be sure to welcome him to the UPF team.

Quality Corner

The “UPF Project Quality Dashboard” was officially rolled out on the UPF project in February 2012. The UPF Management Team has taken a team approach to develop a product that we can all take pride in. The dashboard provides a graphic representation of how selected functions are tracking and monitoring the quality of their performance. It includes both a numeric and color-coded grading system to display individual functional performance as well as the overall project performance from a quality perspective.

The initial rollout of the dashboard will focus on Engineering, Procurement and Construction (EPC), along with Quality, Contractor Assurance and Project Controls. The dashboard is based on a six sigma model that assigns both weights and scores to individual metrics developed for each functional organization. The intent is to focus on monitoring and eliminate rework whenever possible.

Although individual functions will have multiple metrics to facilitate tracking, monitoring, and implementing actions to improve performance, the dashboard is intended to display a small subset of those metrics that are considered both relevant and important to the quality of work being performed by each function as the project continues to evolve through the various EPC stages. As such, the UPF Project Quality Dashboard will continue to evolve as the UPF project itself evolves.
Your Coworkers

Join your coworkers at Commerce Park on March 26 and at Hardin Valley on April 3 to donate blood during the upcoming Medic Blood Drives. Watch YSource and your email for more dates to donate at Y-12.

Contact Us

We want your feedback! Please forward any ideas, topics, or suggestions to Marla Vinson (MVZ). We hope this newsletter will provide useful and exciting information about our UPF Project and the employees in it. Thanks for reading!

Marla Vinson, Editor, Publishing Communications
Denise Novak, Layout, Publishing Communications

WORKSAFE
SAFETY STATISTICS

• UPF personnel worked 101,582 hours in February without an injury
• 3,129,277 hours have been worked over the life of the project without a lost work day injury
• UPF personnel have worked 268,132 hours since the last recordable injury