Tour Script
Portsmouth Depleted Uranium Hexafluoride Conversion Project

April 28, 2015

DRIVE FROM OSU ENDEAVOR CENTER ON SHYVILLE ROAD TO DUF6 Facility

Welcome to southern Ohio! Thank you for participating in today's tour of the Portsmouth Site. Attendees will be observing the exterior of the DUF6 Facility and the Cylinder yards. The tour is intended as an overview and is not inclusive of all tasks included in the Performance Work Statement (PWS). A more extensive pre-proposal tour of the Portsmouth and Paducah DUF6 conversion facilities, including the interiors of the facilities, will be given after the release of the final Request for Proposal.

This tour is scripted by design to ensure consistency and make sure all in attendance are provided similar information in regards to this solicitation.

On our short drive to the plant, we will give you a brief description of the area and history of the site and the DUF6 Facility.

Pike County, where the plant resides, has a population of over 28,000. The unemployment rate for Pike County is one of the highest rates in the state. This site is very important for southern Ohio and the local economies and communities. The closest municipality is the village of Piketon, located approximately 4 miles north of the site, with a population of 2,100. Located north of Piketon are the cities of Waverly and Chillicothe.

Bus departs for the plant site turning left onto North Access Road.

The Portsmouth Gaseous Diffusion Plant (PORTS) is the largest employer in Pike County with about 2400 employees divided among its tenants and the Department of Energy contractors. It was built between 1952 and 1956 as the last of three gaseous diffusion plants constructed to enrich uranium in support of the nation's nuclear defense program. During the early years of the plant, highly enriched uranium was produced for use in the nuclear weapons and nuclear Navy programs. The production of highly enriched uranium was suspended in 1991. The plant enriched uranium for use in commercial nuclear power plants until production ceased in May 2001.

Please use the note cards provided to you for documenting any comments or questions of a technical nature you might have during the tour. We will collect these note cards at the end of the tour and review and consider in development of the final Request for Proposal. You are not required to put your name or company affiliation on the note cards.

You will hear building numbers today. Building numbers at Portsmouth start with the letter "X".

There are five main access roads that lead to the plant perimeter road which encircles the main part of the plant. They are named by direction, North Access, South Access, East Access and West Access. The remaining access road is called Construction Access.

Bus stops at stop sign before turning west onto Perimeter Road.

The plant's perimeter road encircles the facility and is about seven miles in length. The Portsmouth DOE reservation is almost 3,800 acres of which 1,200 acres are located inside the perimeter road.

Stop 1. G Cylinder Yard

The G yard is a typical cylinder storage yard and contains DUF6 cylinders and oxide cylinders in storage. The DUF6 cylinders are subject to surveillance inspections in accordance with the UF6 Management Plan in the Director's Final Findings and Orders, which is the agreement between the DOE, DOE contractors and the Ohio EPA. Cylinders for processing are moved from the cylinder yards along Perimeter Road to the Conversion Facility. The cylinders are transferred by Straddle Carrier. Oxide filled cylinders are returned to the cylinder yards in the same fashion. There are approximately 19,000 DUF6 cylinders in total stored at Paducah; these cylinders contain about 227,000 metric tons of DUF6. Information on the cylinders in storage is maintained on the Cylinder Information Database.

Bus continues to travel down Perimeter Road turning east at the West Access Road toward the DUF6 Facility.

To the right is the Portsmouth DUF6 Conversion Plant. The DUF6 plant converts PORTS' large inventory of depleted uranium hexafluoride to a more stable chemical form of uranium oxide and hydrofluoric acid for reuse or disposal. The hydrofluoric acid that is produced is sold as a product under an existing contract. Two DUF6 Conversion Plants were constructed, one here at Portsmouth, Ohio and another at Paducah, Kentucky. Both Facilities are essentially the same design with minor differences reflecting the site specific characteristics. The Paducah Plant has 4 conversion lines whereas the Portsmouth Plant has 3 conversion lines.

The Facility consists of four buildings - the Conversion Building, the Administration Building, the Warehouse, the Potassium Hydroxide Building, several support systems, including the hydrogen generation system, the nitrogen system, the HF storage tanks and several cylinder staging areas. Each site has trailers providing additional working space. There are railroad tracks for removal of HF and for transportation of cylinders. During 2014, the Portsmouth Plant converted 9,976 metric tons of DUF6 to uranium oxide, and produced 15 million pounds of aqueous HF for sale.

Stop 2. DUF6 Facility

X-1100 DUF6 Administration Building

This building (comprising 9,664 square feet) houses the office operations, computer systems and meeting spaces.

X-1700 DUF6 Warehouse

This building (comprising 9,243 square feet) houses spare parts, lunchroom, showers and lockers and associated offices

X-1300 DUF6 Conversion Building

This building (comprising 69,223 square feet) contains the conversion systems including autoclaves, conversion units, oxide collection system, cylinder modification and neutralization equipment, control room, support systems and offices.

X-1320 DUF6 KOH Building

This building (comprising 4,187 square feet) contains water treatment systems and other support systems

We will pause here briefly to allow you to take notes

X-1305 DUF6 HF Storage Area

This area contains the tanks used to temporarily store the HF acid produced as part of the conversion process. The HF is transferred into trucks or rail cars for transportation by the HF buyer (Solvay) for commercial applications. There are five tanks at the Portsmouth Facility and six at the Paducah Facility. Solvay collects the HF from both sites.

Cylinder Aging Yard

The cylinder aging yard contains empty DUF6 cylinders containing residual heel that are aged for several weeks to reduce background radiation, prior to filling them with oxide.

Nitrogen and Hydrogen Systems

The nitrogen supply system is used to inert the atmosphere in the conversion units. The hydrogen system contains three methane to hydrogen converters, which supply the conversion units for the conversion of DUF6 to oxide.

We will pause here briefly to allow you to take notes

Shared Services

The DUF6 Project operations are supported by the other site contractors. Major site contractors include (Fluor-B&W Portsmouth, LLC, Wastren-EnergX Mission Support, LLC, Centrus American Centrifuge Operating, LLC (USEC), Restoration Services, Inc.). The agreements for Shared Site Services are detailed in Section J-4 of the RFP. It is worth noting the X-1000 facility is a two-story brick Administration Building on the other side of the site, which houses DOE and contractor staffs working on the PORTS D&D Project.

Re-enter Bus and Return to Endeavor Center

We hope this tour has been helpful in providing a broad overview of the Portsmouth site and highlighting those areas that will be included in the DUF6 project. Please remember to provide the attendant at the front of the bus with the cards we provided for your written comments. We will review and consider in development of the final RFP. Once again, a more extensive pre-proposal tour of the Portsmouth and Paducah DUF6 conversion facilities, including the interiors of the facilities, will be given after the release of the final Request for Proposal.

This concludes our tour today, have a safe trip home.