

Portsmouth Hosts Hundreds of High School Students at Science Alliance Event

Engaging nearly 900 eleventh graders from the southern Ohio region in science and technology was a huge success at the first *Science Alliance* held on the grounds of the Portsmouth Gaseous Diffusion Plant in Piketon, Ohio May 3-4, 2011.



The U.S. Department of Energy's Portsmouth Paducah Project Office, with help from its contractors, sponsored the educational outreach event to provide an overview of the plant and to encourage students to pursue careers



in the science, math and engineering fields of study. The *Science Alliance* reinforced DOE's focus on supporting educational initiatives and teaming with local schools in the four

surrounding counties. A total of 19 schools attended. Eleven foreign exchange students from seven countries also enjoyed the event.

“This is part of our ongoing outreach efforts to educate the public about operations here,” said Vince Adams, DOE Site Director.

“It is an opportunity for area juniors to become familiar with the facility and to learn how science and technology are applicable in their everyday lives.”



Students were given a driving tour of portions of the plant site, learning about its history and current missions. After the tour, they walked through four huge tents with 13 interactive demonstrations on scientific and technical aspects of plant operations and

environmental stewardship. Besides plant contractors, outside organizations such as Ohio EPA, Ohio State University Research Center, Shawnee State University and Ohio University, provided unique opportunities for the students to learn scientific information in a very easy to understand format and festive atmosphere.

Some of the activities included:

- Learning about the American centrifuge machines and the practical industrial applications of thermal imaging infrared technologies;
- Using models to explain groundwater plume areas;
- Describing the production of all male bluegills by changing genetics through hormones;
- Utilizing macroinvertebrates as biological indicators in determining stream health;
- Showing interactive models with Geographic Information System (GIS) technology, recreating historic tornado events;



- Understanding the various radiation and chemical monitoring equipment; and
- Observing the use of special equipment to transport 14-ton cylinders of uranium hexafluoride.



In addition, the Portsmouth Site-Specific Advisory Board staffed an informational booth to encourage students to become active participants in the decision-making process on the cleanup program and future uses of the site.

DOE hopes to make the *Science Alliance* an annual event.

###