

2013 Could a Challenging Year for DOE, SSAB

Finding a way to work on everyone’s priorities in a down budget year will be the challenge for DOE-Oak Ridge in FY 2013, and it will be the guiding focus for public input to the Environmental Management (EM) program as well.

The challenge was outlined by Susan Cange, Deputy Manager for the Oak Ridge EM program at the Oak Ridge Site Specific Advisory Board (ORSSAB) annual planning meeting on Saturday, August 18.

According to Cange, Oak Ridge EM near-term goals include:

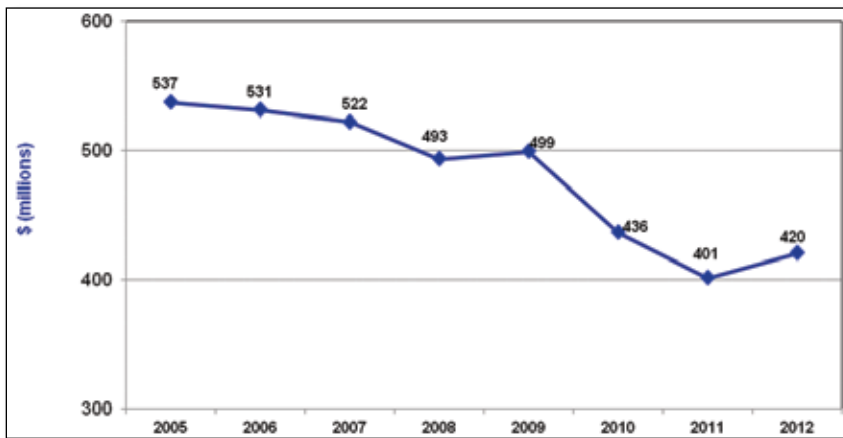
- Completing demolition of Buildings K-25 and K-27 at East Tennessee Technology Park (ETTP)
- Continuing to identify ways to address mercury releases at the Y-12 site
- Removing half of the U-233 inventory at Oak Ridge National Laboratory (ORNL) and preparing for processing remaining inventory
- Continuing to process transuranic waste (debris) and preparing for sludge processing

DOE’s EM regulators, the Tennessee Department of Environment and Conservation and the Environmental Protection Agency, (EPA) are pushing DOE to begin work on other priorities as well. They would generally like to see EM start to address some long-deferred issues and begin assessment of

groundwater contamination. That’s going to be difficult in 2013, and not only because the Oak Ridge EM budget has declined in recent years but also because of constraints on the way the EM budget must be spent.

At the meeting Cange explained that about \$180 million of the roughly \$420 million Oak Ridge EM budget is required just for base operations. In addition, Oak Ridge receives two types of funding: defense and D&D (decontamination and decommissioning), both of which can only be spent in certain ways. There are also control points set by Headquarters and Congress that determine what projects certain funds must be spent on.

DOE, the state, and EPA are coming to agreement on a path forward, Cange said, but until the budget outlook



Historical base funding profiles for the Oak Ridge EM program.

improves, many desired projects will simply have to wait. These longer-term items include the following:

ETTP

- Complete demolition of the highest risk facilities: buildings K-25 and K-27

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IN THIS ISSUE

K-25 Historic Preservation Agreement.	3
Reservation Update.	4
Board Says Farewell to Maggie Owen.	5
New Members Appointed.	6
FY 2013 Officers.	7
New Student Named	7
Groundwater Study Proposed	8

- Address remaining facilities after work starts at other Oak Ridge Reservation sites

Y-12 National Security Complex

- Finalize the overall site cleanup strategy/plan
- Initiate characterization, treatability studies, and building demolition preparation
- Begin D&D after K-27 demolition is complete

ORNL

- Complete U-233 disposition and transuranic waste processing
- Initiate cleanup of remaining facilities after work is underway at Y-12

Other ongoing projects are progressing, Cange added, such as DOE’s footprint reduction initiative. The work being done now for Zone 1 at ETTP is part of that process, she said.

(Continued on page 2)

FY 2013 a Challenging Year (Continued from page 1)

Another important consideration that distinguishes Oak Ridge from other DOE sites is that much of the cleanup program here enables other missions taking place on the Oak Ridge Reservation, including those of the DOE Office of Science, the Y-12 National Security Complex, and the DOE reindustrialization program. Cange also took time to emphasize the progress the program has made over the last decade, such as the enormous amount of D&D work that's been done and the start of removal of U-233 from the ORNL central campus.

SSAB Starts FY 2013 Planning

After talking about EM's plans, Cange changed focus to address the role of the SSAB as it relates to DOE. In FY 2013, EM would like the board to focus its activities to:

- maintain awareness of key program focus areas,
- provide recommendations on high-level programmatic decisions and project implementation,
- solicit input from the broader regional stakeholder community, and
- participate in national dialogues concerning the EM program.

Prior to the meeting, DOE, the state, and EPA submitted lists of specific topics the board might look at in 2013, and members spent much of the afternoon discussing them in order to come up with a unified approach to creating a work plan. The meeting facilitator, Jenny Freeman of Strata-G, assisted in getting members to prioritize topics into high, medium, and low priorities:

High:

- Groundwater strategy
- Provision of input into EM portfolio plans

Medium:

- Participation in ongoing activities to assure sufficient waste disposal

Medium/low:

- Input to the FY 2015 budget process
- Hazardous and radioactive materials in long-term storage
- Footprint reduction
- Clarification of stream postings to the public


While creating a work plan is challenge enough, an even bigger one for the SSAB this year will be how to work effectively with so many new members. Of the 21 members of the board, six attending the SSAB's annual meeting had been appointed only six weeks prior. Three were appointed seven months ago, and eight were appointed a year ago. With just four 'old timers' on the board, educating members about the complex

- Creation of a white paper on the complexities of the Oak Ridge Reservation with regard to DOE EM cleanup challenges. The white paper was turned into a recommendation that the board sent to DOE EM to use in making a case for budget allocations.
- Establishment of the ORSSAB Facebook and YouTube sites.
- Completion of the five new ORSSAB 'infomercials.'
- Publication of the Advocate newsletters, the annual Public Environmental Survey, and ORSSAB monthly meeting videos for area cable stations.

An assessment of how the board operates is always part of the annual planning meeting process. Members are surveyed prior to the meeting, and the results are discussed at the meeting. This year the survey responses were generally positive and within normalized ranges, said Freeman. This indicates that the board is working together well, she said.

The board's purpose and goals are clear and meaningful, she said, although their measurement is an area not completely understood by members. As to the structure and effectiveness of the board, the main area of concern is in members holding each other accountable. The skill set of the current board is good.

'The board is sufficiently recognized by the public for its work' was the one area where there was strong disagreement. What this tells her is that given the amount

of public outreach the board does, it's strange that the public is so unaware. One board member thought it may be due in part to the fact that the general public does not understand the "language" that DOE and the board speak. They may hear our message but not really understand it. 



DOE's Sue Cange, left, discussed EM priorities at the SSAB's annual meeting. Facilitator Jenny Freeman assisted the board in developing its 2013 work plan, based on those priorities.

world of EM activities on the Oak Ridge Reservation will be a critical goal.

FY 2012 Accomplishments and Board Operations

Another important activity at the meeting was to review the board's FY 2012 accomplishments. Key were:

Community Celebrates K-25 Historic Preservation Agreement

In a ceremony attended by representatives of federal, state, and local historic preservation groups, DOE announced the formal completion of an agreement that will preserve the historic contributions of Oak Ridge's K-25 site to the World War II Manhattan Project.

Mark Whitney, DOE's new head of EM in Oak Ridge, opened the ceremony celebrating the recent execution of a memorandum of agreement among DOE, the State Office of Historic

Preservation, the federal Advisory Council on Historic Preservation, the city of Oak Ridge, and the East Tennessee Preservation Alliance

Whitney said the agreement, nearly a decade in the making, lays out a multi-year plan to commemorate the K-25 complex, which contained more than 500 buildings and 12,000 workers at its peak. The project's enormous scale, which in 1945 included the world's largest building, was necessary to produce a few grams of U-235 that were used to build one of the atomic bombs that ended the war with Japan.

Sue Cange, DOE's deputy manager of EM in Oak Ridge, said the agreement "was the product of great ideas from a lot of people who feel passionately about the need to preserve the history of the important work that was performed at the site. After these buildings are gone, and after we are gone, our grandchildren will know that the men and women who worked here made one of the greatest achievements in American history," Cange said.

Under the terms of the agreement, DOE will undertake three broad initiatives to commemorate the history of the K-25 complex and the city's larger role in the Manhattan Project.



Oak Ridge Mayor Tom Beehan addresses the crowd at the K-25 historic preservation ceremony as DOE's Mark Whitney and Sue Cange look on.


1. Approximately 40 acres located inside the road that currently surrounds the original K-25 building will be dedicated for commemoration and interpretation activities. The agreement calls for the construction of a three-story equipment building at the property's southern end that will recreate a

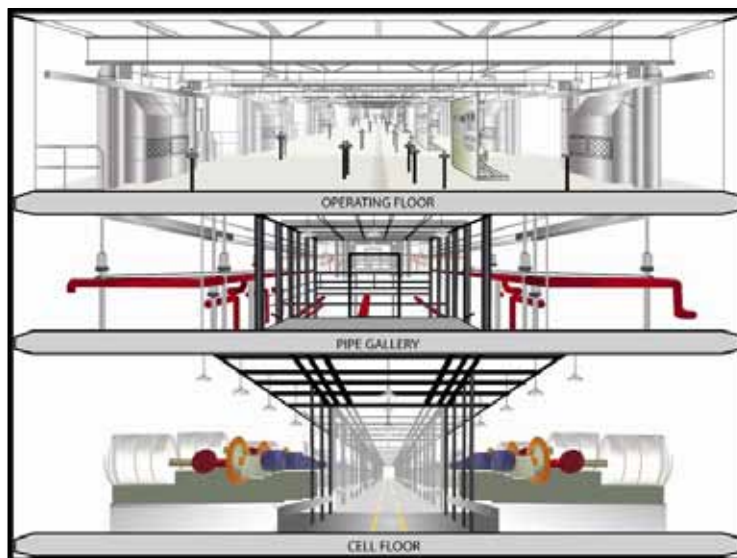
scale representation of the gaseous diffusion technology and contain authentic equipment used in the K-25 building. The building will also house other equipment that was developed and/or used at the site. The project will include a viewing tower and 12 wayside exhibits that will tell portions of the K-25 story.

2. A K-25 history center will be located nearby on the second level of the fire station owned by the city of Oak Ridge. The center will provide space to exhibit equipment, artifacts, oral histories, photographs, and video. DOE has collected more than 700 original artifacts and has archived 70 oral interviews from persons who worked at the site.

3. DOE will provide a grant of \$500,000 to the East Tennessee Preservation Alliance to support the preservation of the Alexander Inn, a historic structure in Oak Ridge where visiting scientists and dignitaries stayed while visiting the area. The grant will be used to purchase the property and stabilize the structure until the inn can be transferred to a private developer.

Cange said implementation of the preservation initiatives will begin this

fall. "On behalf of DOE, I want to thank the large number of people who contributed their time and ideas, and who never gave up on this project," she said. 



Artist's representation of the three-story equipment building.

Oak Ridge Reservation EM Update

Oak Ridge EM Finishes Largest ETTP Demolition to Date

In September EM announced that it had finished the final phase of the Building K-33 demolition project.

Workers with LATA-Sharp Remediation Services, the prime contractor for the project, removed areas of contaminated soil, backfilled the area with topsoil, and seeded the land with grass. In April, they removed a 32-acre concrete slab that served as the foundation for the former 1.4 million-square-foot former gaseous diffusion plant at ETTP. Constructed in 1954, the K-33



Aerial photo of Building K-33 site after demolition.

facility enriched uranium until 1985.

The facility's demolition is the latest effort to convert ETTP into a private industrial park. To date, Oak Ridge's EM program has eliminated significant legacy wastes and almost 250 hazardous or unneeded facilities at ETTP.

A majority of the building's D&D was performed in 1997, but the latest project removed siding, demolished the building, removed the slab, and packaged and transported all associated debris to the EM Waste Management Facility.

K-33's demolition was finished ahead of schedule in April, and debris removal was completed in September, three months ahead of schedule. During the nine-month project, 164,000

tons of steel and concrete were transported in 13,000 shipments to the EM Waste Management Facility for disposal. The slab removal resulted in more than 3,600 shipments of concrete totaling 61,300 tons and 125 cubic yards of disposed contaminated soil.

The K-33 demolition project was funded by a portion of the \$755 million Oak Ridge EM received from the American Recovery and Reinvestment Act.

New Facility Saves \$20 Million, Accelerates Waste Processing

The Oak Ridge EM program recently began operations at a newly constructed facility that will accelerate the completion of remote-handled (RH) transuranic (TRU) waste processing at the site by two years and save taxpayers

more than \$20 million.

The new Cask Processing Enclosure (CPE) facility is located at the Transuranic Waste Processing Center (TWPC). TWPC processes, repackages, and ships the site's legacy TRU waste offsite. The TRU waste at TWPC has two designations: contact-handled (CH), which has lower radioactivity and can be manually sorted and repackaged by workers, and RH, which has higher radioactivity and is processed in hot cells by employee-controlled manipulators. About 1,500 cubic meters of CH waste and 560 cubic meters of RH waste remain at Oak Ridge.

RH waste processing has been ongoing in TWPC's hot cells since 2008, but workers found that much of the processed debris labeled RH waste met the criteria for CH waste, which can be processed more quickly than RH waste. Employees determined that 200 of the 360 casks contain CH waste and can be managed in the CPE instead of the hot cells in TWPC.

"The CPE facility is a tremendous advantage for our mission," said DOE's TRU Waste Program Manager Bill McMillan. "We can divert a large portion of the RH inventory to a faster, less expensive processing method."

The addition of CPE will allow Oak Ridge to remove its RH waste inventory from the site by 2016, instead of 2018.

With a substantial portion of the inventory containing lower levels of radioactivity, the EM program chose to construct the CPE, which provides multiple benefits. The new facility can process the lower-level waste quickly at a low cost. And while that waste is processed at CPE, workers will be able to clean and refurbish TWPC's hot cells in preparation for processing the highly radioactive portions of the inventory in 2014.

The CPE has the capability to manage the significant quantity of groundwater in casks that originated from below-grade trenches. It is estimated that more than 100 waste casks contain groundwater, which is not allowed in waste disposed at DOE's Waste



Workers process waste at the new Cask Processing Enclosure.

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Isolation Pilot Plant near Carlsbad, N.M., the destination for much of the processed waste.

UCOR Announces First Year Accomplishments


After one year as the Oak Ridge EM prime contractor, URS/CH2M Oak Ridge (UCOR) said it has made tremendous progress in safely cleaning up the Oak Ridge Reservation.

According to a UCOR press release, UCOR's highest-profile project, demolition of the K-25 building at ETTP, has been ahead of schedule, and demolition of the east wing is nearing completion, with the exception of five process cells needing further deactivation. UCOR has shipped more than 10,000 loads of K-25 demolition debris for disposal. Most of the waste is being shipped to the EM Waste Management Facility.

UCOR also completed cleanup of the K-1070-B Burial Ground, a 60-year-old landfill located near K-25. It was used from the early 1950s to the mid-1970s to dispose of items such as equipment, materials, parts, and drums. UCOR also placed six ETTP facilities into a "cold and dark" status, which involved removing all hazardous energy sources.

While most of UCOR's work is centered on ETTP, the company is performing cleanup work at other Oak Ridge Reservation sites.

At ORNL, UCOR removed the site's largest source of groundwater contamination, Tank W-1A, and the contaminated soil surrounding it.

UCOR also safely operated the EM Waste Management Facility in Bear Creek Valley, which just celebrated its 10th year of operations, and removed numerous piles of debris and containers at ETTP, ORNL, and the Y-12 National Security Complex. 

SSAB Says Farewell to Outgoing Board Member and Chair Maggie Owen

ORSSAB and DOE expressed appreciation to outgoing chair and retiring board member Maggie Owen at the September SSAB meeting. Maggie was a two-term member and chair of the board for FY 2012.

During her time on ORSSAB she participated in all of the board's standing committees and served a term as chair of the Public Outreach Committee and the Executive Committee. She also served as an outstanding ambassador for the board, participating in a number of public meetings and conferences related to the SSAB's EM advisory mission.

Maggie was presented a special award of recognition at the September 12 SSAB meeting. "It has really been an honor to be a member of this board for the past four years," she said. "I don't know a group of people that I find more dedicated to their community and to the environmental. I've learned so much from everyone. It's been an amazing experience for me."

Maggie decided not to pursue a third term on the board in order to devote more time to another organization that is important to her – the Emory Valley Center in Oak Ridge. The center serves individuals with developmental disabilities from Anderson and surrounding counties.

"I've been involved with the center since 1995, and I've always tried to do things for them, but in the last year I've really become more involved," she said. She offers her talents teaching art classes, plus doing things like organizing proms, updating rooms at the center, and coordinating the receipt and distribution of clothes and shoes to the center's clients.

"I've been an ORSSAB member for four years, and it's been a really good experience. But with my schedule it's been increasingly difficult for me to

make it to board and committee meetings. Working with the Emory Valley Center is something I can do when I have the time."


During the week Maggie works as a Field Radiological Engineer for the K-25/K-27 Project at ETTP. She received her B.S. degree from Francis Marion University in South Carolina and is certified by the National Registry of Radiation Protection Technologists. She is a member of the East Tennessee Chapter of the Health Physics Society, the Down Syndrome Awareness Group of East Tennessee and the Oak Ridge Toastmasters Club.



Outgoing chair Maggie Owen with DOE's Sue Cange.

"By being on the board I've been exposed to things like the geology and groundwater issues on the reservation that I wouldn't normally be exposed to. Plus, where else would I have been able to visit the Waste Isolation Pilot Plant, the Nevada National Security Site, and some of the other SSABs? It's really been a broadening experience for me."

Maggie says she is open to the possibility that she could return someday. "I still have two years of eligibility left. Perhaps at some point my schedule will allow me to re-apply and do a final term."

Maggie resides in Oak Ridge with her husband and three sons. 

DOE Appoints Six New Members to ORSSAB

Six new members joined the ranks of the SSAB in July. Alfreda Cook, Bruce Hicks, Jennifer Kasten, Jan Lyons, Donald Mei, and Scott Stout were seated just in time to learn a little about the board and the DOE EM program before attending their first annual planning meeting in August.

The members were welcomed by the Deputy Manager of the Oak Ridge EM program, Susan Cange, at the July 11 SSAB meeting. "I'm very impressed with the background and experience of these new appointees," she said. "We are very appreciative of your willingness to serve and dedicate time on the board."

Members are appointed for a two-year term. They may serve two additional terms, for a total of six years. The board has a maximum membership of 22, plus two student representatives from local high schools.



Alfreda Cook is retired from URS/CH2M Oak Ridge, where she worked as a waste performance integration manager until January 2012.

She previously worked with several Oak Ridge companies over the past 20 years as a data and systems analyst, a computing analyst, and administrative assistant. She received her B.S. in organizational management from Tusculum College.

Alfreda is interested in serving on the ORSSAB as a way of furthering her interest in the economic development, workforce health and safety, and the environment of the area. She is a member of CASA of the Tennessee Heartland, a children's advocacy group. She resides in Oak Ridge.



Bruce Hicks is the sole proprietor of MetCorps, Inc., which provides consulting services to the National Aeronautics and Space

Administration and the Department of Human Services on issues related to the ways in which components of the environment interact. He retired in 2006 from the U.S. National Oceanic and Atmospheric Administration, where he served as director of the Air Resources Laboratory. He also worked for Argonne National Laboratory and the Commonwealth Scientific and Industrial Research Organization in Melbourne, Australia.

Bruce received his B.S. in physics and mathematics from the University of Tasmania and his M.S. in meteorology from the University of Melbourne.

He is vice president of the Norris, Tennessee, Lions Club and a member of the American Meteorological Society, the American Geophysical Union, and the Norris Conservation/Recycle Commission. Bruce resides in Norris.



Jennifer Kasten is a retired nuclear/environmental engineer, most recently employed from 2000 to 2005 at the Tennessee

Valley Authority Watts Bar Nuclear Power Plant. Previously, she worked in the Nuclear Engineering Department at the University of Tennessee (UT) from 1997 to 2000. She also worked for 12 years at ORNL on gaseous

diffusion plant safety issues and radioactive waste research.

Jennifer received a B.S. in biology from Valparaiso University in Indiana, a B.S. in civil/environmental engineering from UT, and an M.S. in nuclear/radiological engineering from UT. She is a member of the American Nuclear Society, is involved in various fundraising activities, and supports Random Acts of Flowers, which distributes floral arrangements to nursing homes, hospices, assisted living homes, and shelters. Jennifer lives in Knoxville.



Jan Lyons is retired from Southern Methodist University in Dallas, where she worked as an adjunct professor in the Engineering Management,

Information, and Systems Department. Previously, she was employed by Lockheed Martin as a staff systems engineer, cost research manager, risk management oversight manager, and information technology manager.

Jan received her B.A. in economics from the College of William and Mary, her M.S. in systems engineering from Clemson University, and her doctorate in industrial and systems engineering and engineering management from the University of Alabama. She is interested in serving on ORSSAB as a way of furthering her interest in business and economic development issues related to cleanup at the Oak Ridge Reservation.

Jan is active in a number of organizations, including Girl Scouts, where she serves as a training facilitator. She is also a member of Tennessee Citizens for Wilderness Planning and is a financial mentor for the Cokesbury United Methodist Church Hope Trust. She lives in Oak Ridge.

New Leadership Team Elected for FY 2013



Donald Mei is a retired engineer who was employed from 1986 to 2007 by Duke Energy in Charlotte, N.C. During that time, he was the

supervising engineer and technical manager in the Radiation Dosimetry and Records Department and the senior engineer/nuclear production engineer in the Radiation Protection Section. Before working at Duke, he worked in the Health Physics Division of the Institute of Nuclear Energy Research in Taiwan.

Donald received his B.S. in physics from Cheng-Kung University in Taiwan, his M.S. in health physics from UT, and his doctorate in nuclear engineering from Kansas State University. His professional affiliations and activities include: diplomate of the American Board of Health Physics (1991-present), Health Physics Society plenary member (1975-2008), Nuclear Energy Institute Task Force on Radiation Protection Recordkeeping and Dosimetry (1994-2007), Taiwan Radiation Protection Association Advisory Committee (1992-present), and American Board of Health Physics (1995-1999). Donald lives in Oak Ridge.



Scott Stout is the assistant director of the Office of Emergency Services for Roane County, Tennessee. He received his B.A. in liberal

arts from Tennessee Wesleyan College and his Hazmat Specialist Certification from the Tennessee Emergency Management Agency. Scott lives in Rockwood. 🍃

David Martin, Dave Hemelright, and Chuck Jensen were elected SSAB chair, vice chair, and secretary at the board's September meeting.

David Martin (center) is a self-employed electrical engineer who has worked on a wide range of power engineering assignments worldwide. He is a member of the Institute of Electrical and Electronic Engineers and the Tennessee Cattlemen's Association. David lives

in Harriman where he operates his family's farm. He is currently serving his third two-year term on the board.

Dave Hemelright (left) is the marketing director for Alliance Corporation, which provides construction services, primarily to school systems. He has 20 years of construction management experience in commercial, retail,

and food service construction. Dave lives in Lenoir City and was appointed to ORSSAB in July 2011.

Chuck Jensen (right) is the owner and manager of Diversified Technologies in Knoxville, which manufactures,



designs, and services wastewater treatment systems for nuclear power plants. He has founded three technology companies, one of which is listed on the NASDAQ, and is currently operating the third. Chuck lives in Knoxville and is currently serving his third two-year term on the board. 🍃

New Student Representative Appointed



Oak Ridge resident Ross Landenberger was introduced as a new student representative to ORSSAB at the September board meeting.

Ross is a senior at Oak Ridge High School, where he is a member of the International Relations Club, the National Honors Society, and the Oak Ridge High School orchestra. He works for the Clinch River Environmental

Studies Organization, is a member of Oak Ridge's Youth Advisory Board, and volunteers with Keep Anderson County Beautiful. Ross enjoys playing disc golf and plans on pursuing a career in medicine.

In introducing Ross, DOE's Sue Cange said, "It sounds like you're very energetic and that you have an excellent reputation for community service. We appreciate your being on the board."

Ross is the second student representative to be named to the board this year. Sam Yahr from Hardin Valley Academy was seated at the May SSAB meeting. 🍃


Groundwater Researcher Visits Reservation to Discuss Study

For several months now, ORSSAB's EM Committee has been working to identify an independent researcher to study groundwater flow through fractured rock on the Oak Ridge Reservation. Understanding how groundwater flows would be useful in understanding how contamina-

tion on the reservation is making its way into groundwater and where the contamination may be going.

Dan Goode with the U.S. Geological Survey, a possible candidate to do the work, was invited to spend two days in Oak Ridge in August to become better acquainted with the Oak Ridge Reservation and its geologic characteristics.

In the photo, EM Committee chair Bob Hatcher points out some geologic features along the railroad tracks that run parallel to the Clinch River near Edgemoor Road. Goode, in the green shirt, members of the EM Committee, and representatives of the EPA and the state visited several locations on and off the reservation.

Discussions among the SSAB, DOE, and other parties continue on a path forward for the groundwater flow study. 

To add your name to or remove it from our mailing list, or to advise us of an address change, call the ORSSAB Support Offices at (865) 241-4583 or 241-4584. Web: www.oakridge.doe.gov/em/ssab.



Oak Ridge Site Specific Advisory Board

P.O. Box 2001, MS-7604
Oak Ridge, Tennessee 37831

ABBREVIATIONS

D&D — decontamination and decommissioning
DOE — Department of Energy
EM — Environmental Management
EPA — Environmental Protection Agency
ETTP — East Tennessee Technology Park
ORNL — Oak Ridge National Laboratory
ORSSAB — Oak Ridge Site Specific Advisory Board
Y-12 — Y-12 National Security Complex

UPCOMING MEETINGS

All meetings are held at the DOE Information Center, 1 Science.Gov Way, Oak Ridge

Board Meeting

October 10, 6:00 p.m.

Committee Meetings

October 16, 5:30 p.m. – Stewardship

October 17, 5:30 p.m. – EM

