The Honorable Roy Blunt
Office of Constituent Services
308 East High Street, Suite 202
Jefferson City, Missouri 65101

Dear Senator Blunt:

Thank you for asking about this agency's work at several St. Louis County sites mentioned in Rita Sanders' March 6, 2013, letter.

The EPA's work at these sites is dedicated to accomplishing the goals Congress established in several different statutes governing remediation of nuclear-weapon production waste. Overall, the agency carries out its statutory mission to protect public health and the environment by ordering or overseeing responsible, achievable remedies. As you might expect, the EPA's work has generated substantial public controversy, an understandable result of nuclear contamination's risk and the difficult scientific and engineering issues that this agency must address. Throughout the long process of selecting, overseeing, and implementing remedies, this agency has strived to be transparent to the people of the St. Louis area and has welcomed public comment.

Both EPA and the U.S. Army Corps of Engineers (Corps) play a role in the cleanup of the St. Louis County sites, based on Congressional direction. In 1974, Congress created the Formerly Utilized Sites Remedial Action Program (FUSRAP) to address the cleanup of nuclear weapon production and identified particular sites to receive federal funding for site cleanup. FUSRAP originally applied to sites operated by or for the Atomic Energy Commission, which later became the U.S. Department of Energy (DOE).

FUSRAP directs the Corps to follow the EPA's remedy-selection criteria, set forth in federal regulations implementing the 1980 Superfund law (formally known as the Comprehensive Environmental Response Cleanup and Liability Act or CERCLA). In other words, although the Corps chooses the remedy to clean up a FUSRAP site, the standards that define its remedy selection and govern its cleanup mission are the same as those that the EPA follows through the CERCLA process. Under FUSRAP, EPA oversees the Corps in its implementation of the remedies selected by the Corps.

The St. Louis Airport Sites (SLAPS), which includes Coldwater Creek, were designated by Congress to be part of FUSRAP and therefore, the Corps selected the remedies for these sites and sees to their implementation. At the West Lake Landfill site, by contrast, the governing federal laws, particularly CERCLA, require the EPA to select the appropriate remedy and to directly supervise the work of contractors hired by several private and public parties that have legal duties to remediate pollution they caused. At all three sites, statutes impose on DOE, the

federal nuclear-weapons agency that originally created the radioactive waste material, enforceable financial and legal responsibilities. And at all three sites, federal statutes require the EPA and the Corps to conform to applicable state statutes, administered at these sites by the Missouri Department of Natural Resources (MDNR).

I briefly set out this complex framework of laws and agencies because your constituents should understand that remediating sites contaminated with nuclear-weapon production waste requires coordinated activity among different public agencies and private parties. To the extent that this report about the status of remediation at these sites mentions work being done by other federal and state agencies, those agencies' own points of contact should also be consulted to gain a complete appreciation of the cleanup projects. I have listed those contacts at the end of this letter.

St. Louis area residents should expect their public agencies to cooperate on complex tasks like nuclear-waste remediation, and EPA Region 7 strives to attain that goal, while discharging the regulatory and oversight roles Congress intended.

I want to start with the West Lake Landfill site because the EPA's responsibilities are clearest there. At SLAPS, this agency's work is supervisory because Congress has assigned remedy selection and work supervision to the Corps of Engineers.

West Lake Landfill

My predecessor as Regional Administrator, John Askew, approved a Record of Decision (ROD) in May 2008 to clean up OU-1, the radiologically contaminated landfill cells. The ROD described the selected remedy: capping the waste in place, which means placing an engineered cover system over the contaminated areas, monitoring the groundwater for a long term, and establishing institutional controls to restrict access.

After EPA Region 7 approved the ROD, public comments about the selected remedy persuaded this agency in 2010 to order the potentially responsible parties (PRPs) to conduct a Supplemental Feasibility Study (SFS) for OU-1. The SFS evaluated the ROD remedy selected (capping in place), as well as an alternative: full-scale excavation of all radiologically contaminated landfill material and its disposal at either a permitted off-site facility (likely in Idaho or Utah) or in a new, on-site engineered disposal cell. The EPA approved and released for public comment the SFS in December 2011.

Estimated costs for both alternative remedies in the SFS exceeded the cost threshold that requires review by the EPA's National Remedy Review Board (NRRB). In early 2012, the NRRB recommended additional studies to improve the SFS. These include: conducting and evaluating additional groundwater sampling to refresh the data; conducting a more detailed study of a third possible remedy: partial excavation, which would remove from OU-1 only the most contaminated landfill material; and analyzing potential treatment technologies for the contaminated landfill material.

The EPA ordered the PRPs in June 2012 to conduct these additional studies. The first round of new groundwater sampling occurred that summer, and three more rounds will occur this year.

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Region 7 also conducted new vertical gamma scans of materials surrounding monitoring wells at OU-1 in November 2012 and updated older gamma scans of OU-1's surface in March 2013. The purpose of gamma scanning is to detect radiation. After completing and analyzing these new studies, the EPA will release a new proposed plan to amend the 2008 ROD and will consider additional public comment.

I want to assure Ms. Sanders and you that people are not now exposed to unsafe radiation from the contaminated waste buried in OU-1 because the site is fenced to prevent public access. Groundwater beneath the site, which has been determined to be contaminated in isolated areas, is not now, never has been, and will not be used as a drinking-water source.

St. Louis Airport Sites (SLAPS)

The St. Louis Airport sites (SLAPS) are comprised of the "Downtown" sites located at the Mallinckrodt Chemical Plant in downtown St. Louis, and the "North County" sites located near the Lambert International Airport. Uranium ores were processed by Mallinckrodt at the Downtown sites from 1942 to 1957 under contract with the Manhattan Engineering District and later the Atomic Energy Commission.

The SLAPS cleanup was begun as follows:

- October 4, 1989 – Listed on the National Priority List
- June 29, 1990 – DOE and the EPA sign a Federal Facilities Agreement committing DOE to clean up low-level, radioactive-contaminated soils at the Downtown and North County sites
- August 27, 1998 – Record of Decision (ROD) for the Downtown sites
- September 5, 2005 – ROD for the North County sites

The remedy for the SLAPS RODs involves Corps' contractors excavating radioactive-contaminated soils from numerous private and municipally owned properties and shipping by rail car to disposal facilities in Idaho or Utah. Soil excavation work is ongoing in several locations in the Downtown and North County properties—through 2012, 177,000 cubic yards of soils from the Downtown sites and 852,000 cubic yards of soil around the North County sites have been removed.

Coldwater Creek

Investigations by the EPA, DOE and the Corps have attributed potential radiological contamination in Coldwater Creek to runoff or windblown migration of the prior storage of uranium-processing residues and wastes from the North County portion of SLAPS. The Corps removed the sources of these wastes, which came from ore-processing activities at the

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Downtown portion of SLAPS. The Corps biannually conducts sediment and water sampling at six different locations in Coldwater Creek as part of its environmental monitoring program. The Corps reports and evaluates data in its annual environmental monitoring reports.

Although the Corps has taken sediment and water samples along Coldwater Creek since 1998, some data gaps still exist. As part of the plan to work from upstream to downstream, the Corps sampled Coldwater Creek from McDonnell Boulevard to Frost Avenue in October and November 2012. Currently, the Corps is sampling and analyzing the data along the banks adjacent to Coldwater Creek from McDonnell Boulevard to Frost Avenue. The results of the sampling will be summarized in a report expected later this year. In addition, the Corps is developing a sampling plan for the portion of the creek from Frost Avenue to St. Denis Bridge. Once the sampling plan has been issued, the Corps will begin sampling this stretch of the creek, the results of which will determine the density of sampling required throughout the remainder of the creek to the mouth of the Missouri River. The purpose of this final round of sampling will be to confirm that the creek meets the North County ROD's cleanup requirements or to identify and quantify any material requiring removal to meet these requirements

Human Health Concerns

The Missouri Department of Health and Senior Services (DHSS) is looking into cancer rates from ZIP codes including 63031, 63033, 63034, 63042, 63134 and 63138. DHSS is expected to have this analysis complete and findings issued within the next month (Florissant Patch newspaper, March 4, 2013: http://florissant.patch.com/articles/coldwater-creek-state-health-department-investigating-cancer-cluster-instances-8e7d1718).

Thank you for sharing Ms. Sanders' concerns with us.

Sincerely,

Karl Brooks

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