

Fall 2017



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The C-400 cleaning building is being deactivated and cleared of equipment to allow for a future groundwater investigation and remedy. Over 81,000 square feet will be cleared, which is about 82 per cent of the floor space in the building. The following photos are before and after shots of the same locations.

# Oversight News

Newsletter of the Commonwealth's Environmental Oversight Section for the Dept. of Energy's Paducah Site

*Kentucky Department for Environmental Protection  
Division of Waste Management  
Hazardous Waste Branch  
Paducah Site Section*

## Stabilization and Deactivation at C-400



The vapor degreaser used trichloroethylene and later trichloroethane to remove oil and grease from equipment.

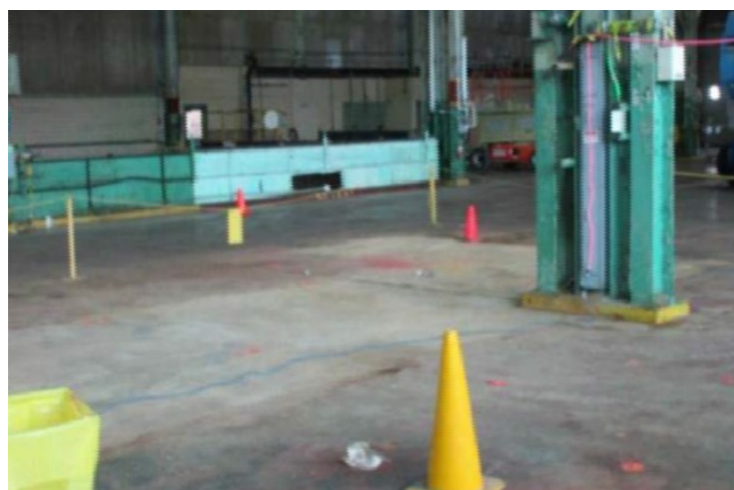


Photos courtesy of DOE.

## Stabilization and Deactivation at C-400



The safety equipment cleaning area (above) was used to clean and disinfect respirators, gloves, and other reusable personal protective equipment. The hand tables (below) were long, shallow, stainless steel troughs with a sink at the end, used for cleaning small pieces of equipment.



The alumina dissolver (above) was used to remove radioactive contaminants from activated alumina.

## Memorandum of Agreement for C-400 Complex Work Signed

In early August 2017 the senior managers of DOE, EPA Region IV and Kentucky DEP signed a Memorandum of Agreement (MOA) to resequence all of the environmental remediation work at the Paducah site. DOE identified and initiated resequencing efforts in May 2016. While several factors influenced DOE's conclusion, the main one was that DOE regained control of the C-400 building in 2014, making it accessible to investigate and clean-up.

The C-400 building has long been suspected as the main source of the two four-mile long TCE groundwater contamination plumes, commonly identified as the Northeast and Northwest Plumes. The groundwater contamination plumes are the main risk drivers for contamination leaving the site. DOE has provided a municipal water supply to nearby residences who live above or in close proximity of these groundwater plumes since 1988. In order to clean up contamination at the C-400 complex, an exhaustive investigation of the area beneath the building must be performed. This action will define all sources of contamination and how each contaminant is distributed vertically, as well as laterally beneath the overall C-400 complex area.

In order to accomplish a comprehensive investigation of the C-400 complex, the senior managers agreed that the C-400 building would be demolished to the slab by the calendar year 2018 (1<sup>st</sup> quarter 2019). Once the building is down and the area is accessible to heavy drilling equipment, the remedial investigation (RI) field start date will follow in the first quarter of 2020. The Record of Decision to address all the sources of contamination at the C-400 site is scheduled to be submitted during the 4<sup>th</sup> quarter of 2022. The ensuing field start date for the remedial action (RA) is planned to occur during the 1<sup>st</sup> quarter of 2024. It is foreseeable that multiple rounds of RIs and RAs will likely occur to make the best use of limited cleanup dollars.

The 2018 Site Management Plan (SMP) will memorialize these enforceable milestones and associated planning dates for the C-400 complex site actions. The 2018 SMP will also integrate the balance of the pre- and post- GDP shutdown projects along with their schedules into one comprehensive clean-up scope. All remaining environmental projects, except the area directly north of the C-720 "Machine Shop" building - referred to as SWMU 211A, will be moved out into the future.

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**The mission of the Kentucky Division of Waste Management is to protect human health and the environment by minimizing adverse impacts on all citizens of the Commonwealth through the development of fair, equitable, and effective waste management programs.**



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