



Department of Energy

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JUN 26 2015

Ms. Julie Corkran
Federal Facility Agreement Manager
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street
Atlanta, Georgia 30303

PPPO-02-3001007-15

Ms. April Webb
Acting Interim Federal Facility Agreement Manager
Division of Waste Management
Kentucky Department for Environmental Protection
200 Fair Oaks Lane, 2nd Floor
Frankfort, Kentucky 40601

Dear Ms. Corkran and Ms. Webb:

**TRANSMITTAL OF THE REPLACEMENT PAGES FOR THE REMOVAL ACTION
WORK PLAN ADDENDUM FOR C-410 COMPLEX INFRASTRUCTURE
DECONTAMINATION AND DECOMMISSIONING PROJECT AT THE PADUCAH
GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY (DOE/LX/07-0304&D2/R2)**

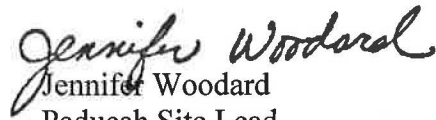
Please find enclosed the certified replacement pages for the *Removal Action Work Plan Addendum for the C-410 Complex Infrastructure D&D Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, DOE/LX/07-0304&D2/R2* (RAWP). This version incorporates addition of a footnote that discusses off-site decontamination of equipment.

On May 29, 2015, the project team requested a deviation from the RAWP to allow for off-site decontamination of equipment. The Federal Facility Agreement parties agreed to revise the RAWP to include a footnote that discussed the requested deviation from the RAWP. The U.S. Department of Energy provided the Kentucky Department for Environmental Protection (KDEP) and the U.S. Environmental Protection Agency (EPA) a copy of draft text for review and approval on June 14, 2015. EPA and KDEP concurred with the text via e-mail on June 15, 2015.

A redline version of the replacement pages is included for your convenience. Please provide written approval of the RAWP at your earliest convenience.

If you have any questions or require additional information, please contact me at (270) 441-6820.

Sincerely,



Jennifer Woodard
Paducah Site Lead
Portsmouth/Paducah Project Office

Enclosures:

1. Certification Page
2. Replacement pages for RAWP Addendum (Clean)
3. Replacement page for RAWP Addendum (Redline)

e-copy w/enclosures:

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CERTIFICATION

Document Identification: ***Removal Action Work Plan Addendum for the C-410 Complex Infrastructure D&D Project at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky (DOE/LX/07-0304&D2/R2)***

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

LATA Environmental Services of Kentucky, LLC
Operator



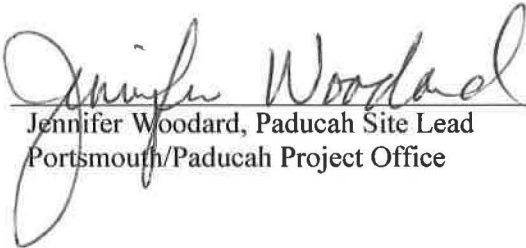
Mark Duff
Paducah Project Manager

6-22-15

Date Signed

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

U.S. Department of Energy (DOE)
Owner



Jennifer Woodard, Paducah Site Lead
Portsmouth/Paducah Project Office

6/22/15

Date Signed

**Removal Action Work Plan Addendum for
C-410 Complex Infrastructure D&D Project at the
Paducah Gaseous Diffusion Plant,
Paducah, Kentucky**



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**Removal Action Work Plan Addendum for the
C-410 Complex Infrastructure D&D Project at the
Paducah Gaseous Diffusion Plant,
Paducah, Kentucky**

Date Issued—June 2010

Revised Date—October 2010

Revised Date—June 2015

Prepared for the
U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Managed by
LATA ENVIRONMENTAL SERVICES OF KENTUCKY, LLC
managing the
Environmental Management Activities at the
Paducah Gaseous Diffusion Plant
under contract DE-AC30-10CC40020

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and execution of all work activities. The term safety encompasses nuclear safety, industrial safety, industrial hygiene, occupational health, health physics, and environmental compliance. ISMS requirements flow down to DOE's prime contractor and their subcontractors.

The five core functions of ISMS are as follows:

- (1) Define scope of work
- (2) Analyze hazards
- (3) Develop and implement hazard controls
- (4) Perform work within those controls
- (5) Provide feedback for continuous improvement

Following are the eight guiding principles of ISMS:

- (1) Line management responsibility for safety
- (2) Clear roles and responsibilities
- (3) Competence commensurate with responsibility
- (4) Balanced priorities
- (5) Identification of safety standards and requirements
- (6) Hazard control tailored to work being performed
- (7) Operations authorization
- (8) Worker involvement

During implementation of this removal action, environmental impacts and worker safety will be controlled through various mechanisms, including, but not limited to, work sequencing and work practices (such as wearing proper personnel protective equipment). Fugitive dust emissions will be mitigated by misting surfaces with water prior to dismantlement and applying fixative to surfaces prior to demolition. Use of water will be controlled in an effort to eliminate an additional waste stream.

Cross-contamination will be controlled through a combination of methods, including, but not limited to, fixing agents, physical barriers, and other contamination control measures. Barriers will be installed as the demolition progresses and may include plastic screens, temporary walls, isolation of areas using existing doors, etc. Spraying fixative on the interior surfaces will minimize airborne contamination.

Decontamination is required for large field equipment or equipment components that touch or enter the ground and parts of the equipment that become splattered with potentially contaminated material. Except for instances where field decontamination is appropriate, cleaning and decontamination of all equipment shall occur at a designated area (decontamination pad) on the site¹.

Disassembly of equipment may be required for areas that are inaccessible (i.e., tracks, pumps, etc.). Decontamination shall be accomplished using brushes or pressure washers with appropriate solvents or tap water and soap, if necessary, to remove particulate matter and surface films. The component shall be rinsed with tap water prior to relocation to an appropriate storage area. All equipment will be surveyed by radiation control personnel prior to free release from the plant.

Air monitoring in the areas around the structures will allow for identification and mitigation of airborne contamination. Asbestos control procedures will be instituted during the removal of the transite siding. These procedures will be implemented in strict compliance with ARARs.

ACMs will be managed in accordance with the ARARs from time of removal until they are disposed of in the C-746-U Landfill or an approved off-site landfill in accordance with applicable regulations.

¹ On May 29, 2015, the project requested a deviation to allow transportation of four large pieces of construction equipment to an off-site vendor for decontamination prior to return to the equipment vendors. The equipment needs to be partially disassembled for effective decontamination. The complexity of this method of decontamination prevents the completion of the decontamination activities on-site. This deviation will be documented fully in the Removal Action Report.

Erosion control structures will be erected to control surface drainage around the facility to minimize sediments in receiving streams. Storm-water containment structures will be constructed, where necessary, to prevent off-site migration of potentially contaminated storm water. Figure 3 illustrates the general configuration of the storm-water sewers associated with the C-410 Complex. The storm-water inlets will be protected by the installation of silt fences. Other sediment barriers and/or temporary storm-water control structures such as ditches or retention basins will be installed, as needed, to minimize excessive erosion and resulting sediment entering the receiving stream. These controls are similar to existing structures installed during the ongoing deactivation activities.

Hazardous Energy. Hazardous energy sources such as steam and electrical power, will be identified. Those sources will have been de-energized, air gapped, and marked during the deactivation process. Removal activities that could be affected by these sources will be initiated only after verifying that the energy sources have been isolated. Lock out/tag out procedures will be applied. All hazardous energy sources will be considered active until proven otherwise. Temporary energy source installs to support the decommissioning activities will be managed in the same manner as permanent sources.

Water. The decommissioning activities are not expected to generate significant wastewater discharge volumes. The nature of the materials identified within the C-410 Complex would preclude the use of water to decontaminate the wastes generated. All identified floor drains in the C-410 Complex have been plugged to eliminate the uncontrolled discharge of water from the building. Water used to decontaminate personnel will be containerized, transported, and treated, if necessary, prior to discharge through an existing Kentucky Pollution Discharge Elimination System outfall. Shower water for personnel will be treated in the PGDP Sanitary Wastewater Collection Treatment System. Water used for dust control will be minimized.

Air. The C-410 Complex decommissioning may generate airborne particulates that may be radiologically and/or chemically contaminated. The migration pathways for airborne emissions include vents, broken windows, wall penetrations, open doorways, and fugitive emissions when the structures are demolished. Mitigation measures will include, but are not limited to, water spray, vacuuming, and fixative application techniques for fugitive dust emissions.

Hazardous Materials. Transite siding, containing asbestos, will be removed prior to structural demolition and managed in accordance with ARARs. The systems left in place, following deactivation, may contain small quantities of hazardous substances, but the levels are not expected to result in the building debris being characterized as a RCRA-hazardous or TSCA-regulated waste. Small volumes of hazardous waste, such as paint chips or vacuum dust, may be generated during building demolition. These waste streams will be segregated from the building debris and managed in accordance with ARARs. Most of the resulting waste from building demolition is expected to be low-level radiologically contaminated waste and/or PCB bulk product waste.

Transite Removal. The only ACM expected to remain after the deactivation activities will be the transite siding on the exterior of the buildings. The hazards associated with the removal of transite include the fugitive ACM emissions from possible breakage of the transite panels and the lead in the “lead heads” of the screw fasteners that attach the panels to the buildings.

The panels will be removed by detaching the screws from the building. The lead headed screws will be collected as they are removed and packaged for disposal in appropriately labeled containers. Plastic sheeting placed on the ground beneath the work area will prevent the loss of any lead-based material into the soils.

Transite siding will be placed on two 4 inch x 4 inch x 12 ft-long wood posts and stacked approximately 2-ft high and double wrapped with 6-mil-thick plastic sheeting and one layer of absorbent material prior to removal for disposition. Misting with water will be utilized during the transite removal process to minimize airborne contamination. Care will be taken not to break or crush the transite panels during removal.