Report No. DODIG-2018-042



INSPECTOR GENERAL

U.S. Department of Defense

DECEMBER 14, 2017



Evaluation of Army Recovered Chemical Warfare Materiel Response Actions

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Results in Brief

Evaluation of Army Recovered Chemical Warfare Materiel Response Actions

December 14, 2017

Objective

We determined whether the Army managed the Recovered Chemical Warfare Materiel (RCWM) Program in compliance with Army policies and guidelines during its execution of chemical warfare materiel response actions.

Specifically, we evaluated the Army's compliance with the "Interim Guidance for Chemical Warfare Materiel (CWM) Responses," April 1, 2009, (hereafter referred to as "the Army Interim Guidance") and with the USACE Engineering Pamphlet (EP) 75-1-3, "Recovered Chemical Warfare Materiel Response Process," November 30, 2004, for RCWM operations at three active response locations.

We evaluated three RCWM projects: a remediation activity at the former American University Experiment Station (now the Spring Valley Formerly Used Defense Site [SVFUDS]), Washington, D.C.; an intrusive investigation at Redstone Arsenal (RSA), Alabama; and a destruction activity at Joint Base McGuire-Dix-Lakehurst (JBMDL), New Jersey.

Background

The DoD designated the Secretary of the Army as the DoD Executive Agent for the RCWM Program in the United States. The Secretary of the Army further delegated Executive Agent responsibilities to the Assistant Secretary of the Army for Installations, Energy and Environment (ASA[IE&E]). The U.S. Army Corps of Engineers (USACE) is a key

Background (cont'd)

executing organization for RCWM planned responses and is responsible for environmental restoration, operational range clearance, and other RCWM-related field activities. The Recovered Chemical Materiel Directorate (RCMD) is the other key executing organization and provides centralized management and direction for the assessment and disposal of RCWM.

USACE is the lead Army agency for remediation activities and intrusive investigations and RCMD is the lead Army agency for destruction activities. However, in this report, the term "Army" refers to any subordinate Army entity involved in the RCWM Program, such as USACE and RCMD.

Finding

The Army's remediation activities in progress at the SVFUDS complied with the Army Interim Guidance and the USACE EP 75-1-3. In addition, the Army performed a preoperational survey at RSA for an intrusive investigation that complied with the Army Interim Guidance and the USACE EP 75-1-3. Finally, the Army performed a preoperational survey for a destruction activity at JBMDL that complied with applicable portions of the Army Interim Guidance.

Although we determined that the Army complied with the Army Interim Guidance and the USACE EP 75-1-3 at the SVFUDS, RSA, and JBMDL, we also found that the guidance documents did not comply with Army Regulation (AR) 25-30, "Army Publishing Program," June 3, 2015. AR 25-30 sets the currency standard for Department of the Army publications at 5 years. In addition, temporary directives are in effect for 2 years or less. The Army Interim Guidance was published 8 years ago, and the USACE EP 75-1-3 was published 13 years ago. Updated policy is necessary to ensure that procedures, terminology, and designations are current and accurate for organizations that are responsible for executing requirements.



Results in Brief

Evaluation of Army Recovered Chemical Warfare Materiel Response Actions

Recommendation

We recommend that the ASA(IE&E), as the Executive Agent for the RCWM Program, issue policy to replace the Army Interim Guidance and direct the Commander, USACE, to update the USACE EP 75-1-3, to comply with AR 25-30.

Management Comments and Our Response

The Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health, responding for the Assistant Secretary of the Army for Installations, Energy and Environment, agreed with our finding and recommendation.

The Deputy Assistant Secretary stated that the Army has drafted Department of Defense Manual (DoDM) 5101.17,

Volumes 1 through 3, "DoD Recovered Chemical Warfare Materiel Program Guidance." The Deputy Assistant Secretary further stated that the draft DoDM, which will replace the Army Interim Guidance, should be submitted for formal coordination by February 28, 2018. Once DoDM 5101.17 is submitted for formal coordination, the Deputy Assistant Secretary's office will work with USACE to update USACE EP 75-1-3.

Comments from the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health addressed all the specifics of the recommendation. Therefore, the recommendation is resolved but remains open. We will close the recommendation once we verify that DoDM 5101.17, Volumes 1 through 3, and the updated USACE EP 75-1-3 have been published.

Please see the Recommendations Table on the next page.

Recommendations Table

Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
Assistant Secretary of the Army for Installations, Energy and Environment	No	Yes	No

Note: The following categories are used to describe agency management's comments to individual recommendations.

- Unresolved Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **Resolved** Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** OIG verified that the agreed upon corrective actions were implemented.





INSPECTOR GENERAL DEPARTMENT OF DEFENSE 4800 MARK CENTER DRIVE ALEXANDRIA, VIRGINIA 22350-1500

December 14, 2017

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY FOR INSTALLATIONS, ENERGY AND ENVIRONMENT

SUBJECT: Evaluation of the Army Recovered Chemical Warfare Materiel Response Actions (Report No. DODIG-2018-042)

We are providing this report for your information and use. We determined that although the Army complied with policies and guidelines at the three active response locations during its execution of chemical warfare materiel response actions, the Army needs to issue updated policy. We performed our evaluation at the Spring Valley Formerly Used Defense Site, Washington, D.C.; Redstone Arsenal, Alabama; and Joint Base McGuire-Dix-Lakehurst, New Jersey.

We considered management comments on a draft of this report when preparing the final report. DoD Instruction 7650.03 requires that recommendations be resolved promptly. Comments from the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health, addressed the specifics of the recommendation. Therefore, no further comments are required.

We appreciate the courtesies extended to the staff.

Randolph R. Stone

Deputy Inspector General Policy and Oversight

cc: Auditor General, Department of the Army Inspector General of the Army

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Introduction

Objective

We determined whether the Army managed the Recovered Chemical Warfare Materiel (RCWM) Program in compliance with Army policies and guidelines during its execution of chemical warfare materiel response actions. We performed our evaluation at the Spring Valley Formerly Used Defense Site (SVFUDS), Washington, D.C.; Redstone Arsenal (RSA), Alabama; and Joint Base McGuire-Dix-Lakehurst (JBMDL), New Jersey.

Specifically, we evaluated the Army's compliance with "Interim Guidance for Chemical Warfare Materiel (CWM) Responses," April 1, 2009, (hereafter referred to as "the Army Interim Guidance"). In addition, we evaluated the U.S. Army Corps of Engineers' (USACE) compliance with the USACE Engineering Pamphlet (EP) 75-1-3, "Recovered Chemical Warfare Materiel Response Process," November 30, 2004, which is one of the primary guidance documents for USACE RCWM operations. See the appendix for our scope and methodology.

Background

During the early part of the 20th century, the United States produced chemical agents and munitions which, when combined, created chemical weapons. Chemical weapons were configured as explosive munitions containing a chemical compound which was intended to kill, seriously injure, or incapacitate personnel through its physiological effects. Items generally configured this way are referred to as "chemical warfare materiel."

According to the August 2012 National Research Council report, "Remediation of Buried Chemical Warfare Materiel," approximately 250 sites in 40 states; Washington, D.C.; and 3 U.S. territories were known or suspected to have CWM buried as a result of disposal practices from the early to mid-20th century. Any ground-disturbing activity at a potential CWM site creates a risk of explosion of a munition and release of a chemical agent that can endanger the general public, DoD personnel, and the environment.

To mitigate these risks to the public, DoD personnel, and the environment, the DoD designated the Secretary of the Army as the DoD Executive Agent for the RCWM Program within the United States.¹ The Secretary of the Army further

¹ DoD Directive 5101.1 defines Executive Agent as the head of a DoD Component to whom the Secretary of Defense or the Deputy Secretary of Defense has assigned specific responsibilities, functions, and authorities to provide defined levels of support for operational missions, or administrative or other designated activities that involve two or more of the DoD Components.

delegated Executive Agent responsibilities to the Assistant Secretary of the Army for Installations, Energy and Environment (ASA[IE&E]).² Furthermore, to meet its responsibilities, the Army developed policies and procedures to recover and mitigate CWM hazards.

The Office of the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health (ODASA[ESOH]) provides oversight of the RCWM Program and Program policy, and provides guidance for RCWM Program activities. ODASA(ESOH) is supported in its role by the RCWM Program Integration Office (IO), which is responsible for conducting archival research and maintaining a comprehensive inventory of CWM sites (sites known or suspected to contain CWM). The IO's primary role is to provide support for CWM response actions by coordinating the activities of Recovered Chemical Materiel Directorate (RCMD), USACE, and the environmental program managers from each of the Services.

USACE conducts CWM responses at sites, including FUDS, known or suspected to contain CWM and supports other activities (for example, range clearance) where CWM is encountered. RCMD provides for the assessment of munitions and certain materials of interest and the destruction of RCWM, including the crews and equipment required for these RCWM Program support functions.

At the time of our evaluation, the Army had three active RCWM Program response actions in progress. We evaluated all three. Two of these, SVFUDS and RSA (an active installation), are CWM sites undergoing a CWM responses (environmental restoration and investigation) which are executed by USACE. The third was an RCWM destruction site at JBMDL where RCMD provided the RCWM Program support functions to destroy RCWM recovered during a USACE-conducted environmental restoration investigation.

In this report, the term "Army" refers to subordinate Army entities involved in the RCWM Program, such as USACE and RCMD.

² DoD Directive 5101.17E, "Roles and Responsibilities Associated with the Recovery of Chemical Warfare Materiel," May 11, 2016, designates the Secretary of the Army as the DoD Executive Agent for the RCWM Program. This role was originally assigned to the Secretary of the Army by Deputy Secretary of Defense Memorandum, "Demilitarization of Non-Stockpile Chemical Warfare Munitions, Agents, and By-Products," March 13, 1991. The Secretary of the Army delegated all of the DoD Executive Agent responsibilities, functions, and authorities to the Assistant Secretary of the Army for Installations, Energy and Environment by memorandum, "Delegation of Executive Agent Responsibilities for the Department of Defense Recovered Chemical Warfare Materiel Program," October 1, 2012.

RCWM Program Requirements

Although the DoD and the Army have numerous policies and requirements regarding the RCWM Program, we limited the scope of our evaluation to the applicable requirements of the Army Interim Guidance and the USACE EP 75-1-3. We did this to verify that Army protocols at these sites were in place to ensure the safety of the public, DoD personnel, and the environment.

- The ASA(IE&E) published the Army Interim Guidance in April 2009, which states "[t]his regulation prescribes Department of the Army (DA) procedures for conducting CWM responses and actions to be taken should CWM or munitions with an unknown liquid fill be encountered either during planned CWM responses or during other environmental responses, construction work, or other activities."
- USACE published the USACE EP 75-1-3 in November of 2004, which "provide[s] detailed procedures on the processes to be used to manage and execute aspects of RCWM response actions." This document addresses all activities from investigation through removal that occur on an RCWM site. The USACE EP 75-1-3 predates the Army Interim Guidance and if there are any conflicting guidance requirements, USACE is required to comply with the Army Interim Guidance.

Finding

The Army Managed the RCWM Program Materiel Response Actions in Compliance with the Army Interim Guidance and the USACE EP 75-1-3, but the Army Needs to Update These Documents

At the SVFUDS, the Army's remediation activities in progress at the time of our evaluation complied with the Army Interim Guidance and the USACE EP 75-1-3. In addition, at RSA, the Army performed a preoperational survey for an intrusive investigation that complied with the Army Interim Guidance and the USACE EP 75-1-3. Finally, at JBMDL, the Army performed a preoperational survey for a destruction activity that complied with applicable portions of the Army Interim Guidance.

Although we determined that the Army complied with the Army Interim Guidance and the USACE EP 75-1-3 at the SVFUDS, RSA, and JBMDL, we also found that the guidance documents did not comply with Army Regulation (AR) 25-30, "Army Publishing Program," June 3, 2015. AR 25-30 sets the currency standard for Department of the Army publications at 5 years. In addition, temporary directives are in effect for 2 years or less. The Army Interim Guidance was published 8 years ago, and the USACE EP 75-1-3 was published 13 years ago. Updated policy is necessary to ensure that procedures, terminology, and designations are current and accurate for organizations that are responsible for executing requirements.

Evaluation of the Site Remediation Activities at Spring Valley

The SVFUDS consists of approximately 661 acres in the northwest section of Washington, D.C. During the World War I-era, the Army established the American University Experiment Station (AUES) at this location for research and testing of chemical agents, equipment, and munitions. Today, the SVFUDS site encompasses approximately 1,200 private homes, including several embassies and foreign properties, and the American University and Wesley Seminary. It is primarily a residential area with apartment buildings, townhouses, and single-family homes surrounding a group of small shops and restaurants. Land use in and around the SVFUDS is primarily low-density residential, with smaller portions zoned for commercial use. The American University (AU) campus comprises a portion of the SVFUDS and is considered institutional use. In January 1993, a contractor discovered buried munitions while digging a utility trench in the neighborhood. In February 1993, the Army initiated an emergency response during which 141 items (43 containing suspected CWM) were removed, and the Army subsequently initiated a remedial investigation of the entire SVFUDS. A remedial investigation is an in depth study designed to gather the data necessary to determine the nature and extent of a known contamination at a site. It also assesses the risk to human health and the environment, as well as establishes criteria for cleaning up the site. Between 1993 and 2016, USACE conducted remedial investigations and removal actions at different sites within SVFUDS.

In August 2010, the Army and its regulatory partners (the U.S. Environmental Protection Agency and District Department of the Environment) decided to separate the private residence at 4825 Glenbrook Road from the rest of the Spring Valley neighborhood sites to expedite its cleanup process. The Army took this action based on the complexity of the SVFUDS and specific concerns within the 4825 Glenbrook Road property. Based on the prior sampling results, historical investigations, and future human health risk associated with 4825 Glenbrook Road, USACE determined that active measures were necessary to protect human health and the environment from actual or potential releases of hazardous substances, pollutants, or contaminants into the environment. Specifically, there were unacceptable risks for plausible future human exposure to munitions and explosives of concern, CWM, and arsenic in soils at 4825 Glenbrook Road. The Army selected a remedial action for 4825 Glenbrook Road which was to remove the house and remediate (clean up) to residential standards, providing for the property's unrestricted future use. This action has been ongoing since 2012.

During our visit to the Glenbrook Road site, we observed onsite remediation activities and we reviewed the Army's Site Specific Work Plan (SSWP), Site Wide Work Plan (SWWP), and the Chemical Safety Submission (CSS) documents. The Army Interim Guidance requires development, submittal, and approval of the CSS and site planning documents for response activities. A typical CSS includes: information on prior CWM site activities and the type of CWM expected to be found at the site, roles and responsibilities for organizations performing or supporting the response, site layout maps, an environmental sampling plan, an air monitoring plan summary, a medical support plan summary, an offsite transportation plan summary, a site storage plan, a hazard analysis, a contingency plan, a decontamination summary, an engineering controls summary, and a CWM assessment summary. In addition, USACE EP 75-1-3 requires that all CSS's, including all site work plans, be completed and made available on site. We reviewed the CSS and these plans for 4825 Glenbrook Road and found they complied with the Army Interim Guidance and the USACE EP 75-1-3 regarding site design and specifications for conducting work activities, scope of the response action, planned work activities, and potential site hazards and controls.

We reviewed the SVFUDS response action plans for content, applicability, and approval, and found that the plans complied with the requirements of the Army Interim Guidance and EP 75-1-2. For example, we found that the plans described roles and responsibilities of personnel and that training records were properly documented and were available on site. We also reviewed security requirements and found the site was fenced, secured, and well-lit, and 24-hour security was present. The Site Safety and Health Officer administered strict visitor control, accounting, and protection.

We also found that USACE executed remediation operations in accordance with the SSWP to ensure the overall safety of the workers and the environment. We observed the operation of the on-site explosive destruction system (EDS) for destroying the recovered CWM items, including treatment and neutralization of CWM. We observed RCWM personnel manning the onsite command post monitoring all activities inside the RCWM exclusion zone using video and audio surveillance.³ Furthermore, the site used a continuous air monitoring system to detect airborne chemical agent. Finally, we observed that emergency response personnel and equipment were onsite to provide emergency support.

Based on our review of plans and other applicable documents, personnel and equipment records, our observance of the physical layout and site attributes, and our observance of work-in-progress, we found that the Army managed the planning and execution of remedial activities at 4825 Glenbrook Road in accordance with the Army's Interim Guidance and the USACE EP 75-1-3.

Preoperational Survey for the Intrusive Investigation at RSA and the Destruction of RCWM at JBMDL

RCWM response actions are hazardous operations because of the risk of a detonation or chemical agent release during ground disturbing and other intrusive operations. To avoid the risk associated with these operations, only authorized personnel essential to performing operations are allowed in close proximity to either onsite intrusive operations or operations requiring the handling of recovered DoD military munitions. Therefore, our ability to observe activities involving hazardous onsite intrusive investigation and destruction of RCWM was limited to observance of preoperational surveys. We observed a preoperational survey for a CWM response at RSA and a preoperational survey for RCMD's destruction of RCWM at JBMDL.

³ An exclusion zone is a controlled work area established at a site to separate chemical agent-contaminated areas from support areas.

A preoperational survey is mandated by the Army Interim Guidance and is executed by the Army for planned chemical responses conducted under the RCWM Program. Preoperational surveys evaluate the readiness of the participating organizations to safely proceed with a RCWM response operation. Completion of a preoperational survey ensures that: required explosive safety submissions have been approved by the Department of Defense Explosive Safety Board, and that required work plans, site safety health plans, and accident prevention plans have been approved by the Army command responsible for overall operations (which is USACE for CWM responses and RCMD for assessment and destruction of RCWM). The preoperational survey also ensures that personnel involved in the CWM response actions are qualified and that safety resources are available for medical emergency responses. In addition, the preoperational survey includes a simulated operation to demonstrate the proficiency of operational and support personnel to perform each phase of the CWM response or RCWM destruction operation. Furthermore, it is intended to demonstrate compliance with the munitions response chemical safety submission and the CWM site plan. These documents are key to the response action, serving as the specifications for conducting work activities in the response action. The CSS details the scope of the project, the planned work activities, and the potential hazards and the methods for controlling the hazards. The CWM site plan is a component of the CSS and describes the physical layout of the site and the relationships between all facilities and equipment on site in terms of hazards and controls.

At the conclusion of a preoperational survey, the Army prepares a report to address the readiness of the RCWM operation to proceed. If nonconformities with requirements are noted during the preoperational survey, the RCWM operation may proceed only after the nonconformities are adequately mitigated. Our findings regarding operations at RSA and JBMDL were based on the results of observing these preoperational surveys.

Preoperational Survey for Intrusive Investigation at RSA

The Army identified 17 possible RCWM burial sites at RSA. All of these sites are likely to contain CWM, either intact or leaking. Based on historical records, the Army expects to find approximately a million CWM and 4.2 million nonlethal CWM chemical munitions and containers. We evaluated the Army's preparations for intrusive investigation at the Marshall Space Flight Center RCWM site, which is located on RSA.

Specifically, we reviewed the Intrusive Investigation Plan that is completed prior to the preoperational survey. According to the Army Interim Guidance, an intrusive investigation is an activity that involves or results in the penetration of the ground

surface at an area known or suspected to contain munitions and explosives of concern. Intrusive activities can be an investigative or removal action. The purpose of the Intrusive Investigation Plan is to define the methodology for excavating and sampling for the suspected CWM. We also reviewed the Preoperational Survey Plan for RSA's intrusive investigation. After comparing elements of the Intrusive Investigation Plan and the Preoperational Survey Plan to the guidance documents, we determined that planning for site safety and health, field investigation, sampling, and chemical munitions mapping were all completed and that both of these plans complied with the Army Interim Guidance and with applicable portions of the USACE EP 75-1-3.

The preoperational survey for the intrusive investigation at the Marshall Space Flight Center site evaluated planned activities relative to safety, health, environment, and operational readiness and recommended whether the planned activities should be allowed to transition to chemical agent operations. During the preoperational survey, we found that roles and responsibilities were defined in the CSS and were executed according to the requirements in the Army Interim Guidance and USACE EP 75-1-3. In addition, during our review of training records, we found that training was appropriately documented, and the site specific training plan contained training requirements as defined in the Army Interim Guidance, to include Hazardous Waste Operations and Emergency Response training, chemical agent exposure and response training, self-aid and buddy care training, security training, and emergency and spill response training.

We also observed ground crews at the digging site, as well as personnel at the decontamination station utilizing the appropriate Personal Protective Equipment (PPE) in accordance with the Site Safety and Health Plan. PPE is protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury or infection. The hazards addressed by protective equipment include physical, electrical, heat, chemicals, biohazards, and airborne particulate matter. Furthermore, RCWM, and munitions with an unknown liquid fill, like the ones discovered at RSA, are required to be stored and secured in accordance with the Army Interim Guidance. A Site Security Plan (SSP) is also required by USACE EP 75-1-3. We reviewed the SSP and evaluated the RCWM storage magazines at RSA. The storage magazines included physical security measures, such as barriers, lighting, signage, access control, lock and key control, containment, and a security force that complied with the Army Interim Guidance, the SSP, and the USACE EP 75-1-3.

The preoperational survey was conducted under the direction and control of the Army and subject matter experts were on site as evaluators. Based on our evaluation of the Intrusive Investigation Plan and our observance of the preoperational survey, we found that the Army completed the required planning for intrusive investigation at RSA and performed the preoperational survey for intrusive investigation in accordance with the Army Interim Guidance. The Army also complied with applicable portions of the USACE EP 75-1-3.

Destruction of RCWM at JBMDL

In November 2015, an Army contractor performing a CWM response (remedial investigation) at JBMDL uncovered two World War I-era artillery projectiles at the Lakehurst Parachute Jump Circle. The nonintrusive assessment of one of the projectiles determined that it contained mustard agent, and the other projectile contained phosgene gas.⁴ We reviewed an Action Memorandum and the Army Interim Guidance that outlined the requirements to appropriately remove, package, and store RCWM that is pending destruction.⁵ We verified that the RCWM projectiles at JBMDL had been removed, packaged, and stored in a secure interim holding facility as required by these documents.

Specifically, we reviewed the Site Safety Plan, RCWM Destruction Plan, and Preoperational Survey Plan. The Site Safety Plan accurately described the site and site operations, and it included an analysis of the explosive quantity and the maximum credible (possible) hazardous event for the RCWM to be destroyed at the site. The Destruction Plan accurately described the process for destroying the RCWM. Finally, the Preoperational Survey Plan included a simulated operation for transporting RCWM to the destruction site, neutralizing the RCWM, monitoring the environment, providing emergency medical support, and ensuring the capability for contingency operations.

We observed execution of the preoperational survey for the destruction operation at JBMDL and compared it to the Preoperational Survey Plan. We verified that health and safety requirements contained in the plans were implemented, training requirements were completed and documented, and that RCWM personnel carried out operating procedures in accordance with the Preoperational Survey Plan.

Furthermore, we found that the RCWM destruction site was configured in accordance with the Destruction Plan and Site Safety Plan. For example, the site contained a command post with video and audio surveillance of the site and broadcast warning capability. The site featured an adequate environmental enclosure, air filtration and environmental monitoring, and backup power.

⁴ Both mustard gas and phosgene gas are WWI-era toxic chemical agents.

⁵ Department of the Air Force, Air Force Civil Engineer Center, Remediation Program Manager memorandums, "Final Time Critical Removal Action Memorandum for the Destruction of Recovered Chemical Warfare Materiel from Target Area A in the Parachute Jump Circle, Former Lakehurst Proving Grounds and Bombing Targets (ZZ003), Joint Base McGuire-Dix-Lakehurst (JBMDL), New Jersey," July 12, 2016.

We found that the RCWM storage facility included physical security measures, barriers, lighting, signage, access control, lock and key control, containment, and a security force. Based on our evaluation of the Site Safety Plan, RCWM Destruction Plan, and Preoperational Survey Plan, and our observance of the preoperational survey, we found that RCMD completed the required planning for the destruction operation at JBMDL and performed the preoperational survey for the destruction operation in accordance with the Army Interim Guidance.

Currency of Army Interim Guidance and USACE EP 75-1-3

Although we determined that the Army complied with the Army Interim Guidance and USACE EP 75-1-3 at SVFUDS, RSA, and JBMDL, we found that the Army Interim Guidance and the USACE EP 75-1-3 were outdated and did not comply with Army Regulation (AR) 25-30, "Army Publishing Program," June 3, 2015. AR 25-30 sets the currency standard for Department of the Army publications at 5 years. In addition, temporary directives are effective for 2 years or less. The Army Interim Guidance was published 8 years ago and the USACE EP 75-1-3 was published 13 years ago. Updated policy is necessary to ensure that procedures, terminology, and designations are current and accurate for organizations that are responsible for executing requirements.

Conclusion

At the SVFUDS, the Army's remediation activities in progress at the time of our evaluation complied with the Army Interim Guidance and the USACE EP 75-1-3. In addition, at RSA, the Army performed a preoperational survey for an intrusive investigation that complied with the Army Interim Guidance and the USACE EP 75-1-3. Finally, at JBMDL, the Army performed a preoperational survey for a destruction activity that complied with applicable portions of the Army Interim Guidance.

However, we found that the Army Interim Guidance and the USACE EP 75-1-3 did not meet the requirements of AR 25-30, "Army Publishing Program," June 3, 2015, because the Army Interim Guidance was published 8 years ago and the USACE EP 75-1-3 was published 13 years ago.

Recommendation, Management Comments, and Our Response

Recommendation

We recommend that the Assistant Secretary of the Army for Installations, Energy and Environment issue policy to replace the Army Interim Guidance and direct the Commander, U.S. Army Corps of Engineers, to update Engineering Pamphlet 75-1-3 to comply with Army Regulation 25-30.

Army Comments

The Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health, responding for the Assistant Secretary of the Army for Installations, Energy and Environment, agreed with the recommendation, stating that the Army has drafted Department of Defense Manual (DoDM) 5101.17, Volumes 1 through 3, "DoD Recovered Chemical Warfare Materiel Program Guidance." The Deputy Assistant Secretary further stated that the draft DoDM, which will replace the Army Interim Guidance, should be submitted for formal coordination by February 28, 2018. Once DoDM 5101.17 is submitted for formal coordination, the Deputy Assistant Secretary's office will work with USACE to update USACE EP 75-1-3.

Our Response

Comments from the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health addressed all the specifics of the recommendation, and no further comments are required. Therefore, the recommendation is resolved but remains open. We will close the recommendation once we verify that DoDM 5101.17, Volumes 1 through 3, and the updated USACE EP 75-1-3 have been published.

Appendix

Scope and Methodology

We conducted this evaluation in accordance with the "Quality Standards for Inspection and Evaluation," published in 2012 by the Council of the Inspectors General on Integrity and Efficiency. Those standards require that we plan and perform the evaluation to obtain sufficient, appropriated evidence to provide a reasonable basis for our findings and conclusion based on our evaluation objectives. We believe that the evidence obtained provides a reasonable basis for our finding based on our evaluation objectives.

At the time of our evaluation, the Army had three active RCWM Program response actions in progress. Two of these, SVFUDS and RSA (an active installation), were environmental restoration and investigation sites with the U.S. Army Corps of Engineers managing the majority of the activities. The third was a RCWM destruction site at JBMDL where the Army Chemical Materials Activity's Recovered Chemical Materiel Directorate provided the RCWM Program support functions to destroy RCWM recovered during a USACE-conducted environmental restoration investigation. We performed site visits to all three of these sites for our evaluation.

RCWM response actions are hazardous operations due to the risk of a detonation or chemical agent release during ground disturbing and other intrusive operations. To avoid the risk associated with these operations, only authorized personnel essential to performing operations are allowed in close proximity to either onsite intrusive operations or operations requiring the handling of recovered DoD military munitions. Therefore, our ability to observe activities involving hazardous onsite intrusive investigation and destruction of RCWM was limited to observance through video feed and through observance of preoperational surveys. We observed work in progress at SVFUDS through video feed, and we observed a preoperational survey for an intrusive investigation at RSA and a pre-operational survey for the Army RCMD destruction of RCWM at JBMDL.

Use of Computer-Processed Data

We did not use computer-processed data to perform this evaluation.

Use of Technical Assistance

During this evaluation, we used the assistance of subject matter experts in the area of the RCWM Program.

Prior Coverage

During the last 5 years, the Army Audit Agency has issued two reports related to the audit objective. Unrestricted Army Audit Agency reports can be accessed from .mil domains at https://www.aaa.army.mil/.

U.S. Army Audit Agency

Report No. A-201600093-IEE, "Audit of Support Functions for the Recovered Chemical Warfare Material Program," May 2016

Report No. A-2-16-0068-IEE, "Audit of Support Functions for the Recovered Chemical Warfare Material Program," March 2016

Management Comments

Department of the Army

DEPARTMENT OF THE ARMY OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY INSTALLATIONS, ENERGY AND ENVIRONMENT 110 ARMY PENTAGON WASHINGTON DC 20310-0110 DEC 0 1 2017 SAIE-ESO MEMORANDUM FOR Deputy Inspector General for Policy and Oversight, Department of Defense Inspector General, 4800 Mark Center Drive, Alexandria, Virginia 22350-1500 SUBJECT: Draft Report of Evaluation of Army Recovered Chemical Warfare Materiel Response Actions (Project No. D2016-D000PT-0132.000) 1. The Army concurs with the report as written. 2. With regard the DoDIG's recommendation, the Army has drafted Department of Defense Manual (DoDM) 5101.17, Volumes 1 - 3, DoD Recovered Chemical Warfare Materiel Program Guidance. The draft DoDM, which will replace the Army's Interim Guidance for Chemical Warfare Material (CWM) Responses, dated 1 April 2009, should be submitted for formal coordination by 28 February 2018. Once DoDM 5101.17 is submitted for formal coordination, my office will work with the U.S. Army Corps of Engineers to update its Engineering Pamphlet 75-1-3, Recovered Chemical Warfare Materiel Response Process, dated 30 November 2004. The updated policy and guidance will be issued and maintained in accordance with AR 25-30, Army Publishing Program. EUGENE COLLINS Deputy Assistant Secretary of the Army Environment, Safety and Occupational Health

Acronyms and Abbreviations

AR	Army Regulation	
ASA(IE&E)	IE&E) Assistant Secretary of the Army (Installations, Energy and Environment)	
AU	AU American University	
AUES	AUES American University Experiment Station	
CAIS	CAIS Chemical Agent Identification Sets	
СМА	CMA Army Chemical Materials Activity	
CSS	Chemical Safety Submission	
CWM	Chemical Warfare Materiel	
DA	Department of the Army	
DDESB	Department of Defense Explosives Safety Board	
EDS	Explosive Destruction System	
EOD	Explosive Ordnance Disposal	
EP Engineer Pamphlet		
FUDS	Formerly Used Defense Sites	
IHF	Interim Holding Facility	
JBMDL	Joint Base McGuire-Dixie-Lakehurst	
ODASA(ESOH)	Office of the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health	
OSD	Office of the Secretary of Defense	
RCMD	Recovered Chemical Materiel Directorate	
RCWM	Recovered Chemical Warfare Materiel	
RSA	Redstone Arsenal	
SSWP	Site Specific Work Plan	
SVFUDS	Spring Valley Formerly Used Defense Site	
SWWP	Site Wide Work Plan	
USACE	United States Army Corps of Engineers	



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