

MEMORANDUM FOR RECORD

FROM: US Army Base Realignment and Closure Office
Date: November 1, 2023
RE: Fort Devens, DCL Contributor Sites Land Use Controls

SUMMARY: The US Army completed an environmental remediation action at the Former Fort Devens at sites identified as the Devens Consolidated Landfill (DCL) Contributor Sites.

The Record of Decision (ROD) for the contributor sites selected a final remedy¹ which required, among other things, excavation and consolidation of excavated debris at the on-site landfill and institutional controls (i.e., land use restrictions to prevent residential use) and five-year site reviews at those sites where Unrestricted Use or Unlimited Exposure (UU/UE) is not achievable or economical. The final inspection of the consolidated landfill and remediation sites – Area of Contamination (AOC) 9, 11, 40, 41 and Study Areas (SA) 12 and 13 was completed on June 11, 2003, and is described in the Final Remedial Action Completion Report (RACR) dated September 2003. The RACR indicated that cleanup goals for the disposal areas (i.e., the more stringent of the USEPA Region 9 Preliminary Remediation Goals (PRGs) for residential soil and/or the Massachusetts Contingency Plan (MCP) S-I Soil Standards) were attained and verified through the collection and analysis of soil samples from the excavation limits and that ROD-specified performance and/or response objectives were met.

The Environmental Protection Agency (EPA) certified that the RACR was complete in its letter dated September 30, 2003, which included the completion memorandum signature page that is incorporated in the Final RACR.

After the finalization of the RACR, the property underlying the former contributor sites was identified for transfer out of federal control. At that time, the EPA and Army informally identified confirmation sampling analytical reports that indicated that some metals and organic compounds remained at concentrations greater than the PRGs, revealing that the cleanup goals that would allow for unrestricted land use may not have been achieved at AOC 9, 40, and SA 13. As specified on page 11 of 48 of the deed transferring the property to the MassDevelopment Finance Agency (now known as MassDevelopment) (see Book 38514Pg: 121 Doc: DEED, 03/07/2008 10:32 AM), the Army placed a residential land use restriction (LUC) on three of the contributor sites AOC 9 (Parcel A2A), AOC 40 (Parcel A4) and SA 13 (Parcel A8). For several years, the land use restrictions included in the deed for AOCs 9

¹ The selected remedy states: For SA 12, AOC 4: Surface debris removal, known hot -spot removal and site monitoring and for AOC 9, AOC 11, SA 13, AOC 40: Debris excavation, backfill, and regrading; Wetlands restoration at AOC 9, AOC 11, and AOC 40; Consolidation of excavated debris at onsite Consolidation Landfill, or transport to an offsite landfill; If applicable, cover system monitoring and maintenance, and institutional controls at the Consolidated Landfill; and, Institutional controls and five-year site reviews at those sites where unrestricted future use is not achievable or economical

(Parcel A2A), 40 (Parcel A4) and SA 13 (Parcel A8) were treated as if they were selected as part of the final remedy and included in the Five-Year Review (FYR) Reports.

In 2016, the Army proposed, based on its application of EPA guidance on conducting FYRs, which states that sites achieving UU/UE should not be included in the FYR, and the RACR, to remove the DCL Contributor Sites from future FYRs. EPA disagreed with this assessment and required as part of its 2016 Additional Work Request that Army incorporate these sites into an Amended FYR (or FYR Addendum). Army completed a FYR Addendum to address the DCL Contributor Sites in 2019 and indicated its intention to conduct an updated baseline risk assessment to evaluate attainment of UU/UE cleanup goals and support removal of land use restrictions prohibiting residential use of these properties. However, this issue arose again during the 2020 FYR, and based on this issue and other disagreements, EPA issued an Additional Work Letter in September 2020, and then initiated an informal dispute with the Army.

In conjunction with the information presented below, the Army proposes to resolve the current dispute by treating the existing deed restrictions prohibiting residential use as part of the selected remedy under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and including their assessment in all future FYRs. The deed restrictions will be included in annual long term monitoring reports and described in a site-specific Land Use Control (LUC) Implementation Plan (LUCIP) that will include the DCL and three DCL Contributor Sites AOC 9, AOC 40 and SA 13. Because the ROD selected a remedy that included both excavation to achieve UU/UE and the inclusion of LUCs at sites where UU/UE was not achieved, this action is a minor change to the remedy, which can be conducted through a memorandum for the record (MFR) and there is no requirement for an Explanation of Significant Differences (ESD). However, to maintain transparency and to adhere to the core values of including the public in all CERCLA decision-making processes, this MFR and an accompanying Fact Sheet, will be presented to the public for comments and will be placed in the Administrative Record for the site.

BACKGROUND: The Former Fort Devens is located 35 miles northwest of Boston, in north-central Massachusetts within the towns of Ayer and Shirley in Middlesex County and the towns of Harvard and Lancaster in Worcester County. The site was selected for closure under the 1995 Base Realignment and Closure (BRAC) Act. Environmental investigations and remediation at Fort Devens began in the 1980s and 1990s and culminated with the inclusion of Fort Devens on the EPA's National Priorities List (NPL). In accordance with Section 120 of CERCLA, the EPA and the Army signed a Federal Facility Agreement (FFA) in 1991. The FFA prescribed the process of completing environmental investigations and implementation of selected remedies, and included a series of administrative actions, such as consultation requirements and dispute resolution procedures. Under the FFA, the Army is required to complete remedial actions in accordance with CERCLA as the lead agency, while the EPA is identified as the lead regulatory agency, with the MassDEP identified as the supporting regulatory agency.

The DCL Contributor Sites included six non-contiguous areas that were historically used for disposal of construction and landscaping debris. The environmental investigations at the DCL Contributor Sites were conducted between 1994 and 1996. The ROD was signed in July 1999 and specified excavation and consolidation of the DCL Contributor Sites as the final remedy. The excavation and consolidation work was described in the 2003 RACR, which stated that the cleanup goals were attained and that ROD-specified performance and/or response objectives were met.

After the RACR was signed, but before the property was transferred, there were informal discussions between EPA and Army which indicated that some confirmatory results from the excavation bottom at three (AOC 9, SA 13, AOC 40) of the AOCs exceeded the EPA Region 9 PRGs. Although the Army believed that the minor point-by-point exceedances did not result in an unacceptable risk since, in accordance with EPA Guidance under CERCLA, all site-wide confirmation data is used to develop the arithmetic average mean to perform a risk assessment, the Army agreed, as a precautionary measure, to restrict the use of the property post transfer by placing deed restrictions at the three contributor sites. At the time of transfer, these deed restrictions were not considered to be a part of a CERCLA ROD and were instead placed on the property at the discretion of the land-holding agency, the Army. In property transfers out of federal control, restrictions on the post-transfer re-use does not require a corresponding environmental remedy selecting such restrictions or LUCs. However, after transfer, the Army verified the deed restrictions for parcels A2A (AOC 9), A8 (SA 13), and A4 (AOC 40) to prevent residential development of the properties in both the 2nd (2010) FYR Report and 2019 Addendum to the 2015 FYR Report.

Army proposed to remove the DCL Contributor Sites from evaluation under the FYR because, in accordance with the RACR, the contributor sites met UU/UE and therefore should not be included in FYR Reports. This decision was not supported by either the EPA or the MassDEP.

EPA initiated an informal dispute in September 2020. EPA stated that post-excavation sampling indicated that contaminants were left in place above levels that allowed for UU/UE and must not only be included in FYRs, but must also be subject to LUCs as a final remedy. The Army requested additional detail on the sampling results being used to make the determination that there currently exists an unacceptable risk and after much discussion, the Army is agreeing to state there remains risks above levels that allow for UU/UE because of these minor exceedances of the Region IX Residential PRGs related to metals and organic compounds², as indicated in a letter submitted by Army to EPA on July 15, 2022 and documented below.

AOC 9 – Excavation Confirmation Sample CO-013: The confirmatory sampling result for benzo(a)pyrene (BaP) of 0.31 milligrams per kilogram (mg/kg) exceeded cleanup goal (Region 9 Preliminary Remediation Goal (PRG) of 0.062 mg/kg).

Study Area 13 - Staging Area Samples BG-002, BG-014, BG-015: These sample, designated “BG” for background, were not collected from the excavation area, but rather from adjacent soil stockpile area prior to the placement of excavated soil. Therefore, they are not confirmation samples for the excavation extent. The exceedances include: BG-002: 23 mg/kg of arsenic exceeded the cleanup goal of 22 mg/kg; BG-014: 23 mg/kg of arsenic exceeded the cleanup goal of 22 mg/kg; and 0.40 mg/kg BaP exceeded the cleanup goal of 0.062 mg/kg and BG-015: 0.29 mg/kg BaP exceeded the cleanup goal of 0.062 mg/kg

AOC 40 – Excavation Confirmation Samples CO-028A, CO-29, CO-031: CO-028A: 0.74 mg/kg BaP (cleanup goal of 0.062 mg/kg); 0.98 mg/kg benzo(b)fluoranthene (cleanup goal of 0.62 mg/kg); 0.85 mg/kg benzo(a)anthracene (cleanup goal of 0.62 mg/kg). CO-029: 38 mg/kg arsenic (cleanup goal 22 mg/kg) CO-031 0.33 mg/kg BaP (cleanup goal of 0.062 mg/kg)

² Although not listed below, EPA also verbally indicated that several compounds that were not detected at the time of the work would now be considered as being detected since the detection limits were greater than the cleanup goals.

The current uses for these contributor sites include undeveloped space that contains a utility corridor for overhead power lines (AOC 9), a wetland (AOC 40), and open space (SA 13). At all three sites, the Army's remedy will remain excavation and LUCs to prevent residential reuse. Should a future property owner evaluate the sites for potential reuse under a residential scenario, any additional remediation necessary to achieve UU/UE will be borne by the new property owner. Additionally, any new contaminant released as the result of the transferee's activities or any contaminant that is found at a higher concentration than that which was measured as part of the excavation confirmatory sampling completed by the Army and documented in the RACR will not be considered a release associated with historic Army activities unless, pursuant to the deed, the transferee is able to demonstrate that such release or such newly discovered hazardous substance was due to Army's prior activities, ownership, use, or occupation of the property. However, because the property was transferred with a restriction in place, the Army concludes that identifying MassDevelopment as a Potentially Responsible Party and revoking the CERCLA Covenant and Warranty is not required at this time.

CONCLUSION: The DCL Contributor Sites ROD July 1999 required among other things, included excavation at contributor sites and consolidation of excavated debris at the on-site landfill and LUCs to prevent residential use and five-year site reviews at those sites where UU/UE is not achievable or economical. The Army finds that, since some metals and organic compounds remain present at concentrations exceeding the cleanup goals, that LUCs were implemented through deed restrictions, and that because the ROD included the potential need for LUCs, an Explanation of Significant Differences is not required. The Army therefore proposes to incorporate the current deed restrictions, as they appear in Deed Book 38514, Page 121, #2006 0003280), into a Land Use Control Implementation Plan (LUCIP) for the DCL Contributor Sites AOC 9, AOC 40, and SA13 as part of the CERCLA remedy selected in the 1999 ROD. The Army will also verify that the properties are being used as allowed and include the DCL Contributor Sites in all subsequent FYR Reports until and if they are remediated to UU/UE status by the property owner.