



DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF, G-9
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WASHINGTON, DC 20310-0600

November 17, 2020

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Anni Loughlin
Chief, Superfund Federal Facilities and Information Management Section
Office of Site Remediation and Restoration
U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mailcode: 07-3
Boston, MA 02109-3912

RE: Final Former Fort Devens 2020 Five-Year Review (FYR) Report

Dear Ms. Loughlin:

Enclosed is a preliminary analysis and proposed way forward for the Environmental Protection Agency Region I (EPA) Additional Work requests in response to EPA letters dated September 25 and 29, 2020, and October 15, 2020, as promised in the Army's October 27, 2020 letter. The Army's analysis divides EPA's requested Additional Work requests into three categories (the number of issues in each category are in parenthesis):

1. Addressed in the FYR Report (2): issues that the Army has already addressed in the Final Five-Year Review.
2. Currently ongoing work (9): work that Army has previously agreed to perform and that is presently underway or in the planning stage.
3. New work (12): work requested by EPA that was not identified prior to the 2020 FYR and that Army would perform subject to Army and EPA agreement on the scope of work (SOW).

Subsequent to our phone conversation on October 29, 2020, the Army and EPA had an initial new work technical review meeting on November 10, 2020. The continuation of the Army and EPA technical review using the enclosed Army analysis and proposed way forward is anticipated to inform an Army and EPA agreement on a SOW for each new work project.

Consistent with our discussion during the informal dispute meeting on November 12, 2020, the Army and EPA SOW agreements will enable the Army to provide EPA the following by December 30, 2020, as requested in EPA's September 29, 2020 letter:

- a. References for completed work listed as Additional Work.
- b. Project schedules for funded and ongoing work.
- c. Proposed SOWs and draft project schedules for the 12 new work projects.

The Army looks forward to the continued technical meetings on the respective SOWs and our next informal dispute resolution call on December 3, 2020.

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Thomas A. Lineer
BRAC Program Manager
BRAC Field Branch
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**Former Fort Devens 2020 Five-Year Review Additional
Work Requirements**

This document provides Army’s preliminary analysis to EPA’s list of issues and recommendations pertaining to the Fifth (2020) Five-Year Review (FYR) for the former Fort Devens Army Base, Devens, MA. EPA’s issues, recommendations, and protectiveness determination statements were transmitted to the Army on September 29, 2020.

Army’s response to each issue/recommendation identifies whether the work is (1) already addressed in the Final Five-Year Review, (2) ongoing work that Army has previously agreed to perform and that is presently underway or in planning stage, or (3) new work requested by EPA that was not identified prior to the 2020 FYR.

Army agrees to perform the work. While some of the work is under contract and funded, other work is currently not scoped nor funded so milestone dates may need to be revised.

OU01 – Shepley’s Hill Landfill (SHL)

OU(s): 01 SHL	Issue Category: Remedy Performance			
	EPA FYR Issue: <i>CURRENT REMEDY IS INADEQUATE TO ACHIEVE ROD/ESD- SPECIFIED RAOs AND CLEANUP GOALS AND ENSURE LONG-TERM REMEDY PROTECTIVENESS</i>			
	EPA FYR Recommendation: Demonstrate plume capture – Submit SHL SOW Phase 1 Subtask 1.d Technical Memorandum			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	1/1/2021
<p>Army Response: This issue is currently being addressed through on-going or planned work.</p> <p>Army has previously agreed to submittal of the SHL SOW Phase 1, Subtask 1.d Technical Memorandum. This work is in progress.</p> <p>Army’s Understanding and Proposed Path Forward: Upon concurrence of the groundwater model (Phase 1, Task 4, Subtask 4.a.), Army will submit the outline for this technical memorandum to EPA for review. Once the outline is approved, the memorandum will be prepared.</p> <p>Per EPA’s scope of work, this memorandum is to delineate the capture zone based on hydraulic and geochemical data.</p> <p>EPA’s FYR table has SOW Phase I, Task 1, Subtask 1.d Technical Memorandum. Please clarify if the submittal should be referenced as SOW Phase I, Task 1, Subtask 1.g, Technical Memorandum per EPA March 9, 2017 EPA Informal Dispute Letter.</p> <p>Proposed Milestone Date: 07/18/2021</p>				

OU(s): 01 SHL	Issue Category: Remedy Performance			
	EPA FYR Issue: <i>CURRENT REMEDY IS INADEQUATE TO ACHIEVE ROD/ESD- SPECIFIED RAOs AND CLEANUP GOALS AND ENSURE LONG-TERM REMEDY PROTECTIVENESS</i>			
	EPA FYR Recommendation: Demonstrate plume capture – Submit SHL SOW Phase 1 Subtask			

Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	2/15/2021
<p>Army Response: This issue is currently being addressed through on-going or planned work. Army has previously agreed to submittal of the SHL SOW Phase 1, Subtask 2.g Technical Memorandum. This work is in progress.</p> <p>Army's Understanding and Proposed Path Forward: Upon concurrence of the groundwater model (Phase 1, Task 4, Subtask 4.a.), Army will submit the outline for the Phase I, Task 2, Subtask 2.g. Technical Memorandum for EPA review. Once the outline is approved the memorandum will be prepared. Per EPA's scope of work, this memorandum is to delineate the lateral and vertical extent of the plume upgradient of the extraction system.</p> <p>Proposed Milestone Date: 08/18/2021</p>				

OU(s): 01 SHL	Issue Category: Remedy Performance			
	EPA FYR Issue: <i>CURRENT REMEDY IS INADEQUATE TO ACHIEVE ROD/ESD- SPECIFIED RAOs AND CLEANUP GOALS AND ENSURE LONG-TERM REMEDY PROTECTIVENESS</i>			
	EPA FYR Recommendation: Demonstrate plume capture – Submit SHL SOW Phase 1 Subtask 4.e Technical Memorandum			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	3/1/2021
<p>Army Response: This issue is currently being addressed through on-going or planned work. Army has previously agreed to submittal of the SHL SOW Phase 1, Subtask 4.e Technical Memorandum. This work is in progress.</p> <p>Army's Understanding and Proposed Path Forward: Upon concurrence of the groundwater model (Phase 1, Task 4, Subtask 4.a.), Army will submit the outline for the Phase I Technical memorandum, Task 4, Subtask 4.e. for EPA review. Once the outline is approved, the memorandum will be prepared. Per EPA's scope of work, the memorandum is to validate the updated groundwater flow model with sufficient field measured hydraulic data to confirm conclusions.</p> <p>Proposed Milestone Date: 09/05/2021</p>				

OU(s): 01 SHL	Issue Category: Remedy Performance			
	EPA FYR Issue: <i>CURRENT REMEDY IS INADEQUATE TO ACHIEVE ROD/ESD- SPECIFIED RAOs AND CLEANUP GOALS AND ENSURE LONG-TERM REMEDY PROTECTIVENESS</i>			
	EPA FYR Recommendation: Demonstrate plume capture – Submit SHL SOW Phase 1 Subtask 5.e Technical Memorandum			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	4/1/2021
<p>Army Response: This issue is currently being addressed through on-going or planned work. Army has previously agreed to submittal of the SHL SOW Phase 1, Subtask 5.e Technical Memorandum. This work is in progress.</p> <p>Army’s Understanding and Proposed Path Forward: Upon concurrence of the final groundwater model (Phase 1, Task 4, Subtask 4.a.), Army will submit the outline for the Phase I Technical memorandum, Task 5, Subtask 5.e. for EPA review. Once the outline is approved the memorandum will be prepared. Per EPA’s scope of work, the memorandum is to validate the extent of capture by evaluating concentration trends in NIA monitoring locations as compared to flow paths developed from the updated groundwater flow model.</p> <p>Proposed Milestone Date: 10/06/2021</p>				

OU(s): 01 SHL	Issue Category: Remedy Performance			
	EPA FYR Issue: <i>CURRENT REMEDY IS INADEQUATE TO ACHIEVE ROD/ESD- SPECIFIED RAOs AND CLEANUP GOALS AND ENSURE LONG-TERM REMEDY PROTECTIVENESS</i>			
	EPA FYR Recommendation: Demonstrate plume capture – Submit SHL SOW Phase 2 Task 1.e Technical Memorandum			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	5/17/2021
<p>Army Response: This issue is currently being addressed through on-going or planned work. Army has previously agreed to submittal of the SHL SOW Phase 2, Subtask 1.e Technical Memorandum. This work is in progress.</p> <p>Army’s Understanding and Path Forward. This task involves collection of groundwater samples collected for five years from SOW specified monitoring location following approval of the Phase I Work to evaluate remedy performance.</p> <p>Proposed Milestone Date: TBD</p>				

OU(s): 01 SHL	Issue Category: Remedy Performance			
	EPA FYR Issue: <i>CURRENT REMEDY IS INADEQUATE TO ACHIEVE ROD/ESD- SPECIFIED RAOs AND CLEANUP GOALS AND ENSURE LONG-TERM REMEDY PROTECTIVENESS</i>			
	EPA FYR Recommendation: Demonstrate plume capture – Submit SHL SOW Phase 2 Task 2 Technical Memorandum			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	7/30/2021
<p>Army Response: This issue is currently being addressed through on-going or planned work.</p> <p>Army’s Understanding and Path Forward: Following EPA approval of the Phase I Work, Army will proceed with Phase II, Task 2, Subtask 2.e. Technical Memorandum. Per EPA’s scope of work, this memorandum is to perform a study to determine site-specific background levels or arsenic in groundwater.</p> <p>Proposed Milestone Date: TBD</p>				

OU(s): 01 SHL	Issue Category: Remedy Performance			
	EPA FYR Issue: <i>ROD-SPECIFIED CLEANUP GOALS (i.e. MCLs/MMCLs) ARE INCONSISTENT WITH CURRENTLY PROMULGATED DRINKING WATER STANDARDS</i>			
	EPA FYR Recommendation: Army shall issue an ESD to amend the ROD-specified cleanup goal (i.e. 50 ug/L) for arsenic to reflect more stringent drinking water standards (i.e. MCL/MMCL) promulgated in January 2001 (i.e. 10 ug/L) to ensure protectiveness in the long term; ICs are in place to restrict current exposure to groundwater within SHL boundaries and in the downgradient NIA so short- term protectiveness of the remedy is unaffected.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	12/1/2020
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>Army’s Proposed Path Forward: Army will prepare and ESD to amend the ROD-specific cleanup goals. Army proposes to incorporate this change once the EPA SOW Informal Dispute Phases I and II work is completed to incorporate any other changes to the remedy. In addition, Army propose to eliminate other constituent such as volatile organic compounds that are no longer above cleanup levels.</p> <p>Proposed Milestone Date: TBD</p>				

OU(s): 01 SHL	Issue Category: Remedy Performance / Other Finding			
	EPA FYR Issue: <i>THE 500-YEAR FLOODPLAIN IS HIGHER IN ELEVATION THAN THE BOTTOM OF THE WASTES REMAINING IN THE LANDFILL</i>			
	EPA FYR Recommendation: Army shall conduct a study to determine if the new floodplain regulations affect remedy protectiveness and whether the regulation should be identified in the SHL ROD/ESD remedy as an ARAR; if remedy protectiveness is impacted, Army shall evaluate potential remedial response options/alternatives (i.e. monitoring, managing and repairing, if necessary, rip-rap and/or soil covers up to the 500-year flood elevation) to ensure protection of wastes left in place within the floodplain and prepare a schedule for issuance of a draft ESD to include the new floodplain regulation as an ARAR and memorialize the selected response action.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	6/30/2021
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>Army's Proposed Path Forward: Army will prepare a technical memorandum which evaluates whether the new floodplain regulation affects the remedy protectiveness and whether the regulation should be identified as an ARAR in the ROD. If remedy protectiveness is affected, Army shall prepare an ESD to include the regulation as an ARAR and evaluate potential response actions.</p> <p>Proposed Milestone Date: 12/31/2021</p>				

OU(s): 01 SHL	Issue Category: Monitoring			
	EPA FYR Issue: <i>CURRENT LTMMP IS INEFFECTIVE IN EVALUATING PERFORMANCE /EFFECTIVENESS OF ALL REMEDIAL COMPONENTS AND ALL COCs/COPCs</i>			
	EPA FYR Recommendation: Army shall prepare/submit a draft work plan for baseline and five-year review pore water and sediment sampling in the Red Cove area of Plow Shop Pond to monitor barrier wall performance (and ongoing success of AOC 72 removal action); upon approval of the baseline sampling work plan, Army shall develop a revised, comprehensive, long-term groundwater monitoring program for OU01 – SHL that incorporates required pore water and surface sampling, includes existing/additional monitoring locations identified by EPA, and groups monitoring wells/piezometers by key subareas and at the sampling frequency specified in the SHL SOW Phase 2 Task 1.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	8/1/2021
<p>Army Response: This issue is currently being addressed through on-going.</p> <p>Army's Proposed Path Forward: Army agrees to prepare a work plan for pore water and sediment sampling in the Red Cover Area of Plow Shop Pond to monitor barrier performance. This work will then be incorporated into the updated long-term monitoring and maintenance plan for Shepley's Hill Landfill.</p> <p>Proposed Milestone Date: 12/31/2021</p>				

OU02 – Devens Consolidation Landfill (DCL) and DCL Contributor Sites (SAs 6 & 13; AOCs 9, 11 & 40)

OU(s): 02 DCL & DCL Contributor Sites (SAs 6 & 13; AOCs 9, 11 & 40)	Issue Category: Remedy Performance			
	<p>EPA FYR Issue: <i>INCOMPLETE RESPONSE ACTION</i> - The selected remedy, as presented in the 1999 ROD, did not adequately identify/evaluate potential risks to human health and the environment posed by exposure to contaminants in all media at the DCL and Contributor Sites; because the remedy assumed complete excavation/removal of landfilled debris from all SAs/AOCs, the ROD states only that “ICs are planned for those sites where debris will be excavated but unrestricted land use is not achievable or economical” and “will help limit human exposure by preempting residential use.”</p> <p>EPA FYR Recommendation: Army shall, in accordance with the Devens FFA, conduct the following Additional Work: (1) conduct/prepare a baseline human health and ecological risk assessment for each of DCL Contributor Site (i.e. SA/AOC) that evaluates/identifies current and potential (future) human health and ecological risks via exposure to contaminants detected in SI, RI or post-excavation/confirmatory sampling results (whichever most recent) for all media and all current and potential (future) pathways of exposures; and, (2) amend the 1999 ROD to include RAOs and cleanup goals for each of the DCL Contributor Sites (i.e. SAs/AOCs), as/if warranted, based on the results of the human health and ecological risk assessments, and identifies substantive restrictions (i.e. ICs/LUCs) necessary to ensure attainment of the RAOs and ensure short- and long-term protection of human health and the environment.</p>			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
Yes	Yes	Army	EPA/State	11/1/2021
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>Army’s Proposed Path Forward: Army agrees to prepare a risk assessment using confirmation sample results collected following the remedial action that was undertaken at the DCL contributor sites. If the results of the risk assessment indicate that the contributor sites are suitable for UU/UE, then future FYRs will no longer be required.</p> <p>Proposed Milestone Date: 12/31/2021</p>				

OU(s): 02 DCL & DCL Contributor Sites (SAs 6 & 13; AOCs 9, 11 & 40)	Issue Category: Institutional Controls			
	EPA FYR Issue: <i>CURRENT DCL LTMMP (LUCIP) DOES NOT IDENTIFY/INCLUDE ICs/LUCs FOR THE DCL CONTRIBUTOR SITES</i> - Current DCL LTMMP is inadequate to monitor and/or evaluate ongoing remedy performance, progress towards achieving ROD/ESD-specified RAOs and ensure long-term remedy			
	EPA FYR Recommendation: Upon issuance of a final ROD Amendment or ESD (to the 1999 ROD), Army shall revise the existing DCL LUCIP to include/identify requirements for implementing, monitoring and enforcing ROD/ESD-specified ICs/LUCs for each SA/AOC; an Annual LUC Inspection checklist will be created for use during annual LUC inspections and inclusion in the DCL and DCL Contributor Site portion of the Annual Main Post LTM Report.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
Yes	Yes	Army	EPA/State	1/3/2022
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>Army's Proposed Path Forward: If a risk remains at the site, Army will prepare a site-specific stand-alone LUCIP for the DCL contributor sites. Since several site-specific LUCIPs will need be prepared as part of the Five-Year Additional Work, an overall work plan will first be submitted for agency approval, which includes a proposed template for the stand-alone LUCIP to facilitate agreement on format and contents.</p> <p>Please note that the Army has been monitoring land-use control restrictions at these sites as described in the section 4.0 of the LTMMP.</p> <p>Proposed Milestone Date: 01/03/2022</p>				

OU(s): 02 DCL & DCL Contributor Sites (SAs 6 and 13; AOCs 9, 11 and 40)	Issue Category: Remedy Performance / Other Finding			
	EPA FYR Issue: <i>500 YEAR FLOODPLAIN WOULD LIKELY IMPACT AOC 40 AND COULD POTENTIALLY IMPACT AOC 9</i>			
	EPA FYR Recommendation: Conduct a study to determine if the new floodplain regulations affect remedy protectiveness and whether the regulation should be identified in the DCL ROD/ESD remedy as an ARAR; if remedy protectiveness is impacted, Army shall evaluate potential remedial response options/alternatives to ensure protection of wastes left in place within the floodplain and prepare a schedule for issuance of a draft ESD to include the new floodplain regulation as an ARAR and memorialize the selected response action.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	12/27/2021

Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.

Army’s Proposed Path Forward: Following the results of the risk assessment, the Army will prepare a technical memorandum which evaluates whether the new floodplain regulation affects the remedy protectiveness and whether the regulation should be identified as an ARAR in the ROD. If remedy protectiveness is affected, Army shall prepare an ESD to include the regulation as an ARAR and evaluate potential response actions, if any.

Proposed Milestone Date: 03/15/2022

OU04 – Barnum Road Maintenance Yards (AOCs 44 AND 52)

OU(s): 04 AOCs 44 and 52	Issue Category: Remedy Performance			
	EPA FYR Issue: <i>INADEQUATE TECHNICAL ASSESSMENT OF THE SELECTED</i> REMEDY - The long-term protectiveness of the selected remedy for AOCs 44 and 42 could not be determined in the 2020 FYR because the Report does not adequately respond to the three technical assessment questions specified in EPA’s FYR Guidance for evaluating and verifying performance and protectiveness of a selected remedy in the			
	EPA FYR Recommendation: Army must respond to the three technical assessment questions specified in EPA’s June 2001 FYR guidance, supplemental guidance (see list on Page 4 of EPA’s January 20, 2016 Recommended FYR template and more specifically, EPA Region 1’s FY2020 Supplemental FYR Template) to verify remedy performance and effectiveness and support development of a Protectiveness Statement.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	8/2/2021
<p>Army Response: This issue has already been addressed in the Final Five-Year Review</p> <p>The Army responded to the three technical assessment questions in the final FYR. The Technical Assessment was revised based on EPA comments received on August 26, 2020. Specifically,</p> <ul style="list-style-type: none"> • The Technical Assessment was revised to include a table of cleanup levels. • The Technical Assessment was revised to include a table of MCLs from 2003 compared to current MCLs. • The Technical Assessment was revised indicating the risk assessment was conducted using the EPA standard benzo(a)pyrene approach. The text was also revised evaluating the PAH soil cleanup level with respect to the new PAH toxicity values. • Text from the Appendix E, Operation and Maintenance of the Drainage System, <i>Final Remedial Action Completion Report for the Remediation of Barnum Road Maintenance Yards AOCs 44 & 52</i> (Weston, 1996) was added to Section 4.2.5 System Operations/Operations and Maintenance and to the System Operations/Operation and Maintenance portion of the Technical Assessment. To address EPA’s comments on the O&M of the storm water collections system. The FYR text was revised by incorporating language from the O&M plan, specifically where it indicates the maintenance is “suggested”. 				

OU(s): O4 AOCs 44 and 52	FYR Issue Category: Institutional Controls			
	EPA FYR Issue: <i>CURRENT LUCIP IS INADEQUATE FOR EVALUATING / VERIFYING REMEDY PERFORMANCE AND</i>			
	EPA FYR Recommendation: Army shall prepare/submit a draft LUCIP for AOCs 44 and 52 that accurately represents the LUCs/ICs identified in the AOCs 44 and 52 ROD/RACR, clearly specifies requirements for the effective implementation, monitoring and enforcement of the LUCs/ICs, and includes an amended Annual LUC Inspection checklist for use during annual LUC inspections conducted in conjunction with the Annual Main Post LTM activities.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	9/1/2021
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>Army's Proposed Path Forward: Army will prepare a stand-alone site-specific LUCIP for the AOC 44/52. As noted above, since several site-specific LUCIPs will need be prepared as part of the Five-Year Additional Work, an overall work plan will first be submitted for agency approval, which includes a proposed template for the stand-alone LUCIP to facilitate agreement on format and contents</p> <p>As indicated in the FYR, the former Maintenance Yards (AOCs 44/52) property is currently owned by Army. The current LUCs developed for AOCs 44 and 52 are detailed in the Real Property Master Plan (RPMP) Long Range Component for Devens Reserve Forces Training Area, Addendum (2007) (Appendix G of the 2015 LTMMP) (Sovereign/HGL, 2015) and compliance with the LUCs is verified through monitoring of the controls, which are conducted in accordance with the Land Use Control Implementation & Monitoring Plan portion of the Long-Term Monitoring and Maintenance Plan (LTMMP) (Sovereign/HGL, 2015).</p> <p>Proposed Milestone Date: 09/01/2021</p>				

OU06 – Former Gas Stations AOCs 43G and 43J

<p>OU(s): 06</p> <p>AOCs 43G and 43J</p>	<p>Issue Category: Remedy Performance</p> <hr/> <p>EPA FYR Issue: <i>INADEQUATE TECHNICAL ASSESSMENT OF THE SELECTED REMEDY</i> - The long-term protectiveness of the selected remedies for AOCs 43G and 43J could not be determined in the 2020 FYR because the Report does not adequately respond to the three technical assessment questions specified in EPA’s FYR Guidance for evaluating and verifying performance and long-term protectiveness of a selected</p> <hr/> <p>EPA FYR Recommendation:</p> <p>For AOC43G, Army must respond to the three technical assessment questions specified in EPA’s June 2001 FYR guidance, supplemental guidance (see list on Page 4 of EPA’s January 20, 2016 Recommended FYR template and more specifically, EPA Region 1’s FY2020 Supplemental FYR Template) to verify remedy performance and effectiveness.</p> <p>For AOC 43J, Army shall, in coordination with MassDevelopment, respond to the three technical assessment questions specified in EPA’s June 2001 FYR guidance, supplemental guidance (see list on Page 4 of EPA’s January 20, 2016 Recommended FYR template and more specifically, EPA Region 1’s FY2020 Supplemental FYR Template) to verify remedy performance and effectiveness.</p>			
<p>Affect Current Protectiveness</p>	<p>Affect Future Protectiveness</p>	<p>Party Responsible</p>	<p>Oversight Party</p>	<p>Milestone Date</p>
<p>No</p>	<p>Yes</p>	<p>Army</p>	<p>EPA/State</p>	<p>7/30/2021</p>
<p>Army Response: This issue has already been addressed in the Final Five-Year Review.</p> <p>The Army responded to the three technical assessment questions in the final FYR. The Technical Assessment was revised based on EPA comments received on August 31, 2020. Responses were prepared in the FYR to the three technical assessment questions specified in EPA’s June 2001 FYR guidance, EPA’s January 20, 2016 Recommended FYR template, and EPA Region 1’s FY2020 Supplemental FYR Template. Specifically,</p> <p>The Technical Assessment was revised to include tables of cleanup levels from the ROD and an evaluation of any changes in standards related to the cleanup levels.</p> <p>The Technical Assessment was revised to reflect the EPA Region 1’s FY2020 Supplemental FYR Template.</p> <p>The Technical Assessment was revised addressing the changes in toxicity values for PFAS and PAHs and screening levels for lead. indicating the risk assessment was conducted using the EPA standard benzo(a)pyrene approach.</p>				

<p>OU(s): 06</p> <p>AOCs 43G and 43J</p>	Issue Category: Remedy Performance			
	EPA FYR Issue: <i>SELECTED REMEDY WILL NOT ATTAIN ROD-SPECIFIED CLEANUP GOALS AND RAOs</i>			
	<p>EPA FYR Recommendation:</p> <p>For AOC 43G, Army shall develop/implement a “more aggressive” remedial action (i.e., soil vapor extraction (SVE) system in the source area) to ensure prompt and effective remediation of all ROD-specified groundwater COCs; a draft assessment of proposed remedial alternatives that includes the evaluation of petroleum hydrocarbons in the unsaturated overburden as a continuing source of groundwater contamination, shall be prepared and submitted to EPA and MassDEP review and comment in accordance with the Devens FFA.</p> <p>For AOC 43J, Army shall, in coordination with MassDevelopment, develop/implement a “more aggressive” remedial action to ensure prompt and effective remediation of all ROD-specified groundwater COCs, attainment of ROD-specified RAOs, and ensure long-term protection of human health; a draft assessment of proposed remedial alternatives that includes the evaluation of petroleum hydrocarbons in the unsaturated overburden as a continuing source of groundwater contamination, shall be prepared and submitted to EPA and MassDEP for review and comment in accordance with the Devens FFA.</p>			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	5/30/2022
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>Army’s Proposed path forward. Army will prepare a work plan to address all EPA recommendations. Based on these additional investigations, historical site data and updated CSM, Army will prepare a focused FS to evaluate changes to the remedy and any applicable ROD amendments.</p> <p>For 43J, the Army will coordinate with MassDevelopment and MassDEP to prepare a remedial investigation work plan and focused feasibility study.</p> <p>Proposed Milestone Date: 12/31/2022</p>				

OU(s): 06 AOCs 43G and 43J	Issue Category: Monitoring			
	EPA FYR Issue: <i>EXISTING LTMMP IS INADEQUATE</i> for purposes of characterizing the full extent and nature of groundwater contamination at AOCs 43G and 43J, verifying attainment of ROD-specified RAOs and cleanup goals, and ensuring long-term remedy protectiveness			
	EPA FYR Recommendation: For AOC 43G, Army shall prepare and issue a draft, revised (2008) LTMMP that evaluates all known and suspected contaminants of concern and includes a sufficient number of sentinel/monitoring wells along the LUC/compliance boundary to more effectively evaluate groundwater conditions/contaminant concentrations, confirm/deny possible off-site contaminant migration, and verify attainment of ROD-specified RAOs and cleanup goals in this portion of the site. For AOC 43J, Army shall, in coordination with MassDevelopment, prepare and issue a draft, revised LTMMP that adequately evaluates all known and suspected contaminants of concern (including but not limited to PFAS compounds) and includes a sufficient number of sentinel/monitoring wells along the LUC/compliance boundary to effectively evaluate groundwater conditions and contaminant concentrations, confirm/deny possible off-site contaminant migration, and verify attainment of ROD-specified RAOs and cleanup goals in this portion of the site.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	8/1/2022
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>Army's Proposed Path Forward: The Army will revise the LTMMP for 43G based on the results of the additional work implemented above. The Army will coordinate with MassDevelopment and MassDEP to ensure that a revised LTMMP is prepared for 43J.</p> <p>Proposed Milestone: 06/30/2023</p>				

OU(s): 06 AOCs 43G and 43J	Issue Category: Institutional Controls			
	EPA FYR Issue: <i>CURRENT LUCIP IS INADEQUATE / INEFFECTIVE TO EVALUATE REMEDY PERFORMANCE AND VERIFY PROTECTIVENESS OF THE REMEDY</i> - Process and procedures for implementing, enforcing and/or monitoring ROD/ESD-specified ICs are inadequate to ensure effective long-term protectiveness of the remedy.			
	EPA FYR Recommendation: For AOC 43G, Army shall prepare and submit a draft LUCIP Update that specifies the implementation, monitoring and enforcement of ROD/ESD-specified ICs/LUCs; an amended Annual LUC Inspection checklist shall be created for use during annual LUC inspections and inclusion in the AOC 43G portion of the Annual Main Post LTM Report; For AOC 43J, Army shall, in coordination with MassDevelopment, prepare and submit a draft LUCIP that specifies the implementation, monitoring and enforcement of ROD/ESD-specified ICs/LUCs; an amended Annual LUC Inspection checklist shall be created for use during annual LUC inspections and inclusion in the AOC 43J Annual LTM Report.			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date

No	Yes	Army	EPA/State	10/3/2022
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>Army’s Proposed Path Forward: Army will prepare a stand-alone site-specific LUCIP for the AOC 43G and will coordinate with MassDevelopment on preparation of a LUCIP for 43J. As noted above, since several site-specific LUCIPs will need be prepared as part of the Five-Year Additional Work, an overall work plan will first be submitted for agency approval, which includes a proposed template for the stand-alone LUCIP to facilitate agreement on format and contents.</p> <p>Proposed Milestone Date: 10/03/2022</p>				

OU07 – Former Elementary School (AOC 69W)

OU(s): OU7 AOC 69W	Issue Category: Institutional Controls			
	<p>EPA FYR Issue: <i>POSSIBLE IC/LUC BREACH / INADEQUATE DISTRIBUTION OF INFORMATION NECESSARY TO VERIFY COMPLIANCE WITH ROD-SPECIFIED LUCS/ICS</i></p> <p>EPA FYR Recommendation: Army shall verify that the “internal HVAC and sidewalk/retaining wall work” performed “in the corner of the building near the restricted “Soil Management Area” of the property was fully compliant with ROD-required restrictions employed to prevent current and future exposure to contaminated soil and groundwater remaining in these areas of the property. Army’s submittal shall include, at a minimum, a detailed description of the work performed, details pertaining to the collection and analysis of soil samples and applicability of/compliance with the Off-Site Rule, the final volume and destination of excavated soils (i.e. name and address of receiving TSD facility), and figures/photos showing pre- and post- project site conditions.</p> <p>Army shall amend the current AOC 69W LUCIP to ensure accurate identification, thorough awareness/familiarity and effective communication of ROD-specified LUCs/ICs. Although Army provided notice of the proposed work to EPA and MassDEP (as required in the ROD/deed notice), it hasn’t provided any follow-up documentation to confirm the project’s compliance with ROD-specified requirements. While the May 2020, draft 2019 Annual Main Post Report includes a statement made by the Parker School Principal during a discussion of the completed project, it suggests that while she may have a general understanding of existing deed restrictions, her reference to a 2-foot depth-limitation is troubling especially in light of Army’s mention of this same restriction in the discussion of LUC inspection results. Specifically, the discussion states “There were no excavations or penetrations <i>greater than 2-feet through pavement</i> within the ESMA observed during 2019.”</p> <p>Army shall explain the relevance (and source) of the reference to “<i>greater than 2- feet through pavement</i>” which does not appear in the 2001 ROD and “Soil Excavation Restriction” deed language. The property owner’s reference to irrelevant restrictions and Army’s inclusion of the same irrelevant restriction in the draft 2019 Annual Report are indicative of a breakdown in LUC/IC communication that must be rectified to ensure long-term remedy protectiveness.</p>			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date

No	Yes	Army	EPA/State	8/31/2021
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>There is no evidence the LUCs in the deed restriction were violated. Per the deed restriction, the Parker School indicated an LSP and CIH wrote a soil management and health and safety plan before commencement of the work. Also, per the deed restriction, written approval of the work was obtained by the Parker School from the Army, EPA, and MassDEP prior to commencement of the work. There is no requirement in the ROD or the deed restriction to submit a completion report.</p> <p>Army's Proposed Path Forward: A site-specific LUCIP will be prepared for 69W and any additional requirements that are not currently in the LTMMP can be added such as submittal of a completion report can be added.</p> <p>Proposed Milestone Date: 08/31/2021</p>				

OU(s): 07 AOC 69W	Issue Category: Monitoring			
	EPA FYR Issue: <i>CURRENT LTMMP IS INADEQUATE TO FOR PURPOSES OF COLLECTING SUFFICIENT SITE-SPECIFIC DATA SUFFICIENT TO MONITOR PROGRESS TOWARDS ATTAINMENT OF ROD-SPECIFIED RAOS AND CLEANUP GOALS AND ENSURE SHORT- AND LONG-TERM REMEDY EFFECTIVENESS</i>			
	<p>EPA FYR Recommendation: Army shall revise/amend the current LTMMP to ensure collection of site-specific data sufficient to confirm/deny Army predictions/generalizations (and resolve long-standing disputes/deficiencies in annual LTM reports) regarding current/future site conditions, contaminant concentrations and associated current and future risks, and aquifer reducing conditions and associated impacts on metals detections/concentrations.</p> <p>The existing LTMMP must be expanded to allow sufficient and accurate collection of site-specific data necessary to resolve consistently disputed issues/deficiencies annual LTM reports, accurately define/confirm the lateral and vertical extent of contamination, effectively evaluate/identify current and potential human health risks, monitor attainment of ROD-specified RAOs and cleanup goals; and ensure short- and long-term protectiveness of the selected remedy.</p>			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	1/3/2022
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>Army's Proposed Path Forward: Army will prepare a work plan for AOC 69W to address the EPA recommendations. Based on these additional investigations, historical site data and updated CSM, Army will prepare a focused FS to evaluate changes to the remedy and any applicable ROD amendments.</p> <p>Proposed Milestone Date: 12/31/2022</p>				

OU09 - Former Building 3713 Fuel Spill (AOC 57)

<p>OU(s): 09</p> <p>AOC 57</p>	<p>Issue Category: Remedy Performance / Monitoring</p>			
<p>EPA FYR Issue: <i>CURRENT LTMMP IS INADEQUATE FOR PURPOSES OF DEFINING THE EXTENT OF CONTAMINATION, ASSESSING POTENTIAL OFF-SITE IMPACTS, MONITORING PROGRESS TOWARDS THE ATTAINMENT OF ROD/ESD-SPECIFIED RAOS AND CLEANUP GOALS AND ENSURE SHORT- AND LONG-TERM PROTECTIVENESS OF THE SELECTED REMEDY</i></p>				
<p>EPA FYR Recommendation: Army shall amend/revise the current AOC 57 LTMMP, as specified below, to ensure collection of sufficient site-specific data:</p> <ul style="list-style-type: none"> • reinstatement of all ROD/ESD-specified COCs in Areas 1 and 2; • reinstatement of existing (Army eliminated) Area 2 monitoring wells and piezometers; • installation of additional monitoring wells and piezometers screened in deeper portions of the aquifer to accurately delineate the vertical extent of groundwater contamination and verify deeper groundwater flow direction based on site-specific groundwater data; • installation of additional wells and piezometers on the far side of Cold Spring Brook (CSB) to confirm the hydraulic connection between CSB and AOC 57 groundwater and contaminant transport paths • restatement of existing (eliminated) and installation of new downgradient monitoring wells to accurately define/verify the downgradient extent of COC concentrations in groundwater and confirm the boundary of reducing (low ORP) conditions; and, • confirm/deny off-site migration of contaminated groundwater and identify current impacts, if any, on downgradient public and/or private drinking water supply and irrigation wells. 				
<p>Affect Current Protectiveness</p>	<p>Affect Future Protectiveness</p>	<p>Party Responsible</p>	<p>Oversight Party</p>	<p>Milestone Date</p>
<p>Yes</p>	<p>Yes</p>	<p>Army</p>	<p>EPA/State</p>	<p>2/1/2022</p>
<p>Army Response: This issue represents new work requested by EPA that was not identified prior to the 2020 FYR.</p> <p>Proposed Path Forward: Army will prepare a work plan for AOC 57 to address the EPA recommendations. Based on these additional investigations, historical site data and updated CSM, Army will prepare a focused FS to evaluate changes to the remedy and any applicable ROD amendments.</p> <p>Proposed Milestone Date: 12/31/2022</p>				

OU(s): OU09 AOC 57	Issue Category: Other / Investigation of Possible Source Area			
	EPA FYR Issue: <i>INADEQUATE ASSESSMENT OF DISCOVERED BURIED WASTE/DRUM AREA/ IDENTIFICATION AS POTENTIAL SOURCE AREA</i>			
	<p>EPA FYR Recommendation: Army shall prepare/issue a written report to EPA, MassDEP and MassDevelopment detailing activities performed in response to the March 2019 discovery of the area of buried wastes between AOC 57 Areas 2 and 3; the report shall provide details specific to the (1) characterization/investigation of the buried waste area/materials (i.e. confirmation/description of drum carcasses and spent containers observed at the time of the discovery), (2) excavation, removal and subsequent disposal of buried wastes and other items, and (3) collection, analysis and results of post-excavation, confirmation soil sampling performed in the excavation/buried waste area; the report should also include a figure (showing the boundaries/extent of the area of buried wastes and other items, location and quantity of uncovered items, and confirmatory soil sample locations) and data summary table (with the corresponding laboratory data package attached).</p> <p>Based on the information provided in the report, a determination will be made by Devens BCT members as to the identification and/or subsequent investigation of the buried waste/disposal area as a new AOC 57 source area.</p>			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	4/25/2022
<p>Army Response: This issue is currently being addressed through ongoing or planned work.</p> <p>Proposed Milestone Date: 04/25/2022</p>				

OU13 – Former Oak and Maple Housing Areas

OU(s): 13 Former Oak and Maple Housing Areas	Issue Category: Institutional Controls			
	EPA FYR Issue: Deficiencies identified in the 2015 Devens FYR pertaining to issuance of a final LUCIP Addendum for the former Oak and Maple Housing Areas remain unresolved in the 2020 FYR Report.			
	EPA FYR Recommendation: Army shall address unresolved issues and finalize the LUCIP Addendum for the former Oak and Maple Housing Areas to ensure long-term remedy protectiveness of the selected remedy			
Affect Current Protectiveness	Affect Future Protectiveness	Party Responsible	Oversight Party	Milestone Date
No	Yes	Army	EPA/State	12/31/2020
<p>Army Response: This issue is currently being addressed through ongoing or planned work.</p> <p>Proposed Milestone Date: TBD</p>				