

| EMP Action Items - FY Q2 2020 | | | | Notes |
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| Site Restoration (High Priority) | | | | |
| Met on February 12, 2020: D. Liu, T. Meyer, M. Simko, S. Dunn, K. Yargus | | | | |
| Objective: Conduct effective environmental remediation/restoration to mitigate risks to human health and the environment, and reduce NASA's environmental liability at WFF | | | | |
| Targets: | | | | |
| 1) Manage the restoration program in accordance with the Administrative Agreement on Consent with the Environmental Protection Agency | | | | |
| 2) Manage the restoration program for petroleum-impacted site | | | | |
| 3) Ensure former military sites are properly evaluated under the Formerly Used Defense Sites program | | | | |
| 4) Manage Formerly Used Defense Sites (FUDS) program under CERCLA and the MOA between the Army and NASA | | | | |
| Actions | | | | |
| | Start | Completion/ Ongoing | Responsibility | |
| CERCLA Sites | | | | |
| 1) Manage the restoration program, in accordance with the Administrative Agreement on Consent with the Environmental Protection Agency. | 12/8/2004 | 9/30/2020 | D. Liu, S. Dunn | |
| i) Complete and submit the draft annual Site Management Plan (SMP) Review the ongoing appropriateness of the SMP, make amendments as required and re-issue to the EPA and annual updates for the duration of the AAOC (Dec 1, 2007, Dec 1, 2008, etc) | 10/1/2016 | 11/27/2019 complete | D Liu | |
| ii) <u>Annually</u> execute work in accordance with SMP | 10/1/2016 | 9/30/2020 | D Liu | |
| a) Continue on-going monitoring for PFAS | 4/1/2017 | Ongoing Monthly | D Liu | monthly drinking water, quarterly perimeter monitoring wells, quarterly surface water (1 year) |
| b) PFAS preliminary assessment/site investigation | 7/6/2017 | Ongoing | D Liu | PA started November 2017 and finalized April 2019. SI field work completed April-May 2019. Draft SI report 4/2020 |
| c) Complete site investigation for former Navy sites | 10/1/2016 | Ongoing | S Dunn | |
| d) Third 5-year review | 9/1/2022 | 2/8/2024 | D Liu | |
| iii) Issue the semi-annual progress report - for the duration of the AAOC (June 07, June 08, etc) | 4/1/2017 | 6/1/2020 | D Liu | |
| iv) Annually conduct site visit to ensure that land use controls are in place | 6/15/2017 | 6/27/2020 | S Dunn | |
| v) Construct and operate the GAC treatment system | 5/30/2019 | 9/30/2025 | D Liu | |
| Petroleum Impacted Site | | | | |
| 2) Manage the restoration program for petroleum-impacted site. | 1/24/2005 | 5/10/2020 | D.Liu, J.Wheaton | |
| i) Execute the CAP and report progress to DEQ as required in one annual report | 10/1/2016 | 5/21/2020 | D Liu, J Wheaton | |
| Formerly Used Defense Sites (FUDS) | | | | |
| 3) Ensure former military sites are properly evaluated under the Formerly Used Defense Sites program. | CY 2001 | 9/30/2020 | D. Liu, S. Dunn | |
| i) <u>Annually</u> coordinate and facilitate US Army Corps of Engineers - FUDS activities at WFF through regular contact by phone, email, and document review | 10/1/2016 | 9/30/2020 | D Liu, S Dunn | |
| ii) Participate in project meetings with USACE, VA DEQ, and EPA | 10/1/2016 | 9/30/2020 | D Liu, S Dunn | |
| 4) Manage Formerly Used Defense Sites (FUDS) program under CERCLA and the MOA between the Army and NASA | CY 2015 | 9/30/2020 | D. Liu, S. Dunn | |
| i) Complete and submit the annual spend plan by March 31 beginning in 2016 | 2/28/2016 | 3/15/2020 | D Liu, S Dunn | |
| ii) Complete and submit the draft annual Site Management Plan (SMP) | 10/1/2016 | 11/27/2019 complete | D Liu | |
| iii) <u>Annually</u> execute work in accordance with SMP | 10/1/2016 | 9/30/2020 | D Liu | |
| a) Sign ROD for Sites 9, 14, and 15 | 7/6/2016 | 9/30/2020 | D Liu | |
| b) Sign ROD for former WWTP | 8/31/2016 | 9/30/2020 | D Liu | |
| c) Main Base remedial investigation | 10/1/2016 | Ongoing | D Liu | Internal draft received July 10, 2018. Draft submitted 2/13/2019 Update Main Base background study |

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| d) Skeet Range | 10/1/2016 | 3/31/2021 | D Liu | Field work completed 12/17-20/2018. RI reviewed. EPA and VDEQ provided comments 11/2019. RI report completed 1/2020 |
| e)Construction Debris Landfill non time critical removal action | 10/1/2019 | 9/30/2021 | D Liu | USACE provided funding |
| iv) Issue the semi-annual progress report - for the duration of the AAOC (June 07, June 08, etc) | 4/1/2017 | 6/1/2020 | D Liu | |
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| People: 1.25 FTE (civil servant); 1.2 WYEs (contractors) | |
| Money: ~3M (FY20) | |
| Other: WICCI contract, KSC Remediation contract, and outside consultants/contractors | |
| | |
| Training: OSHA, RCRA, ICP | |
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| Monitoring and Measurement: | |
| 1) Progress against the SMP schedule | |
| 2) Execution costs in comparison to "cost to complete" estimates | |
| 3) Progress against FUDS Schedule | |
| 4) CERCLA Sites- maintain database for active and closed sites | |
| 5) Total Number of Active Sites | |
| 6) Total Number of Closed Sites | |
| | |
| RCRA 7003 Administrative Agreement on Consent (AAOC) | |
| 14 Closed Sites | |
| 3 Sites under investigation | |
| 2 Long Term Monitoring (LTM) Sites | |
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| Storage Tank Sites (DEQ Petroleum Program) | |
| 22 Closed Sites | |
| 1 LTM Site | |
| | |
| US Army Corps of Engineers (USACE) Formerly Used Defense Sites (FUDS) Program | |
| 11 Active Sites | |
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| Records: | |
| 1) The administrative record, which contains documents that support the selection of response actions performed by NASA to restore/remediate the site (e.g., minutes from meetings with regulators and decisions made) | |
| 2) Weekly reports for field work performed at WFF | |
| 3) Semi-annual report to regulators--EPA and DEQ (June of each year) | |
| 4) Annual Report--SMP (December of each year) | |
| 5) Minutes--Quarterly RPM Meetings | |
| 6) RPM Document Tracking and Schedule Projection | |
| 7) Annual Report--Old AFTF (May 10 of each year) | |
| 8) LTM Reports for FFTA and Waste Oil Dump | |
| 9) Memorandum of Agreement (MOA) between Department of Army and NASA | |