US Army Garrison Wiesbaden

Army Cleanup Program

Installation Action Plan Final

June 2024

TABLE OF CONTENTS

STATEMENT OF PURPOSE

The Installation Action Plan (IAP) provides evidence that the Army is firmly committed to expeditious identification and cleanup of environmental contamination, and that the installation has a credible, organized program to carry out that commitment. The IAP provides an outline of the total multi-year environmental cleanup program for each site with ongoing or future planned restoration activity and includes the (1) environmental restoration requirements, (2) the rationale for the selected technical approach, and (3) foundation to develop corresponding financial needs for each cleanup site.

ACRONYMS

Acronym	Definition
ARLOC	Army Location
ASC	Auto Skills Center
AST	Aboveground Storage Tank
BBodschG	Bundes-Bodenschutz-Gesetz Federal Soil Protection Act
BbodschV	Bundes-Bodenschutz-Verordnung Federal Soil Protection Ordinance
BGS	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
CC	Compliance-related Cleanup
CHC	Chlorinated hydrocarbon
CIC	Consolidated Intelligence Center
CRL	Cleanup Restoration & Liabilities
CTC	Cost-to-Complete
DD	Decision Document
DNAPL	Dense Non-Aqueous Phase Liquids
DODI	Department of Defense Instruction
DUCS	Database of USAREUR Contaminated Sites
ENV	Environmental
ERH	Electrical Resistance Heating
FS	Feasibility Study
FY	Fiscal Year
GWS-VwV	German Federal Groundwater Regulation
HLUG	Hessisches Landesamt für Umwelt und Geologie
HN	Host Nation
IAP	Installation Action Plan
IAW	In Accordance With
ID	Identification
IR	Installation Restoration
IRA	Interim Remedial Action
ISCO	In-Situ Chemical Oxidation
ITV	Insignificance Threshold Values
JP	Jet Propellant
km	kilometer
LEC	Lead Environmental Component
LTM	Long-Term Management
m	meter

Acronym	Definition
m^2	square meter
m^3	cubic meter
MCA	Military Construction, Army
mg/kg	milligram per kilogram
mg/L	milligram per liter
mg/m^3	milligram per cubic meter
MIP	Membrane Interface Probe
MNA	Monitored Natural Attenuation
MOGAS	Motor Gasoline
MR	Munitions Response
MRSPP	Munitions Response Site Prioritization Protocol
NATO	North Atlantic Treaty Organization
ND	Non-Detect
NFA	No Further Action
NPL	National Priorities List
PA	Preliminary Assessment
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PFAS	Per- and Polyfluoroalkyl Substances
PFC	Perfluorinated Compound
PFOS	Perfluorooctane Sulfonic Acid
POV	Privately-Owned Vehicle
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RAB	Restoration Advisory Board
RC	Response Complete
RD	Remedial Design
RI	Remedial Investigation
RIP	Remedy-in-Place
RP	Regierungspräsidium (Host Nation Regulatory Agency)
RRSE	Relative Risk Site Evaluation
SC	Site Closeout
SI	Site Inspection
SOFA	Status of Forces Agreement
TBD	To Be Determined
TCE	Trichloroethylene
TPH	Total Petroleum Hydrocarbons

Acronym	Definition
TV	Threshold Value
ug/L	microgram per liter
UST	Underground Storage Tank

PHASE TRANSLATION TABLE

CERCLA Phase	RCRA Phase	RCRA UST Phase
Preliminary Assessment (PA)	RCRA Facility Assessment (RFA)	Initial Site Characterization (ISC)
Site Inspection (SI)	Confirmation Sampling (CS)	Investigation (INV)
Remedial Investigation/ Feasibility Study (RI/FS)	RCRA Facility Investigation/Corrective Measures Study (RFI/CMS)	Corrective Action Plan (CAP)
Remedial Design (RD)	Design (DES)	Design (DES)
Interim Remedial Action (IRA)	Interim Measure (IM)	Interim Remedial Action (IRA)
Remedial Action (Construction) (RA(C))	Corrective Measures Implementation (Construction) (CMI(C))	Implementation (Construction) (IMP(C))
Remedial Action (Operations) (RA(O))	Corrective Measures Implementation (Operations) (CMI(O))	Implementation (Operations) (IMP(O))
Long-Term Management (LTM)	Long-Term Management (LTM)	Long-Term Management (LTM)

PROGRAM SUMMARY

Number of Open Sites with Response Complete/Total Open IR Sites: 0/0

Number of Open Sites with Response Complete/Total Open MR Sites: 0/0

Number of Open Sites with Response Complete/Total Open CC Sites: 0/6

SITE-LEVEL INFORMATION

GE54F - McCully Barracks

Installation Name: US Army Garrison Wiesbaden

Installation City: Mainz

5675A.1001_CCWB104_GE54F_Fuel Station Bldg 6294

Env Site ID: CCWB104

Cleanup Site: GE54F_Fuel Station Bldg 6294

Alias: #

Regulatory Driver: DODI

RIP Date: 11/15/2026

RC Date: 11/15/2026

RC Reason: Not assigned

SC Date: 11/16/2026

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: N/A

Phase	Start	End
PA:	1/1/2016	1/1/2016
SI:	2/1/2016	3/15/2017
RI/FS:	3/16/2017	11/15/2026
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: SITE LOCATION AND DESCRIPTION

1. Location- The Gas Station (Building 6294) is located in the southeast section of McCully Support Center (ARLOC GE54F) about 1.0 km south of the town of Wackernheim.

2. Physical Layout/Site Use- The site has been used as a gas station since 1963. The site is mostly covered with a concrete pad and fueling island.

CONCEPTUAL SITE MODEL

1. Release Description- The source of the release was leaking underground storage tanks containing diesel (tank 3), and MOGAS (tank 4).

2. Media Impacted- Soil and groundwater.

3. Nature and Extent of Contamination- Soil samples were collected from 6 locations during the RI/FS and analyzed for TPH and BTEX. There were no elevated TPH concentrations. BTEX exceeded the 1 mg/kg threshold value (TV) at two of the four locations; at RKS1 from 3.0-4.2 m bgs (3.06 mg/kg) and at RKS2 from 2.0-3.0 m bgs (78.8 mg/kg), and 3.0-4.2 m (7.75 mg/kg). The extent of BTEX contamination was described as very locally limited, and approximately 153 tons of soil are estimated to exceed the TV. The risk assessment found that the BTEX contamination poses little or no threat to human health or the environment. Based on these results, no further action (NFA) was recommended to the Host Nation. In response, the Host Nation has requested an additional investigation and an expanded RI/FS is programmed for FY24. A meeting with the Host Nation Regulatory Agency is planned for the April 3, 2024 time frame. At subject meeting the future investigation will be discussed.

4. Receptors- The risk of pollutant input to groundwater is classified as low. There is no direct danger to humans, animals, or plants.

REMEDIAL OBJECTIVE

1. Long-Term Closeout Strategy- The Host Nation has requested an additional investigation in FY24.

2. Achievable Remedial Action Objective- The Host Nation has requested an additional investigation in FY24.

3. Specific Regulatory Standards and Legal Drivers- The following regulatory citations are applicable at this site- BBodSchG, BBodSchV, GWS-VwV, and the Hessian Assessment Criteria for Groundwater.

4. Remediation Methods Planned or Being Conducted- No remediation planned.

5. Response Complete- Is currently scheduled in November 2026 at the conclusion of the RI/FS but may change pending response from the Host Nation.

6. Site Closure- Site closeout is set at the conclusion of the RI/FS (November 2026), but may change pending response from the Host Nation.

7. Host Nation Involvement- The HN environmental authority is the Hessisches Landesamt für Umwelt und Geologie (HLUG) (Hessian State Agency for Environment and Geology).

PHASE SCHEDULE

1. Current Phase Objective- The Host Nation has requested an additional investigation which will take place through FY25. The investigation is desktop study possibly followed by minor field work that may include the installation of a groundwater monitoring well. A decision document will be prepared in FY25.

2. Milestones- RIP (11/15/2026), RC (11/15/2026), Site Closeout (11/16/2026)

SCHEDULE & BUDGET CHANGES

1. Schedule- During the Spring 2024 data, one year were added to the RC, RIP, and RI/FS end dates.

2. Budget- This is a zero cost site in Spring 2024.

HISTORICAL SITE ACTIVITIES

Reconstruction and repair work of the gas station were performed in 2015, during which time soil contamination in the area of a diesel tank (tank 3) and MOGAS tank (tank 4) were discovered. During explorations, petroleum hydrocarbons were detected in soil at concentrations up to 4,100 mg/kg. The MOGAS tank, which has already been shut down, was removed and the contaminated soil in its vicinity removed by means of a soil exchange. It was determined that the no immediate remedial actions were needed for the diesel tank, which is still in operation; however, contaminated soil proximate to tank 3 should be addressed when the tank is replaced in the future. In 2017, the Host Nation (HN) sent a letter to the Garrison requiring further investigation to delineate contamination south and east of tank 4 and south of tank 3. An RI/FS was completed to satisfy this requirement and determine the nature and extent of contaminants. Soil samples were collected from 6 locations and analyzed for TPH and BTEX. There were no elevated TPH concentrations. BTEX exceeded the 1.0 mg/kg threshold value (TV) at two of the four locations; at RKS1 from 3.0-4.2 m bgs (3.06 mg/kg), and at RKS2 from 2.0-3.0 m bgs (78.8 mg/kg) and 3.0-4.2 m (7.75 mg/kg). The extent of BTEX contamination was described as very locally limited, and approximately 153 tons of soil are estimated to exceed the TV. The risk assessment found that the BTEX contamination poses little or no threat to human health or the environment. Based on these results, no further action (NFA) was recommended to the Host Nation. The Host Nation requested additional investigation consisting of mostly desktop evaluation. The site was never included in the DUCs database.

PROJECT APPROVAL

The project is required per IAW DoDI 4715.08 (1 Nov 13), Encl. 3, Par 1e (international agreement). The requirements are imposed by the BBodSchG (Bundes-Bodenschutz-Gesetz/ Federal Soil Protection Act) and the BBodSchV (Bundes-Bodenschutz-Verordnung/ Federal Soil Protection Ordinance. Pursuant to Art 53 of the Supplementary Agreement to the NATO SOFA [a binding international agreement within the

meaning of DODI 4715.08, Encl. 3, par 1e (2)(b)], the US is to apply the provisions of these laws where applicable. A Decision Document will be prepared and LEC consulted following the RI/FS.

GE93Q - Lucius D. Clay Kaserne

Installation Name: GE93Q - Lucius D. Clay Kaserne

Installation City: Wiesbaden

5724A.1001_CCWB020_GE93Q_Area 3 Clay Kaserne

Env Site ID: CCWB020

Cleanup Site: GE93Q_Area 3 Clay Kaserne

Alias: FKWB020

Regulatory Driver: DODI

RIP Date: 11/15/2022

RC Date: 9/30/2054

RC Reason: Not assigned

SC Date: 9/30/2054

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: N/A

Phase	Start	End
PA:	5/31/1990	5/31/1990
SI:	5/31/1990	5/31/2006
RI/FS:	9/30/2006	4/15/2016
RD:	4/16/2016	11/15/2018
IRA:	9/30/1999	4/30/2001
RA(C):	6/15/2019	11/15/2022
RA(O):	11/15/2022	9/30/2054
LTM:	- -	- -

Site Narrative: SITE LOCATION AND DESCRIPTION

1. Location- Area 3 is located within Lucius D. Clay Kaserne (formerly Wiesbaden Army Airfield) (ARLOC GE93Q) within 120 m of Bldgs 1086 and 1087 within 800 m of the northern ARLOC boundary.

2. Physical Layout/Site Use- The site is used as a training area for helicopter pilots and includes a radar station on the northern portion. The site is within the airfield and mostly unpaved.

CONCEPTUAL SITE MODEL

1. Release Description- Since 1990, petroleum hydrocarbons have been detected in soil and CHCs have been detected in groundwater at concentrations exceeding the GWS- VwV regulatory limits. The volume and exact location of the release is unknown.

2. Media Impacted- CHC contaminated groundwater is the primary concern at the site.

3. Nature and Extent of Contamination- An RI/FS was completed that has refined the nature/extent of the CHC plume. MIP sampling defined the lateral and vertical extent of residual CHCs, which are 7.0-12.0 m bgs in an area of 400 m^2. Concentrations of TCE suggest that DNAPL exists. It is estimated that the CHC plume covers approximately 100,000 m^2 (TCE >10 ug/L), with the highest concentrations present within a 4,000 m^2 area. Maximum CHC groundwater concentrations in the center of the CHC plume have been as high as 106 mg/L at MIP 4 as reported in the July 2014 DD. At the end of active ERH remediation in FY21, TCE concentrations in groundwater were below the remediation target value of 100 µg/L at all compliance wells. TCE concentrations in the western portion of the ERH remediation area (MW-E05, and MW-E06) have continuously exceeded the 100 µg/L remediation criteria post ERH shut down, with maximum concentrations of 1,940 µg/L in September 2022, and 1,850 µg/L in both December 2021 and December 2022. The depth to groundwater is between 2.0-4.0 m bgs and flows south.

4. Receptors- In Germany, the groundwater itself is a protected receptor in accordance with German regulations. Occupants of buildings down gradient of the aircraft apron could be receptors if CHC vapors are present at that location.

REMEDIAL OBJECTIVE

1. Long-Term Closeout Strategy- Reduce contaminant concentrations to the site-specific remedial goal of 100 ug/L.

2. Achievable Remedial Action Objective- Reduce contaminant concentrations to the site-specific remedial goal of 100 ug/L. The Host Nation is not requiring cleanup to the 20 ug/L standard since this is infeasible for the site.

3. Specific Regulatory Standards and Legal Drivers- The following regulatory citations are applicable- BBodSchG, BBodSchV, GWS-VwV, and the Hessian Assessment Criteria for Groundwater.

4. Remediation Methods Planned or Being Conducted- Electrical resistance heating (ERH) and monitored natural attenuation (MNA).

5. Response Complete- Will be achieved once the remedial goal of 100 ug/L has been achieved.

6. Site Closure- Will be achieved once the remedial goal of 100 ug/L has been achieved.

7. Host Nation Involvement- The HN environmental authority is the Hessishes Landesamt für Umwelt und Geologie (HLUG). The HN is involved with providing approval of remedial strategies, remedial goals, and interim milestones.

PHASE SCHEDULE

1. Current Phase Objective- MNA in the RA(O) phase will be performed indefinitely.

2. Milestones- RIP (11/15/2022), RC (9/30/2054), Site Closeout (09/30/2054)

SCHEDULE & BUDGET CHANGES

1. Schedule- During the Spring 2024 datacall, one year was added to the RC and RA(O) end dates.

2. Budget- The CTC for this site in Spring 2024 is TBD.

HISTORICAL SITE ACTIVITIES

Area 3 is a training area for helicopter pilots and includes a radar station. Ten soil borings were drilled and one monitoring well was installed in this area in 1990. Soil and ground water samples were analyzed for TPH, CHCs, heavy metals, PCBs, and nitrates. Laboratory analysis indicated CHC concentrations in soil at levels exceeding the regulatory limits applicable at that time. TPH and CHCs were also found in groundwater at levels exceeding the regulatory limits. No metals or nitrate contamination was detected. It was therefore recommended that an additional investigation be performed to fully characterize the soil and groundwater impacts. During a follow-on study performed in 1992 contaminant concentrations did not exceed any regulatory limits in soil and soil/gas. However, TPH was detected in groundwater at a maximum concentration of 1,700 ug/L and CHCs were detected at 1,400 ug/L. Both TPH and CHCs exceeded the applicable regulatory limits. The main CHC compounds detected were trichloroethylene cis-dichloroethylene and tetrachloroethylene. In 1996 and 1997,65 piezometers were installed and sampled. Additionally, samples from the five permanent groundwater monitoring wells were collected. The maximum detected TPH concentration was 2,810 ug/L which exceeds the regulatory limits of 50 ug/L and remediation target value of 10 ug/L. The extent of contamination was estimated to be 26,000 m^2. Assuming an aquifer thickness of 3.5 m and a porosity of 40%, the total volume of TPH-contaminated groundwater was estimated at 36,400 m^3. The CHC plume appeared to extend to the south, with the maximum contamination centered between Buildings 1086/1087 and the runway to the south. Comparing the data collected in 1989 and 1995, it suggests that the plume had not migrated far. A Dual Phase extraction system to mitigate the contamination was designed in 1998, installed in 1999, and operated until 2001. At that time, it was determined that the system was not able to reduce the high groundwater CHC concentrations to the remediation target value. It appeared as if the system was not

adequately capturing the plume area, therefore further study of the area was recommended prior to continuing further remedial actions. An RI/FS was performed in 2014, which evaluated three alternatives to achieve the remedial action objective of decreasing CHCs to concentrations below 100 ug/L, including- Alternative #1) No Action; Alternative #2) Active source area remediation utilizing Electrical Resistance Heating (ERH) where CHCs are >5,000ug/L and In-Situ Chemical Oxidation (ISCO) where CHC concentrations between 1,000 µg/L and 5,000µg/ areas where CHCs are < 1,000 µg/L will be allowed to naturally attenuate; and Alternative #3) Active source area remediation utilizing ERH where CHCs are >10,000ug/L and ISCO where CHC concentrations between 1,000 µg/L and 10,000µg/L, areas where CHCs are < 1,000 ug/L will be allowed to naturally attenuate. The 2014 RI/FS recommended Alternative #3. In 2017, a pilot study was performed to verify the efficacy of the in-situ remediation methods ERH and ISCO. The pilot study demonstrated that ISCO and ERH could successfully treat the source areas and that conditions favoring natural attenuation exist. As of Spring 2021, the contaminant concentrations were showing reduction from the ERH system operating; however, during the spring 2023and 2024 data calls, rebounding concentrations are being observed following ERH. Two several-day pump tests were performed in FY23 to determine if pump and treatment would be feasible. The tests concluded that the pump and treat method would not be feasible at MW602. During the FY24 datacall, it was determined that ISCO injections will no longer be conducted and a LTM phase of two years will be conducted until the end of FY25. A follow on discussion with the Host Nation Regulatory Agency will determine the future of subject site; MNA or another active remediation. This site was previously included in the DUCs database under DUCS number FKWB020.

PROJECT APPROVAL

The project is required per IAW DoDI 4715.08 (1 Nov 13), Encl. 3, Par 1e (international agreement). The requirements are imposed by the BbodSchG (Bundes-Bodenschutz-Gesetz/ Federal Soil Protection Act) and the BbodSchV (Bundes-Bodenschutz-Verordnung/ Federal Soil Protection Ordinance. Pursuant to Art 53 of the Supplementary Agreement to the NATO SOFA [a binding international agreement within the meaning of DODI 4715.08, Encl. 3, par 1e (2)(b)], the US is to apply the provisions of these laws where applicable. A Decision Document was prepared in July 2014.

5724A.1004_CCWB102_GE93Q_Area 15 Fmr Tank Farm

Env Site ID: CCWB102

Cleanup Site: GE93Q_Area 15 Fmr Tank Farm

Alias: #

Regulatory Driver: DODI

RIP Date: 11/16/2022

RC Date: 11/15/2025

RC Reason: Not assigned

SC Date: 11/16/2025

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: N/A

Phase	Start	End
PA:	1/31/2010	3/31/2010
SI:	3/31/2010	3/15/2013
RI/FS:	10/15/2013	11/15/2021
RD:	- -	- -
IRA:	- -	- -
RA(C):	11/16/2021	11/15/2022
RA(O):	11/16/2022	11/15/2025
LTM:	- -	- -

Site Narrative: *** CCWB102 was reopened during the Spring 2017 data call in response to elevated contaminant concentrations that were detected during the course of groundwater monitoring. HN has requested a remedial investigation be conducted to identify any continuing contaminant sources. ***

SITE LOCATION AND DESCRIPTION

1. Location- The site is located within the Lucius D. Clay Kaserne (formerly Wiesbaden Army Airfield) (ARLOC GE93Q) immediately north of the takeoff and landing strip. The site is located along the northern boundary of the ARLOC.

2. Physical Layout/Site Use- The area includes the fuel depot with 12 underground and 3 surface tanks and connecting pipelines. The total area is approximately 1,200 m^2. The surface and underground tanks are covered with grass. Concrete-paved routes exist between the tanks. A new multi-sport complex is under construction immediately adjacent to the former fuel depot.

CONCEPTUAL SITE MODEL

1. Release Description- The presence of 12 USTs and 3 ASTs and the possibility of historic handling losses and undocumented spills warranted an SI in FY11. The findings of the SI indicated that soil is not contaminated and that groundwater impacts are slight and do not trigger remediation requirements. The SI report concluded that NFA was appropriate for the site and the site was closed in FY13. However, groundwater sampling conducted in FY16 found elevated concentrations of petroleum related constituents.

2. Media Impacted- Groundwater has fluctuating concentrations of petroleum hydrocarbons and related constituents.

3. Nature and Extent of Contamination- Groundwater base wide sampling conducted in FY16 found elevated concentrations of petroleum related constituents. These results were not reproduceable during the sampling campaigns in August and December 2019. Two wells were sampled during these campaigns

(GWM5-19 and GWM7-19). Results show that TPH is non-detect and PAHs were detected below the GWS-VWV threshold value of 0.2 ug/L. An elevated (above threshold value) concentration of Fluoranthene was detected in one groundwater sample at GWM 7-19 in August 2019. During the January 2021 sampling, exceedances of PFHxS were detected in both GWM 5-19 (0.4 ug/L) and GWM 7-19 (0.2 ug/L) During the January 2022 sampling, concentrations above the threshold value were found in GWM 5-19 (PFHxS - 0.5 ug/L, PFOS - 0.2 ug/L) and GWM 7-19 (PFHxS - 1.1 ug/L, PFOA - 0.1 ug/L, PFOS - 0.6 ug/L). Monitoring is currently underway to determine the nature and extent of petroleum impacts. The completed RI/FS found that groundwater poses little to no threat to the environment.

4. Receptors- The use of groundwater as a public resource is the primary receptor that must be protected.

REMEDIAL OBJECTIVE

1. Long-Term Closeout Strategy- Will be achieved once contaminant concentrations are below regulatory concentrations. HN will allow closure if COC concentrations exhibit a downward trend.

2. Achievable Remedial Action Objective- HN requested four years of monitoring upon completion of the RI/FS.

3. Specific Regulatory Standards and Legal Drivers- The following regulatory citations are applicable- BBodSchG, BBodSchV, GWS-VwV, and the Hessian Assessment Criteria for Groundwater.

4. Remediation Methods Planned or Being Conducted- To date, no remediation has been conducted. No remediation is currently planned.

5. Response Complete- Is currently scheduled in November 2025 at the conclusion of the MNA.

6. Site Closure- Site closeout is set at the conclusion of the MNA (November 2025) but is subject to change.

7. Host Nation Involvement- The HN environmental authority is the Hessishes Landesamt für Umwelt und Geologie (HLUG) (Hessian State Agency for Environment and Geology). The Host Nation has been informed of this site and their involvement will be necessary to close the site.

PHASE SCHEDULE

1. Current Phase Objective- The investigation in FY20 determined that MNA will be conducted at the site for four years. For FY22, groundwater monitoring will be conducted under the RA-C phase. For FY23, FY24, and FY25 monitoring will be conducted under the RA-O phase.

2. Milestones- RIP (11/16/2022), RC (11/15/2025), Site Closeout (11/16/2025).

SCHEDULE & BUDGET CHANGES

1. Schedule- During the Spring 2024 data call, no changes were made to the phase schedule.

2. Budget- The CTC for this site in Spring 2024 is TBD.

HISTORICAL SITE ACTIVITIES

There is very little documentation concerning historical activities specifically in the footprint of the planned construction site. At the abutting area, according to Dames & Moore, 1990, JP8 was stored and handled at the site. The twelve underground tanks were installed during the 1950's and the three surface tanks in 1977. Interviews indicated that spills occurred at the helicopter hot fueling pad. The 1990 investigation found limited soil gas impacts (fuel compounds) near the former dispensing stations. Groundwater impacts were identified at two different locations with hydrocarbon concentrations of 0.2 and 0.5 mg/L. The depth to the groundwater table is 2.7 m. A 2004, report by Huttmeier/Wayss & Freytag JV did not find significant impacts and recommended no further action. However, because the area of the MCA project was not the subject of an extensive investigation and it is adjacent to the former

tank farm, an SI was performed at the site in FY11. The FY11 SI indicated that soil is not contaminated, and groundwater is slightly contaminated at concentrations that do not trigger remedial action. The former fuel depot was identified as Area 15 in the DUCs database and was assigned DUCs Number FKWB015. Based on increasing contaminant trends in groundwater, the Host Nation (HN) has requested further assessment to determine if hazardous groundwater contamination exists and if remediation measures are necessary. During the spring 2017 datacall the site was re-opened in the CC program to facilitate performance of an RI/FS. The exit strategy is to perform an RI/FS investigation to determine the nature and extent of contaminants. The FY20 investigation was conducted, and the Decision Document recommended MNA for four years as part of the RA-C and RA-O phases.

PROJECT APPROVAL

The project is required per IAW DoDI 4715.08 (1 Nov 13), Encl. 3, Par 1e (international agreement). The requirements are imposed by the BBodSchG (Bundes-Bodenschutz-Gesetz/ Federal Soil Protection Act) and the BBodSchV (Bundes-Bodenschutz-Verordnung/ Federal Soil Protection Ordinance. Pursuant to Art 53 of the Supplementary Agreement to the NATO SOFA [a binding international agreement within the meaning of DODI 4715.08, Encl. 3, par 1e (2)(b)], the US is to apply the provisions of these laws where applicable. A Decision Document will be prepared and LEC consulted following the RI/FS.

5724A.1005_CCWB012_GE93Q_PFAS_Area 5 Fmr Gas Stat.

Env Site ID: CCWB012

Cleanup Site: GE93Q_PFAS_Area 5 Fmr Gas Stat.

Alias: FKWB012

Regulatory Driver: DODI

RIP Date: 9/16/2018

RC Date: 9/30/2054

RC Reason: Not assigned

SC Date: 9/30/2054

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: N/A

Phase	Start	End
PA:	3/15/1990	4/16/1991
SI:	4/17/1991	5/15/1993
RI/FS:	5/31/2014	9/15/2017
RD:	- -	- -
IRA:	5/16/1993	9/15/1999
RA(C):	9/16/2017	9/15/2018
RA(O):	9/16/2018	9/30/2054
LTM:	- -	- -

Site Narrative: SITE LOCATION AND DESCRIPTION

1. Location- The Area 5 site is located within the southern portion of Lucius D. Clay Kaserne (ARLOC GE93Q), about 150 m from the southeastern boundary.

2. Physical Layout/Site Use- The site is improved with the Consolidated Intelligence Center (CIC) parking garage and is completely covered with asphalt pavement.

CONCEPTUAL SITE MODEL

1. Release Description- The source of contamination was determined to be leaking underground tanks and a damaged pipeline.

2. Media Impacted- BTEX, TPH, and PAH have been detected in groundwater at concentrations exceeding the Hessian Groundwater Insignificance Threshold Values.

GWM 1 (?PAH 0.25 ug/L, Fluoranthene 0.06 ug/L, PFOS 0.20 ug/L), GWM 2 (PFOS 0.1 ug/L), and GWM 5 (Fluoranthene 0.03 ug/L). The depth to groundwater is approximately 4.0 m and flows in a southerly direction. Groundwater monitoring is currently performed under the RA(O) phase

4. Receptors- Human receptors with exposure pathways via inhalation, ingestion, and dermal contact with petroleum contaminated soil and groundwater.

REMEDIAL OBJECTIVE

1. Long-Term Closeout Strategy- MNA in RA(O) until contaminant concentrations are consistently below remedial goals.

2. Achievable Remedial Action Objective- Groundwater sampling to monitor contaminant degradation in the RA(O) phase.

3. Specific Regulatory Standards and Legal Drivers- The following regulatory citations are applicable at this site- BBodSchG, BBodSchV, GWS-VwV, and the Hessian Assessment Criteria for Groundwater.

4. Remediation Methods Planned or Being Conducted- Remediation was performed between 1993 & 1999 which included pump & treat of soil gas and groundwater using active carbon, replacement of damaged tanks and pipelines, and ventilation to support the biological decay process. MNA is currently underway to monitor contaminant degradation.

5. Response Complete- Will be achieved when contaminant concentrations are consistently below remedial goals.

6. Site Closure- Site closure is set at the end of RA(O), which is being performed for a rolling 30-year period.

7. Host Nation Involvement- The HN environmental authority is the Hessisches Landesamt für Umwelt und Geologie (HLUG) (Hessian State Agency for Environment and Geology).

PHASE SCHEDULE

1. Current Phase Objective- MNA indefinitely, because there is no model or trend analysis, the RA(O) phase is estimated at 30 years. PFAS has been added to the analytical scope.

2. Milestones- RIP (9/16/2018), RC (9/30/2054), Site Closeout (09/30/2054)

SCHEDULE & BUDGET CHANGES

1. Schedule- During the Spring 2024 data call one year was added to the RC and RA(O) end dates.

2. Budget- The CTC for this site in Spring 2024 is TBD.

HISTORICAL SITE ACTIVITIES

Investigations were conducted in 1990 and 1992. The contaminated area was estimated at 2,000 m^2 in 1990 and 5,300 m^2 in 1992. The source of contamination was determined to be underground tanks and pipeline damage. In 1990, maximum petroleum hydrocarbon (C18) concentrations between 2.5-3.0 m grade of 4,740 mg/kg were measured above the remediation trigger value of 2,500 mg/kg. In 1990, BTEX levels of 30 - 2,500 mg/m^3 were determined in soil gas. In 1992, total hydrocarbon concentration of 10,150 mg/m^3 were measured in soil gas. Groundwater investigations in the past did not offer a uniform picture. In 1990, the concentrations in two wells in the area of the underground tanks were still measured at up to 170 ug/L. In monitoring well MW 5, floating phase was discovered during both investigation cycles. BTEX concentrations up to 71,960 ug/L were measured in 1992 above the remediation trigger value of 120 ug/L. Sampling in 2004 showed CHC concentration up to 32.2 ug/L with the main substance being Tetrachloroethene. Remediation began in 1993 and was executed in several phases. Soil gas and groundwater was extracted from the saturated and unsaturated zones by means of 25 extraction wells and cleaned with active charcoal. The damaged tanks and pipelines were removed in 1995 and replaced by new ones. Additionally, to support biological decay processes ventilating with atmosphere was begun in 1997. In September 1999, the measures were concluded. It was expected that the remaining residual concentrations would be removed by natural biological decay processes. In Area 5, remediation measures were carried out and completed. No further investigations have been requested by the authorities. During the construction of the new CIC parking garage in 2013 soil exhibiting petroleum staining and odor was observed at the approximate water table of 4.0 m across an area of 50 m by 10 m. Soil samples were collected and concentrations were below the Hessian Assessment Values for Soil. A groundwater grab sample was collected from the pit water and BTEX, TPH, and PAH all exceeded the Hessian Groundwater Criteria Values. However, this sample is not considered truly representative of groundwater. Groundwater results from a well installed and sampled in November 2013 confirmed the presence of TPH, BTEX, and PAH above the Insignificance Threshold Values. The HN requested the installation of three monitoring wells. These three wells were sampled in March 2014. Petroleum hydrocarbons and PAHs were each detected above the insignificance Threshold

Values in on well during this event. In addition, these 3 wells are located above the confining clay layer located at 4.0 m. The HN required installation of two new deeper wells below the clay layer to allow for evaluation of groundwater impacts below the clay layer. A comprehensive Site Investigation was performed between 2015 and 2017 to evaluate groundwater conditions. The following were noted during this evaluation. Five wells were sampled with most of the Hessian Groundwater Insignificance Threshold Values (ITV) exceedances observed at GWM1. TPH ranged from ND to 160 ug/L with 2 wells exceeding the 100 ug/L ITV. Benzene ranged from ND to 7.2 ug/L with 3 wells exceeding the 1 ug/L ITV. BTEX ranged from ND to 73.4 ug/L with 1 well exceeding the 20 ug/L ITV. Fluoranthene ranged from ND to 9.7 ug/L with all 5 wells exceeding the 0.025 ug/L ITV. PAHs ranged from ND to 25.86 ug/L with all 5 wells exceeding the 0.2 ug/L ITV. Concentrations of PAHs and fluoranthene observed during the December 2016 sampling round were 2 to 3 orders of magnitude higher than all other sampling rounds. With the exception of the December 2016 sampling round, an overall downward trend was observed. This site was previously included in the DUCs database as FKWB012.

PROJECT APPROVAL

The project is required per IAW DoDI 4715.08 (1 Nov 13), Encl. 3, Par 1e (international agreement). The requirements are imposed by the BBodSchG (Bundes-Bodenschutz-Gesetz/ Federal Soil Protection Act) and the BBodSchV (Bundes-Bodenschutz-Verordnung/ Federal Soil Protection Ordinance. Pursuant to Art 53 of the Supplementary Agreement to the NATO SOFA [a binding international agreement within the meaning of DODI 4715.08, Encl. 3, par 1e (2)(b)], the US is to apply the provisions of these laws where applicable. A decision document has not been prepared.

5724A.1007_CCWB018_GE93Q_PFAS_Area 12 Burn Pit

Env Site ID: CCWB018

Cleanup Site: GE93Q_PFAS_Area 12 Burn Pit

Alias: FKWB018

Regulatory Driver: DODI

RIP Date: 11/1/2033

RC Date: 9/30/2063

RC Reason: Not assigned

SC Date: 9/30/2063

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: No

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: N/A

Phase	Start	End
PA:	5/31/1990	9/30/1990
SI:	11/30/2010	5/31/2011
RI/FS:	6/30/2011	10/31/2031
RD:	11/1/2031	10/31/2032
IRA:	4/7/2020	10/31/2026
RA(C):	11/1/2032	10/31/2033
RA(O):	11/1/2033	9/30/2063
LTM:	- -	- -

Site Narrative: SITE LOCATION AND DESCRIPTION

1. Location- The site is located on the north/eastern portion of Lucius D. Clay Kaserne (formerly Wiesbaden Army Airfield) (ARLOC GE93Q) within 50 m of the ARLOC boundary.

2. Physical Layout/Site Use- The site was historically a vacant parcel of land that comprised an area of approximately 10,000 m². The site is now used as an auto skills center and is partially (1/3) paved.

CONCEPTUAL SITE MODEL

1. Release Description- The site was used as a fire fighting training area for a period of over 20 years ending 1976. For this purpose, aircrafts, armored vehicles, steel drums, and wooden structures filled with oil or mogas were ignited and then extinguished. The heavily industrialized use of the property over time has resulted in contaminated groundwater.

3. Nature and Extent of Contamination- Six monitoring wells were sampled for PFCs between December 2016 and May 2021. The highest PFC concentrations were detected in MW 6/1 (318 - 360.4 µg/l), followed by MW4 (96.7 - 130.9 µg/l) and MW 3 (70.6 - 100.6 µg/l). In the upstream at GWM 1, PFC concentrations ranged from 2.1 to 3.4 µg/l. PFC concentrations ranging from 13.4 to 18 µg/l were also detected far downstream. In May 2021, five of six monitoring wells had no detectable concentrations or only traces found of Tetrachloromethane and Trichloromethane. Concentrations in MW 4 were 47 µg/L and 44 µg/L, respectively. During the most recent sampling events in January and May 2022, five of six monitoring wells yielded non-detectable or trace ?CHC concentrations; however, MW4 displayed ?CHC concentrations between 99.7 and 104.9 µg/l, above the threshold limit of 10 µg/l. ?PFC concentrations were observed in the highest concentrations in MW6/1 (320.5 - 331.2 µg/l), followed by MW4 (97.0-127.9 µg/l), and MW1 (31.5 - 80.5 µg/l). The depth to groundwater is between 1.5 - 4.8 m bgs and flows southeast.

2. Media Impacted- This site has been primarily established for the monitoring of PFCs in groundwater only. Secondarily, there are low CHC levels present in groundwater.

4. Receptors- The protection of the groundwater as a public resource is the primary receptor at the site.

REMEDIAL OBJECTIVE

1. Long-Term Closeout Strategy- Capping is expected to be completed in FY27. Inerting takes place in FY24 and FY25 to contain PFAS. Indefinite pump and treat and monitoring in RA(O) will take place until contaminant concentrations are consistently below remedial goals.

2. Achievable Remedial Action Objective- Groundwater monitoring in RI/FS while remedial strategy is developed. It is expected that the remedy will include capping and inerting of PFAS, followed by pump and treat and monitoring for an indefinite 30 years. These remedies depend on site characterization of PFAS and a potential follow up study.

3. Specific Regulatory Standards and Legal Drivers- The following regulatory citations are applicable at this site- BBodSchG, BBodSchV, GWS-VwV, the Hessian Assessment Criteria for Groundwater, and Bavarian State regulations for preliminary assessments of PFC-contaminants in water and soil.

4. Remediation Methods Planned or Being Conducted- It is expected that remediation will consist of amending the soil with concrete and concrete capping to prevent leaching. It is expected that groundwater remediation will consist of capping as IRA followed by an indefinite 30 years of MNA and pump and treat. Inerting may also take place in to contain PFAS.

5. Response Complete- Has been set to be achieved at the conclusion of pump and treat.

6. Site Closure- Will be achieved when contaminant concentrations are below regulatory standards.

7. Host Nation Involvement- The HN environmental authority is the Regierungspräsidium (RP) Darmstadt. The HN is involved with providing approval of remedial strategies, remedial goals, and interim milestones.

PHASE SCHEDULE

1. Current Phase Objective- Delineation and capping is underway as of FY24 datacall and expected to be complete in FY27. Groundwater monitoring including Area 1 wells will be conducted in RI/FS between FY25 and FY31. A capping project will be conducted under the IRA phase in FY24. The costs for the final remedy decision document are planned for FY29 with 30 years of pump and treat and MNA planned.

2. Milestones- RIP (11/01/2033), RC (09/30/2063), Site Closeout (09/30/2063)

SCHEDULE & BUDGET CHANGES

1. Schedule- The entire phase schedule was pushed out by one year during the Spring 2024 data call.

2. Budget- The CTC for this site in Spring 2024 is TBD.

HISTORICAL SITE ACTIVITIES

Area 12 was reportedly used for firefighting training purposes for a period of over 20 years until 1976. Firefighting exercises included airplanes, oil tanks, and gasoline-filled steel drums that were set on fire and also the erection of wooden houses and concrete structures. The area was also used as a tank firing range until 1984. The target area was a U-shaped berm, which was demolished between 1992 and 1994 to form an artificial hill. The shape of this resultant hill is approximately 200 m long and 60 m wide, running in an east-west direction. This artificial hill is elevated 2.0-3.0 m above the surrounding areas and consists of sand, silt, and construction debris (concrete blocks). Intensive soil investigations were conducted at this area in 1990 (D&M), 1996 (B&V), 2000 (Huettmeier), and 2009 (SL Geotechnik) which included a total of over 100 soil borings and close to 300 analyses for TPH. In the soil samples predominately TPH and BTEX were detected above remediation criteria published in the Hessen Guideline (2500 mg/kg and 25 mg/kg, respectively). During the previous (and most intensive) soil investigation, no significant PAH, CHC, heavy metal, or explosive concentrations were reported. The

impact of TPH and BTEX on the soil appears to only be local and restricted to the upper 2.0 - 3.0 m bgs. Six groundwater monitoring wells are located at the site. The various groundwater investigations since 1990 reported elevated levels of TPH, BTEX, CHC, PAH, and heavy metal concentrations above the assessment criteria. Since 2004, CHC was the only parameter reported above the assessment criteria (repeatedly in MW1 and MW4). The entire Lucius D. Clay Kaserne-North area is being redeveloped as recreational facilities. The area specific to Area 12 was rebuilt in December 2012 as a new Auto Skills Center (ASC). Prior to construction, an investigation was conducted at the site between November and December 2010 which found perfluorinated compounds (PFCs) in surface soils. During construction of the ASC, approximately 18,000 tons of PFC-contaminated soil were excavated and stockpiled south and west of the construction site. Maximum concentrations of total PFCs of up to 2,300 ug/kg were detected in composite samples collected from the 15 piles of excavated soil that had accumulated. In late 2012, these stockpiles were excavated and disposed of offsite. Since 2011, PFCs have also been detected in groundwater, with concentrations up to 385 ug/L in monitoring well 6; therefore, further investigations were deemed necessary. An investigation was conducted in FY13 that found PFCs and CHCs at maximum respective concentrations of 8.52 ug/L and 64.2 ug/L. In 2014, PFCs were detected in groundwater as high as 385 ug/L exceeding the drinking water limit of 2 ug/L, while Tetrachloromethane and Trichloromethane were detected at combined concentrations of 90 ug/L exceeding the GFS of 20 ug/L for total CHCs. This site was previously included in the DUCs database under DUCS number FKWB018.

PROJECT APPROVAL

The project is required per IAW DoDI 4715.08 (1 Nov 13), Encl. 3, Par 1e (international agreement). The requirements are imposed by the BBodSchG (Bundes-Bodenschutz-Gesetz/ Federal Soil Protection Act) and the BBodSchV (Bundes-Bodenschutz-Verordnung/ Federal Soil Protection Ordinance. Pursuant to Art 53 of the Supplementary Agreement to the NATO SOFA [a binding international agreement within the meaning of DODI 4715.08, Encl. 3, par 1e (2)(b)], the US is to apply the provisions of these laws where applicable. Decision Document will be prepared and LEC consulted after the RI/FS.

5724A.1009_CCWB105_GE93Q_PFAS Area 11

Env Site ID: CCWB105

Cleanup Site: GE93Q_PFAS Area 11

Alias: #

Regulatory Driver: DODI

RIP Date: 11/15/2027

RC Date: 11/15/2027

RC Reason: Not assigned

SC Date: 11/15/2027

Program: Compliance-related Cleanup

Subprogram: CC

NPL Status: Not assigned

Hazardous Ranking Score: 0

RRSE: N/A

MRSPP: N/A

Phase	Start	End
PA:	1/15/2006	2/28/2006
SI:	10/1/2016	10/15/2023
RI/FS:	10/16/2023	11/15/2027
RD:	- -	- -
IRA:	- -	- -
RA(C):	- -	- -
RA(O):	- -	- -
LTM:	- -	- -

Site Narrative: SITE LOCATION AND DESCRIPTION

1. Location- The site is located on the northwest portion of Lucius D. Clay Kaserne (formerly Wiesbaden Army Airfield) (ARLOC GE93Q) adjacent to the northwest ARLOC boundary.

2. Physical Layout/Site Use- The site is located at the northwest boundary of the airfield, north of the takeoff and landing strip. The site is open space with open storage areas located in several portions, with the exception of the Federal Autobahn, A 66, to the north the area surrounding the Airfield is used for agriculture. Agricultural buildings are located to the south.

CONCEPTUAL SITE MODEL

1. Release Description- The cause of the PFC pollution is likely located north of DP 2, on the grounds of Clay Kaserne, possibly in the area of the former training fire extinguishing pit (Area 11 – POV Impound Lot"), south of DP 3.

2. Media Impacted- Soil and groundwater is contaminated with PFCs above regulatory values.

3. Nature and Extent of Contamination- In March 2021, 20 direct push soundings were conducted to investigate groundwater contamination by PFAS. Six new monitoring wells were installed September 2021 and sampled in October 2021. During the direct-push soundings, PFAS total concentrations ranged from 0.02 ug/l to 160 ug/l. The single parameter PFHxS showed exceedances of the corresponding GFS of 0.1 ug/l in all soundings, either in the upper or lower sampling section. The individual parameter PFOS was also above the GFS of 0.1 ug/l in all soundings except DP 05/21 and DP 08/21. PFAS total concentrations in groundwater monitoring wells ranged from 0.56 ug/l at the southwest edge of Clay Kaserne to 39 ug/l in the immediate downstream area of Area 11. The GFS for PFHxS and PFOS were exceeded in all water samples. A soil investigation by means of small diameter percussion drilling was also completed in 2021. PFAS total concentrations in the soil eluates were measured from below determination limits to 9.1 ug/l. Overall, the highest concentrations were found in the northern investigation area. In the southern investigation area, elevated levels up to 7.7 ug/l were only present in

KRB 14/21. The March 2022 SI report concluded that NFA was appropriate since there are no relevant risk pathways in the study area. A PFC site characterization project is underway at Clay Kaserne which is picking up the results of the subject area 11 SI. Groundwater is located at approximately 2.0-3.0 m below grade and flows in a southerly direction. The nearest drinking water wells are located approximately 600 m south of the paint works, outside of the airfield.

4. Receptors- The protection of the groundwater as a public resource is the primary receptor at the site.

REMEDIAL OBJECTIVE

1. Long-Term Closeout Strategy- Three years of monitoring is expected in the RI/FS phase. Future phases beyond the RI/FS are not estimable until the Army PFAS strategy for this site is further refined. During the Spring 2024 datacall, it was determined that additional investigation will be needed south of Area 11.

2. Achievable Remedial Action Objective- Additional information is needed before the achievable remedial objective can be determined.

3. Specific Regulatory Standards and Legal Drivers- The following regulatory citations are applicable at this site- BBodSchG, BBodSchV, GWS-VwV, the Hessian Assessment Criteria for Groundwater, and Bavarian State regulations for preliminary assessments of PFC contaminants in water and soil.

4. Remediation Methods Planned or Being Conducted- At this time, there is insufficient information available to determine a plan of action for remediating the site.

5. Response Complete- The RC has temporarily been set as the RI/FS completion date.

6. Site Closure- Site closeout has temporarily been set at the conclusion of the RI/FS phase, but may change depending on investigation results or response from the Host Nation.

7. Host Nation Involvement- The HN environmental authority is the Regierungspräsidium (RP) Darmstadt. The HN is involved with providing approval of remedial strategies, remedial goals, and interim milestones and is becoming increasingly interested in the regulation of PFCs.

PHASE SCHEDULE

1. Current Phase Objective - During the Spring 2023 data call, the RI/FS phase was programmed. Six wells will be sampled twice per year in this phase.

2. Milestones - RIP (11/15/2027), RC (11/15/2027), Site Closeout (11/15/2027)

SCHEDULE & BUDGET CHANGES

1. Schedule- During the Spring 2024 datacall, one year was added to the RI/FS end date.

2. Budget- This is a zero cost site in Spring 2024.

HISTORICAL SITE ACTIVITIES

The site was used as a storage/scrap area for private vehicles and diverse waste products. Waste oil was occasionally burned here until approximately 1975. As it was often waterlogged, the area was covered with cinders from coal firing in 1982 in an attempt to dry the area. In February 2006, a preliminary assessment was conducted at the site along with 16 other Areas at Wiesbaden Army Airfield. Groundwater contamination has only been previously recorded once, in gage MW 11. This gage could not be located during the site inspection on 22 March 2002, it may have been covered by bales of hay; therefore, two new groundwater monitoring wells were installed in the run-up to the 2003 sampling. All analytical results from the April 2003 sampling (zinc, TPH (H53), CHCs, and PAH) were considerably lower than the regulatory values. No further measures were required based on the results of the April 2003 sampling. An investigation was conducted in November 2016, that included the advancement of 32 direct push soil borings to depths up to 5.0 m for the collection of shallow groundwater PFC samples. PFC sum concentrations were detected in groundwater in 13 of 32 borings at concentrations ranging

from 0.0 – 348.71 ug/L, exceeding the regulatory limit of 1.0 ug/L. In July 2017, a total of four monitoring wells identified as GWM 7F, GWM 7T, GWM 11, and GWM 12 were sampled. Several PFCs were detected in all four of the monitoring wells in July 2017 with a PFOS concentration of 17.00 ug/L detected in GWM 7T, exceeding the regulatory value of 0.1 ug/L. Several soil and groundwater sampling events were conducted at the site in 2017 and 2018 for PFCs. The maximum PFC concentration in groundwater during these events was 349 ug/L in DP2 exceeding the drinking water limit of 1.0 ug/L. In June 2018, a surface water sampling event was conducted for PFCs at 11 sampling locations along the Käsbach creek. The Käsbach creek is located about 1.3 km south of Area 11 and flows in a southerly direction. The results of the sampling event found PFCs were detected above regulatory values in 10 of 11 sampling locations. The connection between the surface sampling results and Area 11 is unclear. Additional evaluation will be required to determine the potential connection between the Käsbach creek surface water sampling results and Area 11. As a result of the high PFC concentrations detected during the 2017/2018 PFC sampling events, the HN regulator requested additional soil and groundwater investigations be carried out in a 30 January 2019 letter. Another small fire training pit was found in Area 11 during the SI. Due to its small size, the area may be remediated in the future under a separate CC ID. Downstream from the site a farmer was required to close his irrigation well due to high PFAS contamination. Since these concentrations do not match those at the site, an additional PFAS site may be present. PFAS has migrated from the former paint factory off post to the Borne Farm. The site was not previously included in the DUCs program.

PROJECT APPROVAL

The project is required per IAW DoDI 4715.08 (1 Nov 13), Encl. 3, Par 1e (international agreement). The requirements are imposed by the BBodSchG (Bundes-Bodenschutz-Gesetz/ Federal Soil Protection Act) and the BBodSchV (Bundes-Bodenschutz-Verordnung/ Federal Soil Protection Ordinance. Pursuant to Art 53 of the Supplementary Agreement to the NATO SOFA [a binding international agreement within the meaning of DODI 4715.08, Encl. 3, par 1e (2)(b)], the US is to apply the provisions of these laws where applicable. A Decision Document will be prepared and LEC consulted prior to any remediation.

SITE SUMMARY

SITE CLOSEOUT SUMMARY

CRL ID	Site Name	Site Closeout Date
5724A.1002	CCWB016_GE93Q - Area 4, WAB	2/15/2014
5724A.1003	CCWB101_GE93Q - Fitness Center	7/31/2004
5724A.1006	CCWB013A_GE93Q-AREA 1, WAB	5/18/2020
5724A.1008	CCWB200_GE93Q-WIESBADEN MULTI-SITE LTM P	6/15/2019