



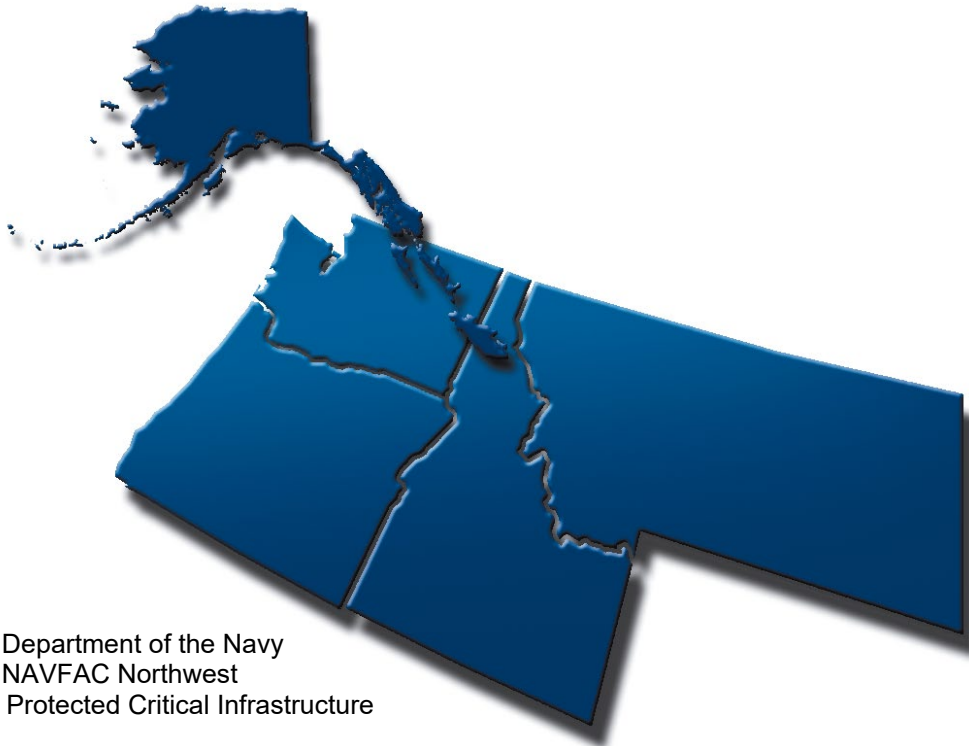
FINAL

January 2024

2023 Land Use Control Inspections Technical Memorandum

**Sites 302, 303, and 304 and Tank 50
Naval Base Kitsap Manchester, Kitsap County,
Washington**

**United States Department of the Navy
Naval Facilities Engineering Systems Command**
1101 Tautog Circle
Silverdale, WA 98315-1101



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**Naval Facilities Engineering Systems Command Northwest
Silverdale, WA**

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Memorandum**

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Washington

January 2024

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FINAL
2023 LAND USE CONTROL INSPECTIONS TECHNICAL MEMORANDUM
SITES 302, 303, AND 304 AND TANK 50
NAVAL BASE KITSAP MANCHESTER, KITSAP COUNTY, WASHINGTON

January 2024

Prepared for
United States Department of the Navy
Naval Facilities Engineering Systems Command Northwest
Silverdale, WA 98315

REVIEW AND APPROVAL

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1/25/2024

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Acronyms and Abbreviations

Ecology	Washington State Department of Ecology
ERN.....	Environmental Restoration, Navy
ESG.....	Environmental and Safety Guide
FY.....	fiscal year
FYR.....	five-year review
LUC	land use control
MILCON	military construction
NAVFAC.....	Naval Facilities Engineering Systems Command
NAVSUP	Naval Supply Systems Command
Navy	U.S. Department of the Navy
NBK.....	Naval Base Kitsap
NFA.....	No Further Action
PCB.....	polychlorinated biphenyl
PFAS.....	per- and polyfluoroalkyl substances
UST	underground storage tank

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Executive Summary

This 2023 Land Use Control (LUC) Inspections Technical Memorandum describes the observations and subsequent recommendations from LUC inspections conducted in July 2023 at specified sites at Naval Base Kitsap (NBK) – Manchester, Kitsap County, Washington. The 2023 LUC inspections are the seventh inspections conducted at Sites 302, 303, and 304 and Tank 50 since issuance of the LUC plan (Navy, 2016a). The Fourth Five-Year Review (FYR) (Navy, 2020) for NBK – Manchester was completed in 2020.

LUCs are required at several sites at NBK – Manchester due to remaining contaminated soil and/or groundwater that prevent unlimited use and unrestricted exposures, as detailed in the LUC Plan for Sites 302, 303, and 304 and Tank 50 (Navy, 2016a). The annual LUC inspections include a field inspection, determination of the current land use, document review (i.e., administrative and institutional controls in place, specifically excavation permits), and condition assessment of engineering controls, such as fencing, gates, signage, monitoring wells, and soil covers.

The LUC Plan addresses four sites:

- Site 302 – Polychlorinated Biphenyl Site,
- Site 303 – D-Tunnel Tanks,
- Site 304 – Industrial Area, and
- Tank 50 – Underground Storage Tank Release Site.

The purposes of the LUC inspections are to:

1. Assess the status of the LUCs as described in the LUC Plan; and
2. Assist in identifying recommendations for corrective/additional action(s) needed to maintain the LUCs in accordance with the approved plan at NBK – Manchester.

This technical memorandum: 1) provides documentation that the LUCs have not been modified or terminated and land use has not been modified (without regulatory approval) at any site; and 2) communicates the status of the LUCs to the project stakeholders (i.e., Washington State Department of Ecology and the Suquamish Tribe).

The LUC inspections of Sites 302, 303, and 304 and Tank 50 at NBK – Manchester were conducted on 26 July 2023, in accordance with the procedures detailed in the LUC plan. Table ES-1 summarizes the three salient observations/findings from the 2023 LUC inspections, subsequent recommendations, and comments regarding the recommendations.

Based on the 2023 inspection results, it is recommended that the LUC inspections continue on an annual basis to allow for a timely evaluation before and after completion of recommended action items. Executed recommendations will be documented in subsequent LUC Technical Memorandums and the Fifth FYR for NBK – Manchester.

Table ES-1: Summary of Findings and Recommendations from the 2023 LUC Inspections

Findings/Observations		Recommendations	Comment
Finding No.	Site 302 – PCB Site		
1	Approximately 60 additional linear feet of fencing was noted during the 2023 LUC inspection to be collapsed along the western boundary of the site due to fallen trees	Reconstruct fence.	The Navy plans to conduct the vegetation and tree clearing and fence repair in FY 2024, and the ERN group will coordinate with NBK - Manchester on implementation.
2	Approximately 100 linear feet of fencing on the northwestern side of the site was observed to be heavily overgrown with vegetation and the area was inaccessible.	Clear heavy vegetation and reconstruct fence, as needed.	The presence of heavy vegetation will continue to compromise the integrity of the fence, potentially leading to additional overgrowth and potential collapse. The Navy plans to conduct the vegetation and tree clearing and fence repair in FY 2024, and the ERN group will coordinate with NBK - Manchester on implementation.
	Site 303 – D-Tunnel Tanks		
3	LUC signage southwest of Tank 22 and south of Tank 29 that was damaged during MILCON field activities has been removed.	Replace the removed signage.	The Navy plans to replace the signage that has been removed in FY 2024.

Abbreviations:

ERN = Environmental Restoration, Navy

FY = fiscal year

LUC = land use control

MILCON = military construction

Navy = U.S. Department of the Navy

NBK = Naval Base Kitsap

PCB = polychlorinated biphenyl

1.0 Introduction

This 2023 Land Use Control (LUC) Inspections Technical Memorandum describes the observations and subsequent recommendations from LUC inspections of specified sites conducted in July 2023 at Naval Base Kitsap (NBK) – Manchester, Kitsap County, Washington. This report was prepared by Liberty JV for Naval Facilities Engineering Systems Command (NAVFAC) Northwest under Contract No. N44255-20-D-5006, Task Order No. N4425523F4026.

LUCs are required at several sites at NBK – Manchester due to remaining contaminated soil and/or groundwater that prevent unlimited use and unrestricted exposures, as detailed in the Land Use Control Plan for Sites 302, 303, and 304 and Tank 50, Naval Base Kitsap Manchester, Manchester, Washington (Navy, 2016a); hereinafter referred to as the LUC Plan.

The LUC Plan addresses four sites:

- Site 302 – Polychlorinated Biphenyl (PCB) Site,
- Site 303 – D-Tunnel Tanks,
- Site 304 – Industrial Area, and
- Tank 50 – Underground Storage Tank (UST) Release Site.

The 2023 LUC inspections are the seventh annual inspections to occur since issuance of the LUC Plan and were conducted in accordance with that document. The LUC inspection procedures provide a means to verify that the LUC requirements ensure protection of human health and the environment.

1.1 Purpose

The purposes of the LUC inspections are to:

1. Assess the status of the LUCs as described in the LUC Plan; and
2. Assist in identifying recommendations for corrective/additional action(s) needed to maintain the LUCs in accordance with the approved plan at NBK – Manchester.

This technical memorandum 1) provides documentation that the LUCs have not been modified or terminated and land use has not been modified (without regulatory approval) at any site; and 2) communicates the status of the LUCs to the project stakeholders (i.e., Washington State Department of Ecology [Ecology] and the Suquamish Tribe).

The LUC inspections of Sites 302, 303, and 304 and Tank 50 at NBK – Manchester were conducted on 26 July 2023, in accordance with the procedures detailed in the LUC plan. The salient observations/findings from the 2023 LUC inspections, subsequent recommendations, and comments regarding the recommendations can be found in Section 3 of this report.

The 2023 LUC inspections are the seventh inspections conducted at Sites 302, 303, and 304 and Tank 50 since issuance of the LUC Plan. The Fourth Five-Year Review (FYR) (Navy, 2020) at NBK – Manchester was completed in 2020.

1.2 Facility Description

1.2.1 Location

NBK – Manchester is located less than 1 mile southwest of Bainbridge Island, approximately 3.5 miles northeast of the town of Port Orchard. The facility is situated on a small peninsula on the larger Kitsap Peninsula. This smaller peninsula is located on the eastern edge of the Kitsap Peninsula and adjacent to Puget Sound to the east and Clam Bay to the north. NBK – Manchester is divided into eastern and western portions by Little Clam Bay, with the two portions connected by a 100-foot-wide causeway. Figure 1 depicts the site vicinity for NBK – Manchester.

1.2.2 Current Use

In the early 1940s (at the beginning of World War II), NBK – Manchester was developed into a key fuel depot and currently remains a fuel depot for the U.S. Department of the Navy (Navy). Most of the facility is used for fuel storage. Infrastructure includes underground and aboveground petroleum product storage tanks, associated pipelines, and a fuel pier. The remainder of the facility is dedicated to an industrial area with support and administrative buildings located adjacent to the fuel pier. Fuel products that have been or are currently stored at the fuel depot include Navy Special Fuel (No. 6 fuel oil [Bunker C]), marine diesel fuel, jet fuel, lubricant oil, and aviation gasoline.

Several areas of the facility have been affected by past releases of petroleum products, which have required remedial investigations and corrective actions. These areas include Site 302 (the PCB Site), which has also been a dumping ground for various industrial wastes, Site 303 (D-Tunnel Tanks), Site 304 (Industrial Area), and Tank 50 (UST Release Site), which are further described in the LUC Plan. A site plan depicting the locations of these specific areas at NBK – Manchester is provided as Figure 2. Sites 302, 303, and 304 and Tank 50 have received No Further Action (NFA) regulatory status and the resulting letters from Ecology state that the sites are *“either properly remediated or do not pose a risk to human health or the environment”* based on the

current and future land use (Ecology, 1998, 2000, and 2001). However, LUC requirements are identified or referred to in the NFA letters to prevent exposure to residual soil and/or groundwater contamination, ensuring continued protection of human health and the environment.

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2.0 2023 LUC Inspection Approach and Findings

This section presents the approach for the LUC inspections and the findings and observations from the LUC inspections of Sites 302, 303, and 304 and Tank 50 at NBK – Manchester.

2.1 LUC Inspection Approach

The annual LUC inspections include a field inspection, determination of the current land use, document review (i.e., administrative and institutional controls in place, specifically permits for approved excavation or disturbances), and a condition assessment of engineering controls such as fencing, gates, signage, monitoring wells, and soil covers. An authorized soil excavation or disturbance indicates that the already established, formal process as detailed in the Environmental and Safety Guide (ESG) (Naval Supply Systems Command [NAVSUP], 2020) has been followed (including development of plans and analytical testing) and ultimately approved by NBK – Manchester environmental personnel. As part of the approval process, NBK – Manchester environmental personnel with knowledge of the LUC requirements review the application with respect to the LUCs. If the activities are to be conducted within an area with LUC requirements, the reviewer directs the contractor or Navy personnel conducting the excavation on the processes required to control the activities in a way that is protective of human health and the environment.

In October and November 2019, well rehabilitation and decommissioning activities were conducted at NBK – Manchester based on the findings of the Well Rehabilitation and Decommissioning Study (Navy, 2017). Ultimately, seven monitoring wells remain in the monitoring network. The following wells were located but were not opened for inspection during the 2023 LUC inspections:

- MW-1 and MW-3 northwest of Tank 30 (Site 303),
- MW-1, MW-2, and MW-4 (under a temporary storage unit and partially covered by wood pallets) at Site 304, and
- MW-1 at Tank 50.

The following well was located during the 2022 LUC inspection but could not be located during the 2023 LUC inspection:

- MW-1 south of Tank 24 (Site 303).

MW-1 was located later by Navy personnel on 1 November 2023 and photographs of the well are included in Appendix D. All of these monitoring wells were resurveyed for

horizontal locations, top of casing elevations, and ground elevations on 14 and 18 November 2019 by NL Olson & Associates, Inc.

The remaining groundwater and vapor monitoring wells at NBK – Manchester were decommissioned because of their poor/moderate general condition, location, intended purpose (i.e., vapor monitoring), and/or the fact that the well would be damaged or destroyed during planned upcoming military construction (MILCON) activities. The details of the well rehabilitation and decommissioning activities were documented in a separate technical memorandum finalized in July 2020 (Battelle, 2020a).

Site-specific LUC inspection checklists and monitoring well inspection checklists were used as tools to guide the annual LUC inspections. Appendices A and B present the completed LUC inspection checklists and monitoring well inspection checklists from the 2023 LUC inspections, respectively. In addition, field notes were taken, and a photographic log was developed to document the findings/observations of the field inspection. The field notes and photographic log are presented as Appendices C and D, respectively. As part of the effort, three field change request forms were developed (see Appendix E) documenting minor changes to the Final Abbreviated Accident Prevention Plan for Various Site Reconnaissance Activities (Navy, 2016b) and the LUC Plan.

2.2 LUC Inspection Findings

2.2.1 Site 302 – PCB Site

Site 302 is a 1.4-acre area located in the southwest portion of NBK – Manchester (see Figures 2 and 3). The site was used as a dumping area for ship bilge waste, transformer oil, and other petroleum waste from local naval facilities from about 1955 through 1976. No estimate of the volume of waste disposed of at the site is available. PCBs were identified as a contaminant of concern at Site 302. Site-specific LUCs are as follows:

1. Ensure that site signage is readable and adequate;
2. Ensure that land use remains for industrial purposes;
3. Ensure that there has been no unauthorized soil excavation or disturbance;
4. Ensure that there has been no unauthorized placement of excess soil from another location;
5. Ensure integrity of the soil cover vegetation, so that any excavation or improper disposal is apparent;

6. Ensure that any soil excavated from the site is properly characterized and disposed off-site and that on-site workers are protected during such activities; and
7. Ensure that site fencing is intact and that gates are secured and locked.

The 2023 LUC inspections confirmed LUC requirements 1 through 6 above are being met at Site 302. It was noted that soil stockpiles identified during the last LUC inspection have been removed and the area was hydroseeded during summer 2023. In addition, the field team provided the NBK – Manchester Environmental Manager with combination locks that were applied to the north and south gates at the site to ensure they were secured.

Three new per- and polyfluoroalkyl substances (PFAS) groundwater monitoring wells have been installed on site since the 2022 LUC inspections: MFD-S302-MW01, MFD-S302-MW02, and MFD-S302-MW03 (Figure 3).

Additional work is necessary to meet LUC requirement 7. The most salient findings from the 2023 LUC inspections were:

- **Finding 1:** Approximately 60 linear feet of fencing was noted during the 2023 LUC inspection to be collapsed along the western boundary of the site due to fallen trees.
- **Finding 2:** Approximately 100 linear feet of fencing on the northwestern side of the site was observed to be heavily overgrown with vegetation and the area was inaccessible.

The locations of these findings are depicted on Figure 3. The completed LUC inspection checklist for Site 302 is provided in Appendix A. The field notes and photographs from Site 302 are provided in Appendices C and D, respectively.

2.2.2 Site 303 – D-Tunnel Tanks

Site 303 consisted of eight 20,000- to 50,000-barrel (840,000- to 2,100,000-gallon) concrete USTs used to store marine diesel fuel, five of which had been decommissioned at the time of this inspection (see Figures 2 and 4). The Navy Special Fuel currently stored and dispensed at NBK – Manchester is designated as F-76. The USTs are located adjacent to the D-tunnel line, which extends from Tank 30 to Building 12 in the Industrial Area (Site 304), as shown on Figure 4. Site-specific LUCs are as follows:

1. Ensure that land use remains for industrial purposes. Coordinate with Ecology prior to change in property ownership or land use concerning the need for remedial actions.
2. Ensure that warnings are posted for workers to guard against exposure to residual petroleum-contaminated soil.
3. Identify remaining areas of concern on facility maps and specify in facility excavation permit instruction.
4. Ensure no production wells are installed and groundwater is not used except for monitoring and/or remediation.
5. Protect existing vapor monitoring wells until formally abandoned.
6. Ensure that there has been no unauthorized soil excavation or disturbance.
7. Confine authorized reusable material¹ to approved staging area.
8. Ensure that any soil excavated from the site is properly characterized and disposed of off-site and that on-site workers are protected during such activities.

The 2023 LUC inspection confirmed LUC requirements 1, 3, 4, and 6 through 8 above are being met at Site 303. During the inspection it was noted that warnings are posted for workers and remaining areas of concern are identified on facility maps and specified in facility permit instructions in response to a previous recommendation for the Contractor ESG (Navy, 2016c). In addition, soil stockpiles noted during the 2022 LUC Inspection have been removed and damaged signage observed near Tank 22 in 2022 has been repaired.

Active construction and earthwork activities related to tank decommissioning and replacement are occurring throughout the southern portion of the site. The NBK – Manchester Environmental Manager and field team verified dig permits for tank removal field activities (excavation) were all on file and the NBK Environmental Manager indicated excavated materials were disposed of in accordance with state and federal regulations.

Additional work is necessary to meet LUC requirements 2 and 5. The most salient finding during the 2023 LUC inspections associated with Site 303 were:

1. “Reusable material” refers to those materials for which on-site placement has been coordinated with the Navy Remedial Project Manager and that have been characterized in collaboration with NBK Manchester environmental personnel. The Navy may choose to coordinate with the Ecology Cleanup Project Manager on a case-by-case basis.

- **Finding 3:** LUC signage damaged due to MILCON field activities southwest of Tank 22 and south of Tank 29 has been removed (LUC requirement 2).

The LUC inspection checklist for Site 303 is provided in Appendix A. The monitoring well inspection checklists are provided in Appendix B. The field notes and photographs from Site 303 are provided in Appendices C and D, respectively.

As detailed in Section 2.1, monitoring wells MW-1 and MW-3 northwest of Tank 30 were located as part of the 2023 LUC inspection, though the wells were not opened and inspected (see Appendix B). Although the field team was unable to locate groundwater monitoring well MW-1 south of Tank 24 during the 2023 LUC inspection fieldwork, the Navy Environmental Protection Specialist Robert Riley was able to confirm MW-1 is still located on the south side of Tank 24 on 01 November 2023. It was likely covered with dirt and debris at the time of the LUC inspection fieldwork.

Well repairs conducted in 2019 as part of the well rehabilitation activities included lowering the MW-1 (south of Tank 24) and MW-3 (north of Tank 30) well casings to fit properly under the monument lids, and installation of new locks, labels, and well caps. The concrete apron surrounding the flush-mounted well monument for MW-1 south of Tank 24 was removed, and new concrete was poured to protect the monument. Additionally, cold patch was placed in the road and tamped to repair the depression in the road surrounding the concrete apron. Well identification labels were affixed to, and a lock was secured on, well MW-1 (Battelle, 2020b). The three monitoring wells in the monitoring network for inspection at Site 303 were resurveyed for horizontal locations, top of casing elevations, and ground elevations on 14 and 18 November 2019 by NL Olson & Associates, Inc., of Port Orchard, Washington (Battelle, 2020b). Table 2-1 summarizes the inspection findings/observations regarding monitoring wells at Site 303.

Table 2-1: Summary of Monitoring Wells at Site 303

Well ID	Northing ¹	Easting ¹	Well Located?	Comments from 2023 Inspections
South of Tank 24				
MW-1	64013.946	371485.35	Yes	Well located, monument cover in good condition, not opened.
North of Tank 30				
MW-1	64612.007	371179.515	Yes	Well located, monument cover in good condition, not opened.
MW-3	64625.423	371219.950	Yes	Well located, monument cover in good condition, not opened.

Note:

1. Coordinate system is State Plane – Washington North (meters).

Abbreviations:

ID = identification

MW = monitoring well

During the 2019 well rehabilitation and 2020 decommissioning activities, vapor monitoring wells were decommissioned at Tank 22 (13 wells), Tank 24 (13 wells), Tank 25 (1 well), Tank 26 (13 wells), Tank 27 (1 well), Tank 29 (13 wells), and Tank 30

(13 wells). Additionally, groundwater monitoring well MW-3 south of Tank 24 was decommissioned. Site restoration related to the well rehabilitation and decommissioning activities were completed in early March 2020 (Battelle, 2020b).

2.2.3 Site 304 – Industrial Area

Site 304 (Industrial Area) is in the eastern portion of NBK – Manchester, as shown on Figures 2 and 5. It comprises maintenance, administration, fuel pumping, and water treatment buildings. Site 304 is the central transfer point for most of the petroleum products stored at NBK – Manchester. Petroleum products (including marine diesel, jet fuels, aviation gasoline, and lube oil) are transported through a network of pipelines running from the fuel pier to storage tanks located throughout the facility. Site-specific LUCs are as follows:

1. Ensure that land use remains for industrial purposes. Coordinate with Ecology prior to change in property ownership or land use concerning the need for remedial actions.
2. Ensure that warnings are posted for workers to guard against exposure to residual petroleum-contaminated soil.
3. Identify remaining areas of concern on facility maps and specify in facility excavation permit instructions.
4. Ensure no production wells are installed and groundwater is not used except for monitoring and/or remediation.
5. Protect existing monitoring wells until formally abandoned.
6. Ensure that there has been no unauthorized soil excavation or disturbance.
7. Ensure that any soil excavated from the site is properly characterized and disposed of off-site and that on-site workers are protected during such activities.

The 2023 LUC inspections confirmed LUC requirements 1 through 7 above are being met at Site 304. Remaining areas of concern are identified on facility maps and specified in facility permit instructions in response to a previous recommendation for the Contractor ESG (Navy, 2016c). Five new groundwater monitoring wells installed as part of a PFAS investigation were within the Site 304 boundary: MFD-B12-MW01, MFD-B12-MW02, MFD-B12-MW03, MFD-VWR-MW02 and MFD-VWR-MW03 (Figure 5).

The LUC signage for Site 304 is located at the northeastern corner of Building 178, outside and north of the Site 304 LUC boundary (see Figure 5). During finalization of the 2020 LUC Technical Memorandum (Battelle, 2020b), the Ecology Project Manager confirmed that it is not necessary to move/relocate the LUC signage for Site 304.

One area of active soil excavation was observed during the 2023 LUC inspection related to a utility line installation on the south side of the main office building (Building 217). The field team reviewed the dig permits and the NBK – Manchester Environmental Manager verified that the excavation was part of active construction activities and is authorized.

The LUC inspection checklist for Site 304 is provided in Appendix A. The monitoring well inspection checklists are provided in Appendix B. The field notes and photographs from Site 304 are provided in Appendices C and D, respectively.

As detailed in Section 2.1, monitoring wells MW-1, MW-2, and MW-4 at Site 304 were located as part of the 2023 LUC inspection, though the wells were not opened and inspected (see Appendix B). Well repairs conducted in 2019 as part of the well rehabilitation activities included installation of new locks, labels, and well caps and resurveying of the horizontal locations, top of casing elevations, and ground elevations by a licensed surveyor. The flush-mounted well monument associated with MW-2 was replaced, including placement of a new concrete apron surrounding the monument (Battelle, 2020b). Table 2-2 summarizes the inspection findings/observations at each monitoring well.

Table 2-2: Summary of Monitoring Well Condition Assessment at Site 304

Well ID	Northing ¹	Easting ¹	Well Located?	Comments from 2023 Inspections
MW-1	64019.596	371750.902	Yes	Well located, monument cover in good condition, not opened.
MW-2	64106.184	371804.246	Yes	Well located, monument cover in good condition, not opened.
MW-4	64054.635	371808.329	Yes	Well located, monument cover in good condition, not opened.

Note:

1. Coordinate system is State Plane – Washington North (meters).

Abbreviations:

ID = identification

MW = monitoring well

2.2.4 Tank 50 – UST Release Site

Tank 50 is the southernmost of a set of five USTs built on the top of a small knoll located on the west side of Little Clam Bay (see Figures 2 and 6). The tank is believed to have been constructed in the early 1950s and is a steel cylinder approximately 100 feet in diameter and 22 feet tall with a capacity of approximately 27,000 barrels (1.1 million gallons). Site-specific LUCs are as follows:

1. Ensure that warnings are posted for workers to guard against exposure to residual petroleum-contaminated soil.

2. Identify remaining areas of concern on facility maps and specify in facility excavation permit instructions.
3. Ensure that land use remains for industrial purposes. Coordinate with Ecology prior to change in property ownership or land use concerning the need for remedial actions.
4. Ensure no production wells are installed and groundwater is not used except for monitoring and/or remediation.
5. Protect existing monitoring wells until formally abandoned.
6. Ensure that there has been no unauthorized soil excavation or disturbance.
7. Ensure that any soil excavated from the site is properly characterized and disposed of off-site, and that on-site workers are protected during such activities.

The 2023 LUC inspections confirmed LUC requirements 1 through 7 above are being met at the Tank 50 Site. The inspection also noted that remaining areas of concern are identified on facility maps and specified in facility permit instructions in response to a previous recommendation for the Contractor ESG (Navy, 2016c).

The LUC inspection checklist for Tank 50 is provided in Appendix A. The monitoring well inspection checklists are provided in Appendix B. The field notes and photographs from Tank 50 are provided in Appendices C and D, respectively.

As detailed in Section 2.1, monitoring well MW-1 at Tank 50 was located as part of the 2023 LUC inspection, though the well was not opened and inspected (see Appendix B). Well repairs conducted in 2019 as part of the well rehabilitation activities included the placement of a new lock, label, and well cap and resurveying of the horizontal location, top of casing elevation, and ground elevation by a licensed surveyor (Battelle, 2020b). Table 2-3 provides a summary of the observations at monitoring well MW-1.

Table 2-3: Summary of Monitoring Well Condition Assessment at Tank 50

Well ID	Northing ¹	Easting ¹	Well Located?	Comments from 2023 Inspections
MW-1	64407.051	370946.014	Yes	Well located, aboveground monument and external casing in good condition, not opened.

Note:

1. Coordinate system is State Plane – Washington North (meters).

Abbreviations:

ID = identification

MW = monitoring well

Monitoring well MW-2 was decommissioned in 2019. Site restoration related to the well rehabilitation and decommissioning activities were completed in March 2020 (Battelle, 2020b).

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3.0 Conclusions and Recommendations

On 26 July 2023, inspections were conducted in accordance with LUC requirements detailed in the LUC Plan. A field inspection, determination of the current land use, document review, and condition assessment of engineering controls were conducted for each site to determine the conditions of the LUCs in place and verify that these LUCs remain effective as designed.

The 2023 LUC inspections are the seventh inspections conducted at Sites 302, 303, and 304 and Tank 50 since issuance of the LUC Plan. The Fourth FYR (Navy, 2020) for NBK – Manchester was completed in 2020.

Table 3-1 presents a comprehensive list of observations/findings from the report entitled Current Conditions at Sites 302, 303, and 304, NBK – Manchester, Port Orchard, Washington (Navy, 2016d) through the 2023 LUC inspections, along with all findings from 2018 through 2023 and subsequent recommendations. The most salient findings from the 2023 LUC inspections are summarized below:

1. Site 302: Approximately 60 linear feet of fencing was noted during the 2023 LUC inspection to be collapsed along the western boundary of the site where repairs are recommended to ensure the security requirements of the LUC are met.
2. Site 302: Approximately 100 linear feet of fencing on the northwestern side of the site was observed to be heavily overgrown with vegetation and the area was inaccessible. It is recommended that the vegetation be cleared, and necessary fence requirements be made.

Site 303: Damaged LUC signage southwest of Tank 22 and south of Tank 29 has been removed. It is recommended that the removed signage be replaced.

The Navy plans to conduct the vegetation and tree clearing and fence repair for items 1 and 2 above and the sign replacement for item 3 above in FY 2024. The Environmental Restoration, Navy (ERN) group will coordinate with NBK – Manchester on implementation.

Based on the results of the 2023 inspection, it is recommended that the LUC inspections continue on an annual basis. Continuing the LUC inspections on an annual basis will allow for a timely evaluation before and after completion of actions described in Table 3-1. These recommendations will be executed and documented in subsequent LUC technical memorandums and the Fifth FYR for NBK – Manchester. It should be noted that Ecology has the authority to revoke the NFA determinations for Sites 302, 303, and 304, and Tank 50 for violations of the LUCs.

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Table 3-1: Summary of Findings and Recommendations from 2016 through 2023 Inspections¹

2019	2020	2021	2022	2023	Findings/Observations	Recommendations	Comment
Site 302 – PCB Site							
✓	✓	✓	—	—	Primary gate/entrance to site is locked, requires NBK – Manchester personnel for access, and has six “Restricted Area/Keep Out” signs posted along the southern fence line; however, there is no specific LUC signage.	Install specific LUC signage on the primary entrance to Site 302.	Completed; LUC signage was installed on the primary entrance in July 2020.
✓	✓	✓	✓	—	The central portion of the site is covered with large, older stockpiles of soil and debris, which were covered with vegetation.	Because detections of Aroclor 1260 in soil samples exceed the soil reuse (commercial fill and road base material) threshold set by Ecology (Ecology, 2016), the soil will be removed and disposed of off-site at an approved treatment and disposal facility.	Completed; the soil was removed and disposed of off-site at an approved treatment and disposal facility, in accordance with state and federal regulations. The remaining area has been re-seeded.
✓	✓	✓	✓	—	The gated entrance on the north side of the site is closed and in a remote area of NBK – Manchester, not easily accessible by personnel. There is LUC signage and lock; however, the gate is not secured and can be pushed open.	Add chain and lock to secure gate and prevent it from being pushed open.	Completed; LUC signage and a lock were installed on the gated entrance in July 2020 and a chain was added in August 2023 making it so the gate cannot be pushed open and is secure.
✓	✓	—	—	✓	Approximately 60 linear feet of fencing was noted during the 2023 LUC inspection to be collapsed along the western boundary of the site due to fallen trees.	Clear heavy vegetation and reconstruct fence, as needed.	The presence of heavy vegetation will continue to compromise the integrity of the fence, potentially leading to additional overgrowth and potential collapse. The Navy plans to conduct the vegetation and tree clearing and fence repair in FY 2024, and the ERN group will coordinate with NBK – Manchester on implementation.
—	✓	✓	✓	✓	Approximately 100 linear feet of fencing on the northwestern side of the site was observed to be heavily overgrown with vegetation and the area was inaccessible.	Reconstruct fence.	The Navy plans to conduct the vegetation and tree clearing and fence repair in FY 2024, and the ERN group will coordinate with NBK – Manchester on implementation.
Site 303 – D-Tunnel Tanks							
—	—	—	—	—	There is no LUC signage warning of contaminated soil and groundwater at Tanks D-24, D-25, D-27, or D-28.	Add signage at the primary vehicle or pedestrian access point to each UST (Tanks D-22, D-24, D-25, D-26, D-27, D-28, D-29, and D-30) warning of contaminated soil and groundwater and prohibiting unauthorized dumping and/or soil excavation.	Completed; signs were installed at Site 303, according to the 2016 recommendations.
—	—	—	—	—	In 2016, numerous vapor monitoring wells could not be located, including Tank D-22, MW-3; Tank D-25, all wells except MW-2 and MW-13; Tank D- 26, MW-13; Tank D-27, all except for one unknown well; Tank D-28, all monitoring wells; Tank D-29, MW-1, MW-3, MW-4, MW-6, MW-8, MW-9, and MW-11; and Tank D-30, MW-1 and MW-4.	Locate all monitoring wells and assess for condition and integrity; mark with survey stakes, if feasible.	Completed; a well rehabilitation and decommissioning study, including a records review and site reconnaissance, was conducted from 2016 through 2017 (Navy, 2017).
✓	✓	—	—	—	An unmarked stockpile of soil covered by black poly sheeting in the northwest corner of the construction laydown area southeast of Tank 24. Poly sheeting was ripped, exposing stockpile.	Confirm soil stockpile is authorized reusable material and is located in an approved staging area. Replace poly sheeting cover.	Completed; as confirmed with NBK – Manchester environmental personnel, soil stockpile is authorized reusable material and is located in an approved staging area. Only clean, reusable aggregate material is approved for placement/staging in the construction laydown area southwest of Tank 24.
—	✓	—	—	—	Soil stockpile under tarp in construction laydown area southwest of Tank 24. Pile of cut asphalt staged next to soil stockpile.	Confirm soil stockpile is authorized reusable material and is located in an approved staging area.	Completed; as confirmed with NBK – Manchester environmental personnel, soil stockpile is authorized reusable material and is located in an approved staging area. Only clean, reusable aggregate material is approved for placement/staging in the construction laydown area southwest of Tank 24.

Table 3-1: Summary of Findings and Recommendations from 2016 through 2023 Inspections (continued)

2019	2020	2021	2022	2023	Findings/Observations	Recommendations	Comment
—	—	✓	—	—	Two stockpiles of landscape rock (red lava rock) and pieces of landscape fabric were observed in the northwest corner of the construction laydown area south of Tank 25. The material in these stockpiles originated from the landscaped areas at the main gate (outside of a LUC site) and is authorized reusable material in an approved staging area.	Keep piles covered and maintained until an on-site use can be found.	Completed; Navy personnel have reused the stockpiled material on-site at NBK – Manchester.
✓	—	—	—	—	Monitoring wells MW-1 south of Tank 24 and MW-3 north of Tank 30 need casing to be lowered to fit cap under lid and minor maintenance/repairs.	Lower casing and perform needed minor maintenance/repairs on monitoring wells MW-1 and MW-3.	Completed; casing was lowered and minor maintenance/repairs on monitoring wells MW-1 and MW-3 were completed during well rehabilitation activities in October/November 2019.
—	—	—	✓	—	Soil disturbance was observed in several areas of Site 303 due to MILCON field activities associated with removal of selected existing tanks. Soil disturbance was observed in the vicinities of Tanks 24, 25, 26, and 30. In addition, soil disturbance was observed to the west of Tanks 28 and 29 in the form of a temporary MILCON access road trending north to south.	Confirm the soil disturbance was authorized.	Completed; the NBK – Manchester Environmental Manager confirmed that the proper protocols, outlined in the ESG (NAVSUP, 2020), were followed during excavation activities (e.g., dig permits). Construction activities are ongoing. If excavation of soil in areas within the LUC boundary but not covered under the current dig permits is necessary, additional dig permits may be required.
✓	✓	✓	✓	—	An old stockpile of soil on a tarp surrounded by a disintegrating absorbent boom was observed in the laydown area north of Tank 29.	Properly characterize, reuse on site, or transport and appropriately dispose of the soil off site.	Completed; the soil stockpile has been characterized and disposed of off-site and the affected area has been reseeded.
—	—	—	✓	—	A small soil stockpile covered by a tarp and secured by gravel bags was observed southeast of Tank 24.	Properly characterize, transport, and appropriately dispose of the soil off site.	Completed; the soil stockpile has been characterized and disposed of off-site.
—	—	—	✓	—	MILCON construction debris related to decommissioning of Tank 23 (outside of the Site 303 LUC boundary) was observed to be stockpiled at Tank 24.	Properly characterize, transport, and appropriately dispose of the debris off site.	Completed; the construction debris has been removed.
—	—	—	✓	✓	LUC signage damaged due to MILCON field activities was observed southwest of Tank 22 and south of Tank 29.	Repair or replace LUC signage upon completion of MILCON activities in affected areas.	The damaged LUC signage has been removed. Recommend replacing the removed signage.
—	—	—	—	—	Groundwater monitoring wells MW-1 and MW-2 were found; however, MW-3 and MW-5 are presumed to be buried under landscaping rocks. MW-4 was located in November 2019 and added to the well rehabilitation activities.	Locate all monitoring wells and assess for condition and integrity.	Completed; a well rehabilitation and decommissioning study, including a records review and site reconnaissance, was conducted from 2016 through 2017 (Navy, 2017).
—	—	—	—	—	There is no LUC signage warning of potential exposure to contaminated soil and groundwater.	Considering there is relatively more activity within the area compared to other sites, signage should be installed at all vehicle and pedestrian access points to Site 304. The signs should warn of contaminated soil and groundwater and prohibit unauthorized soil excavation.	Completed; LUC signage was installed at the main entrance to Site 304 between the 2017 and 2018 LUC inspections.
✓	✓	—	—	—	The LUC signage for Site 304 is located at the northeastern corner of Building 178, outside and north of the LUC boundary.	Maintain the LUC signage in its current location.	Completed; per Ecology comment on the draft 2020 LUC inspections, there is no need to move the LUC signage, as it is located prior to and along the main entryway to Site 304.
✓	—	—	—	—	Monitoring wells MW-1 and MW-2 do not have identification and the expansion caps are broken. In addition, one monument ear is broken on MW-1.	Perform needed minor maintenance/repairs on monitoring wells MW-1 and MW-2.	Completed; casing was lowered and minor maintenance/repairs on monitoring wells MW-1 and MW-3 were completed during well rehabilitation activities in November 2019.
—	—	—	—	—	There is construction of a trench box for a fuel line (i.e., excavation activities).	Post-approval permit from NBK – Manchester Environmental for construction of trench box at job site.	Completed; the trench box was completed after the 2017 inspections and not observed during the 2018 and 2019 inspections.
—	✓	—	—	—	Visual evidence of excavation under asphalt north of MW-1. Approximately 10 feet by 9 feet by 7 feet triangular dimension.	Confirm any excavated soil is stockpiled in an approved staging area, or that it has been properly disposed of. Confirm that proper protocols were followed during excavation activities (i.e., dig permits, etc.).	Completed; as confirmed with NBK – Manchester Environmental Personnel, excavation was conducted to repair subsidence in the area, and all proper protocols were followed during activities.

Table 3-1: Summary of Findings and Recommendations from 2016 through 2023 Inspections (continued)

2019	2020	2021	2022	2023	Findings/Observations	Recommendations	Comment
—	—	✓	✓	—	A small cut in asphalt was observed off the southwest corner of Building 12, which was due to excavation to repair a small area of subsidence near the building. The asphalt cut was triangular with approximate dimensions of 10 feet by 9 feet by 7 feet resulting in an opening in the asphalt that had been filled with gravel	The cut in the asphalt should be repaired.	Completed; as noted in the 2020 LUC Technical Memorandum, and observed during the 2022 LUC inspections, the cut in the asphalt has been repaired.
—	—	✓	✓	—	Ongoing excavation observed to the northwest of the fuel pier and northeast of MW-4 to repair/replace a fire hydrant.	It was confirmed with the NBK – Manchester Environmental Manager that the proper protocols, outlined in the ESG (NAVSUP, 2020), were followed during excavation activities (i.e., dig permits, etc.). Repair asphalt following hydrant repair.	Completed; as noted in the 2021 LUC Technical Memorandum, and observed during the 2022 LUC inspections, the excavation to the northwest of the fuel pier and northeast of MW-4 to repair/replace a fire hydrant was completed.
—	—	—	✓	—	Four breaks were observed along the chain-link fence that surrounds the northeast side of Site 304.	The chain-link fence was in the process of removal and a new fence farther east of Site 304 will be installed. New signage will be installed demarcating the boundary of Site 304.	Completed; the damaged fence has been removed.
—	—	—	✓	—	Recent soil disturbance activity was observed at the former location of Tank 14 (northwest corner of Site 304). The area appeared to be restored with backfill soil material and mulch as the surface completion.	The NBK – Manchester Environmental Manager confirmed that the proper protocols, outlined in the ESG (NAVSUP, 2020), were followed during excavation activities (e.g., dig permits).	Completed; as observed during the 2022 LUC inspections, the excavation and surface completion at former Tank 14 were completed.
✓	✓	—	—	—	There is LUC signage along the southwestern access road, downhill from Tank 50 and near the past environmental release; however, there is no LUC signage on the northern access road – the primary entryway to Tank 50.	Add LUC signage on the northern access road to Tank 50 (i.e., the primary entryway to the site). LUC signage at this location is noted in a well installation and sampling report (Hart Crowser, 1998).	Completed; LUC signage was installed at the primary entryway in July 2020.
✓	—	—	—	—	Monitoring well MW-1 has no exterior well identification and no lock on lid.	Perform needed minor maintenance/repairs on monitoring well MW-1.	Completed; the minor maintenance/repairs on MW-1 were completed during well rehabilitation activities in November 2019.
—	—	—	✓	—	Recent soil disturbance activity was observed to the south of Tank 50. The area appeared to be restored with backfill soil material and reseeded.	The NBK – Manchester Environmental Manager confirmed that the proper protocols, outlined in the ESG, were followed during excavation activities (e.g., dig permits).	Completed; as observed during the 2022 LUC inspections, the soil disturbance to the south of Tank 50 appeared to be addressed (restored to match the surrounding area).

Note:
1. Green-shaded rows indicate that the finding/observation and subsequent recommendation have been addressed/completed.

Key:
✓ = The finding/observation was present during the LUC inspection year listed.
— = The finding/observation was not present during the LUC inspection year listed.

Abbreviations:
Ecology = Washington State Department of Ecology
ERN = Environmental Restoration, Navy
ESG = Environmental and Safety Guide
FY = fiscal year
GPS = global positioning system
LUC = land use control
NBK = Naval Base Kitsap
MILCON = military construction
NAVSUP = Naval Supply Systems Command
Navy = U.S. Department of the Navy
PCB = polychlorinated biphenyl
UST = underground storage tank

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Figures

- Figure 1: Site Vicinity Map
- Figure 2: Site Plan
- Figure 3: Site 302 – PCB Site
- Figure 4: Site 303 – D-Tunnel Tanks
- Figure 5: Site 304 – Industrial Area
- Figure 6: Tank 50 – Release Site

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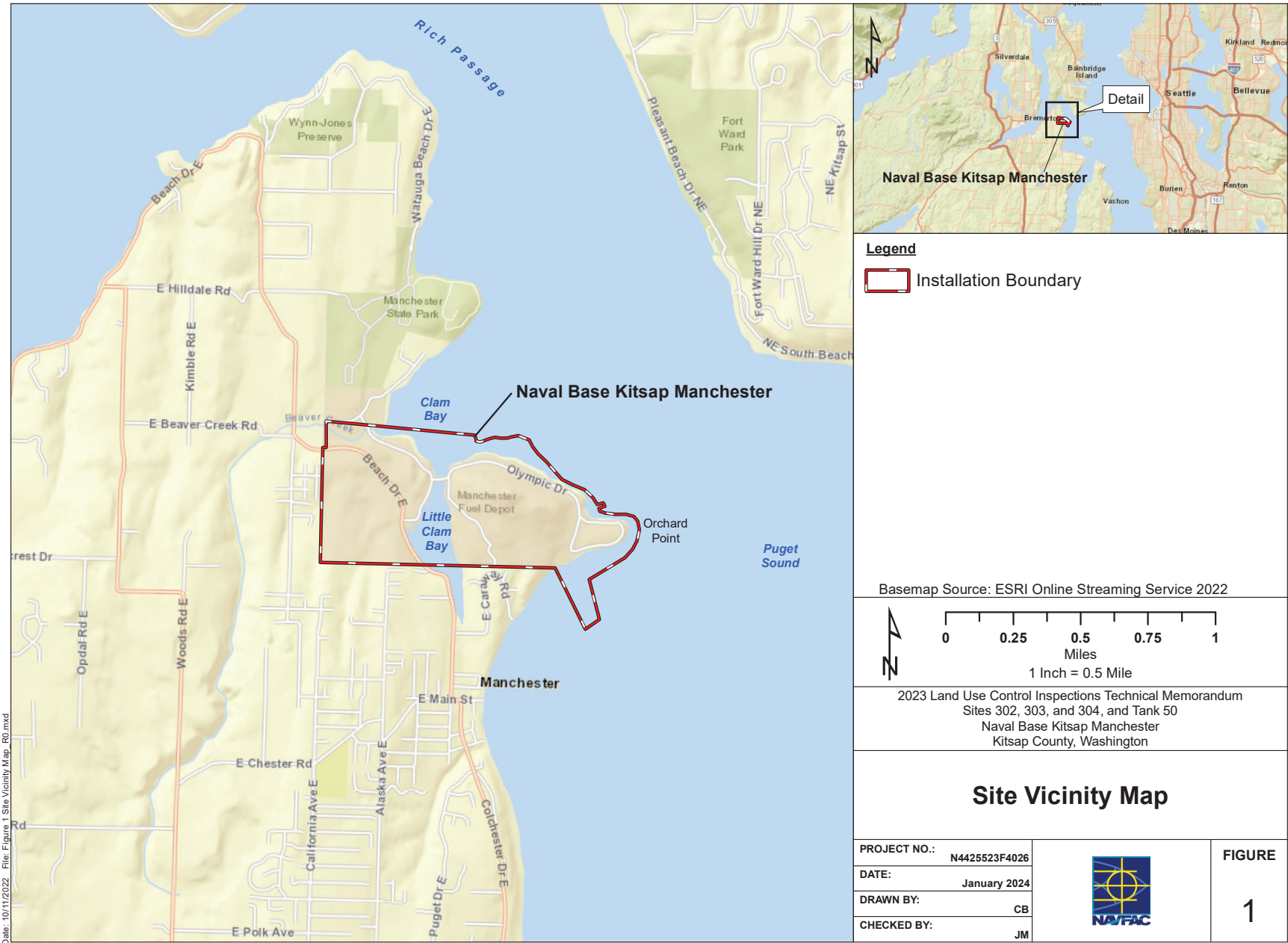


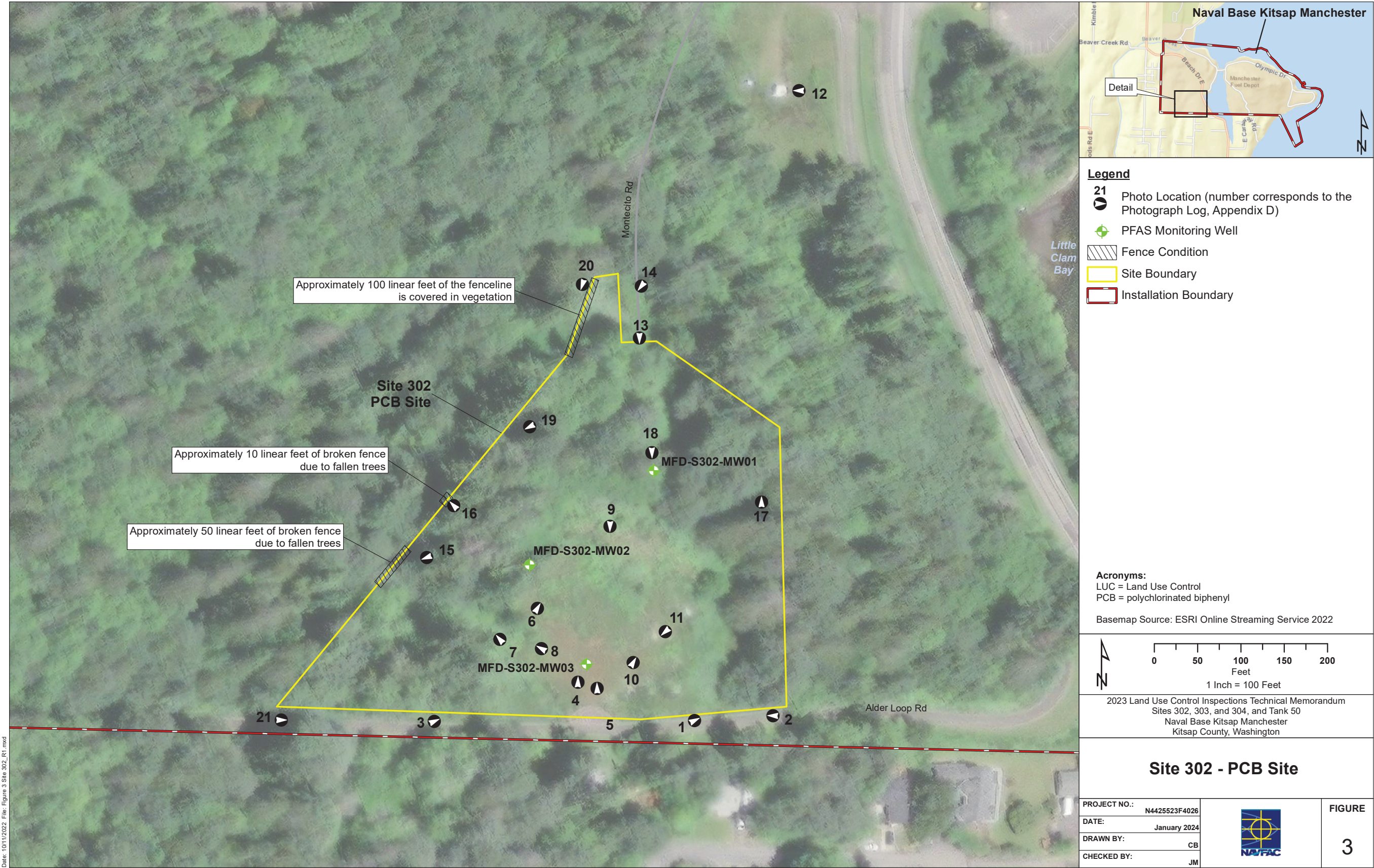
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Appendix A: LUC Inspection Checklists

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NBK Manchester
Site 302 - PCB Site
Naval Facilities Engineering Command Northwest
LAND USE CONTROLS (LUCs) INSPECTION CHECKLIST

DATE(S) (MM|DD|YY):

26 July 2023

INSPECTOR(S):

C. Briggs, C. Foster

COMPANY:

Liberty JV

LUCs

- ENSURE THAT SITE SIGNAGE IS READABLE AND ADEQUATE.
- ENSURE THAT LAND USE REMAINS FOR INDUSTRIAL PURPOSES.
- ENSURE THAT THERE HAS BEEN NO UNAUTHORIZED SOIL EXCAVATION OR DISTURBANCE.
- ENSURE THAT THERE HAS BEEN NO UNAUTHORIZED PLACEMENT OF EXCESS SOIL FROM ANOTHER LOCATION.
- ENSURE INTEGRITY OF THE SOIL COVER VEGETATION, SO THAT ANY EXCAVATION OR IMPROPER DISPOSAL IS APPARENT.
- ENSURE THAT ANY SOIL EXCAVATED FROM THE SITE IS PROPERLY CHARACTERIZED AND DISPOSED OFF-SITE AND THAT ON-SITE WORKERS ARE PROTECTED DURING SUCH ACTIVITIES.
- ENSURE THAT SITE FENCING IS INTACT AND THAT GATES ARE SECURED AND LOCKED.

NOTE: LUCs THAT ARE ITALICIZED ARE REQUIRED LUCs FROM THE NFA LETTER.

LUCs INSPECTION ACTIONS

HAS SITE OR ADJACENT LAND USE CHANGED SINCE LAST INSPECTION?

☐ YES ☒ NOINSPECTION PERFORMED?
(CHECK ALL THAT APPLY)☒ SITE WALK☐ INTERVIEW W/ _____☐ SECURITY CHECK☐ OTHER _____

FINDINGS:

Industrial land use

IS THERE VISUAL OR ADMINISTRATIVE EVIDENCE OF SOIL EXCAVATION OR DISTURBANCE?
IF SO, DETERMINE IF SITE APPROVAL PROCESS HAS BEEN FOLLOWED.☐ YES ☒ NOINSPECTION PERFORMED?
(CHECK ALL THAT APPLY)☒ SITE WALK☐ INTERVIEW W/ _____☐ SECURITY CHECK☐ OTHER _____

FINDINGS:

IS THERE VISUAL OR ADMINISTRATIVE EVIDENCE OF THE UNAUTHORIZED PLACEMENT OF
EXCESS SOIL FROM ANOTHER LOCATION?☐ YES ☒ NO ☐ NAINSPECTION PERFORMED?
(CHECK ALL THAT APPLY)☒ SITE WALK☒ INTERVIEW W/ M. Hardiman☐ SECURITY CHECK☐ OTHER _____

FINDINGS:

Soil stockpiles have been removed.

HAS THE INTEGRITY OF THE VEGETATIVE COVER AT THE SITE BEEN MAINTAINED?

☒ YES ☐ NO ☐ NAINSPECTION PERFORMED?
(CHECK ALL THAT APPLY)☒ SITE WALK☐ INTERVIEW W/ _____☐ SECURITY CHECK☐ OTHER _____

FINDINGS:

Hydroseeding followed stockpile removal.

HAS ACCESS CONTROL BEEN MAINTAINED?

☒ YES ☐ NO, EXPLAIN _____

SECURITY POC: N/A

IS SIGNAGE READABLE AND ADEQUATE?

☒ YES ☐ NO ☐ NA

IS FENCING INTACT AND SECURE?

☐ YES ☒ NO ☐ NA

ARE BOTH THE NORTH AND SOUTH GATES SECURED AND LOCKED

☒ YES ☐ NO ☐ NAINSPECTION PERFORMED?
(CHECK ALL THAT APPLY)☒ SITE WALK☐ INTERVIEW W/ _____☐ SECURITY CHECK☐ OTHER _____

FINDINGS:

Approx. 60 total feet of broken fencing along
western boundary.



NBK Manchester
Site 302 - PCB Site
Naval Facilities Engineering Command Northwest

LUCs INSPECTION CHECKLIST (CONTINUED)

WERE PICTURES TAKEN? ☒ YES
☐ NO

PHOTO IDs See Appendix D

ADDITIONAL NOTES:

Added combination lock to gates. Three new PFAS groundwater monitoring wells had been installed onsite. Soil stockpiles noted during the last LUC inspection have been removed and the area has been hydroseeded this season. Two broken sections of fence observed along the west central site boundary due to downed trees, approximately 60 feet and 10 feet in section lengths. Incursion of heavy vegetation was observed along approximately 100 linear feet of chain-link fence at the northwest perimeter of the site which may damage the integrity of the fence in the future. A chain has been placed on the north gate so that it cannot be pushed open.

I CERTIFY THAT THE CONDITIONS OF THE AREA ON THE INSPECTION DATES(S) WERE AS REPORTED ABOVE.

INSPECTOR SIGNATURE:

Christian Briggs

DATE:

26 July 2023


NBK Manchester
Site 303 - D-Tunnel Tanks
Naval Facilities Engineering Command Northwest
LAND USE CONTROLS (LUCs) INSPECTION CHECKLIST

DATE(S) (MM|DD|YY):

26 July 2023

INSPECTOR(S):

C. Briggs, C. Foster

COMPANY:

Liberty JV

LUCs

- ENSURE THAT LAND USE REMAINS FOR INDUSTRIAL PURPOSES. COORDINATE WITH ECOLOGY PRIOR TO CHANGE IN PROPERTY OWNERSHIP OR LAND USE CONCERNING THE NEED FOR REMEDIAL ACTIONS.
- ENSURE THAT WARNINGS ARE POSTED FOR WORKERS TO GUARD AGAINST EXPOSURE TO RESIDUAL PETROLEUM CONTAMINATED SOIL.
- IDENTIFY REMAINING AREAS OF CONCERN ON FACILITY MAPS AND SPECIFY IN FACILITY EXCAVATION PERMIT INSTRUCTION.
- ENSURE NO PRODUCTION WELLS ARE INSTALLED AND GROUNDWATER IS NOT USED EXCEPT FOR MONITORING AND/OR REMEDIATION.
- PROTECT EXISTING VAPOR MONITORING WELLS UNTIL FORMALLY ABANDONED.
- ENSURE THAT THERE HAS BEEN NO UNAUTHORIZED SOIL EXCAVATION OR DISTURBANCE.
- CONFINE AUTHORIZED REUSABLE MATERIAL* TO APPROVED STAGING AREA.
- ENSURE THAT ANY SOIL EXCAVATED FROM THE SITE IS PROPERLY CHARACTERIZED AND DISPOSED OFF-SITE AND THAT ON-SITE WORKERS ARE PROTECTED DURING SUCH ACTIVITIES.

NOTE: LUCs THAT ARE ITALICIZED ARE REQUIRED LUCs FROM THE NFA LETTER.

*THOSE MATERIALS FOR WHICH ONSITE PLACEMENT HAS BEEN COORDINATED WITH THE ECOLOGY SITE MANAGER AND THAT HAVE BEEN CHARACTERIZED IN COLLABORATION WITH THE ECOLOGY SITE MANAGER.

LUC INSPECTION ACTION

HAS SITE OR ADJACENT LAND USE CHANGED SINCE LAST INSPECTION?

☐ YES ☒ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____

Industrial land use

DO FACILITY MAPS IDENTIFY REMAINING AREAS OF CONCERN?

☒ YES ☐ NO

DESCRIBE:

Contractor Environmental & Safety Guide

DOES THE FACILITY EXCAVATION PERMIT INSTRUCTION SPECIFY REMAINING AREAS OF CONCERN?

☒ YES ☐ NO

DESCRIBE:

Contractor Environmental & Safety Guide

IS THERE VISUAL EVIDENCE OF UNAUTHORIZED ON-SITE WELL INSTALLATION OR GROUNDWATER USE?

☐ YES ☒ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____☐ SEE WELL INSPECTION LOGS☐ WELL INSPECTIONS☐ OTHER _____

ARE ALL MONITORING WELLS IN GOOD CONDITION AND ACCESSIBLE? (REFER TO COMPLETED MONITORING WELL INSPECTION CHECKLISTS)

☐ YES ☒ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____☒ SEE WELL INSPECTION LOGS☒ WELL INSPECTIONS☐ OTHER Unable to locate MW-1

IS THERE VISUAL OR ADMINISTRATIVE EVIDENCE OF SOIL EXCAVATION OR DISTURBANCE? IF SO, DETERMINE IF SITE APPROVAL PROCESS HAS BEEN FOLLOWED.

☒ YES ☐ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____

Active construction activities.



NBK Manchester
Site 303 - D-Tunnel Tanks
Naval Facilities Engineering Command Northwest

LUCs INSPECTION CHECKLIST (CONTINUED)

IS THERE VISUAL OR ADMINISTRATIVE EVIDENCE OF THE UNAUTHORIZED PLACEMENT
EXCESS SOIL, FILL, OR SEDIMENT FROM ANOTHER LOCATION?

☐ YES ☒ NO ☐ NA

INSPECTION PERFORMED? ☒ SITE WALK ☐ INTERVIEW W/ _____
 (CHECK ALL THAT APPLY) ☐ SECURITY CHECK ☐ OTHER _____

FINDINGS: _____

HAS ACCESS CONTROL BEEN MAINTAINED?

☒ YES ☐ NO, EXPLAIN _____

SECURITY POC: N/A

IS SIGNAGE READABLE AND ADEQUATE?

INSPECTION PERFORMED? ☒ SITE WALK ☐ INTERVIEW W/ _____
 (CHECK ALL THAT APPLY) ☐ SECURITY CHECK ☐ OTHER _____

☒ YES ☐ NO ☐ NA

FINDINGS: _____

Consider adding signage upon completion of
construction activities.

WERE PICTURES TAKEN? ☒ YES
☐ NO

PHOTO IDs See Appendix D

ADDITIONAL NOTES:

Soil stockpiles noted during the 2022 LUC Inspection have been removed. Signage that was falling over near Tank 22 has been repaired. Active construction and earthwork activities related to tank decommissioning and replacement are occurring throughout the southern portion of the site. The MFD Environmental Manager and field team verified dig permits for tank removal field activities (excavation) were all on file in accordance with state and federal regulations. The field team could not locate groundwater monitoring well MW-1 south of tank 24.

I CERTIFY THAT THE CONDITIONS OF THE AREA ON THE INSPECTION DATES(S) WERE AS REPORTED ABOVE.

INSPECTOR SIGNATURE:

Christian Briggs

DATE:

26 July 2023


NBK Manchester
Site 304 - Industrial Area
Naval Facilities Engineering Command Northwest
LAND USE CONTROLS (LUCs) INSPECTION CHECKLIST

DATE(S) (MM|DD|YY):

26 July 2023

INSPECTOR(S):

C. Briggs, C. Foster

COMPANY:

Liberty JV

LUCs

- ENSURE THAT LAND USE REMAINS FOR INDUSTRIAL PURPOSES. COORDINATE WITH ECOLOGY PRIOR TO CHANGE IN PROPERTY OWNERSHIP OR LAND USE CONCERNING THE NEED FOR REMEDIAL ACTIONS.
- ENSURE THAT WARNINGS ARE POSTED FOR WORKERS TO GUARD AGAINST EXPOSURE TO RESIDUAL PETROLEUM CONTAMINATED SOIL.
- IDENTIFY REMAINING AREAS OF CONCERN ON FACILITY MAPS AND SPECIFY IN FACILITY EXCAVATION PERMIT INSTRUCTION.
- ENSURE NO PRODUCTION WELLS ARE INSTALLED AND GROUNDWATER IS NOT USED EXCEPT FOR MONITORING AND/OR REMEDIATION.
- PROTECT EXISTING MONITORING WELLS UNTIL FORMALLY ABANDONED.
- ENSURE THAT THERE HAS BEEN NO UNAUTHORIZED SOIL EXCAVATION OR DISTURBANCE.
- ENSURE THAT ANY SOIL EXCAVATED FROM THE SITE IS PROPERLY CHARACTERIZED AND DISPOSED OFF-SITE AND THAT ON-SITE WORKERS ARE PROTECTED DURING SUCH ACTIVITIES.

NOTE: LUCs THAT ARE ITALICIZED ARE REQUIRED LUCs FROM THE NFA LETTER.

LUC INSPECTION ACTIONS

HAS SITE OR ADJACENT LAND USE CHANGED SINCE LAST INSPECTION?

☐ YES ☒ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____

Industrial land use

DO FACILITY MAPS IDENTIFY REMAINING AREAS OF CONCERN?

☒ YES ☐ NO

DESCRIBE:

Contractor Environmental & Safety Guide

DOES THE FACILITY EXCAVATION PERMIT INSTRUCTION SPECIFY REMAINING AREAS OF CONCERN?

☒ YES ☐ NO

DESCRIBE:

Contractor Environmental & Safety Guide

IS THERE VISUAL EVIDENCE OF UNAUTHORIZED ON-SITE WELL INSTALLATION OR GROUNDWATER USE?

☐ YES ☒ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____☐ SEE WELL INSPECTION LOGS☐ WELL INSPECTIONS☐ OTHER _____

ARE ALL MONITORING WELLS IN GOOD CONDITION AND ACCESSIBLE? (REFER TO COMPLETED MONITORING WELL INSPECTION CHECKLISTS)

☒ YES ☐ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____☒ SEE WELL INSPECTION LOGS☒ WELL INSPECTIONS☐ OTHER _____

IS THERE VISUAL OR ADMINISTRATIVE EVIDENCE OF SOIL EXCAVATION OR DISTURBANCE? IF SO, DETERMINE IF SITE APPROVAL PROCESS HAS BEEN FOLLOWED.

☒ YES ☐ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____

Active construction activities.



NBK Manchester
Site 304 - Industrial Area
Naval Facilities Engineering Command Northwest

LUCs INSPECTION CHECKLIST (CONTINUED)

HAS ACCESS CONTROL BEEN MAINTAINED?

☒ YES ☐ NO, EXPLAIN _____

IS SIGNAGE READABLE AND ADEQUATE?

SECURITY POC: N/A

INSPECTION PERFORMED?
(CHECK ALL THAT APPLY)

☒ SITE WALK

☐ INTERVIEW W/ _____

☐ SECURITY CHECK

☐ OTHER _____

☒ YES ☐ NO ☐ NA

FINDINGS:

LUC signage is north of actual site boundary

WERE PICTURES TAKEN?

☒ YES

☐ NO

PHOTO IDs See Appendix D.

ADDITIONAL NOTES:

Soil excavation related to active construction activities was observed on the south side of the main office building (B217). Environmental Manager and field crew verified dig permits for construction activities (excavation) were all on file in accordance with state and federal regulations. Pallet is covering groundwater monitoring well MFD-B12-MW02. Broken fence has been removed and laydown yard material has been cleared. One new flush mounted groundwater monitoring well has been installed.

I CERTIFY THAT THE CONDITIONS OF THE AREA ON THE INSPECTION DATES(S) WERE AS REPORTED ABOVE.

INSPECTOR SIGNATURE:

Christian Briggs

DATE:

26 July 2023



NBK Manchester
Tank 50 Release Site
Naval Facilities Engineering Command Northwest

LAND USE CONTROLS (LUCs) INSPECTION CHECKLIST

DATE(S) (MM|DD|YY):

26 July 2023

INSPECTOR(S):

C. Briggs, C. Foster

COMPANY:

Liberty JV

LUCs

- *ENSURE THAT WARNINGS ARE POSTED FOR WORKERS TO GUARD AGAINST EXPOSURE TO RESIDUAL PETROLEUM CONTAMINATED SOIL.*
- *IDENTIFY REMAINING AREAS OF CONCERN ON FACILITY MAPS AND SPECIFY IN FACILITY EXCAVATION PERMIT INSTRUCTION.*
- ENSURE THAT LAND USE REMAINS FOR INDUSTRIAL PURPOSES. COORDINATE WITH ECOLOGY PRIOR TO CHANGE IN PROPERTY OWNERSHIP OR LAND USE CONCERNING THE NEED FOR REMEDIAL ACTIONS.
- ENSURE NO PRODUCTION WELLS ARE INSTALLED AND GROUNDWATER IS NOT USED EXCEPT FOR MONITORING AND/OR REMEDIATION.
- PROTECT EXISTING MONITORING WELLS UNTIL FORMALLY ABANDONED.
- ENSURE THAT THERE HAS BEEN NO UNAUTHORIZED SOIL EXCAVATION OR DISTURBANCE.
- ENSURE THAT ANY SOIL EXCAVATED FROM THE SITE IS PROPERLY CHARACTERIZED AND DISPOSED OFF-SITE AND THAT ON-SITE WORKERS ARE PROTECTED DURING SUCH ACTIVITIES.

NOTE: LUCs THAT ARE ITALICIZED ARE REQUIRED LUCs FROM THE NFA LETTER.

LUC INSPECTION ACTION

HAS SITE OR ADJACENT LAND USE CHANGED SINCE LAST INSPECTION?

☐ YES ☒ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____

Industrial land use

DO FACILITY MAPS IDENTIFY REMAINING AREAS OF CONCERN?

☒ YES ☐ NO

DESCRIBE:

Contractor Environmental & Safety Guide

DOES THE FACILITY EXCAVATION PERMIT INSTRUCTION SPECIFY REMAINING AREAS OF CONCERN?

☒ YES ☐ NO

DESCRIBE:

Contractor Environmental & Safety Guide

IS THERE VISUAL EVIDENCE OF UNAUTHORIZED ON-SITE WELL INSTALLATION OR GROUNDWATER USE?

☐ YES ☒ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____☐ SEE WELL INSPECTION LOGS☐ WELL INSPECTIONS☐ OTHER _____

ARE ALL MONITORING WELLS IN GOOD CONDITION AND ACCESSIBLE? (REFER TO COMPLETED MONITORING WELL INSPECTION CHECKLISTS)

☒ YES ☐ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____☒ SEE WELL INSPECTION LOGS☒ WELL INSPECTIONS☐ OTHER _____

IS THERE VISUAL OR ADMINISTRATIVE EVIDENCE OF SOIL EXCAVATION OR DISTURBANCE? IF SO, DETERMINE IF SITE APPROVAL PROCESS HAS BEEN FOLLOWED.

☐ YES ☒ NO

INSPECTION PERFORMED?

☒ SITE WALK☐ INTERVIEW W/ _____

FINDINGS:

(CHECK ALL THAT APPLY)

☐ SECURITY CHECK☐ OTHER _____



NBK Manchester
Tank 50 Release Site
Naval Facilities Engineering Command Northwest

LUCs INSPECTION CHECKLIST (CONTINUED)

IS THERE VISUAL OR ADMINISTRATIVE EVIDENCE OF THE UNAUTHORIZED PLACEMENT
EXCESS SOIL, FILL, OR SEDIMENT FROM ANOTHER LOCATION?

☐ YES ☒ NO ☐ NA

INSPECTION PERFORMED? ☒ SITE WALK ☐ INTERVIEW W/ _____
 (CHECK ALL THAT APPLY) ☐ SECURITY CHECK ☐ OTHER _____

FINDINGS: _____

HAS ACCESS CONTROL BEEN MAINTAINED?

☒ YES ☐ NO, EXPLAIN _____

SECURITY POC: N/A

IS SIGNAGE READABLE AND ADEQUATE?

INSPECTION PERFORMED? ☒ SITE WALK ☐ INTERVIEW W/ _____
 (CHECK ALL THAT APPLY) ☐ SECURITY CHECK ☐ OTHER _____

☐ YES ☒ NO ☐ NA

FINDINGS:

No LUC signage observed at main access point to
site, adjacent to MFD Main Gate.

WERE PICTURES TAKEN? ☒ YES
☐ NO

PHOTO IDs See Appendix D.

ADDITIONAL NOTES:

MW-2 south of Tank 50 was removed as part of the well decommissioning activities in 2019. The area of previous soil disturbance during the 2022 LUC Inspection was observed to be restored and revegetated during this LUC inspection.

I CERTIFY THAT THE CONDITIONS OF THE AREA ON THE INSPECTION DATES(S) WERE AS REPORTED ABOVE.

INSPECTOR SIGNATURE:

Christian Briggs

DATE:

26 July 2023

Appendix B: Monitoring Well Inspection Checklists

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NBK Manchester
Naval Facilities Engineering Command Northwest
MONITORING WELL CHECKLIST FOR LUC INSPECTION

DATE (MM DD YY): 26 July 2023	TIME (HH:MM): 14:12	WEATHER/TEMPERATURE: Sunny, 70 degrees Fahrenheit
INSPECTOR: Christian Briggs and Chelsea Foster		COMPANY: Liberty JV
SITE: Site 303 D-Tunnel Tanks	DESCRIPTION: D-Tunnel Tanks	
WELL ID: MW-1, South of Tank 24	NORTHING: 64013.946	EASTING: 371485.35

Part 1: TYPE OF MONITORING WELL AND MONUMENT CONDITION

TYPE OF MONITORING WELL: ☒ GROUNDWATER
☐ SOIL VAPOR

MONITORING WELL LOCATED? ☐ YES ☒ NO

IS THE WELL CLEARLY LABELED? ☐ YES ☐ NO

IS THE MONUMENT IN GOOD CONDITION? ☐ YES ☐ NO

TYPE OF WELL CASING: ☐ STICK-UP ☐ FLUSH-MOUNT ☐ OTHER _____

SIZE & NUMBER OF BOLTS ON FLUSH-MOUNT LID: _____

WERE PICTURES TAKEN? ☒ YES ☐ NO

PHOTO IDs: See Appendix D

MONITORING WELL MONUMENT CAP OPENED? ☐ YES ☐ NO (IF NO, SKIP TO PART 3)

Part 2: MONITORING WELL CONDITION

CASING DIAMETER ☐ 2" ☐ 4" ☐ 6" ☐ 8" ☐ OTHER _____

IS THE CASING IN GOOD CONDITION? ☐ YES ☐ NO

IS THERE A CAP ON THE MONITORING WELL? ☐ YES ☐ NO

TYPE OF CAP: ☐ PVC SLIP CAP
☐ J-PLUG
☐ EXPANSION
☐ PRODUCTION W/TUBING
☐ OTHER _____

IS THERE ANY EVIDENCE OF TAMPERING WITH THE WELL CASING OR CAP? ☐ YES ☐ NO

ARE THERE ANY ODORS? ☐ YES ☐ NO

IF YES, DESCRIBE ODOR: ☐ SOLVENT
☐ SULFIDE/ROTTEN EGGS
☐ PETROLEUM
☐ OTHER _____

WERE PICTURES TAKEN? ☐ YES ☐ NO

PHOTO IDs: _____

Part 3: ADDITIONAL NOTES OR COMMENTS
GENERAL CONDITION (CHECK ONE):

- ☐ GOOD CONDITION
☐ MODERATE CONDITION
☐ POOR CONDITION

Groundwater Monitoring Well MW-1 could not be located. Soil and/or vegetation may be covering the well.


NBK Manchester
Naval Facilities Engineering Command Northwest
MONITORING WELL CHECKLIST FOR LUC INSPECTION

DATE (MM DD YY): 26 July 2023	TIME (HH:MM): 13:26	WEATHER/TEMPERATURE: Sunny, 70 degrees Fahrenheit
INSPECTOR: Christian Briggs and Chelsea Foster		COMPANY: Liberty JV
SITE: Site 303 D-Tunnel Tanks	DESCRIPTION: D-Tunnel Tanks	
WELL ID: MW-1, North of Tank 30	NORTHING: 64612.007	EASTING: 371179.515

Part 1: TYPE OF MONITORING WELL AND MONUMENT CONDITION

TYPE OF MONITORING WELL: ☒ GROUNDWATER
☐ SOIL VAPOR

MONITORING WELL LOCATED? ☒ YES ☐ NO

IS THE WELL CLEARLY LABELED? ☒ YES ☐ NO

IS THE MONUMENT IN GOOD CONDITION? ☒ YES ☐ NO

TYPE OF WELL CASING: ☐ STICK-UP ☒ FLUSH-MOUNT ☐ OTHER _____

SIZE & NUMBER OF BOLTS ON FLUSH-MOUNT LID: 2 bolts, 9/16 inch

WERE PICTURES TAKEN? ☐ YES ☐ NO

PHOTO IDs: See Appendix D

MONITORING WELL MONUMENT CAP OPENED? ☐ YES ☒ NO (IF NO, SKIP TO PART 3)

Part 2: MONITORING WELL CONDITION

CASING DIAMETER ☐ 2" ☐ 4" ☐ 6" ☐ 8" ☐ OTHER _____

IS THE CASING IN GOOD CONDITION? ☐ YES ☐ NO

IS THERE A CAP ON THE MONITORING WELL? ☐ YES ☐ NO

TYPE OF CAP: ☐ PVC SLIP CAP
☐ J-PLUG
☐ EXPANSION
☐ PRODUCTION W/TUBING
☐ OTHER _____

IS THERE ANY EVIDENCE OF TAMPERING WITH THE WELL CASING OR CAP? ☐ YES ☐ NO

ARE THERE ANY ODORS? ☐ YES ☐ NO

IF YES, DESCRIBE ODOR: ☐ SOLVENT
☐ SULFIDE/ROTTEN EGGS
☐ PETROLEUM
☐ OTHER _____

WERE PICTURES TAKEN? ☐ YES ☐ NO

PHOTO IDs: _____

Part 3: ADDITIONAL NOTES OR COMMENTS

GENERAL CONDITION (CHECK ONE):
☐ GOOD CONDITION
☒ MODERATE CONDITION
☐ POOR CONDITION

Groundwater Monitoring Well MW-1 located, but not opened for inspection in accordance with the approved Field Change Request (FCR). Monument is rusted and behind fence.


NBK Manchester
Naval Facilities Engineering Command Northwest
MONITORING WELL CHECKLIST FOR LUC INSPECTION

DATE (MM DD YY): 26 July 2023	TIME (HH:MM): 13:20	WEATHER/TEMPERATURE: Sunny, 70 degree Fahrenheit
INSPECTOR: Christian Briggs and Chelsea Foster		COMPANY: Liberty JV
SITE: Site 303 D-Tunnel Tanks	DESCRIPTION: D-Tunnel Tanks	
WELL ID: MW-3, North of Tank 30	NORTHING: 64625.423	EASTING: 371219.950

Part 1: TYPE OF MONITORING WELL AND MONUMENT CONDITION

TYPE OF MONITORING WELL: ☒ GROUNDWATER
☐ SOIL VAPOR

MONITORING WELL LOCATED? ☒ YES ☐ NO

IS THE WELL CLEARLY LABELED? ☒ YES ☐ NO

IS THE MONUMENT IN GOOD CONDITION? ☒ YES ☐ NO

TYPE OF WELL CASING: ☐ STICK-UP ☒ FLUSH-MOUNT ☐ OTHER _____

SIZE & NUMBER OF BOLTS ON FLUSH-MOUNT LID: 2 bolts, 9/16 inch

WERE PICTURES TAKEN? ☒ YES ☐ NO

PHOTO IDS: See Appendix D

MONITORING WELL MONUMENT CAP OPENED? ☐ YES ☒ NO (IF NO, SKIP TO PART 3)

Part 2: MONITORING WELL CONDITION

CASING DIAMETER ☐ 2" ☐ 4" ☐ 6" ☐ 8" ☐ OTHER _____

IS THE CASING IN GOOD CONDITION? ☐ YES ☐ NO

IS THERE A CAP ON THE MONITORING WELL? ☐ YES ☐ NO

TYPE OF CAP: ☐ PVC SLIP CAP
☐ J-PLUG
☐ EXPANSION
☐ PRODUCTION W/TUBING
☐ OTHER _____

IS THERE ANY EVIDENCE OF TAMPERING WITH THE WELL CASING OR CAP? ☐ YES ☐ NO

ARE THERE ANY ODORS? ☐ YES ☐ NO

IF YES, DESCRIBE ODOR: ☐ SOLVENT
☐ SULFIDE/ROTTEN EGGS
☐ PETROLEUM
☐ OTHER _____

WERE PICTURES TAKEN? ☐ YES ☐ NO

PHOTO IDS: _____

Part 3: ADDITIONAL NOTES OR COMMENTS

GENERAL CONDITION (CHECK ONE):
☒ GOOD CONDITION
☐ MODERATE CONDITION
☐ POOR CONDITION

Groundwater Monitoring Well MW-3 located, but not opened for inspection in accordance with the approved Field Change Request (FCR).


NBK Manchester
Naval Facilities Engineering Command Northwest
MONITORING WELL CHECKLIST FOR LUC INSPECTION

DATE (MM DD YY): 26 July 2023	TIME (HH:MM): 11:50	WEATHER/TEMPERATURE: Sunny, 70 degrees Fahrenheit
INSPECTOR: Christian Briggs and Chelsea Foster		COMPANY: Liberty JV
SITE: Site 304 Industrial Area	DESCRIPTION: Industrial Area	
WELL ID: MW-1	NORTHING: 64019.596	EASTING: 371750.902

Part 1: TYPE OF MONITORING WELL AND MONUMENT CONDITION

TYPE OF MONITORING WELL: ☒ GROUNDWATER
☐ SOIL VAPOR

MONITORING WELL LOCATED? ☒ YES ☐ NO

IS THE WELL CLEARLY LABELED? ☒ YES ☐ NO

IS THE MONUMENT IN GOOD CONDITION? ☒ YES ☐ NO

TYPE OF WELL CASING: ☐ STICK-UP ☒ FLUSH-MOUNT ☐ OTHER _____

SIZE & NUMBER OF BOLTS ON FLUSH-MOUNT LID: 2 bolts, 9/16 inch

WERE PICTURES TAKEN? ☒ YES ☐ NO

PHOTO IDS: See Appendix D

MONITORING WELL MONUMENT CAP OPENED? ☐ YES ☒ NO (IF NO, SKIP TO PART 3)

Part 2: MONITORING WELL CONDITION

CASING DIAMETER ☐ 2" ☐ 4" ☐ 6" ☐ 8" ☐ OTHER _____

IS THE CASING IN GOOD CONDITION? ☐ YES ☐ NO

IS THERE A CAP ON THE MONITORING WELL? ☐ YES ☐ NO

TYPE OF CAP: ☐ PVC SLIP CAP
☐ J-PLUG
☐ EXPANSION
☐ PRODUCTION W/TUBING
☐ OTHER _____

IS THERE ANY EVIDENCE OF TAMPERING WITH THE WELL CASING OR CAP? ☐ YES ☐ NO

ARE THERE ANY ODORS? ☐ YES ☐ NO

IF YES, DESCRIBE ODOR: ☐ SOLVENT
☐ SULFIDE/ROTTEN EGGS
☐ PETROLEUM
☐ OTHER _____

WERE PICTURES TAKEN? ☐ YES ☐ NO

PHOTO IDS: _____

Part 3: ADDITIONAL NOTES OR COMMENTS

GENERAL CONDITION (CHECK ONE):
☒ GOOD CONDITION
☐ MODERATE CONDITION
☐ POOR CONDITION

Groundwater Monitoring Well MW-1 located, but not opened for inspection in accordance with the approved Field Change Request (FCR).


NBK Manchester
Naval Facilities Engineering Command Northwest
MONITORING WELL CHECKLIST FOR LUC INSPECTION

DATE (MM DD YY): 26 July 2023	TIME (HH:MM): 11:35	WEATHER/TEMPERATURE: Sunny, 70 degrees Fahrenheit
INSPECTOR: Christian Briggs and Chelsea Foster		COMPANY: Liberty JV
SITE: Site 304 Industrial Area	DESCRIPTION: Industrial Area	
WELL ID: MW-2	NORTHING: 64106.184	EASTING: 371804.246

Part 1: TYPE OF MONITORING WELL AND MONUMENT CONDITION

TYPE OF MONITORING WELL: ☒ GROUNDWATER
☐ SOIL VAPOR

MONITORING WELL LOCATED? ☒ YES ☐ NO

IS THE WELL CLEARLY LABELED? ☒ YES ☐ NO

IS THE MONUMENT IN GOOD CONDITION? ☒ YES ☐ NO

TYPE OF WELL CASING: ☐ STICK-UP ☒ FLUSH-MOUNT ☐ OTHER _____

SIZE & NUMBER OF BOLTS ON FLUSH-MOUNT LID: 2 bolts, 3/4 inch

WERE PICTURES TAKEN? ☒ YES ☐ NO PHOTO IDS: See Appendix D

MONITORING WELL MONUMENT CAP OPENED? ☐ YES ☒ NO (IF NO, SKIP TO PART 3)

Part 2: MONITORING WELL CONDITION

CASING DIAMETER ☐ 2" ☐ 4" ☐ 6" ☐ 8" ☐ OTHER _____

IS THE CASING IN GOOD CONDITION? ☐ YES ☐ NO

IS THERE A CAP ON THE MONITORING WELL? ☐ YES ☐ NO

TYPE OF CAP: ☐ PVC SLIP CAP
☐ J-PLUG
☐ EXPANSION
☐ PRODUCTION W/TUBING
☐ OTHER _____

IS THERE ANY EVIDENCE OF TAMPERING WITH THE WELL CASING OR CAP? ☐ YES ☐ NO

ARE THERE ANY ODORS? ☐ YES ☐ NO

IF YES, DESCRIBE ODOR: ☐ SOLVENT
☐ SULFIDE/ROTTEN EGGS
☐ PETROLEUM
☐ OTHER _____

WERE PICTURES TAKEN? ☐ YES ☐ NO PHOTO IDS: _____

Part 3: ADDITIONAL NOTES OR COMMENTS
GENERAL CONDITION (CHECK ONE):

- ☒ GOOD CONDITION
☐ MODERATE CONDITION
☐ POOR CONDITION

Groundwater Monitoring Well MW-2 located, but not opened for inspection in accordance with the approved Field Change Request (FCR).


NBK Manchester
Naval Facilities Engineering Command Northwest
MONITORING WELL CHECKLIST FOR LUC INSPECTION

DATE (MM DD YY): 26 July 2023	TIME (HH:MM): 11:44	WEATHER/TEMPERATURE: Sunny, 70 degrees Fahrenheit
INSPECTOR: Christian Briggs and Chelsea Foster		COMPANY: Liberty JV
SITE: Site 304 Industrial Area	DESCRIPTION: Industrial Area	
WELL ID: MW-4	NORTHING: 64054.635	EASTING: 371808.329

Part 1: TYPE OF MONITORING WELL AND MONUMENT CONDITION

TYPE OF MONITORING WELL: ☒ GROUNDWATER
☐ SOIL VAPOR

MONITORING WELL LOCATED? ☒ YES ☐ NO

IS THE WELL CLEARLY LABELED? ☒ YES ☐ NO

IS THE MONUMENT IN GOOD CONDITION? ☒ YES ☐ NO

TYPE OF WELL CASING: ☐ STICK-UP ☒ FLUSH-MOUNT ☐ OTHER _____

SIZE & NUMBER OF BOLTS ON FLUSH-MOUNT LID: 2 bolts, 3/4 inch

WERE PICTURES TAKEN? ☒ YES ☐ NO

PHOTO IDs: See Appendix D

MONITORING WELL MONUMENT CAP OPENED? ☐ YES ☒ NO (IF NO, SKIP TO PART 3)

Part 2: MONITORING WELL CONDITION

CASING DIAMETER ☐ 2" ☐ 4" ☐ 6" ☐ 8" ☐ OTHER _____

IS THE CASING IN GOOD CONDITION? ☐ YES ☐ NO

IS THERE A CAP ON THE MONITORING WELL? ☐ YES ☐ NO

TYPE OF CAP: ☐ PVC SLIP CAP
☐ J-PLUG
☐ EXPANSION
☐ PRODUCTION W/TUBING
☐ OTHER _____

IS THERE ANY EVIDENCE OF TAMPERING WITH THE WELL CASING OR CAP? ☐ YES ☐ NO

ARE THERE ANY ODORS? ☐ YES ☐ NO

IF YES, DESCRIBE ODOR: ☐ SOLVENT
☐ SULFIDE/ROTTEN EGGS
☐ PETROLEUM
☐ OTHER _____

WERE PICTURES TAKEN? ☐ YES ☐ NO

PHOTO IDs: _____

Part 3: ADDITIONAL NOTES OR COMMENTS
GENERAL CONDITION (CHECK ONE):

- ☒ GOOD CONDITION
☐ MODERATE CONDITION
☐ POOR CONDITION

Groundwater Monitoring Well MW-4 located, but not opened for inspection in accordance with the approved Field Change Request (FCR). MW-4 partially covered by wood pallets.


NBK Manchester
Naval Facilities Engineering Command Northwest
MONITORING WELL CHECKLIST FOR LUC INSPECTION

DATE (MM DD YY): 26 July 2023	TIME (HH:MM): 09:55	WEATHER/TEMPERATURE: Sunny, 70 degrees Fahrenheit
INSPECTOR: Christian Briggs and Chelsea Foster		COMPANY: Liberty JV
SITE: Tank 50	DESCRIPTION: Tank 50 Release Site	
WELL ID: MW-1	NORTHING: 64407.051	EASTING: 370946.014

Part 1: TYPE OF MONITORING WELL AND MONUMENT CONDITION

TYPE OF MONITORING WELL: ☒ GROUNDWATER
☐ SOIL VAPOR

MONITORING WELL LOCATED? ☒ YES ☐ NO

IS THE WELL CLEARLY LABELED? ☒ YES ☐ NO

IS THE MONUMENT IN GOOD CONDITION? ☒ YES ☐ NO

TYPE OF WELL CASING: ☒ STICK-UP ☐ FLUSH-MOUNT ☐ OTHER _____

SIZE & NUMBER OF BOLTS ON FLUSH-MOUNT LID: _____

WERE PICTURES TAKEN? ☒ YES ☐ NO

PHOTO IDs: See Appendix D

MONITORING WELL MONUMENT CAP OPENED? ☐ YES ☒ NO (IF NO, SKIP TO PART 3)

Part 2: MONITORING WELL CONDITION

CASING DIAMETER ☐ 2" ☐ 4" ☐ 6" ☐ 8" ☐ OTHER _____

IS THE CASING IN GOOD CONDITION? ☐ YES ☐ NO

IS THERE A CAP ON THE MONITORING WELL? ☐ YES ☐ NO

TYPE OF CAP: ☐ PVC SLIP CAP
☐ J-PLUG
☐ EXPANSION
☐ PRODUCTION W/TUBING
☐ OTHER _____

IS THERE ANY EVIDENCE OF TAMPERING WITH THE WELL CASING OR CAP? ☐ YES ☐ NO

ARE THERE ANY ODORS? ☐ YES ☐ NO

IF YES, DESCRIBE ODOR: ☐ SOLVENT
☐ SULFIDE/ROTTEN EGGS
☐ PETROLEUM
☐ OTHER _____

WERE PICTURES TAKEN? ☐ YES ☐ NO

PHOTO IDs: _____

Part 3: ADDITIONAL NOTES OR COMMENTS
GENERAL CONDITION (CHECK ONE):

- ☒ GOOD CONDITION
☐ MODERATE CONDITION
☐ POOR CONDITION

Groundwater Monitoring Well MW-1 located, but not opened for inspection in accordance with the approved Field Change Request (FCR). Well contains a lock (brass 05. inch shank) on the stove top riser.

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Appendix C: Field Notes

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FIELD

NOTES

Project Name: 2023 NBK Manchester, Kitsap County, WA

Project Number: 23-4026

Weather	Bright Sun	Clear	Overcast	Rain	Snow
Temp (F)	Under 32	32-50	51-70	71-85	Over 85
Wind	Still	Mod.	High		
Humidity	Dry	Mod.	High		

Date:	Time:	Notes:
7/26	0800	Arrive onsite. Attempt to check in with Mike Hardman. Mob to site 302. Perform daily safety brief and site indoc.
	0820	Begin LUC inspection at 302. Add lock to gate, combo 0302. Three PFAS wells for monitoring onsite. Soil stockpiles have been removed. Cap ^{CS} Cover has been hydroseeded this season. Fence still needs repairs in areas noted. Fence repairs contract has been awarded, work is set to begin this summer. North gate can still be pushed open, Aric plans to bring a chain for it tomorrow. Photograph Fishers well.
	0915	
	0930	Begin LUC inspection at Tank 50. in Signage still in place. No soil disturbance observed. MW-1 in good condition. MW-2 not found. Two PFAS wells (assumed assumed they are for PFAS) monitoring wells have been installed.
	1020	Complete Tank 50 LUC inspection.
	1030	Check in with Mike Hardman. He discussed the procedures for updating documents with areas of concern. The Team reviewed soil excavation permits for active construction projects.
	1100	Lunch
	1130	Begin LUC inspection at Site 304. Two wells named MW01. One new well named MW03 on the concrete but no name badge. Soil excavation related to utility trenching at main office building (B B217). Pallet covering MW04. Broken fence has been removed and laydown yard material has been cleared.
	1215	Check in with construction manager on access to site 303. Don appropriate PPE.

FIELD

NOTES

Project Name: 2023 NBK Manchester, Kitsap County, WA

Project Number: 23-4026

Weather	Bright Sun	<u>Clear</u>	Overcast	Rain	Snow
Temp (F)	Under 32	32-50	61-70	71-85	Over 85
Wind	Still	<u>Mod</u>	High		
Humidity	Dry	<u>Mod.</u>	High		

Date:	Time:	Notes:
7/26	1230 1500 1515	<p>Begin LUC inspection at site 303. Site Soil stockpile north of tank 29 has been removed. Signage that was (tank 22) falling over has been repaired. All soil or material onsite is related to ongoing construction activities. Signage south of tank 29 has been removed. A large portion of the site is being entirely re-worked due to tank replacement activities. Could not find MW-1 south of tank 24. Complete LUC inspections. Review photos with Mike Carter. Depart Site.</p> <p style="text-align: center;">_____</p> <p style="text-align: center;">7.26.23 CB End of Day</p>

Appendix D: Photographic Log

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Site 302 – PCB Site



Photograph 1

Land use control (LUC) signage along southeastern road boundary, facing east.



Photograph 2

LUC signage at southeast corner, facing west.

Site 302 – PCB Site



Photograph 3

Fencing along southwestern boundary of site, facing northeast.



Photograph 4

South central area of site and new PFAS groundwater monitoring well MFD-S302-MW03, facing north.

Site 302 – PCB Site



Photograph 5

LUC signage located on south side of site, facing north.



Photograph 6

Central area of the site, facing northwest. Stockpiles have been removed.

Site 302 – PCB Site



Photograph 7
South central area of site, facing northwest



Photograph 8
South central area of site, facing northwest. PFAS groundwater monitoring well MFD-S302-MW02 in the background.

Site 302 – PCB Site



Photograph 9

Central area of site, facing south. Soil stockpiles have been removed.



Photograph 10

Stockpiles with covered with vegetation, central area of site, facing northeast.

Site 302 – PCB Site



Photograph 11

Central area of site, facing southwest. Soil stockpiles have been removed.



Photograph 12

National Marine Fisheries Service shed, northeast of site, facing west.

Site 302 – PCB Site



Photograph 13

Locked access gate and LUC signage located on north side of site, facing south. Chain has been added to secure the gate.



Photograph 14

Northern corner fence line, facing southwest.

Site 302 – PCB Site



Photograph 15

Broken section of fence (approximately 50 feet) along west perimeter, facing southwest.



Photograph 16

Broken section of fence (approximately 10 feet) along west perimeter, facing west.

Site 302 – PCB Site



Photograph 17
East perimeter fence line, facing north.



Photograph 18
New PFAS groundwater monitoring well MFD-S302-MW01 located within the northeast area of site, facing south.

Site 302 – PCB Site



Photograph 19
West perimeter fence line, facing southwest.



Photograph 20
Northwest boundary fence covered with heavy vegetation, facing southwest.

Site 302 – PCB Site



Photograph 21
Southwest boundary of site, facing east.

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Site 303 – D Tunnel Tanks



Photograph 1
Southeast boundary, facing southwest.



Photograph 2
Land Use Control (LUC) signage and storage containers, facing southeast.

Site 303 – D Tunnel Tanks



Photograph 3

Locations of former vapor monitoring wells and newly installed vault, facing east.



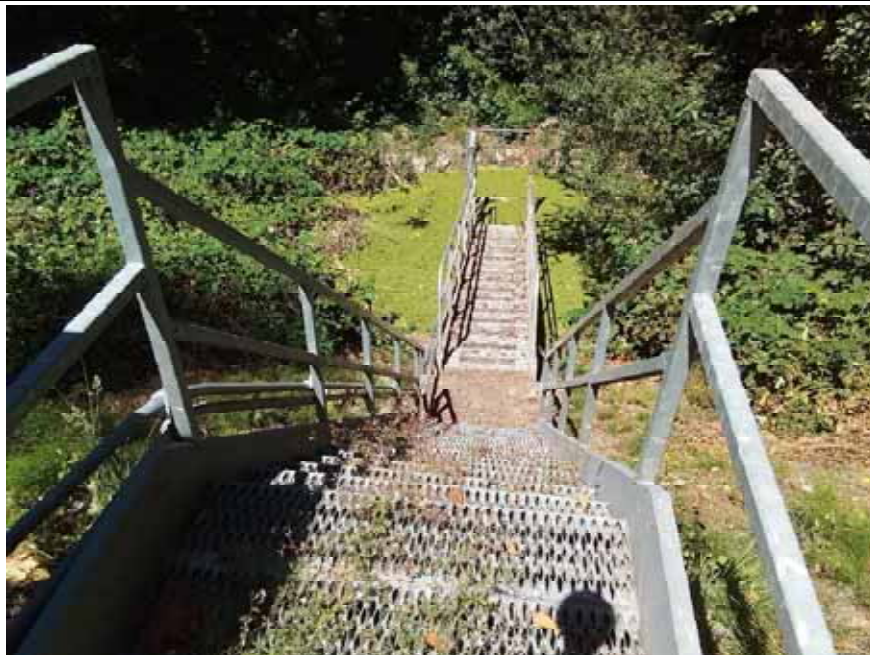
Photograph 4

Utility trench associated with active construction activities.

Site 303 – D Tunnel Tanks



Photograph 5
LUC signage along southeast perimeter, facing west.



Photograph 6
Stairway and ponded water south of Tank 24, facing north.

Site 303 – D Tunnel Tanks



Photograph 7

Unable to locate groundwater monitoring well MW-1, facing east.



Photograph 8

Construction and earthwork activities, facing northwest.

Site 303 – D Tunnel Tanks



Photograph 9
Construction and earthwork activities, facing east.



Photograph 10
LUC signage, facing east.

Site 303 – D Tunnel Tanks



Photograph 11
Vault at the tank 27, facing northwest.



Photograph 12
LUC signage at tank 27, facing northwest.

Site 303 – D Tunnel Tanks



Photograph 13
LUC signage at tank 28, facing northwest.



Photograph 14
Soil stockpile has been removed north of Tank 29, facing northwest.

Site 303 – D Tunnel Tanks



Photograph 15
Vault near Tank 29, facing west.



Photograph 16
Construction laydown yard near Tank 29, facing north.

Site 303 – D Tunnel Tanks



Photograph 17
LUC signage at tank 30, facing northeast.



Photograph 18
Vault at Tank 30, facing southeast.

Site 303 – D Tunnel Tanks



Photograph 19

Repaired former construction access road at Tank 30, facing east.



Photograph 20

Tank 30 site overview facing northeast.

Site 303 – D Tunnel Tanks



Photograph 21

Repaired cut in road related to former construction access road near Tank 30, facing west.



Photograph 22

Former construction access road southwest of Tank 29, facing north.

Site 303 – D Tunnel Tanks



Photograph 23

Groundwater monitoring well MW-3, northwest of site boundary, facing north.



Photograph 24

Groundwater monitoring well MW-1, northwest of site boundary, facing north.

Site 303 – D Tunnel Tanks



Photograph 25
Construction and earthwork activities, facing northwest.

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Site 304 – Industrial Area



Photograph 1

Parking lot along northeast boundary, facing north.



Photograph 2

Parking lot along southcentral area of site, facing southwest.

Site 304 – Industrial Area



Photograph 3

South central boundary adjacent to Administration Building showing utility trench related to construction activities, facing northeast.



Photograph 4

Groundwater monitoring well MW-4 (covered by pallets), located along southcentral boundary of site facing north.

Site 304 – Industrial Area



Photograph 5

Close up of groundwater monitoring well MW-4 (covered by pallets), located along southcentral boundary of site facing north.



Photograph 6

Southwest boundary of site, facing west.

Site 304 – Industrial Area



Photograph 7
Southwest boundary of site, facing northeast.



Photograph 8
Groundwater monitoring well MW-3 and one new PFAS monitoring well MFD-B12-MW03,
facing west.

Site 304 – Industrial Area



Photograph 9

Repaved asphalt located near southwest boundary, facing east.



Photograph 10

Western central boundary of site, facing south.

Site 304 – Industrial Area



Photograph 11
West central area of site, facing northeast.



Photograph 12
Groundwater monitoring well MW-2, facing northeast.

Site 304 – Industrial Area



Photograph 13

Fuel related waste storage containers (under canopy), facing northwest.



Photograph 14

Northeast boundary, facing northeast.

Site 304 – Industrial Area



Photograph 15

Land use control (LUC) signage located outside of north boundary of site, facing southwest.



Photograph 16

Construction laydown area and location of former Tank 14, west of site boundary, facing southeast.

Site 304 – Industrial Area



Photograph 17

Recently replaced concrete pad and vaults, along northwest boundary, facing southwest.



Photograph 18

Northeastern site boundary, facing southeast.

Site 304 – Industrial Area



Photograph 19

Construction laydown are along eastern boundary of site, facing northeast. Fence has been removed.



Photograph 20

Eastern site boundary, facing southwest.

Tank 50



Photograph 1

Land use control (LUC) signage along southwest road boundary, facing southeast.



Photograph 2

LUC signage at the former location of monitoring well MW-2, located along the southwest area of the site, facing south.

Tank 50



Photograph 3

Restored soil along the southwest boundary of site, facing southeast.



Photograph 4

Tanker truck facility and containerized fuel related waste, facing northeast.

Tank 50



Photograph 5
Southeast boundary of site, facing northeast.



Photograph 6
Monitoring well MW-1, located along the southeast boundary, facing southeast.

Tank 50



Photograph 7

Slope area recently cleared of trees, located along the northeast boundary, facing west.



Photograph 8

Tank 50 site overview, facing southwest.

Tank 50



Photograph 9
Tank 50 site overview, facing northwest.



Photograph 10
Former road along northwest boundary of site, facing southwest.

Tank 50



Photograph 11

Former road along northwest boundary of site, facing northeast.



Photograph 12

Northwest boundary of site, facing southeast.

Tank 50



Photograph 13

Northwest boundary of site, facing southeast.

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Appendix E: Field Change Request Forms

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Naval Base Kitsap Manchester, Kitsap County, WA

Naval Facilities Engineering Systems Command Northwest

FIELD CHANGE REQUEST (FCR) FORM

CONTRACT NO.: N4425520D5006	TASK ORDER NO.: N4425523F4026	FCR NO.: 01
NTR/RPM/COR: Aric Frohman	LOCATION: NBK Manchester, Kitsap County, WA	DATE: June 20, 2023

1. DOCUMENT TO BE CHANGED (IDENTIFY REVISION, DATE, SECTION, DRAWING, ETC.):

Final Abbreviated Accident Prevention Plan for Various Site Reconnaissance Activities, Naval Base Kitsap Manchester, Manchester, Washington (dated November 10, 2016).

Items to be updated:

- 1) Section 2.0 – Background Information, Description of Work to be Performed
- 2) Table 2. Project Contact List
- 3) Figure 2. Lines of Authority for Project Safety
- 4) Table 3. Emergency Notification/Contact List

2. DESCRIPTION OF EXISTING REQUIREMENT AND PROPOSED CHANGE (ATTACH SHEET IF NECESSARY):

Item 1:

- **EXISTING REQUIREMENT:** The Description of Work to be Performed states: "a. locate all vapor and groundwater monitoring wells at the site (using a metal detector as needed)"; "b. obtain global positioning system (GPS) coordinates for each well" and "d. open each well cover to collect depth-to-water and total depth measurements of each well." Five definable features of work with associated activity hazard analyses (AHAs) are related to these activities: AHA #2 (Locate vapor and groundwater monitoring wells with metal detector); AHA #3 (Obtain global positioning system [GPS] Coordinates for Vapor and Groundwater Monitoring Wells); AHA #4 (Opening, inspecting, collected depth-to-water measurements, and closing vapor and groundwater monitoring wells); AHA #5 (Equipment decontamination); and AHA #6 (Investigation-derived waste [IDW] removal and disposal).
- **PROPOSED CHANGE:** Remove text in Section 2.0 that refers to obtaining GPS coordinates for the wells; opening and collecting depth-to-water and total depth measurements at the wells; equipment decontamination; and IDW removal and disposal. Groundwater monitoring wells at Sites 302, 303, 304, and Tank 50 will be located and photographed, but not opened during the 2023 land use control (LUC) inspections.

Item 2:

- **EXISTING REQUIREMENT:** Table 2 provides the name, title, and contact information for primary personnel involved with this project.
- **PROPOSED CHANGE:** In Table 2, add Aric Frohman as the Navy Task Order Contracting Officer's Representative (TO COR) and Remedial Project Manager (RPM), add Michael Hardiman as the Naval Base Kitsap (NBK) Manchester Environmental Director, add Jeff Menken as the Task Order Manager, add Matt Brookshire as the Quality Control Manager, add Stacy Gutierrez as Health, Safety, and Environment Corporate Representative, add Christian Briggs as the Field Operations Lead (FOL) and the Site Safety and Health Officer (SSHO), add Chelsea Foster, Senior Scientist, add Brad Closson as the Alternate SSHO. Remove Carlotta Cellucci as the RPM, COR, and Navy Technical Representative (NTR); remove Charles Escola as NTR; remove Dennis Faulk as the United States Environmental Protection Agency (USEPA) Region 10 Remedial Project Manager; remove Angela Paolucci as Project Manager; remove Ryan Moon as Health, Safety, and Environment Corporate Representative; remove Derek Payne as the FOL; remove Samuel Moore as the SSHO; remove Max Zelenevich as the Alternate SSHO.

Item 3:

- **EXISTING REQUIREMENT:** Figure 2 provides the lines of authority for project safety.
- **PROPOSED CHANGE:** Update Figure 2 to reflect Jeff Menken as Task Order Manager, Stacy Gutierrez as Health, Safety, and Environment Corporate Representative, Christian Briggs as the FOL and the SSHO, and Chelsea Foster, Senior Scientist.

Item 4:

- **EXISTING REQUIREMENT:** Table 3 provides a list of emergency phone numbers and phone numbers for primary project personnel.
- **PROPOSED CHANGE:** Table 3, add names and phone numbers for Michael Hardiman, Jeff Menken, Matt Brookshire, Stacy Gutierrez, Christian Briggs, Chelsea Foster, Brad Closson. Remove contact information for Angela Paolucci, Ryan Moon, Derek Payne, Sam Moore, Max Zelenevich, Carlotta Cellucci, and Charles Escola.

☒ MINOR CHANGE☐ MAJOR CHANGE**3. REASON FOR CHANGE (ATTACH SHEET IF NECESSARY):**

Item 1: GPS coordinates will not be collected, and wells will not be opened to collect depth-to-water and total depth measurements during the 2023 LUC inspection activities. Since depth-to-water and total depth measurements will not be collected, equipment (oil-water interface probe) decontamination and IDW removal and disposal will not be required. Groundwater monitoring wells at Sites 302, 303, 304, and Tank 50 will only be located and photographed, but not opened during the 2023 LUC inspections.

Item 2: Navy and contractor personnel changes are required to represent the team working under the current contract task order. Sites 302, 303, 304 and Tank 50 are regulated under the Model Toxics Control Act (MTCA) with oversight from Ecology; therefore, the USEPA is not a project stakeholder.

Items 2 and 4: Navy and contractor personnel changes are required to represent the team working under the current contract task order. Aric Frohman is not listed in Tables 2 or 3 but will be serving as the Navy RPM and TO COR for this project. Michael Hardiman is not listed in Tables 2 or 3 but is the Environmental Director at NBK Manchester and will be involved with this project. Carlotta Cellucci, Angela Paolucci, Ryan Moon, Derek Payne, Samuel Moore, and Max Zelenevich will not be involved with this project. Jeff Menken will be serving as the Task Order Manager, Christian Briggs will be serving as the FOL/SSHO, and Chelsea Foster will be the SSHO for this project.

Item 3: Navy and contractor personnel changes are required to represent the team working under the current contract task order. Jeff Menken will be serving as the Task Order Manager, Matt Brookshire will be serving as the Project Quality Control Manager, Stacy Gutierrez will be serving as the Health, Safety, and Environment Corporate Representative. Christian Briggs and Chelsea Foster will be the Senior Scientist conducting the 2023 LUC inspections at the NBK Manchester.

4. ORIGINATOR (PRINT NAME AND SIGN) Christian Briggs Christian Briggs <small>Digitally signed by Christian Briggs Date: 2023.07.06 09:36:47 -07'00'</small>		TITLE Liberty JV Field Operations Lead/ Site Safety and Health Officer		DATE
REVIEWED BY (PRINT NAME AND SIGN) Chelsea Foster chelsea.foster <small>Digitally signed by chelsea.foster Date: 2023.07.06 09:27:08 -07'00'</small>		TITLE Liberty JV Site Safety and Health Officer		DATE
SITE SUPERINTENDENT (PRINT NAME AND SIGN) Christian Briggs Christian Briggs <small>Digitally signed by Christian Briggs Date: 2023.07.06 09:37:16 -07'00'</small>	DATE	TASK ORDER MANAGER (PRINT NAME AND SIGN) Jeff Menken jeffrey.menken <small>Digitally signed by jeffrey.menken Date: 2023.07.06 09:10:37 -07'00'</small>	DATE	
PROGRAM QC MANAGER (PRINT NAME AND SIGN) Matt Brookshire Matthew.Brookshire <small>Digitally signed by Matthew.Brookshire Date: 2023.07.06 11:34:18 -06'00'</small>	DATE	RPM ACKNOWLEDGEMENT (PRINT NAME AND SIGN) Aric Frohman FROHMAN.ARI C.C.139540315 6 <small>Digitally signed by FROHMAN.ARI.C.139540315 Date: 2023.07.06 14:49:53 -07'00'</small>	DATE	

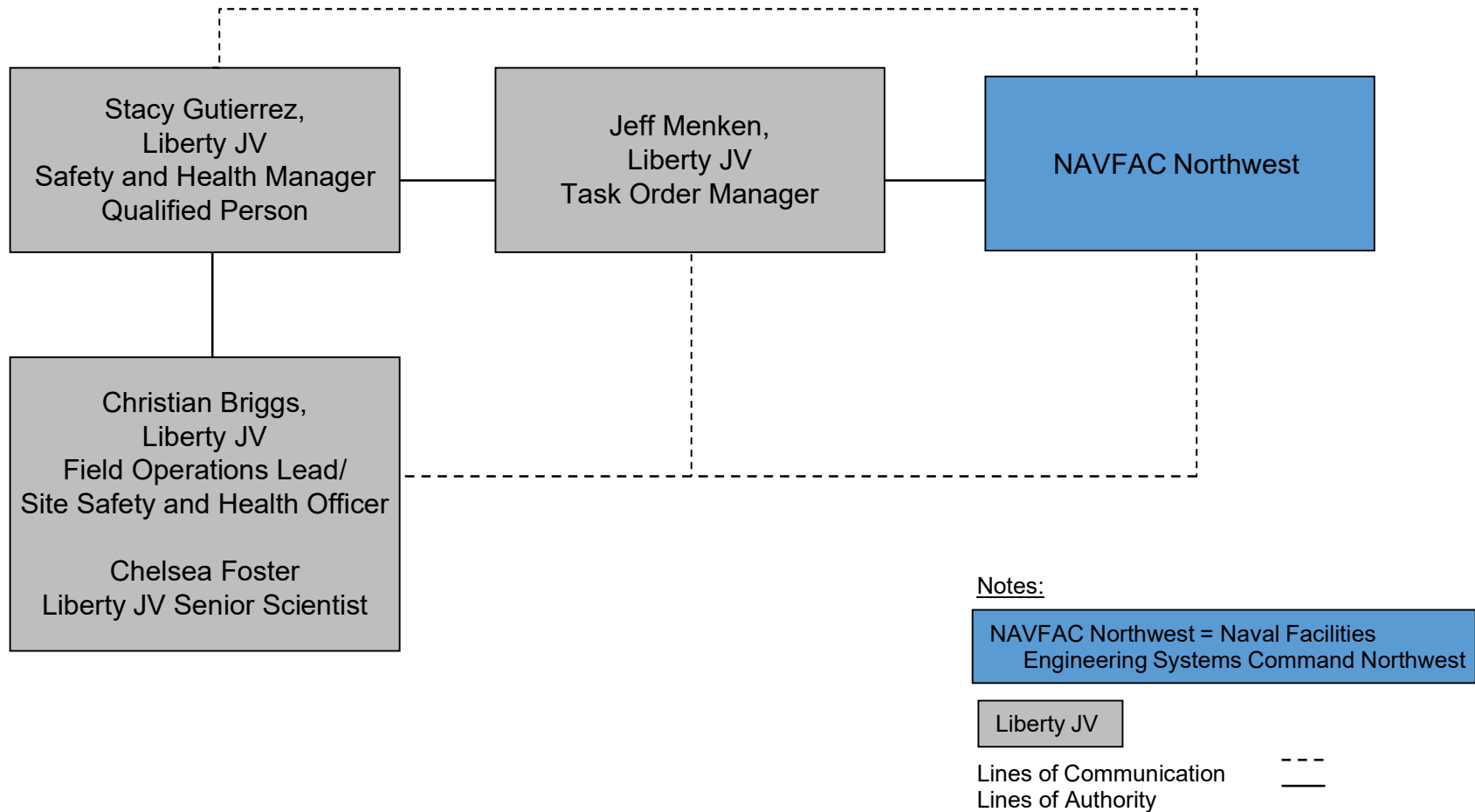
Table 2 – Project Contact List

Name and Title	Organization	Contact Information
Aric Frohman RPM, TO COR	NAVFAC Northwest	(360) 396-0206 (office) (360) 440-5791 (mobile) aric.c.frohman.civ@us.navy.mil
Michael Hardiman Environmental Director	NBK Manchester	(360) 476-5737 (office) michael.o.hardiman.civ@us.navy.mil
Brice Frey Project Manager/Engineer		(360) 476-0446 (office) brice.frey.civ@us.navy.mil
Doug Tailleir Environmental Specialist		(360) 476-2664 (office) douglas.tailleur.civ@us.navy.mil
Kristen Reed Ecology Site Manager	Ecology	(360) 742-2595 kristen.reed@ecy.wa.gov
Andrew Schmeising Suquamish Tribe Representative	Suquamish Tribe	(360) 265-4405 (office) aschmeising@suquamish.nsn.us
Jeff Menken Task Order Manager	Liberty JV	(971) 440-0408 (mobile) jeffrey.menken@wsp.com
Matt Brookshire Quality Control Manager		(858) 740-6268 (mobile) matthew.brookshire@wsp.com
Stacy Gutierrez Health, Safety, and Environment Corporate Representative / SHM		(928) 344-8374 (Office) stacyg@neiaw.com
Christian Briggs FOL, SSHO		(231) 409-0146 (mobile) cbriggs@neiaw.com
Chelsea Foster Senior Scientist		(360) 820-3400 (mobile) chelsea.foster@wsp.com
Brad Closson Alternate SSHO		(928) 919-1776 (mobile) bclosson@neiaw.com

Notes:

COR = Contracting Officer's Representative; Ecology = Washington State Department of Ecology;
 FOL = Field Operations Lead; Liberty JV = Liberty Joint Venture; NAVFAC = Naval Facilities Engineering Systems
 Command; NBK = Naval Base Kitsap; RPM = Remedial Project Manager; SHM = Safety and Health Manager;
 SSHO = Site Safety and Health Officer; TO = Task Order

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Figure 2 – Lines of Authority for Project Safety

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Table 3 - Emergency Notification/Contact List

Emergency Services	
FOR ALL EMERGENCIES	911
South Kitsap Fire and Rescue – Station 9	(360) 871-2411
Agency for Toxic Substances and Disease Registry Poison Control Center	(888) 422-8737
National Response Center, Toxic Chemicals and Oil Spills	(800) 424-8802
Medical Centers	
St. Anthony Hospital Emergency Services	(253) 530-2000
Regulatory Agencies	
Washington State Department of Labor and Industries	(800) 423-7233
Navy Points of Contact	
Aric Frohman, TO COR	Mobile: (360) 440-5791
Michael Hardiman, Environmental Director	Office: (360) 476-5737
Brice Frey, Project Manager/Engineer	Office: (360) 476-0446
Doug Tailleir, Environmental Specialist	Office: (360) 476-2664
Liberty JV Personnel	
Jeff Menken, Task Order Manager	Mobile: (971) 440-0408
Christian Briggs, FOL, SSHO	Mobile: (231) 409-0146
Chelsea Foster Senior Scientist	Mobile: (360) 820-3400
Brad Closson, Alternate SSHO	Mobile: (928) 919-1776
Stacy Gutierrez, Health, Safety, and Environment Corporate Representative / SHM	Office: (928) 344-8374

Notes:

COR = Contracting Officer's Representative; FOL = Field Operations Lead; Liberty JV = Liberty Joint Venture;
SHM = Safety and Health Manager; SSHO = Site Safety and Health Officer; TO = Task Order



Naval Base Kitsap Manchester, Kitsap County, WA
Naval Facilities Engineering Systems Command
Northwest

FIELD CHANGE REQUEST (FCR) FORM

CONTRACT NO.: N4425520D5006	TASK ORDER NO.: N4425523F4026	FCR NO.: 02
NTR/RPM/COR: Aric Frohman	LOCATION: NBK Manchester, Kitsap County, WA	DATE: June 20, 2023

1. DOCUMENT TO BE CHANGED (IDENTIFY REVISION, DATE, SECTION, DRAWING, ETC.):

Final Abbreviated Accident Prevention Plan (APP) for Various Site Reconnaissance Activities, Naval Base Kitsap Manchester, Manchester, Washington – Attachments

Items to be updated:

- 1) Attachment 1
 - A) Section 1.3: Key Personnel;
 - B) Section 2.0: Project Tasks;
 - C) Section 4.0: Site Control; and
 - D) Table 1. Activity Hazard Analysis
- 2) Attachment 2
 - A) Competency Verification Documentation
- 3) Attachment 3
 - A) APP Acknowledgement & Safety Compliance Agreement Form
 - B) Safety Inspection Checklist

2. DESCRIPTION OF EXISTING REQUIREMENT AND PROPOSED CHANGE (ATTACH SHEET IF NECESSARY):

Item 1A:

- **EXISTING REQUIREMENT:** Section 1.3 lists key Battelle personnel for this project.
- **PROPOSED CHANGE:** Replace all Battelle key personnel with Liberty JV key personnel. Liberty JV key personnel are Jeff Menken, Task Order Manager; Christian Briggs, Field Operations Lead (FOL) and Site Safety and Health Officer (SSHO); Chelsea Foster, Senior Scientist; Brad Closson, Alternate SSHO; and Stacy Gutierrez, Health, Safety, and Environment Corporate Representative.

Item 1B:

- **EXISTING REQUIREMENT:** Section 2.0 lists the major project tasks and their associated activity hazard analyses (AHA). The project tasks listed as work to be performed during the land use control (LUC) inspections include: site inspection; locate vapor and groundwater monitoring wells with metal detector; obtain global positioning system (GPS) coordinates of vapor and groundwater monitoring wells; open, inspect, collect depth-to-water measurements within, and close vapor and groundwater monitoring wells; equipment decontamination; and investigation-derived waste (IDW) removal and disposal.
- **PROPOSED CHANGE:** Remove text in Section 2.0 that refers to obtaining GPS coordinates of monitoring wells, opening wells, collecting depth-to-water and total depth measurements, decontaminating equipment, and managing IDW. Groundwater monitoring wells at Sites 302, 303, 304, and Tank 50 will be located and photographed but not opened during the 2023 LUC inspections.

Item 1C:

- **EXISTING REQUIREMENT:** Sections 4.2 and 4.3 describe procedures for decontamination and disposal of decontamination waste, respectively.
- **PROPOSED CHANGE:** Remove text in Sections 4.2 and 4.3.

CUI/FEDCON

2023 Land Use Control Inspections Technical Memorandum
Naval Base Kitsap Manchester, Kitsap County, Washington

Appendix E: Field Change Request Forms

Item 1D:

- **EXISTING REQUIREMENT:** AHA #1 (Site Inspection); AHA #2 (Locate Vapor and Groundwater Monitoring Wells with Metal Detector); AHA #3 (Obtaining GPS Coordinates for Vapor and Groundwater Monitoring Wells); AHA #4 (Opening, Inspecting, Collected Depth-to-Water Measurements, and Closing Vapor and Groundwater Monitoring Wells); AHA #5 (Equipment Decontamination); and AHA #6 (IDW Removal and Disposal). AHAs #1 through #6 list competent/qualified personnel for the equipment to be used.
- **PROPOSED CHANGE:** Remove AHAs #3 through #6. In AHAs #1 and #2, remove Derek Payne, Sam Moore, and Max Zelenevich, and replace with Christian Briggs and Chelsea Foster, as competent/qualified personnel.

Item 2:

- **EXISTING REQUIREMENT:** Attachment 2 lists competency verification documentation for key Battelle personnel for this project.
- **PROPOSED CHANGE:** Information in Attachment 2 does not apply. Competency information for Liberty JV personnel will be made available upon request.

Item 3 A and B:

- **EXISTING REQUIREMENT:** The APP Acknowledgement & Safety Compliance Agreement Form and Safety Inspection Checklist list key Battelle personnel for this project, as well as previous contract and task order numbers.
- **PROPOSED CHANGE:** Remove Derek Payne and Samuel Moore as SSHO and replace with Christian Briggs, remove Max Zelenevich as Alternative SSHO and replace with Brad Closson, and update both contract and task order numbers.

☒ MINOR CHANGE

☐ MAJOR CHANGE

3. REASON FOR CHANGE (ATTACH SHEET IF NECESSARY):

Items 1B – 1D: GPS coordinates will not be collected, and wells will not be opened to collect depth-to-water and total depth measurements during the 2023 LUC inspection activities. Since depth-to-water and total depth measurements will not be collected, equipment decontamination and IDW management will not be required. Groundwater monitoring wells at Sites 302, 303, 304, and Tank 50 will be located and photographed, but will not be opened during the 2023 LUC inspections.

Items 1A, 2 and 3: Navy and contractor personnel changes are required to represent the team working under the current contract task order. Angela Paolucci, Ryan Moon, Derek Payne, Samuel Moore, and Max Zelenevich will not be involved with this project. Jeff Menken will serve as the Task Order Manager, Matt Brookshire will serve as the Quality Control Manager, Stacy Gutierrez will serve as the Health, Safety, and Environment Corporate Representative, Christian Briggs will serve as the FOL and the SSHO, and Brad Closson will serve as the Alternate SSHO. Christian Briggs and Chelsea Foster will be the field personnel conducting the 2023 LUC inspections at the Naval Base Kitsap (NBK) Manchester.

4. ORIGINATOR (PRINT NAME AND SIGN) Christian Briggs Christian Briggs <small>Digitally signed by Christian Briggs Date: 2023.07.06 09:37:42 -07'00'</small>		TITLE Liberty JV, Field Operations Lead/ Site Safety and Health Officer		DATE
REVIEWED BY (PRINT NAME AND SIGN) Chelsea Foster chelsea.foster <small>Digitally signed by chelsea.foster Date: 2023.07.06 09:27:30 -07'00'</small>		TITLE Liberty JV, Site Safety and Health Officer		DATE
SITE SUPERINTENDENT (PRINT NAME AND SIGN) Christian Briggs Christian Briggs <small>Digitally signed by Christian Briggs Date: 2023.07.06 09:37:59 -07'00'</small>	DATE	TASK ORDER MANAGER (PRINT NAME AND SIGN) Jeff Menken jeffrey.menken <small>Digitally signed by jeffrey.menken Date: 2023.07.06 09:11:05 -07'00'</small>	DATE	
PROGRAM QC MANAGER (PRINT NAME AND SIGN) Matt Brookshire Matthew.Brookshire <small>Digitally signed by Matthew.Brookshire Date: 2023.07.06 12:01:01 -08'00'</small>	DATE	RPM ACKNOWLEDGEMENT (PRINT NAME AND SIGN) Aric Frohman FROHMAN.ARIC.C.1395403156 <small>Digitally signed by FROHMAN.ARIC.C.1395403156 Date: 2023.07.06 14:47:35 -07'00'</small>	DATE	

CUI/FEDCON

2023 Land Use Control Inspections Technical Memorandum
Naval Base Kitsap Manchester, Kitsap County, Washington

Appendix E: Field Change Request Forms

SAFETY INSPECTION CHECKLIST

Site: NBK Manchester, Kitsap County, Washington

Contract No.: N4425520D5006

Task Order No.: N4425523F4026

SSHO: Christian Briggs

Alternative SSHO: Brad Closson

HEALTH & SAFETY REQUIREMENTS	YES	NO	NA
Is a hardcopy of the APP/SSHP available on site?			
Have all on-site personnel reviewed and signed-off on the APP/SSHP?			
Has the daily tailgate safety meeting been conducted?			
Are all on-site personnel wearing the appropriate PPE:			
Traffic Vest			
Steel-Toed Boots			
Protective Eye Wear			
Hard Hat, if overhead hazards			
Ear Protection, if near air field			
Gloves, for special purposes			
Are all necessary tools on site and in good condition:			
Flathead Screwdriver			
Socket Wrench			
Other Health & Safety Requirements Available On Site:			
First-Aid Kit			
Hydrating Fluids (e.g., water, Gatorade)			
Sunscreen			

If any of the requirements noted above are missing/incomplete, please document corrective actions taken:

Inspection Conducted by: _____

Signed by: _____

Date: _____



Naval Base Kitsap Manchester, Kitsap County, WA

Naval Facilities Engineering Systems Command Northwest

FIELD CHANGE REQUEST (FCR) FORM

CONTRACT NO.: N4425520D5006	TASK ORDER NO.: N4425523F4026	FCR NO.: 03
NTR/RPM/COR: Aric Frohman	LOCATION: NBK Manchester, Kitsap County, WA	DATE: June 20, 2023

1. DOCUMENT TO BE CHANGED (IDENTIFY REVISION, DATE, SECTION, DRAWING, ETC.):

Final Land Use Control Plan for Sites 302, 303, 304 and Tank 50, Naval Base Kitsap Manchester, Manchester, Washington (dated December 9, 2016).

Items to be updated:

- 1) Section 1.3 - Roles and Responsibilities
- 2) Table 1-1 - Contact Information and Roles and Responsibilities for NBK Manchester
- 3) Section 3.3 - LUC Inspections
- 4) Section 3.5 - LUC Modification and Termination
- 5) Appendix B - Monitoring Well Visual Inspection Checklist

2. DESCRIPTION OF EXISTING REQUIREMENT AND PROPOSED CHANGE (ATTACH SHEET IF NECESSARY):

Item 1:

- **EXISTING REQUIREMENT:** Section 1.3 describes roles and responsibilities of all project stakeholders.
- **PROPOSED CHANGE:** Remove the United States Environmental Protection Agency (USEPA) as a project stakeholder and update text to state: "NAVFAC Northwest will communicate the land use control (LUC) status by providing a LUC inspection Technical Memorandum, with completed LUC checklists for each site, on an annual basis to the project stakeholders, specifically Ecology and the Suquamish Tribe."

Item 2:

- **EXISTING REQUIREMENT:** Table 1-1 provides the contact information and roles and responsibilities of all project stakeholders.
- **PROPOSED CHANGE:** Remove Carlotta Cellucci as the Naval Facilities Engineering Systems Command (NAVFAC) Northwest, Remedial Project Manager (RPM); remove Charles Escola, Navy Technical Representatives (NTRs); remove Dennis Faulk USEPA RPM, Region 10; remove Mahbub Alam Washington State Department of Ecology [Ecology] Cleanup Project Manager; add Aric Frohman as the RPM and Task Order (TO) Contracting Officer's Representative (COR); add Michael Hardiman as the Naval Base Kitsap (NBK) Manchester Environmental Director; add Kristen Reed as Ecology Cleanup Project Manager; update roles/responsibilities of Kristen Reed (Ecology Cleanup Project Manager) to include "To review and provide comment on the LUC Inspection Technical Memorandum on an annual basis"; and update roles/responsibilities of Andrew Schmeising (Suquamish Tribe) to include "To review and provide comment on the LUC Inspection Technical Memorandum on an annual basis."

Item 3:

- **EXISTING REQUIREMENT:** Section 3.3 describes the LUC inspection procedures.
- **PROPOSED CHANGE:** Update text to state: "The results of the LUC inspections (i.e., as documented in the LUC Inspection Technical Memorandum, with completed LUC checklists for each site) will be submitted to project stakeholders, specifically Ecology and the Suquamish Tribe, to communicate the status of the LUCs on an annual basis."

Item 4:

- **EXISTING REQUIREMENT:** Section 3.5 describes the process for modification or termination of LUCs.
- **PROPOSED CHANGE:** Update text to state: "The LUC Inspection Technical Memorandum, including completed LUC checklists for each site, will be the basis for evaluating the effectiveness of the LUCs as part of this five-year review process."

Item 5:

- **EXISTING REQUIREMENT:** Appendix B provides a monitoring well visual inspection checklist.
- **PROPOSED CHANGE:** Updated the checklist to include a provision to indicate if the monitoring well monument cap was opened during the inspection.

☒ MINOR CHANGE☐ MAJOR CHANGE**3. REASON FOR CHANGE (ATTACH SHEET IF NECESSARY):**

Items 1, 2, and 3: Navy and contractor personnel changes are required to represent the team working under the current contract task order. Sites 302, 303, 304 and Tank 50 are regulated under the Model Toxics Control Act (MTCA) with oversight from Ecology; therefore, USEPA is not a project stakeholder.

Item 2: Through the fourth five-year review process, Ecology requested to review and provide comment on the annual LUC Inspection Technical Memorandum.

Items 1, 2, 3, and 4: A LUC Inspection Technical Memorandum, including completed LUC checklists, completed monitoring well inspection checklists, field notes, and photographic log, will be prepared and submitted to all project stakeholders on an annual basis (i.e., not solely completed checklists).

Item 5: Monitoring wells will not be opened as part of the 2023 LUC Inspections. The monitoring well visual inspection checklist was updated to include a provision to indicate whether or not the monitoring well monument cap was opened during the inspection.

4. ORIGINATOR (PRINT NAME AND SIGN) Christian Briggs Christian Briggs <small>Digitally signed by Christian Briggs Date: 2023.07.06 09:38:20 -07'00'</small>		TITLE Liberty JV, Field Operations Lead/ Site Safety and Health Officer		DATE
REVIEWED BY (PRINT NAME AND SIGN) Chelsea Foster chelsea.foster <small>Digitally signed by chelsea.foster Date: 2023.07.06 09:27:49 -07'00'</small>		TITLE Liberty JV, Site Safety and Health Officer		DATE
SITE SUPERINTENDENT (PRINT NAME AND SIGN) Christian Briggs Christian Briggs <small>Digitally signed by Christian Briggs Date: 2023.07.06 09:38:36 -07'00'</small>	DATE	TASK ORDER MANAGER (PRINT NAME AND SIGN) Jeff Menken jeffrey.menken <small>Digitally signed by jeffrey.menken Date: 2023.07.06 09:11:15 -07'00'</small>	DATE	
PROGRAM QC MANAGER (PRINT NAME AND SIGN) Matthew.Brookshire Matt Brookshire <small>Digitally signed by Matthew.Brookshire Date: 2023.07.06 12:01:13 -06'00'</small>	DATE	RPM ACKNOWLEDGEMENT (PRINT NAME AND SIGN) Aric Frohman FROHMAN.ARIC.C.1395403156 <small>Digitally signed by FROHMAN.ARIC.C.1395403156 Date: 2023.07.06 14:46:26 -07'00'</small>	DATE	

**Table 1-1 – Contact Information Roles and Responsibilities for
NBK Manchester**

Name and Title	Organization	Contact Information	Roles/Responsibilities
Aric Frohman RPM, TO COR	NAVFAC Northwest	(360) 396-0206 (office) (360) 440-5791 (mobile) aric.c.frohman.civ@us.navy.mil	<ul style="list-style-type: none"> To ensure the effectiveness of the LUCs by performing annual LUC inspections. To coordinate with NBK Manchester regarding any LUC maintenance or corrective actions, as required.
Michael Hardiman Environmental Director	NBK Manchester	(360) 476-5737 michael.o.hardiman.civ@us.navy.mil	<ul style="list-style-type: none"> To coordinate with NAVFAC Northwest regarding LUC maintenance or corrective actions, as required. To educate site personnel and contractors on the LUC requirements.
Brice Frey Project Manager/ Engineer		(360) 476-0446 brice.frey.civ@us.navy.mil	
Doug Tailleir Environmental Specialist		(360) 476-2664 douglas.tailleur.civ@us.navy.mil	
Kristen Reed Ecology Site Manager	Ecology	(360) 742-2595 kristen.reed@ecy.wa.gov	<ul style="list-style-type: none"> To provide regulatory review of the LUC requirements detailed in the NFA letters at each five-year review. To provide review of this Plan. To review and provide comment on the LUC Inspection Technical Memorandum on an annual basis.
Andrew Schmeising Suquamish Tribe Representative	Suquamish Tribe	(360) 265-4405 aschmeising@suquamish.nsn.us	<ul style="list-style-type: none"> To provide review of this Plan. To review and provide comment on the LUC Inspection Technical Memorandum on an annual basis.

Notes:

COR = Contracting Officer's Representative; Ecology = Washington State Department of Ecology; LUC = land use control; NAVFAC = Naval Facilities Engineering Systems Command; NBK = Naval Base Kitsap; NFA = no further action; NTR = Navy Technical Representative; RPM = Remedial Project Manager; TO = Task Order



Naval Base Kitsap Manchester, Kitsap County, WA

Naval Facilities Engineering Systems Command Northwest

MONITORING WELL CHECKLIST FOR LUC INSPECTION

DATE (MM DD YY):		TIME (HH:MM):		WEATHER/TEMPERATURE:	
INSPECTOR:			COMPANY:		
SITE:		DESCRIPTION:			
WELL ID:		NORTHING:		EASTING:	

Part 1: TYPE OF MONITORING WELL AND MONUMENT CONDITION

TYPE OF MONITORING WELL: ☐ GROUNDWATER
☐ SOIL VAPOR

MONITORING WELL LOCATED? ☐ YES ☐ NO

IS THE WELL CLEARLY LABELED? ☐ YES ☐ NO

IS THE MONUMENT IN GOOD CONDITION? ☐ YES ☐ NO

TYPE OF WELL CASING: ☐ STICK-UP ☐ FLUSH-MOUNT ☐ OTHER _____

SIZE & NUMBER OF BOLTS ON FLUSH-MOUNT LID: _____

WERE PICTURES TAKEN? ☐ YES ☐ NO

PHOTO IDs: _____

MONITORING WELL MONUMENT CAP OPENED? ☐ YES ☐ NO (IF NO, SKIP TO PART 3)

Part 2: MONITORING WELL CONDITION

CASING DIAMETER ☐ 2" ☐ 4" ☐ 6" ☐ 8" ☐ OTHER _____

IS THE CASING IN GOOD CONDITION? ☐ YES ☐ NO

IS THERE A CAP ON THE MONITORING WELL? ☐ YES ☐ NO

TYPE OF CAP: ☐ PVC SLIP CAP
☐ J-PLUG
☐ EXPANSION
☐ PRODUCTION W/TUBING
☐ OTHER _____

IS THERE ANY EVIDENCE OF TAMPERING WITH THE WELL CASING OR CAP? ☐ YES ☐ NO

ARE THERE ANY ODORS? ☐ YES ☐ NO

IF YES, DESCRIBE ODOR: ☐ SOLVENT
☐ SULFIDE/ROTTEN EGGS
☐ PETROLEUM
☐ OTHER _____

WERE PICTURES TAKEN? ☐ YES ☐ NO

PHOTO IDs: _____

Part 3: ADDITIONAL NOTES OR COMMENTS

GENERAL CONDITION (CHECK ONE):

☐ GOOD CONDITION

☐ MODERATE CONDITION

☐ POOR CONDITION

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Appendix F: Response to Stakeholder Comments

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Document Title: 2023 Land Use Control Inspections Technical Memorandum
Comments by: Kristen Reed, Site Manager, Department of Ecology, State of Washington
Comments Received: Aric Frohman, Remedial Project Manager, NAVFAC Northwest

#	Doc/Para No.	Comment (11/30/2023)	Comment Response
1	Site 302, fence	In looking at the past LUC reports, Ecology sees that the fencing is still an issue at this site. The 2022 LUC report stated that this would be addressed in the FY 2023. Is this work scheduled to be completed in this FY? And can you provide a date if this is scheduled?	Navy agrees that the fencing is an issue. The fence repairs at Site 302 were scheduled for fourth quarter 2023 but have been rescheduled for first quarter 2024 due to manpower availability.
2	Site 302, Piles	Ecology would like to thank the Navy for getting the piles removed from this site. Ecology wants to remind the Navy that there was a Preliminary Notice to Rescind letter, dated 10/12/2022, that still has requirements that need to be met before this issue can be closed. The due date for this closure is on/before June 30 th , 2024.	This work related to the Notice to Rescind letter is under way and on target for completion in second quarter 2024.
3	Site 303, pile removal	Was there a report regarding the characterization and removal of this material from the site?	The small soil pile at tank 29 put into a bin, tested and removed with approved soil profile as non-hazardous soil. A soil characterization report has not created for this work.
4	Site 303, MW-1	What is the timeline for the Navy going back and getting eyes on this MW?	The Navy Environmental Protection Specialist was able to confirm MW-1 is still located on the south side of tank 24 on November 1, 2023. Pictures have been added to the LUC Inspection Report photo log and the report text has been revised accordingly. It appears to have been covered and therefore not visible at the time of the LUC inspection.
5	Tank 50, pg 2-8	You stated that LUC requirements 1-6 are being met, but there is no mention of #7. Is this a typo or is there missing information regarding the requirements for #7?	Concur. That statement contained a typo and has been corrected to "...LUC requirements 1 through 7 above are being met at the Tank 50 Site."

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