

October 22, 2018 SES-LTM/OM-9011-18-0628

Ms. Carlotta Cellucci Remedial Project Manager Naval Facilities Engineering Command Northwest 1101 Tautog Circle Silverdale, WA 98315-1101

SUBJECT: FINAL TECHNICAL MEMORANDUM: 2018 NAVAL BASE KITSAP KEYPORT INSTITUTIONAL CONTROLS INSPECTION RESULTS

Reference: Contract N44255-14-D-9011, Long Term Monitoring, Operations, and Maintenance Contract

Dear Ms. Cellucci:

This technical memorandum has been prepared by Sealaska Environmental Services, LLC (Sealaska) to document the findings of the 2018 institutional controls (IC) inspections conducted at Naval Base Kitsap (NBK) Keyport. The inspections were completed per the *Institutional Controls Plan, Operable Unit 1, Operable Unit 2, and Areas 22 and 7* (Navy 2017) and included Operable Unit (OU) 1 Area 1, OU 2 Area 2 and Area 8, Area 22, and Area 7. Figure 1 showing all IC site locations is provided as Attachment A.

The inspection process included:

- Visually inspecting the sites with ICs to ensure implemented controls remain protective;
- Identifying current land use and users; and
- Interviewing Keyport personnel to ensure administrative controls are being appropriately implemented.

Additional information on the IC inspection process can be found in the 2017 IC Plan (Navy 2017).

IC INSPECTION RESULTS

The following subsections discuss the results of the IC inspections conducted at NBK Keyport. Visual inspection of each of the IC sites was conducted on August 14, 2018. Interviews with NBK Keyport personal and Naval Undersea Warfare Center (NUWC) Division Keyport personnel (the primary tenant of NBK Keyport) were conducted via email and included the following individuals:

- Lee Anne Fowler NUWC Division Keyport, Code 1021 Facilities: construction, excavation permitting, administrative controls.
- Ben Keasler Public Works Department Naval Facilities Engineering Command (NAVFAC) Northwest, Kitsap Environmental Project Liaison: construction, excavation permitting, administrative controls.
- Gary Simmons NUWC Division Keyport, Environmental Engineer: drinking water well installation.
- Kevin Glover NUWC Division Keyport, Security Officer: access and site security.

Completed IC inspection checklists are provided as Attachment B.

OU 1 Area 1

OU 1 Area 1, the former Installation landfill (see Figure 1, Attachment A), is covered by asphalt- and gravel-surfaced parking areas, two phytoremediation plantations, equipment and material laydown areas, several storage structures, a motorcycle training area, a marsh system and marsh pond, tide flats, vegetated areas, and nature trails. Land use is primarily light industrial and open space, consistent with past inspections.

Administrative procedures are in place to control digging at OU 1 Area 1, and have been followed. Signs of past excavation activities were observed, but based on the results of the interviews conducted, all excavations was adequately permitted. No excavation or construction was completed in or around the marsh area.

No new drinking water wells have been installed on Navy property within 1,000 feet of the landfill. Since the 2017 inspection, the only new wells were installed to support remedial investigation activities.

The asphalt surface covering the former landfill at OU 1 Area 1 is intact and does not currently appear to require major repairs.

Access controls are maintained through limiting installation access to authorized personnel with appropriate badging at the main installation access gate. No unauthorized personnel are reported to have gained access to the installation.

OU 2 Area 2

OU 2 Area 2, the Van Meter Road Spill/Drum Storage Area, include a recycling facility/material storage center, asphalt-covered laydown/storage areas, undeveloped areas, and an adjacent wetland area. The land use at OU 2 Area 2 remains light industrial, consistent with past inspections.

No signs of current or past excavation were observed in the area of OU 2 Area 2 covered by ICs. Based on the interviews completed, administrative controls have reportedly been followed. No installation of drinking water wells has occurred at Area 2 over the past year.

Installation access controls have been maintained and no unauthorized personnel are reported to have gained access to the installation. Site access is also controlled by a locked gate maintained by Fleet Logistics Center (FLC) an NKB Keyport tenant who operates the recycling and storage facility.

OU 2 Area 8

OU 2 Area 8, the former Plating Shop Waste/Oil Spill Area consists of an asphalt-covered parking area surrounded by light industrial activities to the north and west, with an adjacent beach to the east and south. Land use at OU 8 Area 8 remains consistent with past inspections.

No indications of current or recent excavation was observed at the site.

No drinking water wells have been installed at the site in the past year.

Installation access controls has been maintained. No unauthorized personnel are reported to have gained access to the installation.

No residential land uses were observed in OU 2 Area 8.

Area 22

Land use in Area 22, the former landfill extension area remains light industrial, consistent with past inspections. Current land uses include a hazardous waste handling and storage facility, other light industrial operations, and asphalt-covered parking areas.

There were indications of recent excavations along Bradley Road and near the intersection of 4th and A Street. These excavations were associated with the replacement of the installation water mains and appear to have been adequately controlled through the dig permit process.

No drinking water wells have been installed at the site in the past year.

Installation access controls has been maintained and no unauthorized personnel are reported to have gained access to the installation.

Area 7

Area 7, the peninsula fill area, is composed of light industrial facilities, asphalt-covered parking areas, and boat ramp/dock. Light industrial land uses remains consistent with past inspections..

A small excavation was observed on the east side of Building 489. There were also concrete patches around/near Building 489. Based on the interviews conducted with Base personnel, all excavation was properly permitted.

No drinking water wells have been installed within Area 7 during the past year.

Installation access controls have been maintained; and no unauthorized personnel are reported to have gained access to the installation.

COMPLETED CORRECTIVE ACTION

No corrective action was identified or completed in 2018.

CONCLUSIONS AND RECOMMENDATIONS

ICs have been adequately implemented, have prevented exposure to residual contamination, and have controlled, limited or prohibited activities that may interfere with the integrity of the completed remedial actions.

IC inspections of OU 1 Area 1, OU 2 Areas 2 and Area 8, Area 7 and Area 22 should continue as described in the 2017 IC Plan until ICs are removed from these areas.

REFERENCES

Navy. 2017. Final Revision 3, Institutional Controls Plan; Operable Unit 1, Operable Unit 2, and Areas 22 and 7, Naval Base Kitsap Keyport, Washington. May 1.

Please contact me with any comments or questions on this submittal at (360) 626-3991.

Sincerely,

Scott Elkind, PE Task Order Manager Sealaska Environmental Services, LLC

cc: Mahbub Alam, Ecology Harry Craig, EPA Denice Taylor, Suquamish Tribe

Attachments:

ATTACHMENT A FIGURES ATTACHMENT B IC INSPECTION FORMS

ATTACHMENT A FIGURES



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ATTACHMENT B IC INSPECTION FORMS

Contract: N44255-14-D-9011 Task ORDER: N4425518 F4214

Operable Unit 1, Area 1 Former Landfill Inspected by: <u>Cara Alferness</u>, <u>Sealaska Environmental</u> Services, LLC Date of inspection: 8/14/18 - 8/28/18, 9/5/18, 9/11/18 Tide flats and grassed area outside boundary of Keyport Facility fencing, monitoring wells, paved parking Land uses: 1015 motorcycle training, boundary of Keyport Facility fencing, monitoring wells, paved parking Structures/ covered recycling areas; unoccupied natural areas of marsh, grass trees; gravel roadway, Land users: 3 Bunkers (used for storge), nature tails, gravel parking, closed (and fill asphalt courses). Page 1 of 2 Keypost Employees, government contractors, Motorcycle trainees, recreation & userst Employee Parking outside Keyport boundary sence at Pass & ID open to public users. ----

1	Y/N		Finding	
Inspector's Checklist	NA/NC	Findings/Comments	No.	
as access to OU 1 been maintained (have security procedures for base try served to maintain a restricted access)?	Y	Person Contacted: Kevin Glover, Security Dire Findings: Security Measures are in place. Restricted	Across MAL	faind
ave drinking water wells been installed on Navy property within 000 feet of the landfill?	N	Person Contacted: Gary Simmons, NUWC Division Findings: No new drinking water wells; Navy #5.	ngineer, remains be	9/5/18 se unti
or Area A, the land between the tide flats and the marsh, have water wells een installed, except those for monitoring or remedial action purposes?	\mathcal{N}	Pervisual inspection, pone noted other than		
or Area B, the land between the tide flats and the Pass and ID Building arking lot, have water wells been installed, except those for monitoring or medial action purposes?	N	remedial purposes		
or Area C, the tide flats and adjacent shoreline owned by the Navy, have by activities occurred that could interfere with or compromise monitoring remedial actions?	N	Ú.		
or Area D, the former landfill, have water wells been installed, except ose for monitoring or remedial action purposes?	N	Q		
or Area D, the former landfill, are any employees permanently assigned to ork in buildings within this area?	N	Per visual inspection, storage/laydown	reasonly	4
or Area D, the former landfill, have there been any land use activities her than remedial activities, storage, parking, and facilities that involve aly occasional occupancy by workers?	N	None observed.		
or Area D, the former landfill, have activities that involve digging and onstruction within this area been controlled by the base excavation/dig	Y	Person Contacted: Lee Anne Fowler, Code 1021 F Findings: Email 8/28/18. Excavation Permit process in place throughout Reyport A	adities	

Y=Yes NA-notapplicable N=No NC-nochange

Dage 11

Operable Unit 1, Area 1 Former Landfill
Inspected by: Cara Alferness SES
Date of inspection: 8/14/18 - 8/29/18, 9/5, 9/11/18
Land uses: See page 1 of 2; (1 of 6 whole checklist)
Land users: <u>slepage 1 & 2; (106 6 whole checklist</u>)
Page 2 of 2

	Y/N		Finding
Inspector's Checklist	NA/NC	Findings/Comments	No.
For Area D, the former landfill, is there significant damage (e.g., cracking, seam separation, root damage, etc.) to asphalt surfaces that permits direct- contact exposure of people to underlying soils or that may significantly increase infiltration of surface water/stormwater?	N	Cracks and seams are deminimus in extent, similar to previous years' inspection. No repairs warranted.	
For Area D, the former landfill, if activities requiring an excavation/dig permit were conducted, were there any instances in which the permit requirements were not effective in maintaining the requirements of the Institutional Controls Plan?	N	Person Contacted: Lee Anne Fowler, Code 1021 Facilities, email 8/28/18 Findings: Excavation Permit in place, no accavations excavation Permit in place, no accavations performed that were not effective in controls,	
For Area E, the marsh pond and marsh system, have there been any new construction or maintenance activities that disturbed the wetlands adjacent to the landfill and resulted in an exposure hazard?	Ň	Person Contacted: CarloHa Cellucci, NAVFACNWK CINCLEEAnne Fowler, empil: 8/98/18, 8/94 Findings: NO, new achivities that resulted in Expos No projects in Marsh area requiring permit pro cess.	
For Area E, the marsh pond and marsh system, have there been any new construction or maintenance activities that interfere with or compromise the monitoring or remedial actions for the landfill?	N	Person Contacted: Carlo Ha Cellucci, NAVFAC NW prid Lee Anne Fowler, 8/29/18 Findings: No activities that compromise monit remedy at the land Fill	e PM foring or

I certify that the conditions of Operable Unit 1 on the inspection date were as reported above. permit process if there were any. <u>Una Uperners</u> Inspector
<u>S/28/18, 9/5/18, 9/11/18</u> Date

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Operable Unit 2 Area 2, Van Meter Road Spill/Drum Storage Area Inspected by: <u>lara Alferness Sealaska Environmental</u> Services, LLC Date of inspection: <u>8/14/18</u>, <u>8/28/18</u>, <u>9/5/18</u>, <u>9/11/18</u> Land uses: <u>Keyport Base Reuse | Recycling | Masterials Storage Center, Welland and Natural area</u>, dirt-Covered roadway, Land users: <u>Asphalt roadway and parking</u>. Page 1 of 1 <u>Keyport Employees/Base Workars</u>

	Y/N		Finding	
Inspector's Checklist	NA/NC	Comments	No.	
Has access to OU 2 Area 2 been maintained (have security procedures	3./	Person Contacted: Kevin Glover, Security Directo	R, email	9/11/18.
for base entry served to maintain a restricted access)?	Ĭ	Findings: Security Measures are in place, Restricted	access man	ntainod.
Have activities that involve digging and construction within OU 2	. /	Person Contacted: Lee Anne Fowler, Code 1021 F Email: 8/28/18	adlities	
Area 2 been controlled by the base excavation/dig permit procedure and	IY	Findings.	Í	
other pertinent base instructions?	1	Excavation Permit in place, excavations are con	trolled by	racedure.
If activities requiring an excavation/dig permit were conducted within		Excavation Permit in place, excavations are con Person Contacted: Lee Anne Fowler, email 8/2-	118	
OU 2 Area 2, were there any instances in which the permit requirements	. /	Findings: No, permits effective when/, F	· -	
were not effective in maintaining the requirements of the Institutional	N			
Controls Plan?		needed.		
Have water wells been installed at OU 2 Area 2, except those for	11	None observed. Gary-Simmons, Nuwe Keypou	Engineer	
monitoring or remedial actions?		None observed, Gary-Simmons, Nuwe Keypor email 9/5/18: No new drinking water w	ells.	
Has residential development occurred in OU 2 Area 2?	N	None observed.		

I certify that the conditions of Operable Unit 2 Area 2 on the inspection date were as reported above.

na alkernen

Inspector

8/28/18, 9/5/18, 9/11/18 Date

Y=Yes NA=notapplicable N=No NC=no change

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Operable Unit 2 Area 8, Plating Shop Waste/Oil Spill Area Cara Alberness, Sealaska Environmental Services, LLC Inspected by: Date of inspection: 8/18/18, 8/28/18, 9/5/18, 9/11/18. Land uses: Light industrial, occupied buildings, parking & streets (asphalt-covered) Land users: Keyport employees and Base workers. Page 1 of 1

	Y/N		Finding
Inspector's Checklist	NA/NC	Comments	· No.
Has access to OU 2 Area 8 been maintained (have security procedures for base entry served to maintain a restricted access)?	Y	Person Contacted: Kevin Glover, Seurity Direct Email: 9/11/18, Security measures in p Findings: Restricted access maintained.	Pare.
Have activities that involve digging and construction within OU 2 Area 8 been controlled by the base excavation/dig permit procedure and other pertinent base instructions?	Y	Person Contacted: Lee Anne Fowler, Code 1021 F. Email 8/28/18. Findings: Excavation permit process used a Un place; effective control of excavation	acilities nd ns
If activities requiring an excavation/dig permit were conducted below the water table within OU 2 Area 8, were there any instances in which the permit requirements were not effective in maintaining the requirements of the Institutional Controls Plan?	N	Person Contacted: Lee Anne Fowler, email 8/2 Findings: No Instances where permits Not effective,	U JI 8
Have water wells been installed at OU 2 Area 8, except those for monitoring or remedial actions?	N	GARY Simmons, NUWC Keyport Engineer, 9/5/18; No new drinking water wells on	email sife
Has residential development occurred in OU 2 Area 8?	N	none observed (visual inspection)	

I certify that the conditions of Operable Unit 2 Area 8 on the inspection date were as reported above.

Inspector

8/28/18, 9/5/15, 9/11/18

Y- Yes NA- not applicable N= No NC- no change

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Naval Base Kitsap Keyport **Institutional Controls Inspection Checklist**

Area 22
Inspected by: Cara Alferness, Sealaska Environmental Services, LLC
Date of inspection: 8/14/18 8/28/18 9/5/18, 9/11/18
Land uses: Light Industrial, offices, parking, streets
Land users: Keyport Employees, Base Workers
Page 1 of 1

	Y/N		Finding
Inspector's Checklist	NA/NC	Comments	No.
Has access to Area 22 been maintained (have security procedures for base	11	Person Contacted: Kevin Glover, Security Direc	tor
entry served to maintain a restricted access)?	T	Person Contacted: Kevin Glover, Security Direc Email 9/11/18, Findings: Security measures are in place. Restricted of	ccess maintain
Have activities that involve digging and construction within Area 22 been		Person Contacted: Lee Anne Fowler, Code 1021 Fac Email 8/28/18, Findings: Excavation fermit Process in USE.	ilities
controlled by the base excavation/dig permit procedure and other pertinent		Findings: Excavation fermit Process in use.	
base instructions?			
If activities requiring an excavation/dig permit were conducted within		Person Contacted: Lee Anne Fowler, email 8/3	8/18
Area 22, were there any instances in which the permit requirements were		Findings: Excavation Remit Process	
not effective in maintaining the requirements of the Institutional Controls		Effective.	
Plan?			
Have water wells been installed in Area 22, except those for monitoring or	1	Gary Simmons, Nuwc Keyport Engineer	9
remedial actions?	\mathcal{N}	Gary Simmons, Nuwc Keyport Enginee Email 9/5/18: No new drinking water Wells. Aro none observed by inspector	
Is pavement still in place at Area 22?	Y	Existing pavement in place, some utility u	
Has land use at Area 22 changed?	NC		

I certify that the conditions of Area 22 on the inspection date were as reported above.

Inspector

 $\frac{laua alfernens}{\text{spector}}$ Y = Yes NA-notapplicable N = No NC-no Change

8/28/18, 9/5/18, 9/11/18 Date

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Area 7
Inspected by: <u>ara Alterness</u> , SES
Date of inspection: 8/14/18, 8/38/18, 9/5/18, 9/11/18
Land uses: Light Industrial, offices, paved parking and streets, beat dock/shoreline
Land users: Keyport Employees/Base Workers
Page 1 of 1

	Y/N		Finding	
Inspector's Checklist	NA/NC	Comments	No.	
Has access to Area 7 been maintained (have security procedures for base entry served to maintain a restricted access)?	Y	Person Contacted: Kevin Glover, Security Director Email 9/11/18 Findings: Security measures in place. Restricted Acc Person Contacted: Grary Simmons, Lee Anne Fourle	ess maintai	inec
Have activities that involve digging and construction within Area 7 been controlled by the base excavation/dig permit procedure and other pertinent base instructions?	Y	Excavation Permit Process in place.		
If activities requiring an excavation/dig permit were conducted within Area 7, were there any instances in which the permit requirements were not effective in maintaining the requirements of the Institutional Controls Plan?	N	Person Contacted: Lee Anne Fowler, code 1021 Fo Email B/20/10. Findings: No Uncontrolled excavation, permits effective.		
Have water wells been installed in Area 7, except those for monitoring or remedial actions?	N	Gary Simmons, NUWC Keyport Engineer email 9/5/18, No new Orinking water Wells installed None observed by in	ector,	
Is pavement still in place at Area 7?	Y	where paved still in place.		
Has land use at Area 7 changed?	NC	-		

I certify that the conditions of Area 7 on the inspection date were as reported above.

Nal berners

Inspector

Y= yes N=No NA= not applicable NC= no change

8/28/18, 9/5/18, 9/11/18 Date

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