PUGET SOUND NAVAL SHIPYARD (PSNS) & INTERMEDIATE MAINTENANCE FACILITY (IMF) ADDENDUM B FACILITY DESCRIPTION AND GENERAL PROVISIONS

CHANGE CONTROL LOG

Change Control Logs ensure that changes to this unit are performed in a methodical, controlled, coordinated, and transparent manner. Each unit addendum will have its own change control log with a modification history table. The "**Modification Number**" represents Ecology's method for tracking the different versions of the permit. This log will serve as an up to date record of modifications and version history of the unit.

Modification History Table

Modification Date	Modification Number
03/18/2022	PSNS.2021.1F

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ADDENDUM B
FACILITY DESCRIPTION AND GENERAL PROVISIONS

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B. FACILITY DESCRIPTION AND GENERAL PROVISIONS

B.1 General Facility Description

B.1.1 Description of Facility

Naval Base Kitsap–Bremerton (NBK–Bremerton) is located in Bremerton, Washington, along Sinclair Inlet on Puget Sound, 15 miles west of Seattle. NBK–Bremerton occupies 350 acres of land and an additional 340 acres of tidelands along 11,000 feet of shoreline. NBK–Bremerton is owned by the United States Department of the Navy and has been operated continuously since 1891. The nature of business for NBK–Bremerton is the home porting, maintenance, overhaul, decommissioning, and dismantling of vessels in service of the United States Navy. As a result of these industrial processes, support services are required such as lodging, recreation and retail. NBK–Bremerton contains over 300 buildings and structures, 6 deep water piers, 6 dry-docks, and numerous moorings. Metal security fences surround NBK–Bremerton, as well as a floating metal security fence at the southern marine boundary. On the east side of NBK–Bremerton lays the Controlled Industrial Area (CIA) operated by Puget Sound Naval Shipyard and Intermediate Maintenance Facility (PSNS & IMF). NBK–Bremerton and the CIA are separated by metal security fence internally, but share a common fence on the north, east, and southern borders of the CIA.

B.1.2 Description of the Mixed Waste Storage Facility

The Mixed Waste Storage Facility (MWSF), Building 1002, is a rectangular building, 54 feet by 42 feet in size, located south of Farragut Avenue between Buildings 818 and 455 at PSNS & IMF. The MWSF is operated in accordance with Naval Nuclear Propulsion Program (NNPP) requirements, Washington State's Dangerous Waste Regulations (Washington Administrative Code [WAC]), and Toxic Substances Control Act (TSCA) requirements for the storage of radioactive, dangerous, and Polychlorinated Biphenyl (PCB) waste, respectively. Mixed waste has been stored at the MWSF since September 1996. The Washington Department of Ecology (Ecology) approved the facility for operation under interim status provisions of the Resource Conservation and Recovery Act (RCRA) in a letter to PSNS & IMF dated October 18, 1994. Dangerous Waste Permit number WA2170023418 for the MWSF became effective July 28, 2006. The MWSF was designed and constructed specifically to store mixed waste in accordance with Chapter 173-303 WAC. The MWSF is the only permitted dangerous waste storage location at NBK–Bremerton and is strictly a storage area with no capabilities for treatment or disposal. There are no permitted treatment or disposal locations on NBK–Bremerton.

Tenant commands of NBK–Bremerton, including PSNS & IMF, generate solid and dangerous waste as a result of maintenance work on nuclear-powered vessels at naval facilities in support of the United States Navy. The dangerous waste program for NBK–Bremerton is operated by PSNS & IMF. Dangerous wastes are generated during laboratory analysis, on-site demolition, and from PSNS & IMF production work including: removal and installation of components on vessels, on-vessel and off-vessel repair of components, decommissioning vessels, and dismantling of vessels. Dangerous waste is generated onboard United States Navy vessels during operation and maintenance, and within facilities at NBK–Bremerton that support maintenance and personnel. PSNS & IMF operates a wastewater treatment unit, exempt from dangerous waste permitting requirements, that supports shipyard process wastewaters. PSNS & IMF also receives dangerous wastes from United States Navy vessels. Dangerous wastes are accumulated at universal waste sites, in Satellite Accumulation Areas (SAAs), and in Central Accumulation Areas (CAAs). Dangerous wastes are prepared for shipment off-site for treatment and disposal. PSNS & IMF tracks regulatory dates and unique identification numbers for each dangerous waste container. PSNS & IMF does not perform treatment by generator operations on dangerous waste. Flow diagrams for dangerous waste operations are shown in Figure B-7, Dangerous Waste Management Process.

PSNS & IMF operates Permit by Rule tanks and sumps in Building 873 to support plating wastewaters; a tank in Building 857 for photo etching wastewaters; and a sump in Building 872 for pressure washing operations. All three of these buildings are within the CIA at NBK–Bremerton.

PSNS & IMF does not perform recycling activities at NBK–Bremerton.

Mixed waste is a subset of dangerous waste generated at NBK–Bremerton and is a mixture of low-level radioactive and chemically hazardous waste. Solid mixed waste is contained at the job site by various means to prevent the spread of hazardous constituents. Liquid mixed waste is contained at the jobsite in rigid containers with mechanical seals. Mixed waste is accumulated in SAAs and CAAs and packed into shipping containers (e.g., metal drums, metal boxes, fire-resistant wood boxes, etc.) meeting the design standards set forth in Code of Federal Regulations (CFR) Title 49, Transportation (49 CFR) prior to storage in the MWSF. Closed containers of mixed waste are stored in the MWSF until arrangements can be made to ship the containers to an authorized off-site treatment or disposal facility. Mixed waste is not processed or treated at the MWSF. All shipping containers in the MWSF are kept closed except the rare occasion where consolidation, validation of contents, or unexpected circumstances requires opening a container. In addition, the MWSF accepts small amounts of mixed waste from off-site facilities that generate NNPP waste. Dangerous wastes listed in Part A, further clarified in Addendum C, "Waste Analysis Plan," of this permit renewal application are accepted for storage at the MWSF. Flow diagrams for dangerous waste operations are shown in Figure B-8, Mixed Waste Management Process.

Mixed waste shipments from off-site enter NBK–Bremerton through the Missouri Truck Inspection Gate at the southwest corner of NBK–Bremerton and continue east on Charleston Beach Road and Farragut Avenue. Shipments enter the CIA at the Farragut Gate and continue east to the MWSF. Mixed waste generated off-site is received at the MWSF in 49 CFR-compliant containers. Containers are managed as discussed in Addendum D, "Process Information," of this permit renewal application.

B.1.3 Environmental Permits

Environmental permits required for operations at NBK–Bremerton are as follows: Air Operating Permit – Puget Sound Clean Air Agency, No. 21177; Radioactive Air Emissions License – Puget Sound Clean Air Agency, No. FF005; National Pollutant Discharge Elimination System – Environmental Protection Agency, No. WA0002062; State Waste Discharge Permit – Ecology, No. ST0007374.

Figure B-7 Dangerous Waste Management Process

Figure B-8 Mixed Waste Management Process

B.2 Seismic Requirements

No proposed expansions or new dangerous waste management units at the facility are proposed with this application, therefore WAC 173-303-806(4)(a)(xi) seismic risk considerations are not applicable.

B.3 Traffic Information

B.3.1 Access Gates and Traffic Control

NBK–Bremerton may be accessed, with proper credentials, by vehicles and pedestrians through security gates with guards at the Naval, Montgomery, Charleston, and Missouri Gates. Pedestrians with proper credentials may access NBK–Bremerton through the outer State Gate. The CIA may be accessed, with proper credentials, by vehicles and pedestrians through security gates with guards at the Main, Farragut, and Wyckoff Gates. Pedestrians with proper credentials may access the CIA through the Burwell, Decatur, and inner State Gates. Commercial vehicles enter and exit NBK–Bremerton through the Missouri Truck Inspection Gate. Gate access may change at any time depending on national security posture and manning. All traffic is screened and controlled by guards at the access gates shown on Figure B-2, Boundaries and Access Points. Each vehicle must stop to present proper credentials and only properly badged personnel are allowed to proceed. Traffic is further restricted by the speed limit on NBK–Bremerton of 20 miles per hour except where posted at a lower value. Signal lights are used at the access gates to support traffic entering and exiting NBK–Bremerton. No traffic control signal lights are located within NBK–Bremerton, traffic control signs are used.

B.3.2 General Description of Access Roads

The roadways of NBK–Bremerton are oriented to provide access to parking, lodging, retail, recreation, and offices. The roadways of the CIA are oriented to provide access to offices, warehouses, shops, dry-docks and piers; Farragut Avenue is the main access in the CIA. The MWSF is located on Farragut Avenue in the center of NBK–Bremerton, just inside the security gates of the CIA. Figure B-2, Boundaries and Access Points, provides a street map with the location of the MWSF marked. Access roads at NBK–Bremerton are paved concrete with asphalt patches and have a minimal load bearing capacity of 32,000 pounds per axle (American Association of State Highway Transportation Officials [AASHTO] H-20-44 Truck Loading Standard). Load and unload areas are paved concrete with asphalt patches and carry the same load capacity as access roads.

B.3.3 General Traffic Estimation

It is estimated that 7,500 vehicles enter NBK–Bremerton on any given weekday. Vehicles enter NBK–Bremerton for numerous functions such as: employee parking, recreation, retail, dining, housing, delivery, waste removal or transit to the CIA. Vehicles enter the CIA for the function of industrial work such as: personnel movement, delivery of goods, and waste removal. 2,500 vehicles per day are expected to pass by the MWSF (east and west along Farragut Avenue). These vehicles include busses, trucks, vans, and small non-highway usable vehicles that remain within NBK–Bremerton. Non-commercial vehicles are rarely permitted in the CIA. Figure B-2.2, Traffic Patterns, provides a detailed view of the MWSF, inside the CIA, and traffic patterns.

B.3.4 Mixed Waste Traffic Patterns

All vehicles used to transport mixed waste shipments on and off NBK–Bremerton will enter and exit through the Missouri Truck Inspection Gate, located at the southwest corner of NBK–Bremerton (Figure B-2, Boundaries and Access Points). In the unlikely event the Missouri Truck Inspection Gate is unavailable, vehicles used to transport mixed waste shipments will use the Charleston gate on the west side of NBK–Bremerton (Figure B-2, Boundaries and Access Points). Both gates lead directly to Highway 304. In rare events, mixed waste shipments may enter NBK–Bremerton by vessel via Sinclair Inlet. In such instances the vessel would dock pierside and the shipping container would be lifted onto an awaiting truck for transfer directly to the MWSF.

B.3.5 Mixed Waste Transport Vehicles

Manifested mixed waste shipments, leaving or entering NBK–Bremerton by land, use tractor trailers as transport. Manifested reactor compartment shipments, for burial at Department of Energy at Hanford, leave NBK–Bremerton on barges via Sinclair Inlet. Container transfers internal to NBK–Bremerton use transport vehicles such as flatbed trucks, vans, and small non-highway usable vehicles. Forklifts, pallet jacks, and drum dollies are used to transfer palletized containers in and out of the MWSF from transport vehicles. Small items not palletized may be hand carried into the MWSF. Mixed waste items at NBK–Bremerton are transferred from SAAs to CAAs by hand, pallet jack, forklift, small non-highway usable vehicles, vans, or flatbed trucks. Mixed waste transferred at NBK–Bremerton may only be transported on approved routes by trained personnel once the item is entered into an accountability system.

B.3.6 Mixed Waste Traffic Estimation

Traffic specific to mixed waste operations is a small portion of the overall traffic at NBK–Bremerton. Table B-1 details mixed waste traffic volume for calendar year 2014, and is indicative of expected future volumes. Manifested shipments of mixed waste leaving the MWSF occurred 3 times in 2014. Manifested shipments of mixed waste from off-site entering the MWSF arrived 5 times in 2014. Transfers of mixed waste from CAAs entering the MWSF occurred 25 times in 2014.

Table B-1 2014 Mixed Waste Traffic Volume

Vehicle Type	Trips to Mixed Waste Storage Facility	Trips from Mixed Waste Storage Facility
Tractor Trailers	5	3
Flatbed Tractor Trailers	12	0
Vans/Non-Highway Usable Vehicles	13	0
Total	30	3

B.4 Topographic Maps

Due to the large scale of NBK–Bremerton, multiple maps have been created to satisfy the requirements of WAC 173-303-806(4)(a)(xviii) and avoid data congestion. Each map includes map scale, date, map orientation, MWSF location, and legal boundaries. There are no intermittent streams or injection and withdrawal wells on-site or 1,000 feet beyond NBK–Bremerton property boundaries.

Figure B-1, Topographical with Water Features, shows NBK–Bremerton, providing topographical features, surface water, 100-year flood plain areas, and wind rose. The majority of NBK–Bremerton is topographically flat at less than 20 feet above sea-level. The north central area of NBK–Bremerton has a rise in elevation to 169 feet above sea-level; this area is primarily used for residential housing. Three water towers exist at the 160-foot elevation. The CIA is a topographically flat area with piers, dry-docks, buildings and concrete roads with asphalt patches. The unusable northern borders of the CIA change elevation rapidly with either walls or steeply sloped vegetation. National Flood Insurance Program maps, available through the Federal Emergency Management Agency (FEMA), indicate the MWSF is not within the 100-year flood plain.

Figure B-2, Boundaries and Access Points, shows NBK–Bremerton, providing gate access points, security fences, CIA boundaries, access roads, internal roads, and load/unload areas. Also detailed in Figure B-2, Boundaries and Access Points, are buildings, dry-docks, and piers. NBK–Bremerton contains two fire control facilities operated by Navy Region Northwest Fire and Emergency Services, one is located in NBK–Bremerton and the other is located within the CIA. Both fire control facilities are continuously

manned and are identified in Figure B-2, Boundaries and Access Points. Two fire hydrants are located approximately 100' and 115' from the building and are detailed in Figure B-2.2, Traffic Patterns. Fire extinguishers are located inside the MWSF and are detailed in Addendum G, Figure G-2, Mixed Waste Storage Facility Typical Facility Layout.

Figure B-3, Land Uses, shows NBK–Bremerton, providing land uses and surrounding land uses. NBK–Bremerton has recreational, residential, commercial, and industrial areas of land use. The areas surrounding NBK–Bremerton, in the City of Bremerton and areas of unincorporated Kitsap County, are mixed commercial and residential. The area south of NBK–Bremerton, Sinclair Inlet, is strictly marine and has no land uses.

Figures B-4 are divided into 5 drawings (B-4.1 through B-4.5) and collectively show NBK–Bremerton's intricate stormwater and runoff control systems. The MWSF is located on Figure B-4.4, Water Control Systems (South Quadrant), and is highlighted. NBK–Bremerton contains six dry-docks, each has a caisson at the southern marine boundary which facilitates an active flood control system for the associated dry-dock. Official signatures for these drawings are maintained with the original hard-copies.

Figure B-5, Sanitary and Process Sewer System, shows NBK–Bremerton, providing the sanitary and process sewer systems with the MWSF highlighted. The Industrial Wastewater Pretreatment Facility (Building 1109) connects to the sanitary sewer system and is highlighted on Figure B-5, Sanitary and Process Sewer System. The MWSF does not connect to the sanitary sewer system; it is a closed system with a blind sump. The MWSF is 1,920 feet away from the closest legal boundary in a straight line due north. Areas outside the legal boundaries of NBK–Bremerton are maintained by the City of Bremerton and Kitsap County. Official signatures for this drawing are maintained with the original hard-copy.

Figure B-6, Solid Waste Management Units, shows NBK–Bremerton, providing locations of solid waste management units. Addendum E, "Releases from Solid Waste Management Units," of this permit renewal application provides detail on solid waste management units at NBK–Bremerton.

Figure B-9, Wind Rose, shows a standalone wind rose (also included in the topographical map) with a 10-year plot period. The data was recorded at the Bremerton National Airport, 7.3 miles southwest of NBK–Bremerton. A majority of the winds are out of the SSW at 5.7 miles per hour and are calm 31.4 percent of the time.

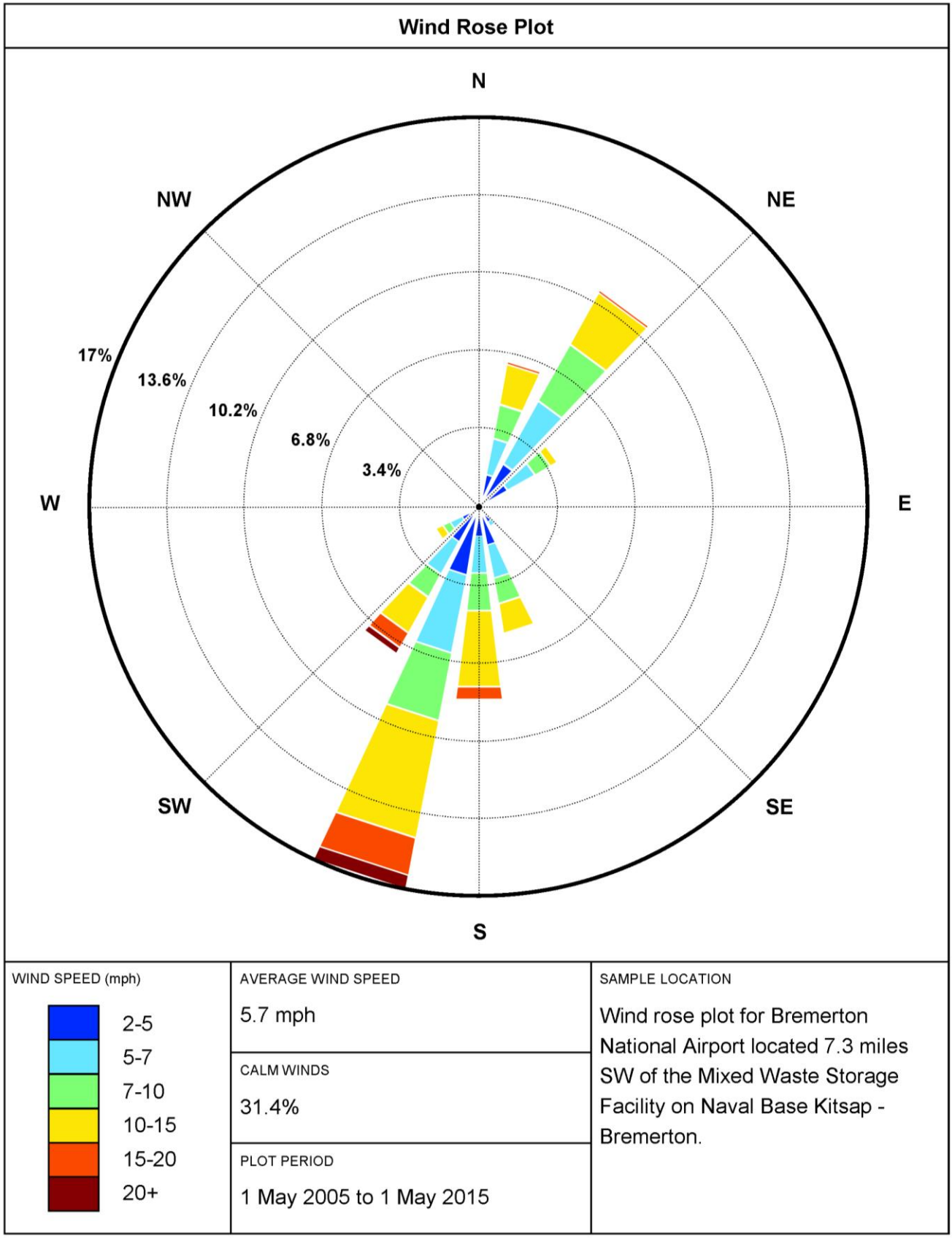

Figure B-9 Wind Rose