

# **SLUG/SPILL DISCHARGE CONTROL AND TOXIC ORGANIC MANAGEMENT PLAN**



**March 2023**

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**NAVAL UNDERSEA WARFARE CENTER DIVISION KEYPORT  
610 Dowell Street  
Keyport, Washington 98345-7610**

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## 1.0 INTRODUCTION

### 1.1 BACKGROUND

Naval Base Kitsap (NBK) Keyport, Washington is located approximately 15 miles West of Seattle and 12 miles North of Bremerton. Naval Base Kitsap Keyport is surrounded on two sides by Puget Sound and is adjacent to the rural residential community of Keyport, Washington. NBK Keyport property is highly developed to support a variety of industrial activities along with 21 family housing units located at the facility.

The primary industrial tenant of NBK Keyport is the Naval Undersea Warfare Center (NUWC), Division Keyport. NBK and NUWC Division Keyport co-manage Environmental programs at the NBK Keyport installation according to internal Navy support agreements.

All Oil and Hazardous Substance (OHS) release and emergency response actions at Puget Sound Area Navy bases are governed by the Commander Navy Region Northwest (CNRNW) OHS Integrated Contingency Plan (ICP). The CNRNW OHS ICP is managed by CNRNW and is an overarching plan which pools local Navy resources and establishes a common Navy command and control structure and procedures to respond to OHS release incidents. The OHS ICP covers all Puget Sound Area Navy installations, is reviewed and approved by WADOE and the United States Coast Guard, and contains specific annexes for each installation within CNRNW, including NBK Keyport. Per the ICP, both NBK and NUWC maintain OHS release contingency responsibilities for OHS releases at NBK Keyport, with CNRNW maintaining responsibility for the overall program.

NBK Keyport maintains a sanitary sewer system internal to the installation fence line which is owned and operated by NBK Naval Facilities Engineering Command (NAVFAC) Public Works. This sanitary sewer system receives both domestic discharges from NBK Keyport buildings as well as industrial discharges from industrial processes taking place within the installation fence line. Industrial discharges into the sanitary sewer system are managed in accordance with the conditions of State Waste Discharge Permit (SWDP) Number ST-0007353. These discharges enter the Navy's sanitary sewer system which contains both domestic and industrial discharges, prior to connection with Kitsap County's sanitary sewer system and ultimate discharge to the Central Kitsap Wastewater Treatment Plant (WA-003052-0), which is a Publicly Owned Treatment Works (POTW) maintained and operated by Kitsap County. NBK Keyport also maintains an internal installation storm water system which carries surface runoff to Liberty Bay and Port Orchard Reach which is owned and operated by NBK NAVFAC Public Works.

As the primary industrial tenant at the installation and process owner of the majority of industrial discharges covered by the permit, NUWC Division Keyport is the lead command with responsibility for the Industrial Wastewater pretreatment program and manages compliance with State Waste Discharge Permit Number ST-0007353 at NBK Keyport.

Table 1.1 provides information regarding the lead Navy managing organization for permits and primary governing instructions for implementation of the requirements of the Slug Discharge and Toxic Organic Management Control Plans at NBK Keyport.

**Table 1 Lead Organization and Implementing Instructions at NBK Keyport**

<b>Environmental Program</b>	<b>Lead Navy Command</b>	<b>Permit</b>	<b>Implementing Instructions/Plans</b>
Industrial Wastewater Management	NUWC Division Keyport	ST-0007353	NUWC DIVKPT 5090.20 Industrial Wastewater Pre-Treatment Plant Program
Hazardous Waste Management	NUWC Division Keyport	RCRA Part B Permit WA1 170 023	NUWC DIVKPT 5090.10 Hazardous Waste Management Program NUWC DIVKPT 5090.11 Hazardous Waste Management Plan/Procedures Part B Permit Plans and Procedures (Waste Analysis Plan, Contingency Plan, etc.)
Hazardous Materials Management	NUWC Division Keyport	Not Applicable	NUWC DIVKPT 5090.3 Hazardous Material Control and Management Procedures
Environmental Management System	NUWC Division Keyport (for NUWC programs) NBK (for NBK programs)	Not Applicable	NUWC DIVKPT 5090.15-20 EMS Series Directives (for NUWC)  COMNAVREGNWINST 5090.2 Environmental Management System Implementation and Maintenance (for NBK)
Pollution Prevention	NUWC Division Keyport (for NUWC programs)	Not Applicable	NUWC DIVKPT 5090.4 Pollution Prevention and Hazardous Waste Minimization
Stormwater Management	NBK	NBK Keyport MSGP: NPDES WAR05F003 EPA Municipal Separate Storm Sewer System (MS4) Permit WAS0296646	NBK Keyport Stormwater Pollution Prevention Plan (SWPP)  NAVBASEKITSAPINST 5090.4 Water Pollution Prevention Program
Spill Prevention, Control, and Countermeasure (SPCC) Program (40 CFR 112)	NBK	Not Applicable	NBK Keyport SPCC Plan
OHS Spill Contingency Program	CNRNW (NBK and Keyport have roles)	Not Applicable	COMNAVREGNWINST 5090.1 Oil and Hazardous Substances Integrated Contingency Plan

## 1.2 PURPOSE

The primary purpose of the Slug Discharge Control Plan is to document procedures in place for preventing spills or discharges of oil, toxic organics, hazardous substances, or unauthorized wastewater to the Central Kitsap POTW. The plan also documents the reporting and notification procedures in place to ensure that any unauthorized OHS releases to the sanitary sewer system are identified and promptly reported to the Central Kitsap POTW and other applicable local agencies.

Additionally, this plan documents the Best Management practices/pollution prevention program in place at NBK Keyport to minimize spills/releases and by SWDP No. ST-0007353.

The programs and practices outlined in this document also effectively control the release of toxic organic substances to the sanitary sewer and the environment. Therefore, this plan also serves as the Toxic Organic Management Control Plan for NBK Keyport.

The majority of practices referred to in this document are established and implemented in existing facility environmental program permits, procedures, and governing instructions. In many instances, this document will reference existing plans and procedures and provide additional information where required.

This Plan identifies facilities that possess the potential for a spill and defines what containment and diversionary structures are currently in place to control spills, describes spill reporting systems, provides recommendations for operational changes and facility modifications to minimize spill potential, and specifies responsibilities for record keeping, inspections, personnel training, and security.

This Plan provides information and procedures relating to the prevention of process spills and unauthorized discharges in support of the State Waste Discharge Permit #7353 at NUWC, Division Keyport and includes:

- A description of a reporting system to be used to immediately notify facility management, the IWTP operators, Central Kitsap POTW operators, and appropriate State, Federal, and local authorities of any slug discharges and provisions to provide a written follow-up report within five days;
- A description of operator training, equipment, and facilities for preventing, containing, or treating slug discharges.
- Procedures to prevent adverse impact from accidental spills including:
  - Inspection and maintenance of storage areas
  - Handling and transfer of materials
  - Loading and unloading operations
  - Control of plant site run-off
  - Worker training
  - Building of containment structures or equipment

- Measures for containing toxic organic pollutants (including solvents)
- Measures and equipment for emergency response
- A list of raw materials, products, chemicals, and hazardous materials used, processed, or stored at the IWTP complex and other significant industrial wastewater discharge points listed in the permit; the normal quantity maintained on the premises for each listed material; and information regarding where they are located.
- A description of discharge practices for batch and continuous processes under normal and non-routine circumstances.
- A brief description of any unauthorized discharges which occurred during the 36-month period preceding the effective date of SWDP ST-0007353 and subsequent measures taken by Keyport to prevent or to reduce the possibility of further unauthorized discharges.
- An implementation schedule including additional operator training and procurement and installation of equipment or facilities required to properly implement this plan.

This document also provides information and procedures relating to the prevention of process spills and unauthorized discharges of Toxic Organics to the sanitary sewer system and meets the requirements set forth in State Waste Discharge Permit #7353 for a Slug Discharge and Toxic Organics Management Control Plan.

NUWC Division Keyport has been monitoring and reporting Total Toxic Organics (TTO) at sample point 001 for the past 16 years with no permit exceedances. As such, NUWC Division Keyport is including a Toxic Organic Management Plan within this document as an option to reduce sampling burden in lieu of continuing with the monitoring and reporting requirements for Total Toxic Organics (TTO) as authorized by the State Waste Discharge Permit (SWDP) # ST-7353.

This plan documents the procedures in place to minimize the discharge of toxic organic compounds to the sanitary sewer. The full list of toxic organic compounds is found in 40 CFR Part 433.11(e). For NUWC Division Keyport, the regulated toxic organic compounds required to be monitored in the SWDP are those volatile toxic organics measured by EPA Method 624.

## **2.0 SPILL PREVENTION & RESPONSE PROCEDURES**

### **2.1 POLLUTION PREVENTION AND FACILITY ENVIRONMENTAL TRAINING (SWDP No. ST-0007353, Section S.4.C, AND S.10.b.2 & S.10.b.3(e))**

Pollution Prevention (P2) practices apply to all processes through all portions of their life cycle. The process begins at the source of the pollution and ends with the reduction of disposal of the wastes created by the pollutants. P2 is responsible for reducing or eliminating the creation of pollutants.

The Environmental Readiness Program Manual, M-5090 per OPNAVINST 5090.1 series, and the Washington Administrative Code Hazardous Waste Reduction Regulations, WAC 173-307, govern the NUWC Division Keyport's Pollution Prevention efforts. Naval Undersea Warfare Center (NUWC) Division Keyport uses its EMS to identify, measure, and improve P2 projects and



procedures to comply with all directives, standards, and regulations regarding P2. Keyport's internal Pollution Prevention program is administered in accordance with NUWC DIV KPT 5090.4 Pollution Prevention and Hazardous Waste Minimization.

Due to the diverse nature of activities at the facility, structured training is used for selected groups, and management continuously strives to impress the importance of waste reduction on shop and facility personnel. Facility Environmental training for all Environmental programs listed below includes general employee actions in the event of an OHS spill or release. Among the Environmental training efforts conducted at Keyport are:

- Formal documented training for Environmental Department Dangerous Waste (DW) management personnel in accordance with NUWC Keyport's RCRA part B Permit requirements.
- Formal training for DW site managers and alternates.
- On-the-job training for shop workers who produce DW by supervisory personnel about segregation and turn-in disposal procedures.
- On the job training of IWTP operators on SWDP ST-0007353 requirements, operations, and permit management plan procedures.
- Training for workers using Hazardous Material (HM) and HM Coordinators in accordance with HM control program requirements.
- Individuals responding to OHS releases are trained in accordance with federal, state, and local emergency response requirements as outlined in the COMNAVREGNW OHS ICP.
- Environmental awareness training for all Keyport employees at new hire. This training involves a general awareness of all facility Environmental programs and procedures with specific emphasis on Keyport's EMS, spill response and reporting, DW management, and storm water pollution prevention.
- Annual storm water pollution prevention training for applicable employees. Information seminars, training, and other Environmental information distributed through NUWC Division Keyport's Environmental Management System (EMS), i.e. Environmental Protection Group Meetings, Environmental Newsletters, Command Message Boards, etc.

Personnel who perform industrial work whose duties include routine use of HM or routine generation of DW are required to attend Industrial Hazardous Material Worker Training. This training provides hazardous material and hazardous waste handling and disposal practices, waste minimization, and spill procedures. Personnel who manage DW accumulation areas, referred to as DW site managers and DW site manager alternates, are required to take additional facility specific training on dangerous waste accumulation and management.

Contractors working at the NBK - Keyport are provided guidance for environmental compliance, which includes dangerous waste handling and disposal, stormwater, wastewater management, and spill reporting as documented in Keyport's contractor's guide to environmental management.

Training is the key to effective spill prevention and advancing an effective EMS. Training begins with proper job and work site orientation. Most spills result from not following proper procedures rather than equipment failure. Most equipment failure can be avoided by following proper inspection and maintenance procedures. Supervisors continuously stress the importance of

following applicable standard operating procedures to ensure worker safety and spill prevention. Supervisors are responsible for inspecting their own equipment and correcting any deficiencies. Proper equipment maintenance is a major contributor to employee safety and spill prevention and is a key element of on-the-job training.

Process specific spill training requirements are largely dictated by local conditions and responsibilities. First-line supervisors are responsible for indoctrinating their personnel in process specific spill prevention procedures and regulations based on their own unique operations.

Our mission is to ensure Keyport is in compliance with all environmental laws, regulations, and policies. Through teamwork, commitment, and awareness, we advocate environmental stewardship as an integral part of that mission. We seek to continually improve the workplace to reduce environmental risk and maintain environmental compliance.

Our goal is to provide 100% compliance with the law by raising the environmental awareness across the station and integrating environmental policy into our mission and culture by operating, maintaining, and continuously improving our Environmental Management System.

## 2.2 BEST MANAGEMENT PRACTICES (SWDP No. ST-0007353, Section S.4.C)

Section S.4.C of SWDP No. ST-0007353 requires the following Best Management Practices:

1. Dispose of sludge and scale from storage tanks, settling tanks, sumps, and solids from grease traps in an approved manner other than to waters of the state.
2. Store all barrels or similar containers containing toxic or deleterious materials, including but not limited to petroleum products, chlorinated organic compounds, cyanide, and heavy metals in a bermed and covered area (or otherwise over a collection sump or spill containment pallet) and covered area, to prevent discharge into the sanitary or storm sewer system or into ground or surface waters in the event of a leak or rupture.
3. Store empty barrels with all openings plugged, in an upright position, and at least ten feet from a storm drain.
4. Not discharge concentrated organic compounds to the sanitary sewer system.
5. Store waste chemicals awaiting disposal in such a manner as to not enter the waters of the state.
6. Close the spill control valve (when so equipped) if a spill occurs within the process area, to prevent the entry of concentrated wastes or chemicals into the sanitary sewer system.
7. Exclude storm water from the sanitary sewer system.
8. Maintain a PH log for all batch discharges of wastewater.

9. Segregate and store non-compatible chemicals securely in separate containment areas that prevent mixing of incompatible or reactive materials.
10. Locate process tanks in a bermed, roofed, and secured area, capable of containing a minimum of 110% of the volume capacity of the largest tank within the bermed area enclosure.
11. Maintain a sealed floor within the bermed area of all wet metal finishing areas, as well as areas which serve as storage areas for wet process chemicals and baths.
12. Maintain the pretreatment system in good operating order.
13. Not discharge motor oil, brake fluid, gear oil, and automatic transmission fluid drained from vehicles in motor vehicle or equipment maintenance areas to the sanitary or storm sewer.
14. Maintain all grease traps and oil/water separators, which discharge to the Central Kitsap Wastewater Treatment Plant, in good working order. Inspect such traps on at least a monthly basis and clean as necessary. Maintain records of each such inspection and cleaning performed and make the information available upon request, to Ecology, during any inspection of the facility it conducts.
15. Not discharge particles or paint chips resulting from grinding, sanding, shot peening, abrasive blasting, cutting, and any other abrasive operations to the sanitary sewer.
16. Not discharge fire retardant foaming agents such as AFFF to the sanitary sewer system in quantities sufficient to cause excessive foaming in the Central Kitsap Wastewater Treatment Plant effluent or to otherwise cause interference at the WTP. Maintain a plan for preventing discharge of AFFF to the sanitary sewer. Excessive foaming is foaming resulting in interference, pass-through, or upset at the WTP, or which otherwise impedes the normal and efficient operation of the WTP.
17. Not discharge surfactant materials, such as soaps and detergents, to the sanitary sewer in quantities sufficient to cause excessive foaming in the WTP effluent or to otherwise cause interference in the WTP. Excessive foaming is foaming resulting interference, pass through, or upset at the WTP, or which otherwise impedes the normal and efficient operation of the WTP.
18. Not discharge discolored materials or other low-transmittance material to the sanitary sewer in such quantities or concentrations as to interfere with the disinfection process at the WTP, or in such amounts as to cause pass-through resulting in impairment of the aesthetic character or designated uses of the receiving water.

The listed required BMP's in Section S.4.C of SWDP ST-0007353 are established and implemented through the Environmental programs and governing documents listed in Table 1.1. Compliance with these requirements is continuously checked, assessed, and updated through the NUWC and

NBK EMS systems. These BMP's minimize the risk of spills to the sanitary sewer system, lowering the likelihood of both slug discharges and discharges of Toxic Organics to the sanitary sewer system. General facility BMP practices established at the facility are as follows.

Hazardous substances are stored in areas designated for that purpose. Materials stored are containerized and compatible. Non-compatible chemicals are segregated and securely stored in separate containment areas that prevent mixing of incompatible or reactive materials. If liquids are involved, secondary containment must have sufficient capacity to contain at least 10% of the total volume of the primary containers or 100% of the volume of the largest container, whichever is greater.

Storage areas will be protected from weather. Hazardous material containers, whether empty or full, will never be stored near sanitary system floor drains (at least ten feet away). Drain covers or diking materials will be readily accessible to areas with high spill potential. Standard Operating Procedures for facilities with sumps, oil/water separators, waste oil tanks, drip pans, or containers must include regular checks to ensure that they are pumped or emptied before they spill. The frequency of these checks depends on the nature of the operation and is determined by facility supervisors.

## 2.3 FILLING AND HANDLING PROCEDURES

Care will be exercised at all times to prevent petroleum, fuel oil, waste oil, or any hazardous substances from reaching any drainage system that could eventually reach a waterway, including the sanitary sewer system. The following procedures should be adhered to when handling, filling or pumping any container(s) of petroleum products or liquid hazardous materials:

- Absorbents and other spill cleanup material will be readily available during all handling and transfer operations.
- When transporting oil or hazardous substances, personnel will be alert to possible container or tank truck damage due to unstable loading or collision with obstacles.
- When transferring petroleum products or other hazardous liquids, all connections and transfer points will be carefully monitored for leaks.
- Tanks receiving petroleum products or other hazardous liquids will be gauged prior to filling to ensure there is adequate space in the tank for the product being delivered. Adequate headspace at the top of the tank will be left to allow for product expansion. A tank should never be "topped off" completely full.
- Tanks, containers and vehicles receiving fuel and oil will be carefully checked prior to and during delivery to ensure that there are no leaks or open drain valves.
- When the fill pipe is located out of direct line-of-sight of the tank, a buddy system will be used for tank filling with one person monitoring the tank and one the truck and hose connection. Communication between the two people will exist throughout the operation.

- Storm drains and floor drains in the immediate vicinity of the tank being filled will be covered with a mat, plug, or other suitable device during filling operations to prevent the flow of product into the drain in case of a leak or spill.
- Oil spill containment boom will be deployed as required during over water POL vessel transfers. Equipment and provisions for on-water OHS release response will be implemented for vessels per CNRNW OHS ICP requirements.
- All waste products will be deposited in designated waste collection containers in approved Dangerous Waste accumulation sites or tanks. Material will be stored in HAZMAT lockers or other hazardous material storage locations (berm or diked areas) per HM Management program requirements.
- Waste oil or other hazardous wastes will not be deposited in the sanitary sewer system.
- Waste oil or other wastes will be deposited in approved waste containers and not be deposited in trash containers or dumpsters.
- Single walled containers will be stored in an area that does not drain to a sanitary sewer or storm drain.
- Containers of fuel, oil, or other hazardous material will be stored in a manner that will preclude damage from stacking or falling, equipment and personnel handling, and impact by vehicles.
- Container storage areas will be maintained in a clean and orderly manner, with absorbent material and cleanup gear available in the immediate area.
- Spills or leaks will be reported to the Central Monitoring Dispatch Center as specified in section 2.4. The Environmental Branch will keep records of all spills or leaks.

All generated wastes at NUWC Division Keyport are evaluated in accordance with the Hazardous Waste Management Plan to ensure proper disposal. In addition, there are requirements within the Spill Control Plan, this plan, Oil Spill Prevention, Control, and Countermeasure Plan, Hazardous Waste Management Program, Tank Management Plan, Hazardous Waste Management Plan and Procedures, and the Oil and Hazardous Substance Integrated Contingency Plan to ensure hazardous materials and Oil and Hazardous Substance (OHS) are properly managed to prevent spills and discharges. The requirements contained in these Plans and Programs minimize the risk of discharges of toxic organics to the sanitary sewer system. Specific BMP's established that reduce the risk of discharge of Toxic Organics to the sanitary sewer system are included below.

- 1) Process wastes including paints, solvents, painting equipment, and related wastewaters are managed per the Hazardous Waste Management Plan.

- 2) OHS is stored and collected in approved containers, and all OHS containers are stored in approved storage lockers or facilities.
- 3) Hazardous waste must be placed into appropriate containers and labeled as soon as it is generated.
- 4) Containers for HW must be closed at all times, except when waste is being added or removed.
- 5) Containers for paints and solvents must be closed at all times, except when paints and solvents are being added or removed.
- 6) Do not dispose of OHS into the sanitary sewer system.
- 7) All industrial wastewaters are required to be identified and evaluated.
- 8) For processes that produce industrial wastewaters, changes to materials used, or changes to the process are required to be identified and evaluated.
- 9) Best Management Practices are used for the purpose of preventing the discharge of pollutants into the POTW.
- 10) All wastewater discharges must comply with discharge limits and requirements of the State Waste Discharge Permit.
- 11) All personnel are required to contain, clean up, and report spills per spill contingency requirements.
- 12) All hazardous materials at NUWC Division Keyport are evaluated for usage and listed on an Authorized Use List.
- 13) HM Storage Locations are inspected on a quarterly basis and inventory is conducted on an annual basis.
- 14) In accordance with NAVBASEKITSAPINST 5090.4 Water Pollution Prevention Program, personnel must obtain written permission from the base Environmental Dept. prior to discharging anything besides domestic wastewater to sewer, or anything besides rainwater to the stormwater system. Personnel are trained on this instruction.

See Figure 2: Liquid Waste Designation Process. This flowchart shows how Industrial Wastewater is evaluated in accordance with the NBK Keyport Part B Permit Facility Waste Analysis Plan and the SWDP.

## 2.4 OHS SPILL REPORTING SYSTEM

**In the event of a spill (this includes slug discharges), all actions, documentation, and recordkeeping, shall be in accordance with COMNAVREGNWINST 5090.1 Oil and Hazardous Substances Integrated Contingency Plan. General OHS procedures and actions related to OHS spill reporting at NBK Keyport as they pertain to the Slug Discharge Control Plan are described below:**

**The person discovering the spill will take the following actions:**

- STOP:** Assess the scene, save people first, equipment second
- WARN:** Pass the word  
Identify the location  
Use the nearest fire alarm box or telephone:
- Call 911 from any Navy phone or 360-396-2244 from any private phone

**ISOLATE:** Use approved equipment/material to stop or slow leakage

**MINIMIZE:** Do not endanger yourself or others in completing these actions

**SUPPLEMENTARY ACTIONS:**

1. Muster in accordance with Building Evacuation Bill.
2. Report immediate actions accomplished to Command Post, scene Incident Commander, and Immediate Supervisor.

NUWC, Division Keyport Emergency Response dispatcher answering the emergency call will take the following information:

1. Name, code, and telephone of the caller.
2. Number and type of injuries/fatalities.
3. Whether evacuation has occurred.
4. Date and time the release occurred or was discovered.
5. Specific location of the release.
6. Name of material discharged or released.
7. Source of discharge or released material.
8. Cause of discharge/release.
9. Capacity of tank/container/vessel.
10. Total quantity of discharge/release.

The dispatcher will contact Command Navy Region Northwest Fire and Emergency Services. CNRNW Fire and Emergency Services acts as the initial Incident Commander for all OHS spills and will implement initial response actions. For Oil and Hazardous Substances releases the NUWC Division Keyport Environmental Department will be notified at: **396-2320 (cell 360-340-5984).**

Depending upon the nature of the emergency, the NUWC Environmental Department or another approved Qualified Individual in accordance with the CNRNW OHS ICP may assume IC functions for OHS releases after initial emergency response actions have been implemented by CNRNW Fire and Emergency Services.

Depending on the type and location of the spill, external notifications will be conducted by NUWC Keyport Environmental Department Personnel or CNRRNW Fire and Emergency Services or the Command Duty Office if Environmental Department personnel are not available:

Regulatory Notifications shall be conducted as outlined in the Spill Notifications Table contained within the CNRRNW OHS ICP Emergency Response Action Plan (ERAP). Relevant Notification numbers to the Slug Discharge Control Plan are included below:

IWTP supervisor	(360) 396-7871
NUWC Keyport Environmental Department OHS Spill Response:	
Primary Environmental Department QI	(360) 396-2320
Backup Environmental Department QI	(360) 396-5438
Cell	(360) 340-5984
Environmental Branch Head	(360) 396-5682
Cell	(360) 620-5792
NUWC Industrial Waste Water Program Manager	(360) 315-8571
Navy On-Scene Coordinator, CNRRNW Bangor	(360) 396-0222 (360) 340-5991 (mobile)
Washington State Dept. of Ecology (24-hr)	(425) 649-7000
Dept. of Health Shellfish (24-hr)	(360) 236-3330 Or (360) 789-8962 (after hours)
Kitsap Public Health District	(360) 728-2235 (press 9 after hours)
Washington State Dept. of Emergency Management	1-800-258-5990
Central Kitsap POTW	(360) 337-5777
Utility Operations Manager	(360) 337-5768 (360) 981-1765 (mobile)
Utility Operator Supervisor	(360) 337-7197

For OHS Releases to the sanitary sewer system, the NUWC Keyport Industrial Wastewater Program Manager will be contacted, who will assess the incident and work with the OHS response team to ensure proper notifications and information is conveyed to the Central Kitsap Wastewater Treatment Plant and appropriate regulatory agencies.



## 2.5 SUMMARY OF UNAUTHORIZED DISCHARGES (Last 36 months)

There were no known occurrences of unauthorized discharges into the sanitary sewer.

## 2.6 MINOR SPILLS RECORDED (Last 36 months)

**Table 2 List of Minor Spills 2019-2022**

<b><u>Location</u></b>	<b><u>Material Spilled</u></b>	<b><u>Description</u></b>	<b><u>Remedy</u></b>
<b>B. 1016</b>	Hydraulic Fluid	2-3 gallons spilled from dumpster hauler truck due to hydraulic system failure.	Spill contained and cleaned. Equipment was repaired.
<b>Main Gate</b>	Windshield wiper fluid	Vehicle accident resulted in total fluid loss of wiper fluid reservoir.	Spill contained and cleaned.
<b>B. K105</b>	Oil	Oil from oily metal shavings leaking from 40 yard dumpster. None entered storm or sewer drains.	Spill cleaned. Personnel briefed and trained on proper disposal of oily substances.
<b>B. 233</b>	Oil	Small sheen reported. De minimus amount likely from small spill of oil used for operations.	Spill cleaned. Personnel trained in BMPs.
<b>Museum Parking Lot</b>	Oil	Non-government vehicle had significant sheen around it.	Spill contained and cleaned. Vehicle owner tracked and informed they needed to correct issue.
<b>B. 1049, 208, 209, 1060</b>	Otto Fuel II	Otto Fuel was spilled while pumping between tankers. 5-7 gallons maintained in containment with approx. 2 gallons spilling onto floor.	Clean and contain area. Replace malfunctioning equipment. Review procedures.
<b>B. 514</b>	Paint	About 1/4 cup of roof paint coating that had not dried was carried by rain onto the surrounding area.	Storm and sewer drains covered. Area cleaned.
<b>B. 893</b>	Sodium Hydroxide	One pint of forklift battery electrolyte overcharged, causing it to overflow onto the interior floor of B. 893	Neutralized and cleaned spill. Revised procedure.

All remedies noted above employed BMPs in accordance with Section 2.2. None involved slug

discharges to sewer, or release of uncontrolled toxic organics to the environment.

### **3.0 SPILL RESPONSE RESOURCES**

#### **3.1 FEDERAL FIRE AND EMERGENCY SERVICES DEPARTMENT**

The Federal Fire and Emergency Services Department provides the full range of emergency services, and is equipped with fire engines, ladder truck, Emergency Medical Technicians, and a trained Hazardous Material Response Team to perform immediate OHS spill response actions.

#### **3.2 NUWC PERSONNEL**

Small, general housekeeping type OHS releases may be cleaned up by NUWC shop personnel or NUWC Environmental department personnel consistent with training, worker safety, and governing directives and procedures. The NUWC Environmental Department maintains a pumper truck, materials, and spill kits to respond to minor releases in-house.

#### **3.3 BASE OPERATIONS SUPPORT CONTRACTOR**

In addition to the initial response from the Federal Fire and Emergency Services Department and the NUWC Environmental Division, the Base Operations Support Contractor (BOSC) maintains a trained Hazardous Material Response Team (referred to as Team Bravo) at NBK Bangor, which is contracted to respond to land-based OHS releases at NBK Keyport and assist BOSC utility department personnel with response to POL OHS releases to the sanitary sewer system.

#### **3.4 OTHER NAVY RESOURCES**

For Water Based OHS releases, NBK Keyport would reach back to CNRNW for deployment of on-water spill response resources from PSNS or NBK Port Operations. Due to the scale of waterfront operations conducted onsite, NBK Keyport does not maintain an onsite Port Operations organization. On-water spill response craft can arrive on-site from NBK Bremerton within 30 minutes of notification.

For major incidents, CNRNW maintains the capability to mobilize additional Navy resources and employ national navy incident response contract resources if necessary.

### **4.0 HAZARDOUS MATERIAL/WASTE STORAGE LOCATIONS**

All Hazardous Material and Hazardous (Dangerous) Waste Storage locations at NBK Keyport are tracked by the Hazardous Material and Hazardous (Dangerous) Waste compliance programs, respectively. Keyport's HM program requires all HM stored onsite to be approved by Safety and Environmental and documented on the user's Authorized Use List (AUL). The HM Compliance program maintains records of HM storage locations on base and records of specific Hazardous materials approved for use at each shop and HM storage location. The program also tracks the volumes and amounts of materials used on base for Emergency Planning and Community Right-to-

Know Act (EPCRA) and Clean Air Act permit compliance.

POL storage tank locations, products, and tank information is documented and tracked within the NBK Keyport Spill Prevention Controls and Countermeasures (SPCC) Plan.

The Hazardous (Dangerous) Waste compliance program maintains records of DW accumulation locations on base, provides for analysis and designation of waste streams, and tracks, stores, and disposes of DW produced at Keyport in accordance with federal, state, and local regulations. The DW compliance program maintains detailed records on accumulation areas, and facility waste stream composition and quantities generated on base.

POL storage tank locations, products, and tank information is documented and tracked within the NBK Keyport Spill Prevention Controls and Countermeasures (SPCC) Plan and program.

HM and DW storage sites, containers, and tanks are inspected regularly, and deficiencies are tracked and corrected as dictated by relevant Environmental program requirements and as part of NUWC Keyport's EMS.

Specific detailed HM and/or DW information for any location on base can be obtained at any time readily from Environmental program records tracked in Keyport's Environmental Compliance data management system, NUWC Environmental Management System (NEMS) or through other compliance program records.

Specific information regarding Industrial Wastewater Permit-By-Rule discharge processes and Discharges is included below:

#### 4.1 Building 38

Building 38 contains two deburring machines that discharge wastewater into a collection sump that is pumped directly to Building 825, the Industrial Wastewater Treatment Plant.

Since this discharge is transported to Building 825 for batch treatment and sampling prior to discharge to the sanitary sewer system, normal operation of this process represents a low risk for a non-compliant slug discharge to the sanitary sewer system.

Potential Pollutants: POL's, Metals

This building also contains a water jet cutter that discharges to a dedicated solids settling treatment system that discharges directly to the sanitary sewer. Based on the evaluation of water jet cutter and metal sample wastewater sample results, the Department of Ecology has determined that a well maintained solids sump will result in compliance with the same standards set forth in the permit for sample point 002. The discharge passes through sample point 002, which contains monitoring requirements in this permit.

Since this is a continuous discharge process which is controlled through periodic maintenance and inspection of the associated wastewater filtration system, this process does represent a risk for a slug

discharge of contaminants to the sanitary sewer system. However, due to the type of process and the low volume of wastewater discharged at this location (<100 gpd), it is unlikely that an issue at this site could significantly affect the POTW's ability to meet its discharge limits. General facility BMP's are employed to minimize the risk of spills at this location to the sanitary sewer system.

## 4.2 Building 82

The Battery Maintenance Shop is located on the North side of Building 82 in which wet cell batteries are washed down, recharged, and reissued at this facility. Liquid potassium hydroxide solution from expired batteries and wash water from recycled batteries is collected in a sink that discharges into a 330-gallon portable tank located outside and adjacent to Building 82. The tank is transported to Building 825 for pretreatment.

Since this discharge is a batch discharge that is contained and transported to Building 825 for batch treatment and sampling prior to discharge to the sanitary sewer system. Normal operation of this process represents a low risk for a non-compliant slug discharge to the sanitary sewer system. General facility BMP's are employed to minimize the risk of spills at this location to the sanitary sewer system.

Potential Pollutants: POL's, Metals

Hydrostatic test water and water from washing vehicles returning from open water testing also occur at B. 82, however their wastewater characteristics are similar to water and have a small enough volume to be considered incidental discharges. They are listed in Section S.11 of the State Waste Discharge Permit for NBK Keyport.

Waste water from polishing and grinding of metallurgical samples is also discharged into the sanitary sewer after it passes through the solids settling treatment system. Monitoring is not required for the discharge water due to the limited volume and the low potential for this wastewater to contain pollutants at environmentally significant concentrations.

Potential Pollutants: Metals

## 4.3 Building 84

A small volume of chromic acid wastewater is generated from the Alodine process at this location, which is transported in five-gallon containers to Building 825 for pretreatment.

Since this discharge is a batch discharge that is contained and transported to Building 825 for batch treatment and sampling prior to discharge to the sanitary sewer system. Normal operation of this process represents a low risk for a non-compliant slug discharge to the sanitary sewer system.

General facility BMP's are employed to minimize the risk of spills at this location to the sanitary sewer system.

Potential Pollutants: Paint, Metals, Blast Grit

#### 4.4 Building 489

Rinse water from the Alodine touch-up station is collected and transported from Building 489 to Building 825 for pretreatment.

Since this discharge is a batch discharge that is contained and transported to Building 825 for batch treatment and sampling prior to discharge to the sanitary sewer system. Normal operation of this process represents a low risk for a non-compliant slug discharge to the sanitary sewer system. General facility BMP's are employed to minimize the risk of spills at this location to the sanitary sewer system.

Potential Pollutants: Agitene, Otto Fuel, Metals

#### 4.5 Building 514

This is a Permit by Rule process that removes Otto Fuel from a mixture of seawater. The final process in this treatment uses two activated carbon columns to remove all traces of Otto Fuel. The primary component of Otto Fuel is propylene glycol di-nitrate (PGDN). The wastewater from this process is sampled at sample point location SP003 and tested for PGDN.

This is a batch discharge that is treated, contained, and sampled prior to discharge to the sanitary sewer system. The isolation valve for discharging to sewer is normally closed and only opened when sample results indicate acceptable levels of PGDN. Normal operation of this process represents a low risk for a non-compliant slug discharge to the sanitary sewer system.

General facility BMP's are employed to minimize the risk of spills at this location to the sanitary sewer system. Piping, pumps, tanks, and sumps are regularly maintained and inspected in accordance with facility procedures.

Potential Pollutants: POLS, Otto Fuel, Glycol, Metals

This building also has an Automated Test Equipment that uses noncontact cooling water. However, due to the limited volume of wastewater discharged at this location (<100 gpd), it is unlikely that an issue at this site could significantly affect the POTW's ability to meet its discharge limits. Monitoring is not required due to the limited volume and the low potential for this wastewater to contain pollutants at environmentally significant concentrations.

Potential Pollutants: Metals

#### 4.6 Building 825 – Industrial Waste Treatment Plant

The IWTP is a limited controlled access building where all Hazardous Material storage areas are managed per the Oil and Hazardous Substance (OHS) Spill Prevention Plan. NUWC DIVKPT Directive 5090.9 outlines specific spill prevention practices to use when storing or handling HM.

Due to the batch nature of the treatment described in the Industrial Wastewater Treatment Plant

(IWTP) Standard Operating Procedure (SOP), slug discharges are virtually impossible. The following BMP's have been incorporated in the process to minimize the likelihood of a slug discharge:

- The maximum batch that can be treated at one time is 36,000 gallons. The holding capacity of the clearwater tanks used prior to discharge is 20,000 gallons each, for a total of 40,000 gallons. Thus an entire batch can be held in the clearwater storage tanks until the next batch needs to be treated. Based on the current flowrates, this is done on a quarterly basis.
- The discharge valve for the clearwater tanks to the sanitary sewer is normally closed and manually operated. Thus, it would take the action of an IWTP Operator to discharge the clearwater tank to the sanitary sewer.
- The IWTP SOP requires that a sample from the clearwater tank be taken after the treatment is complete, and analyzed for outfall 001 (Bldg. 825, IWTP) discharge contaminants. The results of the test are forwarded to the wastewater discharge program manager, who compares the results to the effluent limitations set forth in the permit for each contaminant. If the clearwater batch meets all the effluent limitations, the IWTP operator is provided written permission to discharge the clearwater batch to the sanitary sewer. All operators are trained regarding the steps and the required documentation prior to clearwater discharge.
- If the clearwater effluent does not meet the permit limitations, an email is forwarded to the IWTP operator to reroute the batch to the reactor tank and restart the treatment process.

The batch treatment procedures employed at Building 825, greatly minimize the potential for slug discharges from the IWTP. If the treated water in the clearwater tank does not meet effluent limitations, it is simply treated again. Due to these established controls, there have been zero unauthorized discharges from the IWTP in the last 10 years.

The following HM are stored at the IWTP:

Potential Pollutants: POLS, Acids, Caustics, Metals

#### Shop Floor

- Ferrous Sulfate: (5) – 55 gal. drums; total 275 gallons
- Caustic Soda: (1) – 55 gal. drum; total = 55 gallons
- Sodium Sulfide: (2) – 55 gal. drums; total = 110 gallons
- Sulfuric Acid: (5) – 55 gal. drums; total = 275 gallons

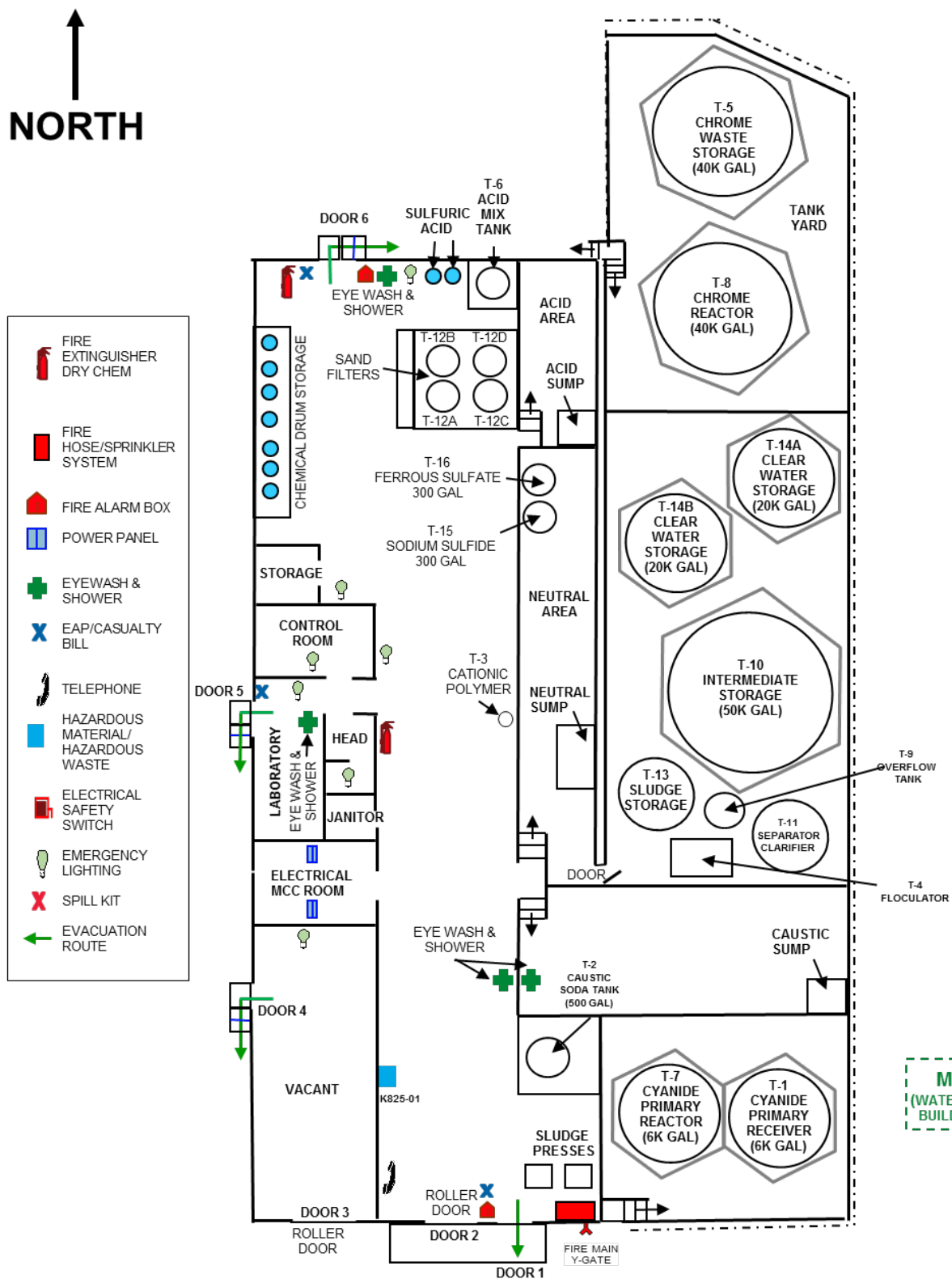
#### Lab Acid Locker

- Nitric Acid: (2) – 1 gal. container; total = 2 gallons
- Sulfuric Acid: (1) – 1 gal. container; total = 1 gallons
- Hydrochloric Acid: (1) – 1 gal. container; total = 1 gallons

The Building 825 IWTP is equipped with a sealed floor and containment sumps so that any spilled materials are not released to the environment.

Please see the following Figure 1-1 for locations of these materials within the footprint of the IWTP.

**Figure 1-1: IWTP HM/HW Storage Locations**  
(Building 825 Site Diagram)



**Figure 1: IWTP HM/HW Storage Locations**



#### 4.7 Building 1058

Centralization of most metal finishing operations at Puget Sound Naval Shipyard has resulted in greatly reduced (with respect to both process type and volume) metal finishing wastewater generation at this facility. Metal anodizing, and metal coating operations are performed at the facility. The anodizing process for aluminum includes standard and hard-coat anodizing employing sulfuric acid solutions. The coating and sealing processes include chromate conversion coating of aluminum, as well as applications of dye and sealing solutions in the anodizing process. This is a Permit by Rule process where the wastewater from the rinse tanks drain to a 1000-gallon acid-waste storage tank in the basement of the building. Wastewater from this tank is automatically pumped from this tank to a 10,000-gallon tank located outside the NE corner of the building. Wastewater from this tank is pumped to the industrial wastewater lift station outside the northeast corner of Building 233, and pumped to Building 825 for pretreatment.

This is a batch discharge that is contained and transported to Building 825 for batch treatment and sampling prior to discharge to the sanitary sewer system. Normal operation of this process represents a low risk for a non-compliant slug discharge to the sanitary sewer system.

General facility BMP's are employed to minimize the risk of spills at this location to the sanitary sewer system. Piping, pumps, tanks, and sumps are regularly maintained and inspected in accordance with facility procedures.

Potential Pollutants: Acids, Caustics, Metals

#### 4.8 OTHER MINOR AND INTERMITTENT INDUSTRIAL DISCHARGES

Wastewater streams not specifically listed in Section 4.0 include those listed in the permit under Section S11. These include non-contact cooling water, washdown water, test tank water, and furnace condensate. These discharges are similar in strength and character to potable water, however, because they are from industrial sources and in some cases chlorinated to potable water standards, are not suitable for discharge to the base storm water system. Because of their volume, strength, and character, there is a low potential for these wastewater streams to contain pollutants at environmentally significant concentrations, and periodic monitoring has been determined not to be required.

### 5.0 PLAN INSPECTIONS AND RECORDS

Inspections and Procedures necessary to ensure compliance with this plan are established and implemented through the Environmental programs and governing documents listed in Table 1.1. Compliance with these requirements is continuously checked, assessed, and updated through the NUWC and NBK EMS systems. General facility inspections related to compliance with this plan established at the facility are as follows.

Routine inspection of oil and hazardous substance storage tanks is done by the cognizant

organization as part of their standard housekeeping procedure or through the NBK SPCC Plan.

This includes inspections of pipes, pumps, and gauges.

Inspections of Permit by Rule and IWTP equipment is as specified in the IWTP Operation and Maintenance Plan and NUWCDIVKPT 5090.20 Industrial Wastewater Pretreatment Plant Program. Testing requirements for tanks, pipes, and hoses will be monitored and scheduled either by the NUWC Division, Keyport Environmental Branch, or the NAVFAC NBK Environmental Department, depending on equipment ownership and available means and methods for obtaining maintenance, testing, and inspections.

The inspection frequencies listed in the program inspection checklists will be used as guidelines. Each facility supervisor will review the items and decide which are applicable to his facility. Inspection frequencies will vary according to types of materials stored, frequency of operation, equipment age and condition, record of past spills or leaks, facility layout, and potential for environmental damage.

Types of EMS Program inspections include:

- Hazardous material storage areas
- On-site transportation of hazardous substances
- Hazardous waste processes and equipment
- Hazardous waste storage areas
- On-site transportation of hazardous wastes
- Containment and drainage control structures including a check on accumulated rainwater for contamination
- Hazardous waste shipping areas

## **6.0 PLAN SUBMITTAL, REVIEW AND AMENDMENT**

Slug discharge control plan submittal and requirements

- Initial plan must be submitted within 60 days of the effective date of the permit. The plan and any subsequent revisions become effective 30 days following submission.
- Review the plan and update as needed.
- Keep the current approved plan on site and readily available to facility personnel
- Follow the approved plan and any approved supplements throughout the term of the permit
- Submit an updated plan, or a certification that it is current by May 1, 2023.

## Toxic organic management plan submittal and requirements

- Initial plan must be submitted and approved prior to suspension of any TTO sampling required in the permit. The plan and any subsequent revisions become effective upon implementation.
- Review the plan and update as needed. Modifications must be submitted within a 30-day period following the implementation of any modified elements of the plan.
- Keep the current approved plan on site and readily available to facility personnel
- Follow the approved plan and any approved supplements throughout the term of the permit
- Submit an updated plan, or a certification that it is current by May 1, 2023.

In addition to the Toxic Organic Management Plan, NUWC Division Keyport must submit a TTO Certification Statement for each Discharge Monitoring Report for which NUWC Division Keyport elects to exercise the TTO monitoring/reporting exemption. The text of the TTO Certification Statement shall be as follows:

“Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic compounds (TTO), I certify, that to the best of my knowledge and belief, no dumping of concentrated organics into wastewaters has occurred since the filing of the last discharge monitoring report. I further certify that this facility is implementing the Toxic Organic Management Plan submitted to the Washington State Department of Ecology.”

NUWC Division, Keyport must submit an update to the existing Slug Discharge Control Plan and Toxic Organic Management Plan to the Department of Ecology when a new permit has been issued or whenever there is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants, or if the Plan(s) is (are) ineffective in controlling pollutants.

Whenever there is a change in facility design, construction, operations, or maintenance that affects the potential for a spill or discharge to Central Kitsap POTW that represents a risk for POTW interference, pass through, or a violation of SWDP or POTW discharge limits, the Slug Discharge Control Plan/Toxic Organic Management Plan must be amended to reflect the change. The change can be the result of new facility construction or of modifications to an existing facility or facility waste streams or processes. The Environmental Division is responsible for reviewing all waste streams, specs for new construction, maintenance, or remodeling, and treatment processes to determine their impact on the Plan(s). If the Plan(s) must be amended, the Environmental Division will amend the Plan(s) and ensures the amendments are implemented within required timeframes.

The Plan must be reviewed and evaluated periodically and as needed. This review includes an assessment of new technology in the area of spill prevention and wastewater treatment and verifies compliance with requirements of the Plan(s) and implementations of previous recommendations. If this review results in amendments to the Plan(s), the Environmental Division will incorporate the amendments and distribute them as required.

## 7.0

## LIQUID WASTE DESIGNATION PROCESS

Figure 2 Liquid Waste Designation Process

