

CY2012 SECRETARY OF THE NAVY ENVIRONMENTAL QUALITY AWARD  
NOMINATION NARRATIVE FOR USS MOMSEN (DDG 92)

1. Introduction

a. USS MOMSEN (DDG 92) is the 41<sup>st</sup> ARLEIGH BURKE-class guided missile destroyer, designed to conduct prompt and sustained combat operations at sea. With its AEGIS Combat System, MOMSEN is equipped to operate offensively and defensively in a high-density, multi-threat environment as an integral member of a Carrier, Amphibious, or Surface Strike Group. Although her firepower is second to no other surface combatant across the globe, MOMSEN is capable of "soft" power missions for diplomatic engagement as a representative of the United States, a deterrent against aggression or illegal activity, or in humanitarian assistance and disaster relief response.

b. MOMSEN is part of Destroyer Squadron NINE, based out of the Pacific Northwest homeport of Naval Station Everett, Washington. She boasts an efficient crew size of 256 Sailors and Officers.

2. Background

a. As a resident of the Pacific Northwest, one of the Continental United States' most eco-friendly communities, MOMSEN continuously sets the standard for environmental stewardship. Specific programs and environmental challenges met and overcome by MOMSEN during the past year include the enforcement of a proactive Environmental Protection plan, implementation of active recycling and refuse sorting techniques, and efforts to mitigate the dangers inherent in inport refueling operations.

b. As any ship at sea will suffer from the occasional intrusion of sea water into the bilge, the collection of condensate on the deck, or the inadvertent seepage of oils, MOMSEN has proven to be an environmentally conscious command by restricting the discharge of these harmful byproducts into the coastal waterways and open ocean and maintaining the OWS in a fully operational state. The Environmental Protection (EP) Program conducted crew training on environmental protection and spill response, and monthly duty section training on eco-friendly procedures for work and home.

c. An aggressive refuse sorting program is enforced both inport and at sea. The EP team continuously evaluates space

requirements to ensure adequate stowage is available, and has open communication with the entire crew on how best to reduce individual trash output.

### 3. Organization

a. MOMSEN's environmental stewardship is led by the Commanding Officer, who appoints the Hazardous Materials (HM) Coordinator and Afloat Environmental Protection Coordinator (AEPC) to run specific portions of this mission on his behalf. The Captain supervises the implementation of the Protective Measures Assessment Protocol (PMAP) and SONAR Positional Report System (SPORTS) into the decision-making matrix regarding use of active SONAR and live fire exercises, ensuring marine mammals are well outside of the danger areas associated with such activities.

b. Along with the Captain, the Engineer Officer is a key member of the EP team, and serves as the Command's Environmental Protection Officer (EPO). As such, he: (1) directly ensures sewage systems are certified, properly operated, inspected, and maintained; (2) engines are maintained in accordance with local air pollution emission and HAZMAT regulations; (3) the Engineering Log reflects any direct discharge of oily waste; (4) prepares Oil and Hazardous Substance (OHS) Spill Contingency Plans, and ensures all personnel are trained and drilled on OHS SCP; and (5) ensures medical waste and HAZMAT is disposed of properly.

c. As the primary assistant to the Commanding Officer, the AEPC directly administers the Environmental Program by ensuring all personnel working with pollution control systems, oil pollution systems, HAZMAT, and sewage systems are properly trained, attend appropriate schools, and are fully aware of associated documentation/regulations.

### 4. Program Summary

a. MOMSEN is fully compliant with Chapter 22 and Appendix K of OPNAVINST 5090.1C (Environmental Program), and abides by the following environmental guidance, directives, and plans:

- (1) Hazardous Material Control & Management (02 Apr 09)
- (2) Oil Pollution Abatement (28 Oct 09)
- (3) OHS Spill Contingency Plans (12 Mar 08)

(4) Plastic and Solid Waste Control (31 May 08)

b. The "Lucky Swede" EP Program is a model of excellence, founded upon procedural compliance and adherence to governing doctrine. The Program focuses on OHS Pollution Abatement, waste management, and maritime life protection.

c. OHS Pollution Abatement is a key component of a vigorous and productive EP Program. MOMSEN has demonstrated exceptional environmental custodianship over the applicable period through the prevention of oil spills/inadvertent discharge. The EP team employs every effort to prevent spills of oil or hazardous substance, and conducts monthly inspections to ensure proper equipment is onboard - and easily accessible - in case of a spill. Due to the relatively remote location of Everett, Washington, and a lack of a duty oiler in the Pacific Northwest, MOMSEN leads the Fleet in inport refueling operations. Such fueling operations, to include refueling, defueling, and internal fuel transfers, always incorporate proper pollution prevention measures. For example, refueling operations are only conducted during working hours, utilizing fully qualified and well-trained fueling details. Advanced coordination between shore facilities and the shipboard organization are seamless, and MOMSEN employs compensating water barges during fueling operations, minimizing the likelihood of an oil spill. MOMSEN is known to be the regional expert; and the local authorities, to include the Regional Support Organization and Port Operations, refer all visiting ships refueling in the Pacific Northwest to the "Lucky Swede" Oil Lab for advice and assistance in operations.

d. HAZMAT/Hazardous Waste transfers are completed expeditiously and are directed to the proper activity for disposal. Program managers do not allow waste to be left on the pier, introduced into the general solid waste stream, or disposed of over the side. In addition, Medical Waste, except under emergency conditions, is never discharged overboard. The Medical Department segregates infectious waste from non-infectious waste prior to entering disposal containers, and shipboard authorities ensure infectious waste is turned over to a Hazardous Waste Accumulation Facility. Solid Waste disposal is sorted by type, and maximum use of on-base recycling facilities is employed. Sewage, Non-Oily Wastewater/Graywater discharge is not pumped over the side, but is retained onboard until properly aligned for disposal ashore. MOMSEN has had no incidents of oil, oily waste, wastewater, or otherwise environmentally unsound discharge over the side during the 2011-2012 period.

e. The protection of Marine Mammals is of paramount importance to the leadership of MOMSEN, and all efforts are made to ensure ship activities do not deliberately harass, or cause inadvertent interactions with, marine mammals. As such, MOMSEN requires aggressive, employment of SPORTS and PMAP prior to active SONAR or gunnery exercises.

## 5. Accomplishments

a. The most outstanding program features of the past year are the continued operational use of the OWS system and the sustained excellence of the HAZMAT Program. As noted above, MOMSEN has one of the few operational OWS systems in the Fleet, a testament to the dedication of the Command and the importance of the EP Program. MOMSEN has never improperly disposed of HAZMAT or hazardous waste, demonstrating the dedication of the crew to the environment.

b. In terms of air pollution abatement, MOMSEN conducts "trail shaft operations" in areas not requiring excessive maneuverability, securing main engines to minimize emissions and ensures the maximum fuel efficiency. Engineers closely monitor air conditioning and sea water service system loads, maintaining only minimum equipment in operation. The reduced combat systems cooling load results in fewer required air conditioning units online, even in hot/humid climates. MOMSEN has been able to operate on one A/C unit instead of two, and two seawater service pumps instead of three - a substantial improvement over baseline usage.

c. Water pollution control is maintained through the Engineer's Standing Orders and Commanding Officer's Temporary Standing Orders. By employing periodic sewage storage flushing procedures, MOMSEN reduces the amount of foam produced by the Vacuum Collection/Holding systems, thereby mitigating the risk of accidental overboard discharge of sewage inport. In terms of oily waste, all bilge water is processed through the OWS system to ensure no oil, or oil-like substance, is pumped overboard. The installed OWS (and associated Oil Content Monitor) is fully operable and certified.

d. MOMSEN's solid waste management and resource recovery models are undergoing continuous evaluation to ensure maximum coverage and impact. The crew is conscientious regarding the sorting of refuse and the proper disposal method. HAZMAT/Hazardous Waste Management mandates all HAZMAT be stored in approved, and periodically inspected, containers, and all

sorting of refuse and the proper disposal method. HAZMAT/Hazardous Waste Management mandates all HAZMAT be stored in approved, and periodically inspected, containers, and all HAZMAT is issued and tracked by the HAZMAT Custodian via receipt. Division Officers are actively engaged in the review and certification of HAZMAT issuance and stowage.

e. In Calendar Year 2012, MOMSEN moved over four million gallons of fuel with zero incidents. Furthermore, due to emergent and non-emergent repairs of fuel storage tanks and associated valves MOMSEN successfully defueled over 150,000 gallons of F-76 fuel for subsequent reuse by the fleet.

f. MOMSEN strictly adheres to applicable regulatory requirements by initiating actions to conserve natural resources, protect historical and cultural properties, and prevent, control, and eliminate discharges which would create pollution. MOMSEN is committed to setting the standard for environmental excellence and leadership in all present and future operations. MOMSEN continues to "Rise Above" to set the standard of environmental protection excellence throughout the Pacific Fleet.