



PUGET SOUND AIR POLLUTION CONTROL AGENCY
KING COUNTY KITSAP COUNTY PIERCE COUNTY SNOHOMISH COUNTY

April 20, 1995

R. F. Cipra
Code 106.3
NAVSHIPYD Puget Sound
1400 Farragut Avenue
Bremerton, WA 98314-5001

Dear Mr. Cipra:

Registration 14082

Waiver of Vertical Stack Requirement (Regulation I, Section 9.16)

Using the information submitted in your letter to the Agency on March 30, 1995 and after consultation with your assigned inspector, a determination was made that the following three horizontal exhausts for four paint spray booths would probably not cause an adverse impact on or off of the Naval Base. This is due to exhaust heights greater than 60 feet above ground level, with dry docks 2 and 4 as the nearest adjacent occupied structures.

- 1) Spray Coating Booth - Dry Filter at 71-431-121 4th Floor Room 414C
- 2) Two Spray Coating Booths - Dry Filter at 67-431-267 4th Floor Room 414B using a common stack
- 3) Spray Coating Booth - Dry Filter at 67-431-131 6th Floor Room 607.

After review of your situation, this Agency hereby grants your request, PROVIDED that this exemption may be revoked for cause.

If you have any questions please contact Claude Williams at (206) 689-4066 or me at (206) 689-4052.

Sincerely,

Jay M. Willenberg, P.E.
Senior Air Pollution Engineer

mj

cc: E. Hendrickson
C. M. Williams

Dennis J. McLerran, Air Pollution Control Officer

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

DAVE K.
CF
PSAPCA MAY 7 1998

MAY 6 1998

Reply To
Attn Of: OAQ-107

Mr. Joseph Williams
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Dear Mr. Williams:

The U.S. Environmental Protection Agency (EPA) has received several inquiries from your agency, other permitting authorities in the Washington and facilities in various jurisdictions seeking authorization to reduce the recordkeeping frequency for small natural gas fired boilers subject to New Source Performance Standards (NSPS) Subpart Dc. The standard currently requires affected facilities to keep records of the amount and type of fuels combusted *each day*.

Under the applicable NSPS, approval of alternate recordkeeping requirements may only be done by EPA. While EPA expressly retains this approval authority, this letter outlines an approach which may be used to implement reduced recordkeeping for certain equipment affected by NSPS Subpart Dc, pursuant to the conditions listed below.

Over the past several years, EPA has made several determinations that reduce the recordkeeping requirements for facilities subject to Subpart Dc. The bulk of these determinations can be found on EPA's web site under the Applicability Determination Index (ADI). In general, these determinations conclude that since Subpart Dc does not have any substantive emissions limitations for units that fire only natural gas, there is little value in requiring daily recordkeeping of the amount of fuel combusted. Specifically, in cases where an affected unit fires only natural gas, or natural gas with clean, low-sulfur fuel oil as a backup, the unit may maintain monthly fuel usage records. However, EPA's determinations have continued to require quarterly reporting of excess emissions consistent with 40 C.F.R. § 60.7(d), for those units firing fuel oil. Region 10 concurs with these determinations.

EPA has approved the reduced recordkeeping frequencies pursuant to the authority found in 40 C.F.R. § 60.13(i). This authority was delegated from EPA Headquarters to the Regions in August 1995, but has not been delegated to states under Section 111(c) of the Clean Air Act. In any case, because of the routine nature of the determinations described above, Region 10 sees little added benefit in approving these minor changes on a case-by-case basis. In fact, these alternate frequencies are best memorialized in a state's preconstruction permit or other preconstruction review process that occurs long before a source's NSPS obligations begin. Therefore, we offer your agency and the local air pollution control authorities in Washington the following procedures to approve reduced recordkeeping frequencies. Although these procedures

are not a formal NSPS delegation, we view it as a common-sense approach to implementing EPA's authority under 40 C.F.R. § 60.13(i) in connection with Subpart Dc.

Recordkeeping [60.48c(g)]

1. The requirement of 40 C.F.R. § 60.48c(g) to record and maintain the amount of fuel combusted each day may be reduced to monthly, where: (a) the only fuel used is natural gas, or (b) the only fuels used are natural gas and distillate oil with a sulfur content less than 0.5%, and compliance is demonstrated using supplier certifications. Documentation may be in the form of fuel bills or meter readings, or other records that adequately document fuel usage.
2. The permitting authority should require sources to certify that they will burn only natural gas or distillate oil using fuel certification, and that they will promptly notify the agency of any anticipated and actual switches in fuel use.
3. To the extent possible, the permitting authority should clearly document any revised recordkeeping frequency in the source's preconstruction permit or other approval document.
4. If a source's fuel oil sulfur content ever exceeds 0.5%, the recordkeeping frequency will immediately revert to daily in order to determine whether the 30-day rolling average sulfur content of the fuel exceeds 0.5%. For additional information regarding this requirement, please see 40 C.F.R. § 60.46c(d)(2).
5. For those affected sources using low-sulfur distillate fuel oil, a reduced recordkeeping frequency shall not exempt the unit from compliance with any of the fuel certification requirements, including those of 40 C.F.R. §§ 60.42c(h), 60.44c(g), or any of the reporting requirements, including those of 60.48c(e)(11) and 60.48c(f).
6. Multiple units that utilize a common fuel supply or fuel header or that duct to a common stack must document the fuel quantity and quality supplied to each unit, or must have the ability to apportion fuel use between each affected unit. As long as the conditions of Item 1 above are met, the affected unit may record this information on a monthly basis.

Reporting [60.48c(d)]

1. Should an affected source fire any fuel oil during the quarter, whether as an emergency or backup fuel, it will be considered subject to the sulfur dioxide emission limitations and will be required to provide a quarterly compliance report.

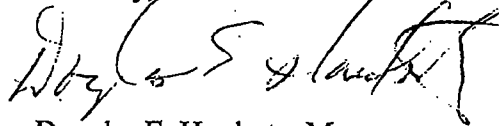
Documentation

1. Each permitting authority will provide notification to EPA prior to granting any authorization of reduced recordkeeping under Subpart Dc. The notification will include a brief description of the basis for proposing the alternative requirements. Authorization will not be given prior to 10 working days after receipt of the notification by EPA. This 10-day period will be extended if EPA requests additional information in order to review the preliminary determination. If EPA notifies the permitting authority of any objection to the reduced requirements, the permitting authority will not authorize the alternative requirements and will refer the matter to EPA for a formal determination under Subpart Dc.
2. The permitting authority will maintain a registry showing who has received approval for reduced recordkeeping under Subpart Dc. The registry may be maintained in either AFS or in a separate state-only database. If tracked outside of AFS, the permitting authority will provide a copy of the registry to EPA Region 10 at least once each federal fiscal year, or upon written request. Otherwise, if the permitting authority elects to use AFS, the Region will access the information directly when needed. The registry should include the company name, boiler identification number, boiler size, types of fuel burned, the date the reduced recordkeeping was approved, and the mechanism used for the approval.

These procedures may be used only for reduced recordkeeping under Subpart Dc and do not authorize the permitting authority to make any other adjustments, pursuant to 40 C.F.R. § 60.13(i), other than those explicitly stated above. EPA reserves its authority to enforce all recordkeeping requirements of the NSPS, and will not recognize reduced requirements where the procedures outlined above are not followed.

If you have any questions, please contact John Keenan, Air Enforcement & Program Support Unit, at (206) 553-1817.

Sincerely,



Douglas E. Hardesty, Manager
Federal & Delegated Air Programs Unit

cc: Benton County Clean Air Authority
Northwest Air Pollution Authority
Olympic Air Pollution Control Authority
✓ Puget Sound Air Pollution Control Agency
Southwest Air Pollution Control Authority
Spokane County Air Pollution Control Authority



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

MAY 1998

Reply To
Attn Of OAQ-107

Mr. R.M. Shipley
Department of the Navy
Puget Sound Naval Shipyard
1400 Farragut Avenue
Bremerton, Washington 98314-5001

Re: 5090
Ser 106.31/0158

Dear Mr. Shipley:

This letter is in response to your request dated April 2, 1998, for a waiver of certain recordkeeping and reporting requirements under the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Shipbuilding and Ship Repair (Surface Coating), 40 CFR Part 63, Subpart II, 63.788(b)(3)(i). This section requires facilities which are demonstrating compliance using the procedures in 40 CFR 63.785 (by using coatings to which thinning solvent will not be added) to maintain records containing: (1) Certification of the as-applied volatile organic compounds (VOC) content of each batch of coating, and (2) The volume of each coating applied. You have requested relief from this requirement as it applies to ships classified as operational.

Your request was based on (and is consistent with) a guidance memo from John B. Rasnic, Director of the Manufacturing, Energy, and Transportation Division, Office of Compliance, U.S. Environmental Protection Agency (EPA) to the Regional EPA Air Division Directors I-X, dated February 9, 1998. According to this memo, both EPA and the Navy agree that the recordkeeping and reporting requirements in 40 CFR 63.788 (b)(3)(i) as apply to crew painting of Navy ships classified as operational, require a significant increase in time with no increase in environmental benefit. This determination and waiver hinges on the Navy, and in this case Puget Sound Naval Shipyard (PSNS), following its two policies of (1) always using a VOC compliant paint, and (2) implementing the 'no thinning' policy. You have certified that PSNS is in compliance with these policies.

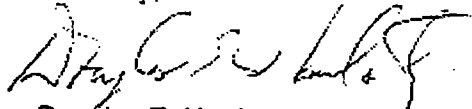
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Pursuant to 40 CFR 63.10(f), EPA approves your request for a waiver, and PSNS is no longer required to conduct the recordkeeping requirements of 40 CFR 63.788(b)(3)(i) for ships classified as operational. This waiver request is granted based on PSNS's demonstration of compliance with the Navy's two policies (as described above) and based on John B. Rasnic's guidance memo. If either of the Navy policies of "no thinning" or using only VOC compliant paints is revoked or not implemented by PSNS, this waiver may become void or may be retracted.

As explained in the guidance memo, this waiver does not apply to Navy ships in maintenance overhaul status. If there is a question as to whether a ship is classified as operational or maintenance overhaul, PSNS should be able to provide documentation to clearly identify the appropriate status. The Shipyard's Workload and Resource Report (WARR) will provide such documentation. This document lists all the ships entering and leaving the shipyard in a given fiscal year (including some historical and projected shipyard activities) and is updated monthly. It provides the status of the ships and should resolve the question as to whether a ship is classified as operational or maintenance overhaul status. The WARR is developed by and located in the PSNS Business Office (Code 1200). If PSNS is unable to provide a copy of the WARR, or the WARR does not provide adequate information to identify a ship's status, EPA will assume that the ship in question is in a maintenance overhaul status and this waiver will not apply.

In no way does this approval abrogate the EPA Administrator's authority under the Clean Air Act or in any way prohibit the EPA Administrator from later canceling this waiver. If you have any questions regarding this waiver, please contact Andrea Wullenweber at (206) 553-8760.

Sincerely,



Douglas E. Hardesty, Manager
Federal & Delegated Air Programs Unit

cc: Claude Williams, PSAPCA

Attachment 4
Radioactive Air Emissions License

Attachment 4 of this air operating permit is a Radioactive Air Emissions License covering Puget Sound Naval Shipyard. This License was prepared by the State of Washington Department of Health in accordance with the Intergovernmental Agreement between Puget Sound Clean Air Agency and the Washington State Department of Health, effective July 1, 1995. Pursuant to this Interagency Agreement, the Puget Sound Clean Air Agency defers regulation of radioactive air emissions to the Department of Health. Attachment 4 is written in the Department of Health format, following Department of Health interpretations of Department of Health requirements, and may not follow the format or conventions used by the Puget Sound Clean Air Agency in the main body of the air operating permit. For purposes of this Attachment, the terms "license" and "permit" are synonymous and may be used interchangeably. Likewise, the terms "licensee" and "permittee" are synonymous and may be used interchangeably. Attachment 4 covers radioactive air emissions from various emission units at this facility. The sources for these radioactive air emissions are under the control of the US Navy.

RADIOACTIVE AIR EMISSIONS LICENSE
For
Puget Sound Naval Shipyard

Issued by

The State of Washington Department of Health
Division of Radiation Protection
Air Emissions and Defense Waste Section

License Number:
FF-005

Pursuant to the State Clean Air Act, RCW 70.94 and the Radioactive Air Emissions Regulations, Chapter 246-247 WAC, and in reliance on statements and representatives heretofore made by the Licensees designated below, a License is hereby issued authorizing such Licensee to vent radionuclides from emission units identified in this License. The State of Washington Department of Health promulgates this License subject to all applicable rules and regulations. This License does not relieve the Licensee of compliance with other State or Federal agencies jurisdiction pertaining to hazardous air pollutants.

Licensee

Department of the Navy
Puget Sound Naval Shipyard
Bremerton, Washington

Issue Date:

Effective Date:

Expiration Date:

DATED at Olympia, Washington the 31st day of December, 2003

Approved By:



Head, Air Emissions and Defense Waste Section

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A. EMISSION STANDARDS

The emission of radionuclides to the ambient air from the Puget Sound Naval Shipyard shall not exceed those amounts that would cause any member of the public to receive in any year an effective dose equivalent of 10 mrem per year. [WAC 246-247-040(1), 4/4/1994]

Emissions are limited by individual emission units identified in Section E Condition and Limitations number 2). [WAC 246-247-040(5), 4/4/1994]

All existing emission units and nonsignificant modifications shall utilize ALARACT. [WAC 246-247-040(4), 4/4/1994]

The conditional requirements for this standard are set forth in Section E

All new construction and significant modifications of emission units commenced after August 10, 1988 shall utilize BARCT.

[WAC 246-247-040(3), 4/4/1994]

The conditional requirements for this standard are set forth in Section E

B. APPLICABLE REQUIREMENT TERMS

A Notice of Construction (NOC) is written information submitted under WAC 246-247-060(1) and (2), and provides information listed in WAC 246-247-110 "Appendix A - Application information requirements." This information must include the total effective dose equivalent (TEDE). The equivalent dose is calculated using the source term derived from the COMPLY CODE, or other EPA, or State of Washington, Department of Health (Health) approved method. A Notice of Construction as detailed below is required for proposed construction or modification of an emission unit as identified in EPA/Navy agreement. An approved NOC with its limits and conditions becomes an applicable requirement to the License. Health approves an exemption under WAC 246-247-020(2)(c) from the WAC 246-247-060 Notice of Construction requirements for all sources for which the TEDE estimated or calculated in accordance with the EPA/Navy agreement is less than 0.1 mr/yr.

WAC 246-247-060(1), 4/4/94 requirements for new construction or modification of emission units are as follows:

Early in the design phase, the applicant shall submit a NOC containing the information required in Appendix A of WAC 246-247. PSNS may use the estimation methods approved in the EPA/Navy agreement as part of the NOC and Appendix A submittal.

Within thirty days of receipt of the NOC, Health shall inform the applicant if additional information is required. The department may determine, on the basis of the information submitted, that the requirements of BARCT or ALARACT have been met, or may require the applicant to submit a BARCT or ALARACT demonstration compatible with Appendix B or C of WAC 246-247, respectively.

Within sixty days of receipt of all required information, Health shall issue an approval or denial to construct. The department may require changes to the final proposed control technology.

The applicant may request a phased approval process by so stating and submitting a limited application. Health may grant a conditional approval to construct for such activities as would not preclude the construction or installation of any control or monitoring equipment required after review of the completed application.

Health shall issue a license, or amend an existing license, authorizing operation of the emission unit(s) when the proposed new construction or modification is complete. For facilities subject to the air operating license requirements of chapter 173-401, the license shall become part of the air operating license issued by the Department of Ecology or a local air pollution control authority.

WAC 246-247-060(2), 4/4/94 requirements for modification of unregistered emission units that are not exempt from the regulations are as follows:

The applicant shall submit an application containing the information required in Appendix A of WAC 246-247.

Within thirty days of receipt of the application, Health shall inform the applicant if additional information is required. The department may determine, on the basis of the information submitted, that the requirements of BARCT or ALARACT have been met, or may require the applicant to submit a BARCT or ALARACT demonstration compatible with Appendix B or C of WAC 246-247, respectively.

Within sixty days of receipt of all required information, Health shall issue or amend the license. For facilities subject to the air operating license requirements of Chapter 173-401, the License shall become part of the air operating license issued by the Department of Ecology or a local air pollution control authority. A determination of non-compliance may result in the issuance of a Notice of Violation.

Health reserves the right to require the owner of an existing, unregistered emission unit to make modifications necessary to comply with the applicable standards of WAC 246-247-040.

Following any modification requiring a Notice Of Construction (NOC) per Section B of this License, Puget Sound Naval Shipyard shall notify the Department of Health at least seven calendar days before any planned pre-operational tests of new or modified emission units that involve emissions control, monitoring, or containment systems of the emission unit(s). The department reserves the right to witness these tests under WAC 246-247-060 (4).

The ALARACT requirement means the use of radionuclide emission control technology that achieves emission levels that are consistent with ALARA. ALARACT compliance is demonstrated by evaluating the existing control system and proposed nonsignificant modification in relation to applicable technology standards and other control technologies operated successfully in similar applications. An ALARACT compliance demonstration is used for inspection or audit purposes, and to demonstrate compliance with the substantive ALARACT technology standard. [WAC 246-247 030(4), 4/4/1994] [WAC 246-247 130(Appendix C), 4/4/1994]

The BARCT requirement means the use of radionuclide emission control technology that will result in a radionuclide emission limitation based on the maximum degree of reduction for radionuclides. A BARCT compliance demonstration must consider energy, environmental, and economic impacts and other costs through examination of production processes and available methods, systems, and techniques for the control of radionuclide emissions. A BARCT compliance demonstration is the conclusion of an evaluative process that results in the selection of the most effective control technology from all known feasible alternatives. [WAC 246-247 030(6), 4/4/1994] [WAC 246-247 120(Appendix B), 4/4/1994] Puget Sound Naval Shipyard has demonstrated to Health that the Naval Nuclear Propulsion Program's integrated system for minimizing airborne radionuclide emissions constitutes BARCT. The elements of this integrated system include unique Navy requirements for high integrity nuclear fuel which retains fission product radionuclides, high integrity reactor coolant systems which contain radionuclides within these systems, and a maintenance philosophy which calls for containing radioactivity as close to the source as possible as the primary means of reducing airborne emissions. Health has reviewed this integrated system and concurs that it constitutes BARCT.

C. *MONITORING, TESTING, QUALITY ASSURANCE*

Section E of this License specifically identifies Monitoring and Testing by emission unit.

Unless otherwise noted, quality assurance must be performed under the requirements of **WAC 246-247-075, 4/4/1994.**

In 1995, the Navy requested U. S. Environmental Protection Agency approval of alternate methods for measuring and estimating airborne radioactive emissions. These alternate procedures were justified by an extensive set of special tests that were performed using test procedures that had also been reviewed and concurred with by EPA. Based upon the test results, the Navy's application, and extensive review by EPA personnel from Headquarters and the affected regions, the EPA Assistant Administrator for Air and Water granted approval of these alternate procedures. Several of these procedures are referenced in this license, and this is referred to as the "EPA/Navy Agreement." The EPA letter granting approval of the EPA/Navy Agreement is included in this license as Appendix A.

D. *INSPECTIONS, RECORD KEEPING AND REPORTING*

For all NESHAPS reporting requirements required under Title V identified by PSCAA in the Standard Terms and Conditions Section V, a radionuclide NESHAP report is also required and will be sent to:

Department of Health
Division of Radiation Protection
Air Emissions and Defense Waste
PO Box 47827
Olympia, WA 98584-7827

Inspections, Reporting and record keeping must be performed under the requirements of **WAC 246-247-080, 4/4/1994.**

The Puget Sound Naval Shipyard shall submit an annual report covering the emissions for a calendar year no later than June 30 of the following year.

A projected annual effective dose equivalent to the Maximally Exposed Individual (MEI) greater than 3 mrem per year shall be reported to the Department within 24 hours.

The Department reserves the right to perform a radionuclide air emissions audit of the facility annually or as deemed necessary. Inspections shall be performed at the Departments discretion.

Applicable emission unit records shall be kept in accordance with section (8) of **WAC 246-247-080, 4/4/1994.**

E. EMISSION UNIT SPECIFIC LICENSE CONDITIONS

ST-983-01

Puget Sound Naval Shipyard - Bremerton

Building 983

Emission Unit ID: 24

Abatement Technology (state only enforceable): BARCT

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	WAC246-247-010(4)	WAC 246-247-010(10)	WAC 246-247-010(10)
	WAC246-247-040(3)	WAC 246-247-060(5)	WAC 246-247-040(4)
controlled work area	HEPA with prefilter and fan	3 exhaust 2 recirculation with exhaust option	single stage treatment parallel filter banks single stack discharge

Monitoring Requirements (state and federally enforceable)

Federal and State Regulatory	Monitoring and Testing Procedure	Radionuclides Requiring Measurement	Frequency
	[WAC 246-247-040(5)] [WAC 173-401-615(1)]	[WAC 173-401-615(1)]	[WAC 246-247-075(1)] [WAC 173-401-615(1)]
WAC 246-247-075 & 40 CFR 61.107(a)	40 CFR 61, Appendix B, Method 114(2)&(3). EPA/Navy agreement methods differ from requirements of 40 CFR 61.107(b). EPA/ Navy agreement addresses particulate, H-3, C-14, noble gas, and radioiodine emissions.	Co-60	Continuous air particulate monitoring

Sampling fixed filter type air sample

Project Title

PSNS Emission Unit 983 Building

NOC ID

558

Conditions (state only enforceable)

- 1) US Navy Puget Sound Naval Shipyard shall comply with all Conditions and Limitations of this License (WAC 246-247-060(5)).
- 2) The total emission limit for this Emission Unit, when combined with that of the entire Shipyard, is limited to 3.0 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).
- 3) **No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to:** performing maintenance work on naval nuclear propulsion plant components and support equipment/facilities. These activities are limited to component decontamination and refurbishment, disassembly, repair, reassembly, testing of radiologically controlled equipment, solid radioactive waste processing for disposal, liquid waste solidification, processing radioactive liquid for reuse, radiochemistry, and facility maintenance.
- 4) The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national

standards (WAC 246-247-075(6)). The applicable national standard at PSNS is 40 CFR 61 Appendix B, Method 114, part 4, "Quality Assurance Methods."

- 5) If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).
- 6) The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)). The applicable national standard in place at PSNS is 40CFR61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 7) The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).
- 8) The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart I. (WAC 246-247-080(2)).
- 9) The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the License (WAC 246-247-080(5)).
- 10) Prior to permanent shut down of an emission unit, the licensee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health.

Once an emission unit is permanently shut down, thereby rendering existing license terms and conditions irrelevant, the licensee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting requirements which are no longer applicable for that emission unit or activity.

All records, relating to the shut down emission unit, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080 (8). (WAC 246-247-080 (6))

- 11) The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).
- 12) The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).
- 13) The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).
- 14) In-service HEPA filters in forced air ventilation systems which exhaust to the environment (i.e., final filters in an exhaust line filter train) shall be tested, annually, to the requirements of ASME N510, and shall have a minimum efficiency of 99.95%.
- 15) The emission unit monitoring system shall have the following activities performed:

- a. Upon request, the Shipyard shall provide to WDOH for review, copies of procedures used to perform the functional/calibration checks and visual inspection activities;
- b. A functional/calibration check of monitoring system instrumentation shall be performed annually;

Within two years of this approval:

- c. A visual check of nozzle position and orientation as well as measurements of nozzle openings;
 - d. Checks to ensure the tightness of all fittings and connections as well as a leak test of the entire sampling system; and
 - e. Visual inspections for corrosion, physical damage, or dust loading of the probe, sample lines, and monitoring system equipment.
- 16) These Conditions and Limitations must be documented in an established procedure (WAC 246-247-040(5) and 246-247-060(5)).
 - 17) Following any modification requiring a Notice Of Construction (NOC) per Section B of this License the facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).
 - 18) The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).
 - 19) The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)). The EPA/Navy agreement addresses the reliability and the accuracy of PSNS particulate monitoring systems and states that these systems are acceptable for demonstrating compliance.
 - 20) The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).
 - 21) Emissions from some radionuclides may be calculated, in lieu of monitoring and measuring, in accordance with a procedure that EPA has granted previous approval (40 CFR 61.107(a)). (WAC 246-247-075(3)).

EPA/Navy agreement covers methods for the Shipyard to calculate H-3, C-14, noble gas, and radioiodine emissions.

Portable Refueling Complexes Puget Sound Naval Shipyard - Bremerton

SHIPYARD (Portable Refueling Complexes)
Emission Unit ID: 526

Abatement Technology (state only enforceable): BARCT

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	WAC246-247-010(4)	WAC 246-247-010(10)	WAC 246-247-010(10)
	WAC246-247-040(3)	WAC 246-247-060(5)	WAC 246-247-040(4)
	HEPA with prefilter and fan	1 for each exhaust	single stage treatment

Monitoring Requirements (state and federally enforceable)

Federal and State Regulatory	Monitoring and Testing Procedure	Radionuclides Requiring Measurement	Frequency
	[WAC 246-247-040(5)] [WAC 173-401-615(1)]	[WAC 173-401-615(1)]	[WAC 246-247-075(1)] [WAC 173-401-615(1)]
WAC 246-247-075 & 40 CFR 61.107(a)	40 CFR 61, Appendix B, Method 114(2)&(3). EPA/Navy agreement methods differ from requirements of 40 CFR 61.107(b). EPA/ Navy agreement addresses particulate, H-3, C-14, noble gas, and radioiodine emissions.	Co-60	Continuous air particulate monitoring

Sampling fixed filter type air sample

Project Title

PSNS Emission Unit Portable Refueling Complexes

NOC ID 560

Conditions (state only enforceable)

- 1) US Navy Puget Sound Naval Shipyard shall comply with all Conditions and Limitations of this License (WAC 246-247-060(5)).
- 2) The total emission limit for each of these Emission Units, when combined with that of the entire Shipyard, is limited to 3.0 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).
- 3) **No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to:** reactor plant refueling/defueling operations, shipboard reactor plant maintenance and testing, radioactive liquid movement and storage, surface cleaning and radioactive waste collection.
- 4) The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)). The applicable national standard at PSNS is 40 CFR 61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 5) If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).

- 6) The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)). The applicable national standard in place at PSNS is 40CFR61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 7) The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).
- 8) The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart I. (WAC 246-247-080(2)).
- 9) The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the License (WAC 246-247-080(5)).
- 10) All records, relating to the shut down emission unit, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080 (8). (WAC 246-247-080 (6))
- 11) The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).
- 12) The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).
- 13) The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).
- 14) HEPA filters in forced air ventilation systems which exhaust to the environment (i.e., final filters in an exhaust line filter train) shall be tested, annually, to the requirements of ASME N510, and shall have a minimum efficiency of 99.95%.
- 15) The emission unit monitoring system shall have the following activities performed:
 - a. Upon request, the Shipyard shall provide to WDOH for review, copies of procedures used to perform the functional/calibration checks and visual inspection activities;
 - b. A functional/calibration check of monitoring system instrumentation shall be performed annually;Within two years of this approval:
 - c. A visual check of nozzle position and orientation as well as measurements of nozzle openings;
 - d. Checks to ensure the tightness of all fittings and connections as well as a leak test of the entire sampling system; and
 - e. Visual inspections for corrosion, physical damage, or dust loading of the probe, sample lines, and monitoring system equipment.
- 16) These Conditions and Limitations must be documented in an established procedure (WAC 246-247-040(5) and 246-247-060(5)).

- 17) Following any modification requiring a Notice Of Construction (NOC) per Section B of this License the facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).
- 18) The department retains the right to conduct environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).
- 19) The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)). The EPA/Navy agreement addresses the reliability and the accuracy of PSNS particulate monitoring systems and states that these systems are acceptable for demonstrating compliance.
- 20) The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).
- 21) Emissions from some radionuclides may be calculated, in lieu of monitoring and measuring, in accordance with a procedure that EPA has granted previous approval (40 CFR 61.107(a)). (WAC 246-247-075(3)).

EPA/Navy agreement covers methods for the Shipyard to calculate H-3, C-14, noble gas, and radioiodine emissions.

Monitored Temporary Ventilation Systems**PSNS - Bremerton**

SHIPYARD (Temporary Vents)
Emission Unit ID: 718

Abatement Technology (state only enforceable): BARCT

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	WAC246-247-010(4)	WAC 246-247-010(10)	WAC 246-247-010(10)
	WAC246-247-040(3)	WAC 246-247-060(5)	WAC 246-247-040(4)
	HEPA with prefilter and fan	1 for each exhaust	single stage treatment

Monitoring Requirements (state and federally enforceable)

Federal and State Regulatory	Monitoring and Testing Procedure	Radionuclides Requiring Measurement	Frequency
	[WAC 246-247-040(5)] [WAC 173-401-615(1)]	[WAC 173-401-615(1)]	[WAC 246-247-075(1)] [WAC 173-401-615(1)]
WAC 246-247-075 & 40 CFR 61.107(a)	40 CFR 61, Appendix B, Method 114(2)&(3). EPA/Navy agreement methods differ from requirements of 40 CFR 61.107(b). EPA/ Navy agreement addresses particulate, H-3, C-14, noble gas, and radioiodine emissions.	Co-60	Continuous air particulate monitoring

Sampling fixed filter type air sample

Project Title

PSNS Emission Unit Monitored Temporary Ventilation Systems

NOC ID 569

Conditions (state only enforceable)

- 1) US Navy Puget Sound Naval Shipyard shall comply with all Conditions and Limitations of this License (WAC 246-247-060(5)).
- 2) The total emission limit for each of these Emission Units, when combined with that of the entire Shipyard, is limited to 3.0 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).
- 3) **No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to:** reactor plant refueling/defueling operations, shipboard reactor plant maintenance and testing, radioactive liquid movement and storage, surface cleaning, radiochemistry, and radioactive waste collection.
- 4) The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)). The applicable national standard at PSNS is 40 CFR 61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 5) If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).

- 6) The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)). The applicable national standard in place at PSNS is 40CFR61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 7) The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).
- 8) The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart I. (WAC 246-247-080(2)).
- 9) The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the License (WAC 246-247-080(5)).
- 10) All records, relating to the shut down emission unit, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080 (8). (WAC 246-247-080 (6))
- 11) The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).
- 12) The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).
- 13) The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).
- 14) HEPA filters in forced air ventilation systems which exhaust to the environment (i.e., final filters in an exhaust line filter train) shall be tested, annually, to the requirements of ASME N510, and shall have a minimum efficiency of 99.95%.
- 15) The emission unit monitoring system shall have the following activities performed:
 - a. Upon request, the Shipyard shall provide to WDOH for review, copies of procedures used to perform the functional/calibration checks and visual inspection activities;
 - b. A functional/calibration check of monitoring system instrumentation shall be performed annually;
Within two years of this approval:
 - c. A visual check of nozzle position and orientation as well as measurements of nozzle openings;
 - d. Checks to ensure the tightness of all fittings and connections as well as a leak test of the entire sampling system; and
 - e. Visual inspections for corrosion, physical damage, or dust loading of the probe, sample lines, and monitoring system equipment.
- 16) These Conditions and Limitations must be documented in an established procedure (WAC 246-247-040(5) and 246-247-060(5)).

- 17) The department retains the right to conduct environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).
- 18) The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)). The EPA/Navy agreement addresses the reliability and the accuracy of PSNS particulate monitoring systems and states that these systems are acceptable for demonstrating compliance.
- 19) The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).
- 20) Emissions from all radionuclides may be calculated, in lieu of monitoring and measuring, in accordance with a procedure that EPA has granted previous approval (40 CFR 61.107(a)). (WAC 246-247-075(3)).

EPA/Navy agreement covers methods for the Shipyard to calculate H-3, C-14, noble gas, and radioiodine emissions.

ST-880-1**Puget Sound Naval Shipyard - Bremerton**

Building 880
Emission Unit ID: 23

Abatement Technology (state only enforceable): BARCT

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	WAC246-247-010(4)	WAC 246-247-010(10)	WAC 246-247-010(10)
	WAC246-247-040(3)	WAC 246-247-060(5)	WAC 246-247-040(4)
controlled work area	HEPA with prefilter and fan	3 exhaust	single stage treatment parallel filter banks single stack discharge

Monitoring Requirements (state and federally enforceable)

Federal and State Regulatory	Monitoring and Testing Procedure	Radionuclides Requiring Measurement	Frequency
	[WAC 246-247-040(5)] [WAC 173-401-615(1)]	[WAC 173-401-615(1)]	[WAC 246-247-075(1)] [WAC 173-401-615(1)]
WAC 246-247-075 & 40 CFR 61.107(a)	40 CFR 61, Appendix B, Method 114(2)&(3). EPA/Navy agreement methods differ from requirements of 40 CFR 61.107(b). EPA/ Navy agreement addresses particulate, H-3, C-14, noble gas, and radioiodine emissions.	Co-60	Continuous air particulate monitoring

Sampling fixed filter type air sample

Project Title

PSNS Emission Unit 880 Building

NOC ID 557

Conditions (state only enforceable)

- 1) US Navy Puget Sound Naval Shipyard shall comply with all Conditions and Limitations of this License (WAC 246-247-060(5)).
- 2) The total emission limit for this Emission Unit, when combined with that of the entire Shipyard, is limited to 3.0 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).
- 3) **No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to:** performing maintenance work on naval nuclear propulsion plant components and support equipment/facilities. These activities are limited to component decontamination and refurbishment, disassembly, repair, reassembly, testing of radiologically controlled equipment, solid radioactive waste processing for disposal, reactor plant refueling/defueling operations, processing radioactive liquid for reuse, evaporation of liquid after processing to remove particulate activity, and facility maintenance.

- 4) The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)). The applicable national standard at PSNS is 40 CFR 61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 5) If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).
- 6) The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)). The applicable national standard in place at PSNS is 40CFR61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 7) The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).
- 8) The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart I. (WAC 246-247-080(2)).
- 9) The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the License (WAC 246-247-080(5)).
- 10) Prior to permanent shut down of an emission unit, the licensee shall file a report of closure with the Department of Health. The report of closure shall include the date of the shutdown and indicate whether, despite cessation of operation, there is still a potential for radioactive air emissions and a need for any active or passive ventilation system with emission control and/or monitoring devices. An emission unit or activity will not be considered permanently shut down or completed until a report of closure is received and approved by Health.

Once an emission unit is permanently shut down, thereby rendering existing license terms and conditions irrelevant, the licensee shall not be required, after the shutdown or completion, to meet any monitoring, record keeping, and reporting requirements which are no longer applicable for that emission unit or activity.

All records, relating to the shut down emission unit, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080 (8). (WAC 246-247-080 (6))
- 11) The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).
- 12) The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).
- 13) The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).

- 14) In-service HEPA filters in forced air ventilation systems which exhaust to the environment (i.e., final filters in an exhaust line filter train) shall be tested, annually, to the requirements of ASME N510, and shall have a minimum efficiency of 99.95%.
- 15) The emission unit monitoring system shall have the following activities performed:
 - a. Upon request, the Shipyard shall provide to WDOH for review, copies of procedures used to perform the functional/calibration checks and visual inspection activities;
 - b. A functional/calibration check of monitoring system instrumentation shall be performed annually;
Within two years of this approval:
 - c. A visual check of nozzle position and orientation as well as measurements of nozzle openings;
 - d. Checks to ensure the tightness of all fittings and connections as well as a leak test of the entire sampling system; and
 - e. Visual inspections for corrosion, physical damage, or dust loading of the probe, sample lines, and monitoring system equipment.
- 16) These Conditions and Limitations must be documented in an established procedure (WAC 246-247-040(5) and 246-247-060(5)).
- 17) Following any modification requiring a Notice Of Construction (NOC) per Section B of this License the facility shall notify the department seven days in advance of any planned pre-operational testing of the emission unit's control, monitoring or containment systems. The department reserves the right to observe such tests (WAC 246-247-060(4)).
- 18) The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).
- 19) The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)). The EPA/Navy agreement addresses the reliability and the accuracy of PSNS particulate monitoring systems and states that these systems are acceptable for demonstrating compliance.
- 20) The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).
- 21) Emissions from all radionuclides may be calculated, in lieu of monitoring and measuring, in accordance with a procedure that EPA has granted previous approval (40 CFR 61.107(a)). (WAC 246-247-075(3)).
EPA/Navy agreement covers methods for the Shipyard to calculate H-3, C-14, noble gas, and radioiodine emissions.

Portable Tank Vents**Puget Sound Naval Shipyard - Bremerton**

SHIPYARD (Tank Vents)
Emission Unit ID: 729

Abatement Technology (state only enforceable): BARCT

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	WAC246-247-010(4)	WAC 246-247-010(10)	WAC 246-247-010(10)
	WAC246-247-040(3)	WAC 246-247-060(5)	WAC 246-247-040(4)
	HEPA	1	passive vent

Monitoring Requirements (state and federally enforceable)

Federal and State Regulatory	Monitoring and Testing Procedure	Radionuclides Requiring Measurement	Frequency
	[WAC 246-247-040(5)]	[WAC 173-401-615(1)]	[WAC 246-247-075(1)]
	[WAC 173-401-615(1)]		[WAC 173-401-615(1)]

WAC 246-247-075 &
40 CFR 61.107(a)

EPA/Navy agreement
methods differ from
requirements of
40 CFR 61.107(b).
EPA/ Navy agreement
addresses particulate,
H-3, C-14, noble gas, and
radioiodine emissions.

Sampling Not required due to low potential for airborne radionuclides. EPA/Navy agreement specifies a conservative emission estimation method.

Project Title

PSNS Emission Unit Portable Tank Vents

NOC ID 570

Conditions (state only enforceable)

- 1) US Navy Puget Sound Naval Shipyard shall comply with all Conditions and Limitations of this License (WAC 246-247-060(5)).
- 2) The total emission limit for each of these Emission Units, when combined with that of the entire Shipyard, is limited to 3.0 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).
- 3) **No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to:** the use of portable tanks is limited to collection, movement, and temporary storage of radioactive liquids.
- 4) The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)). The applicable national standard at PSNS is 40 CFR 61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 5) If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).
- 6) The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)). The applicable national standard in place at PSNS is 40CFR61 Appendix B,

Method 114, part 4, "Quality Assurance Methods."

- 7) The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).
- 8) The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart I. (WAC 246-247-080(2)).
- 9) The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the License (WAC 246-247-080(5)).
- 10) All records, relating to the shut down emission unit, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080 (8). (WAC 246-247-080 (6))
- 11) The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).
- 12) The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).
- 13) The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).
- 14) Tank Vents shall have HEPA filters installed.
- 15) These Conditions and Limitations must be documented in an established procedure (WAC 246-247-040(5) and 246-247-060(5)).
- 16) The department retains the right to conduct environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).
- 17) The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).
- 18) Emissions from all radionuclides may be calculated, in lieu of monitoring and measuring, in accordance with a procedure that EPA has granted previous approval (40 CFR 61.107(a)). (WAC 246-247-075(3)).
EPA/Navy agreement covers methods for the Shipyard to calculate H-3, C-14, noble gas, and radioiodine emissions.

Surface Cleaning**Puget Sound Naval Shipyard - Bremerton**

SHIPYARD (Surface Cleaning)

Emission Unit ID: 728

Abatement Technology (state only enforceable): None. See 3) below for limitations.

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	WAC246-247-010(4)	WAC 246-247-010(10)	WAC 246-247-010(10)
	WAC246-247-040(3)	WAC 246-247-060(5)	WAC 246-247-040(4)

Monitoring Requirements (state and federally enforceable)

Federal and State Regulatory	Monitoring and Testing Procedure	Radionuclides Requiring Measurement	Frequency
	[WAC 246-247-040(5)]	[WAC 173-401-615(1)]	[WAC 246-247-075(1)]
	[WAC 173-401-615(1)]		[WAC 173-401-615(1)]

WAC 246-247-075 &
40 CFR 61.107(a)

EPA/Navy agreement
methods differ from
requirements of
40 CFR 61.107(b).
EPA/ Navy agreement
addresses particulate,
H-3, C-14, noble gas, and
radioiodine emissions.

Sampling Not required due to low potential for airborne radionuclides. EPA/Navy agreement specifies a conservative emission estimation method.

Project Title

PSNS Emission Unit Surface Cleaning

NOC ID 573

Conditions (state only enforceable)

- 1) US Navy Puget Sound Naval Shipyard shall comply with all Conditions and Limitations of this License (WAC 246-247-060(5)).
- 2) The total emission limit for each of these Emission Units, when combined with that of the entire Shipyard, is limited to 3.0 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).
- 3) **No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to:** Cleaning of radioactively contaminated surfaces with low potential for generation of airborne radionuclides.
- 4) The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)). The applicable national standard at PSNS is 40 CFR 61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 5) If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).

- 6) The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)). The applicable national standard in place at PSNS is 40CFR61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 7) The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).
- 8) The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart I. (WAC 246-247-080(2)).
- 9) The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the License (WAC 246-247-080(5)).
- 10) All records, relating to the shut down emission unit, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080 (8). (WAC 246-247-080 (6))
- 11) The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).
- 12) The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).
- 13) The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).
- 14) These Conditions and Limitations must be documented in an established procedure (WAC 246-247-040(5) and 246-247-060(5)).
- 15) The department retains the right to conduct environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).
- 16) The facility must be able to demonstrate the reliability and accuracy of emissions data and other test results from this emission unit (WAC 246-247-075(13)).
- 17) The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).

Surface Ship Exhausts Puget Sound Naval Shipyard - Bremerton

SHIPYARD (Surface Ship Exhausts)
Emission Unit ID: 730

Note: Applies only when the exemption of WAC 246-247-020 (d) does not apply (i.e., ship is in a maintenance status).

Abatement Technology (state only enforceable): None. See 3) below for limitations.

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	WAC246-247-010(4)	WAC 246-247-010(10)	WAC 246-247-010(10)
	WAC246-247-040(3)	WAC 246-247-060(5)	WAC 246-247-040(4)

Monitoring Requirements (state and federally enforceable)

Federal and State Regulatory	Monitoring and Testing Procedure	Radionuclides Requiring Measurement	Frequency
	[WAC 246-247-040(5)] [WAC 173-401-615(1)]	[WAC 173-401-615(1)]	[WAC 246-247-075(1)] [WAC 173-401-615(1)]

WAC 246-247-075 &
40 CFR 61.107(a)

EPA/Navy agreement
methods differ from
requirements of
40 CFR 61.107(b).
EPA/ Navy agreement
addresses particulate,
H-3, C-14, noble gas, and
radioiodine emissions.

Sampling Not required due to low potential for airborne radionuclides. EPA/Navy agreement specifies a conservative emission estimation method.

Project Title

PSNS Emission Unit Surface Ship Exhausts

NOC ID 574

Conditions (state only enforceable)

- 1) US Navy Puget Sound Naval Shipyard shall comply with all Conditions and Limitations of this License (WAC 246-247-060(5)).
- 2) The total emission limit for each of these Emission Units, when combined with that of the entire Shipyard, is limited to 3.0 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).
- 3) **No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to:** [shipboard reactor plant maintenance and testing, radioactive liquid movement and storage, surface cleaning, and radioactive waste collection] with low potential for generation of airborne radionuclides.
- 4) The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)). The applicable national standard at PSNS is 40 CFR 61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 5) If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).

- 6) The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)). The applicable national standard in place at PSNS is 40CFR61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 7) The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).
- 8) The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart I. (WAC 246-247-080(2)).
- 9) The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the License (WAC 246-247-080(5)).
- 10) Since Navy ships routinely arrive at and depart from the Shipyard, closure reports and Health approval are not required for these emissions units.

All records, relating to the shut down emission unit, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080 (8). (WAC 246-247-080 (6))

- 11) The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).
- 12) The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).
- 13) The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).
- 14) These Conditions and Limitations must be documented in an established procedure (WAC 246-247-040(5) and 246-247-060(5)).
- 15) The department retains the right to conduct stack sampling, environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).
- 16) The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).
- 17) Emissions from all radionuclides may be calculated, in lieu of monitoring and measuring, in accordance with a procedure that EPA has granted previous approval (40 CFR 61.107(a)). (WAC 246-247-075(3)).

EPA/Navy agreement covers methods for the Shipyard to calculate H-3, C-14, noble gas, and radioiodine emissions.

Submarine Exhausts**Puget Sound Naval Shipyard - Bremerton**

SHIPYARD (Submarine Exhausts)

Emission Unit ID: 731

Note: Applies only when the exemption of WAC 246-247-020 (d) does not apply (i.e., ship is in a maintenance status).

Abatement Technology (state only enforceable): None. See 3) below for limitations.

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	WAC246-247-010(4)	WAC 246-247-010(10)	WAC 246-247-010(10)
	WAC246-247-040(3)	WAC 246-247-060(5)	WAC 246-247-040(4)

Monitoring Requirements (state and federally enforceable)

Federal and State Regulatory	Monitoring and Testing Procedure	Radionuclides Requiring Measurement	Frequency
	[WAC 246-247-040(5)]	[WAC 173-401-615(1)]	[WAC 246-247-075(1)]
	[WAC 173-401-615(1)]		[WAC 173-401-615(1)]

WAC 246-247-075 &
40 CFR 61.107(a)

EPA/Navy agreement
methods differ from
requirements of
40 CFR 61.107(b).
EPA/ Navy agreement
addresses particulate,
H-3, C-14, noble gas, and
radioiodine emissions.

Sampling Not required due to low potential for airborne radionuclides. EPA/Navy agreement specifies a conservative emission estimation method.

Project Title

PSNS Emission Unit Submarine Exhausts

NOC ID 575

Conditions (state only enforceable)

- 1) US Navy Puget Sound Naval Shipyard shall comply with all Conditions and Limitations of this License (WAC 246-247-060(5)).
- 2) The total emission limit for each of these Emission Units, when combined with that of the entire Shipyard, is limited to 3.0 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).
- 3) **No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to:** [shipboard reactor plant maintenance and testing, radioactive liquid movement and storage, surface cleaning, and radioactive waste collection] with low potential for generation of airborne radionuclides.
- 4) The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)). The applicable national standard at PSNS is 40 CFR 61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 5) If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).

- 6) The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)). The applicable national standard in place at PSNS is 40CFR61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 7) The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).
- 8) The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart I. (WAC 246-247-080(2)).
- 9) The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the License (WAC 246-247-080(5)).
- 10) Since Navy ships routinely arrive at and depart from the Shipyard, closure reports and Health approval are not required for these emissions units.

All records, relating to the shut down emission unit, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080 (8). (WAC 246-247-080 (6))

- 11) The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).
- 12) The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).
- 13) The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).
- 14) These Conditions and Limitations must be documented in an established procedure (WAC 246-247-040(5) and 246-247-060(5)).
- 15) The department retains the right to conduct environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).
- 16) The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).
- 17) Emissions from all radionuclides may be calculated, in lieu of monitoring and measuring, in accordance with a procedure that EPA has granted previous approval (40 CFR 61.107(a)). (WAC 246-247-075(3)).

EPA/Navy agreement covers methods for the Shipyard to calculate H-3, C-14, noble gas, and radioiodine emissions.

Ship Engine Rooms**Puget Sound Naval Shipyard - Bremerton**

SHIPYARD (Ship Engine Rooms)
Emission Unit ID: 732

Note: Applies only when the exemption of WAC 246-247-020 (d) does not apply (i.e., ship is in a maintenance status).

Abatement Technology (state only enforceable): None. See 3) below for limitations.

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	WAC246-247-010(4)	WAC 246-247-010(10)	WAC 246-247-010(10)
	WAC246-247-040(3)	WAC 246-247-060(5)	WAC 246-247-040(4)

Monitoring Requirements (state and federally enforceable)

Federal and State Regulatory	Monitoring and Testing Procedure	Radionuclides Requiring Measurement	Frequency
	[WAC 246-247-040(5)]	[WAC 173-401-615(1)]	[WAC 246-247-075(1)]
	[WAC 173-401-615(1)]		[WAC 173-401-615(1)]

WAC 246-247-075 &
40 CFR 61.107(a)

EPA/Navy agreement
methods differ from
requirements of
40 CFR 61.107(b).
EPA/ Navy agreement
addresses particulate,
H-3, C-14, noble gas, and
radioiodine emissions.

Sampling Not required due to low potential for airborne radionuclides. EPA/Navy agreement specifies a conservative emission estimation method.

Project Title

PSNS Emission Unit Ship Engine Rooms

NOC ID 576

Conditions (state only enforceable)

- 1) US Navy Puget Sound Naval Shipyard shall comply with all Conditions and Limitations of this License (WAC 246-247-060(5)).
- 2) The total emission limit for each of these Emission Units, when combined with that of the entire Shipyard, is limited to 3.0 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).
- 3) **No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to:** [shipboard reactor plant maintenance and testing, radioactive liquid movement and storage, surface cleaning, and radioactive waste collection] with low potential for generation of airborne radionuclides.
- 4) The facility must be able to demonstrate that it has a quality assurance program compatible with applicable national standards (WAC 246-247-075(6)). The applicable national standard at PSNS is 40 CFR 61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 5) If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).

- 6) The facility must be able to demonstrate that workers associated with this emission unit are trained in the use and maintenance of control and monitoring systems, and in the performance of associated tests and emergency procedures (WAC 246-247-075(12)). The applicable national standard in place at PSNS is 40CFR61 Appendix B, Method 114, part 4, "Quality Assurance Methods."
- 7) The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).
- 8) The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart I. (WAC 246-247-080(2)).
- 9) The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the License (WAC 246-247-080(5)).
- 10) Since Navy ships routinely arrive at and depart from the Shipyard, closure reports and Health approval are not required for these emissions units.

All records, relating to the shut down emission unit, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080 (8). (WAC 246-247-080 (6))

- 11) The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).
- 12) The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).
- 13) The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).
- 14) These Conditions and Limitations must be documented in an established procedure (WAC 246-247-040(5) and 246-247-060(5)).
- 15) The department retains the right to conduct environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).
- 16) The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).
- 17) Emissions from all radionuclides may be calculated, in lieu of monitoring and measuring, in accordance with a procedure that EPA has granted previous approval (40 CFR 61.107(a)). (WAC 246-247-075(3)).

EPA/Navy agreement covers methods for the Shipyard to calculate H-3, C-14, noble gas, and radioiodine emissions.

Radiac Cal Lab**Puget Sound Naval Shipyard - Bremerton**

Building #431

Emission Unit ID: 733

Abatement Technology (state only enforceable): None. Emissions controlled by procedure.

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	WAC246-247-010(4)	WAC 246-247-010(10)	WAC 246-247-010(10)
	WAC246-247-040(3)	WAC 246-247-060(5)	WAC 246-247-040(4)

Monitoring Requirements (state and federally enforceable)

Federal and State Regulatory	Monitoring and Testing Procedure	Radionuclides Requiring Measurement	Frequency
	[WAC 246-247-040(5)]	[WAC 173-401-615(1)]	[WAC 246-247-075(1)]
	[WAC 173-401-615(1)]		[WAC 173-401-615(1)]

WAC 246-247-075 &
40 CFR 61.107(a)**Sampling** None. Emissions determined by known tritium release during instrument calibration.**Project Title**

PSNS Emission Unit Tritium Instrument Calibration

NOC ID 577

Conditions (state only enforceable)

- 1) US Navy Puget Sound Naval Shipyard shall comply with all Conditions and Limitations of this License (WAC 246-247-060(5)).
- 2) The total emission limit for this Emission Unit, when combined with that of the entire Shipyard, is limited to 3.0 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).
- 3) **No activities, other than those explicitly described within this approval, shall be conducted without prior written approval. The approved activities are limited to:** Calibration of instruments using tritiated methane.
- 4) If this emission unit is not in compliance with the standards in WAC 246-247-040 during construction or operation, the department reserves the right to require modifications to bring it into compliance (WAC 246-247-060-(2)(d)).
- 5) The department reserves the right to inspect and audit all construction activities, equipment, operations, documents, data and other records related to compliance with the requirements of this chapter (WAC 246-247-080(1)).
- 6) The facility must meet all reporting and record keeping requirements of 40 CFR 61, Subpart I. (WAC 246-247-080(2)).
- 7) The facility shall report to the department within 24 hours, any unexpected release of radioactivity, shutdown or other condition that, if allowed to persist, or lasts more than four hours, would result in the emission of radionuclides in excess of any standards or limitation in the License (WAC 246-247-080(5)).
- 8) All records, relating to the shut down emission unit, generated while the emission unit or activity was in operation, shall be kept in accordance with WAC 246-247-080 (8). (WAC 246-247-080 (6))
- 9) The facility shall maintain readily (promptly) retrievable storage areas (on site) for all records and documents related to, and which may help establish compliance with, the requirements of this chapter. The facility shall keep these records available for department inspection for at least five years (WAC 246-247-080(8)).

- 10) The facility shall ensure all emissions units are fully accessible to department inspectors. In the event the hazards associated with accessibility to a unit require training and/or restriction or requirements for entry, the facility owner or operator shall inform the department, prior to arrival, of those restrictions or requirements. The owner or operator shall be responsible for providing the necessary training, escorts, and support services to allow the department to inspect the facility. At a minimum for unannounced inspections, such requirements or restrictions must be told to inspectors to provide an opportunity for inspectors to meet those requirements prior to the inspection (WAC 246-247-080(9)).
- 11) The facility shall make available, in timely manner, all documents requested by the department for review. The facility shall allow the department to review documents in advance of an inspection. The facility shall allow access to classified documents by representatives of the department with the appropriate security clearance and a demonstrable need-to-know (WAC 246-247-080(10)).
- 12) These Conditions and Limitations must be documented in an established procedure (WAC 246-247-040(5) and 246-247-060(5)).
- 13) The department retains the right to conduct environmental monitoring or other testing around this unit to assure compliance. If directed by the department, the facility must make provision for such testing (WAC 246-247-075(9) and (10)).
- 14) The department may require an ALARACT demonstration at any time (WAC 246-247-080(1)).
- 15) Emissions from this unit may be calculated based on known quantities of tritium used. For this unit, all of the small amount of tritium used in the instrument calibration is released (WAC 246-247-030(6)(a)(i) and 246-247-075(3)).

F. EPA/NAVY AGREEMENT

The following letter (Appendix A) acknowledges the agreement between the Environmental Protection Agency and the US Navy. In 1997 the EPA granted alternative procedures for measurements and estimates of radionuclides in facilities operated by the Navy Nuclear Propulsion Program such as the Puget Sound Naval Shipyard facility. The basis for this agreement was submitted in an application for alternative procedures from the Navy to the EPA. Because this submittal required details of nuclear propulsion program design and practices, a significant portion of this document is classified.

References to this agreement are made in areas of the License that are both federally and state enforceable. Because of this agreement, certain exemptions were allowed under WAC 246-247-020(c). These exemptions are referenced in the License.

APPENDIX A to Radioactive Air Emissions License FF-005



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OCT 1 - 1997

OFFICE OF
AIR AND RADIATION

Admiral F. L. Bowman
Commander, Naval Sea Systems Command
2531 Jefferson Davis Highway
Arlington, VA 22242-5160

Dear Admiral Bowman:

The Environmental Protection Agency (EPA), Office of Air and Radiation has completed its review of your December 27, 1995 application, as supplemented by additional submissions dated November 22, 1996 and January 14, 1997, for approval pursuant to 40 CFR 61.103(a) and 40 CFR 61.107(a) of alternative procedures for measurement and estimation of radionuclide emissions from facilities which are operated by the U.S. Naval Nuclear Propulsion Program ("NNPP"). I am pleased to inform you that your application for approval of alternative procedures has been granted, subject to all of the detailed terms and conditions set forth in your December 27, 1995 application, as supplemented on November 22, 1996 and January 14, 1997. As you have requested, you will be permitted to use the alternative procedures for estimating and measuring emissions both in determining whether particular facilities operated by the NNPP are in compliance with the numerical emission standards in 40 CFR 61.102 and in determining whether an application to construct or modify must be submitted for a particular activity under 40 CFR 61.106(b). As you are aware, the approval of alternative procedures for measurement and estimation of radionuclide emissions is limited to only the procedures described in Attachment A of your December 27, 1995 application. A summary of the approved alternative procedures is enclosed with this letter.

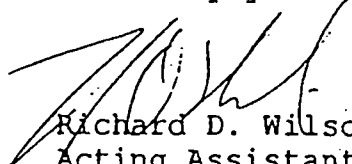
The approval of the requested alternative procedures is effective immediately. The new approved alternative procedures supersede in their entirety the interim alternative procedures approved by EPA on February 17, 1994.

I wish to emphasize that the approval of your application is limited to use of the specified alternative procedures for measurement and estimation of radionuclide emissions in lieu of the particular measurement procedures and estimation procedures which would otherwise apply under 40 CFR 61.107 and Appendix D, and does not affect any other applicable requirements established by Subpart I. As you acknowledged in your letter of January 14, 1997, all use by the NNPP of the approved alternative procedures must be consistent with the quality assurance performance requirements set forth in Appendix B, method 114. In the event that EPA determines that any modification of the approved alternative procedures is necessary to enable the NNPP to comply with these mandatory quality assurance requirements, EPA expects that you will cooperate to assure prompt development and implementation of all necessary modifications.

As in the case of the previously approved interim alternative procedures, each affected facility operated by the NNPP must continue to do a site-specific compliance determination utilizing the computer code COMPLY and source terms determined pursuant to the approved measurement and estimation procedures, and will remain subject to all of the reporting and record keeping requirements set forth in 40 CFR 61.104 and 61.105. Each facility will also remain subject to inspection and enforcement activities as necessary to assure compliance with the approved alternative procedures and with all other requirements in Subpart I not specifically supplanted by the approved procedures.

In closing, I want to express my sincere appreciation for the cooperation and professionalism demonstrated by your staff throughout this effort.

Sincerely yours,



Richard D. Willson
Acting Assistant Administrator
for Air and Radiation

Enclosure

SUMMARY OF FINAL PROCEDURES

1. Existing Sources:

<u>Type of Source</u>	<u>Final Navy Procedure</u>
Monitored Ventilation	Existing Particulate Sampling
Noble Gases and Radioiodine	Noble Gas and Radioiodine from Norfolk Naval Base Test
C-14	C-14 Based on a Specific Quantity per MW-hr
Tritium	1 Curie plus Planned Releases for Tritium
Engine Rooms	Concentration Equal to Main Shore Facility
Tank Vents	Tank Volume $\times 5 \times 10^{-10}$ uCi/ml
Hull Decon	Appendix D Release Fraction
Surface Ship RC	5×10^{-14} uCi/ml
Minor Availability RC Exhaust	Concentration Equal to Main Shore Facility

Note: (Noble gases, radioiodine, carbon-14, and tritium apportioned among the sources.)

2. New Sources

<u>Type of Source</u>	<u>Final Navy Procedure</u>
Monitored Ventilation	Particulate Concentration from Similar Source (Construct or Modify)
Potential Sources	Same as Above for Engine Rooms, tank vents, surface ship RC exhaust, hull decon, or minor availability RC exhaust
Noble Gases and Radioiodine	Noble Gas and Radioiodine from Norfolk Naval Base Test
C-14	C-14 Based on a Specific Quantity per MW-hr
Tritium	1 Curie plus Planned Releases for Tritium

Note: (Noble gases, radioiodine, carbon-14, and tritium apportioned among the sources.)