

Memorandum of Understanding Cruise Operations in Washington State

**Originally signed April 20, 2004
Amendment No. 7 April 2023**

**Washington State Department of Ecology,
Signatory Cruise Companies, and the
Port of Seattle**

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding, originally signed on April 20, 2004 is amended by and between the State of Washington, the Port of Seattle, and the Signatory Cruise Companies, hereinafter referred to as member cruise lines, representing the brands owned and operated by all Signatory Cruise Companies.

Whereas the State of Washington is charged with the responsibility of protecting and conserving Washington's environmental resources in relation to the Cruise Industry's environmental practices in Washington; and

Whereas the United States Coast Guard, herein referred to as USCG, has Federal jurisdiction over environmental matters in navigable waters in the United States; and

Whereas the Port of Seattle is charged with providing the services and facilities to accommodate the transportation of passengers, including cruise ship passengers, while protecting and enhancing the environment of the Port of Seattle; and

Whereas, the Signatory Cruise Companies are for profit entities organized for the purpose of representing all brands owned or operated by Signatory Cruise Companies. The member cruise lines operate in and about waters subject to this Memorandum of Understanding (MOU); and

Whereas, the member cruise lines have adopted the "**Cruise Industry Waste Management Practices and Procedures**" as promulgated by the Cruise Industry's trade association, the Cruise Lines International Association, herein referred to as CLIA, which practices and procedures are attached hereto as *Appendix i*; and

Whereas, member cruise line vessels operate in international waters and move passengers to destinations worldwide and, consequently, those cruise vessel waste management practices must take into account environmental laws and regulations in many jurisdictions and international treaties and conventions; and

Whereas, member cruise lines, the State of Washington as represented by the Washington Department of Ecology (Ecology), the USCG and the Port of Seattle have met to develop waste management practices that preserve a clean and healthy environment and demonstrate the Cruise Industry's commitment to be a steward of the environment; and

Whereas, research is ongoing to establish the impact of ships' wastewater discharges on the ocean environment, and the results of this research will be taken into account in periodic review of the wastewater discharge practices described in this Agreement; and

Whereas, the cruise industry recognizes Washington's fragile marine environment and is committed to help protect this environment;

Now therefore, based upon mutual understanding, the parties enter into this Memorandum of Understanding to implement the following environmental goals, policies and practices:

Definition of terms for the purpose of this agreement:

“blackwater” means waste from toilets, urinals, medical sinks and other similar facilities;

"cruise ship" means any vessel that is owned or operated by a member cruise line;

“disinfection system upset” means disinfection below levels of four log (99.99%) inactivation of norovirus based on expected results assuming a minimum intensity of ultraviolet (UV) lights used for disinfecting effluent or other shipboard administrative controls as may be accepted by the Washington Department of Health..

“Exhaust Gas Cleaning System” means equipment installed onboard a vessel to assist in removal of sulfur oxides from ships’ engine and boiler exhaust gases as approved by the ship’s flag State Administration.

“graywater” includes drainage from dishwasher, shower, laundry, bath, galley drains and washbasin drains;

“Homeported vessel” is a vessel that makes a call or does a turnaround at a port in Washington at least 20 times per year.

“monitoring for disinfection effectiveness” means using measuring equipment to determine the intensity of ultraviolet (UV) lights used for disinfecting effluent, or other shipboard administrative controls as may be accepted by the Washington Department of Health.

“oily bilge water” includes bilge water that contains used lubrication oils, oil sludge and slops, fuel and oil sludge, used oil, used fuel and fuel filters, and oily waste.

“residual solids” includes grit or screenings, ash generated during the incineration of sewage and sewage sludge, which is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge.

“solid waste” means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes and recyclable materials [RCW 70.95.030 (22), Solid Waste Management: Reduction and Recycling].

“waters subject to this Memorandum of Understanding (MOU)” include the Puget Sound and the Strait of Juan de Fuca south of the international boundary with Canada; and for off the west coast, the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles as illustrated in *Appendix ii*.

1. Applicability

- 1.1 The State of Washington agrees that the performance required by member cruise lines under the terms of this Memorandum of Understanding shall be directed only to the brands owned or operated by Signatory Cruise Companies. Member cruise lines acknowledge that its members operate cruise vessels engaged in cruise itineraries greater than one day duration; and further that its members do not operate one-day attraction ships or casino gambling ships. This agreement only applies to voyages during which the commercial passenger vessel actually calls at a port in the State of Washington.
- 1.2 The State of Washington and Port of Seattle accepts the CLIA Waste Management Best Practices and Procedures as posted by CLIA and updated from time to time and described in the attached *Appendix i* as CLIA member policy in the management of solid waste, dangerous waste (State of Washington dangerous waste and all wastes regulated by EPA as federal hazardous waste) and wastewaters in waters subject to this MOU.
- 1.3 In addition to the CLIA Practices, the member cruise line vessels operating in Washington agree to allow Ecology to conduct a minimum of one vessel inspection per season to verify compliance with the MOU pursuant to the Ecology Statement of Work as attached in *Appendix viii* and agree to comply with the following unique practices while operating in waters subject to this MOU:

2.1 Wastewater Management

In recognition of the sensitive nature of Washington's marine environment, member cruise lines agree to the following:

- 2.1.1 to prohibit the discharge of blackwater, untreated graywater, and solid waste within waters subject to this MOU (*Appendix ii*); and to prohibit the discharge of oily bilge water if not in compliance with applicable federal and state laws within waters subject to this MOU.
- 2.1.2 other than as set forth in section 2.1.3 below, to prohibit the discharge of treated graywater in waters subject to this MOU.
- 2.1.3 the discharge of treated graywater from ships equipped with advanced wastewater treatment systems (AWTS) which meet the higher standards and the testing regime set out in federal law, Title XIV, Certain Alaska Cruise Ship Operations, Section 1404 (c) (*Appendix v*) is allowed under the following conditions:
 - A. For discharges if the ship is at least one nautical mile away from its berth at a port in Washington and is traveling at a speed of at least 6 knots:
 - 1) No later than 60 days prior to the date the cruise ship wishes to commence discharge of AWTS-treated effluent, the cruise line shall submit the following vessel specific information to Ecology
 - a. Documentation on the type of treatment system in use on the ship including schematic diagrams of the system.

- b. Documentation that the system is certified by the United States Coast Guard for continuous discharge in Alaska. If the certification has not yet been provided by the Coast Guard at the time the other documentation is submitted to Ecology, it may be submitted less than 60 days prior to commencement of discharge but in no event less than 30 days prior to the commencement of discharge.
- c. Provision for daily twenty-four hour continuous turbidity or equivalent monitoring of the quality of the effluent generated by the AWTS and, beginning in 2009, daily twenty-four hour continuous monitoring for disinfection effectiveness.
- d. Documentation of system design that demonstrates the AWTS can be automatically shut down if monitoring of treated effluent indicates high turbidity or, beginning in 2009, a disinfection system upset; or documentation that demonstrates that operational controls exist to insure system shut down if monitoring of treated effluent indicates high turbidity or, beginning in 2009, a disinfection system upset. An example of an acceptable operational control is a system that has the continuous monitoring device alarmed as to immediately alert engineering staff on watch to shut down overboard discharges from the system in the event of high turbidity levels or disinfection ineffectiveness in the treated effluent.

B. For continuous discharge:

- 1) No later than 60 days prior to the date a cruise ship wishes to commence discharge of AWTS effluent, the cruise line shall submit the following vessel specific information to Ecology:
 - a. Documentation on the type of treatment system in use on the ship including schematic diagrams of the system.
 - b. Documentation that the system is certified by the United States Coast Guard for continuous discharge in Alaska. If the certification has not yet been provided by the Coast Guard at the time the other documentation is submitted to Ecology, it may be submitted less than 60 days prior to commencement of discharge but in no event less than 30 days prior to commencement of discharge.
 - c. Provision for daily twenty-four hour continuous turbidity or equivalent monitoring of the quality of the effluent generated by the AWTS and, beginning in 2009, daily twenty-four hour continuous monitoring for disinfection effectiveness.
 - d. Documentation of system design that demonstrates the AWTS can be automatically shut down if monitoring of treated effluent indicates high turbidity or, beginning in 2009, a disinfection system upset; or documentation that demonstrates that operational controls exist to insure system shut down if monitoring of treated effluent indicates high turbidity or, beginning in 2009, a disinfection system upset. An example of an acceptable operational control is a system that has the continuous monitoring device alarmed as to immediately alert engineering staff on

- watch to shut down overboard discharges from the system in the event of high turbidity levels or disinfection ineffectiveness in the treated effluent.
- e. Documentation that all treated effluent will receive final polishing for disinfection immediately prior to discharge.
 - f. Copies of water quality tests results taken from the AWTS effluent during the preceding six months.
 - g. A vessel specific plan that: identifies how effluent will be stored until the AWTS is repaired and which indicates the storage capacity of holding tanks; and includes a notification protocol for notifying Ecology of system shut down which occurs while within waters subject to this MOU.

If Ecology determines that the documentation provided is insufficient, it shall so notify the cruise line. The cruise line shall provide supplemental documentation as requested by Ecology. If Ecology and the cruise line are unable to agree on the supplemental documentation and cruise line elects to discharge from the AWTS, cruise line understands that any such discharge will not have been approved by Ecology and further that Ecology may take appropriate action, including, but not limited to, publicizing, such fact.

Any cruise ship discharging from an AWTS in waters subject to this MOU operates within the shipping lanes and this effectively means that vessels are more than a half a mile from shellfish beds. For specific information relative to shellfish protection measures, see *appendix ix*.

- C. The vessels that have submitted documentation under A or B above agree to:
- 1) Not discharge within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology. This season's locations include President's Point, Apple Tree Cove and Tyee Shoal as referenced in *Appendix ix*.
 - 2) Immediately stop all discharges when high turbidity occurs and, beginning in 2009, when a disinfection system upset condition occurs.
 - 3) Immediately notify the Washington State Department of Health in the event of a disinfection system upset at (360) 236-3330 during office hours or (360) 786-4183 after hours (24 hour pager). The agreement to provide this notice is based on the understanding by member cruise lines that the Department of Health will not publicize the information provided unless it reasonably determines that a discharge presents a material public health risk.
 - 4) Sample the quality of the treated effluent using a Washington state-certified laboratory at least one time per month while at port in Washington during each cruise season using the sampling requirements established per the United States Coast Guard, Captain of the Port, Southeast Alaska Policy for conventional pollutants continued compliance monitoring regime and as referenced in *Appendix v*. Parameters sampled include pH, Biochemical Oxygen Demand (BOD), Fecal Coliform, Total Suspended Solids (TSS), and Residual Chlorine (RC).

- 5) Meet the limitations on discharge as set in Alaska regulations (*Appendix v*) for BOD, TSS, pH, Fecal Coliform and Residual Chlorine.¹
- 6) Split samples with Ecology upon Ecology's request when sampling is conducted in Washington waters.
- 7) For vessels that have submitted documentation under B above (continuous discharge), conduct Whole Effluent Toxicity (WET) Testing once every two years for vessels homeported in Washington and once every 40 port calls or turnarounds to a port in Washington for all other vessels.
- 8) Provide Ecology with duplicates of test results obtained for and provided to the State of Alaska to enable Ecology to monitor the quality of the effluent from such systems.
- 9) Notify Ecology at least a week in advance of sampling and to allow Ecology staff access to the ship in order to observe sampling events.
- 10) Notify Ecology if any material changes are made to the system.

Note 1: There is a presumption that meeting Alaska's standards means that Washington's Water Quality Standards are likely being met and that if Alaska's standards are not being met, Washington's Water Quality Standards are not being met.

2.1.4 The discharge of residual solids from either a type 2 marine sanitation device or an advanced waste water treatment system is prohibited in waters subject to this MOU, within 12 nautical miles from shore, and within the entire boundaries of the Olympic Coast Marine Sanctuary. All parties acknowledge that most of the Olympic Coast National Marine Sanctuary lies beyond 3 miles of shore and therefore is outside the jurisdiction of the State of Washington.

2.1.5 The Discharge of Exhaust Gas Cleaning System effluent in MOU waters requires open loop scrubbers to use solid separation (if equipped) and residues generated by the exhaust gas cleaning unit should be delivered ashore to adequate reception facilities, in accordance with IMO guidelines and WA State Regulations. Such residues should not be discharged into the waters of the MOU.

2.2 Dangerous Waste Management

2.2.1 Washington state, authorized by EPA to administer the state's Dangerous Waste Regulations in lieu of the federal RCRA rules, assigns EPA/State generator ID#'s to land based sites only. Therefore, the receiving Port's EPA/State generator ID# will be assigned to all necessary Uniform Hazardous Waste Manifests, as the Port is the co-generator responsible for on site management prior to shipment off site. The State of Washington shall have the right to inspect all such records upon written request to the cruise vessel operator. The State of Washington recognizes that in some cases EPA Identification Numbers may not be required under federal law for conditionally exempt small quantity generators.

2.2.2 *Appendix iv* includes the uniform procedure adopted by the member cruise lines for the application of RCRA to cruise vessels disposing of dangerous wastes in the State of Washington and State of Washington WAC and guidance document. The State of Washington requires WAC 173-303 be followed for all Dangerous Waste Management. Ecology's website for how to document and manage your Dangerous Waste Documents is

located in *Appendix iv* and *Appendix vi*. The State of Washington encourages all parties to follow the guidance in *Appendix iv* and *Appendix vi* to select vendors and manage dangerous wastes appropriately in Washington. Member cruise lines agree to provide an annual report regarding the total dangerous waste offloaded in Washington by each cruise vessel.

- 2.2.3 The member cruise lines acknowledge that the State of Washington regulates waste more stringently than EPA and is authorized under RCRA to implement the Dangerous Waste Regulations in lieu of RCRA. The member cruise lines agree, within the waters subject to this MOU, to comply with the WAC 173-303 and guidelines for specific waste streams found in *Appendix i*, *Appendix iv*, and *Appendix vi*.
- 2.2.4 The State of Washington and member cruise lines agree that all dangerous waste records required under state law for cruise vessels entering a Washington port shall be available to the State of Washington upon written request to the cruise vessel operator.
3. The State of Washington and member cruise lines understand that the U.S. Coast Guard (USCG) has Federal jurisdiction over environmental matters in navigable waterways in the United States and conducts passenger ship examinations that include review of environmental systems, Safety Management System (SMS) documentation and such MARPOL-mandated documents as the Oil Record Book and the Garbage Record Book. Additionally, member cruise line vessels will integrate such industry standards into SMS documentation that ensure compliance through statutorily required internal and third party audits.
4. The USCG has developed guidelines relating to the inspection of waste management practices and procedures, which have been adopted by the cruise industry. The State of Washington accepts the USCG Navigation and Vessel Inspection Circular and Environmental Systems Checklist (*Appendix iii*). To reduce administrative burden on the cruise ship industry, the State of Washington agrees to first request from the USCG any records for cruise vessels entering waters subject to this MOU to the extent that those records are covered by the Memorandum of Agreement, dated May 25th, 2001, between the State of Washington Department of Ecology and the USCG. Other USCG records will be provided to the State directly by the member cruise lines upon written request.
5. The State of Washington recognizes that waste management practices are undergoing constant assessment and evaluation by cruise industry members. It is understood by the State of Washington and member cruise lines that the management of waste streams will be an on-going process, which has as its stated objectives both waste minimization and pollution prevention. Consequently, all parties agree to continue to work with each other in good faith to achieve the stated objectives. This may require additional meetings with the parties to this Agreement to discuss specific issues applicable to the cruise industry in the U.S.
6. The member cruise lines acknowledge that operating practices are required to comply with the applicable provisions of the Marine Mammal Protection Act, the Invasive Species Act and the State of Washington Ballast Water Management law, RCW Ch. 77.120. The member cruise lines agree to acknowledge and comply with appropriate rules and

regulations related to the Olympic Coast National Marine Sanctuary, including but not limited to the regulations for implementing the National Marine Sanctuary Program (subparts A through E and subpart O of Title 15, Chapter IX, Part 922 of the Code of Federal Regulations) and the International Maritime Organization (IMO) “Area To Be Avoided” off the Washington Coast.

7. This agreement does not prohibit discharges made for the purpose of securing the vessel or saving life at sea, provided that all reasonable precautions have been taken for the purpose of preventing or minimizing the discharge.
8. All parties acknowledge that ongoing discussions of environmental goals are recognized as a necessary component to the successful implementation of management practices for waste minimization and reduction.
9. Compliance, Modification and Review of MOU: member cruise lines agree to immediately self-report non-compliance with any provision of this MOU to the Department of Ecology at the following 24-hour number: 206-594-0000. By December 1st of each year, a report shall be submitted to the Department of Ecology detailing the compliance with this MOU for each vessel operated by member cruise lines that calls to a port in Washington for the previous cruise season. The reports should follow the format included in *Appendix vii*. All parties acknowledge that this MOU is not inclusive of all issues, rules or programs that may arise in the future. The State of Washington reserves the right to enter into additional MOUs to address or refine such issues, to take enforcement action in response to violations of state law, or to pursue appropriate legislation. All parties agree to at least one annual meeting to review the effectiveness of the MOU. The State of Washington and member cruise lines reserve the right to cancel this MOU upon 90 days written notice.
10. Amendments to the Memorandum of Understanding (MOU) will occur every three years starting in 2012. A request for proposed amendments will be posted on the Port of Seattle and Department of Ecology websites at the beginning of November of the year preceding the amendment adoption (e.g., in the beginning of November 2011 for 2012 adoption). All proposed amendments must be submitted within 21 calendar days of the posting.

A 45-day review period will follow for all of the MOU signatories to review and validate the proposed amendments (around mid January). This period is longer to account for the holiday period, if the timing is different, review periods may be adjusted accordingly.

Amendments that meet the criteria identified below will be then posted for a 30-day public comment period (around mid February).

At the end of the comment period, MOU signatories will review the comments and meet to decide which, if any, of the proposed amendments should be adopted.

Criteria for Proposed Amendments

All proposed amendments meeting the following criteria will be advanced for further review and comment:

- In order to be considered, proposed amendments must be submitted within three weeks of the posted request for proposed amendments.
- Proposed amendments should include only cruise ship activity within the boundaries of the MOU.
- The MOU, as amended, should not duplicate or replace existing regulations that govern cruise ships, however they may be more stringent.
- Proposed amendments must receive the sponsorship of one of the MOU signatories. *(Note: sponsorship does not necessarily mean that the signatory will support adoption of the proposed amendment.)*
- If none of the signatories support a proposed amendment, it will *not* be reviewed or considered for adoption.
- Proposed amendments must include
 - the basis for the amendment (e.g., what environmental concern it addresses)
 - how the amendment is applicable to or compatible with the MOU
 - the anticipated benefits of the amendment
 - potential impacts of the amendment
 - include scientific data that supports the proposed amendment as applicable
- In order for an amendment to be adopted, it must receive unanimous approval from the MOU signatories.

Exceptions

The only exception to this amendment process is an amendment proposed by one of the signatories and supported unanimously by the other two signatories.

11. Funding of Ecology Program

The Port of Seattle and Ecology are entering into an interagency agreement for the purpose of providing for the costs incurred by Ecology to provide oversight and implementation of the MOU as per the Statement of Work in Appendix xiii. The Port of Seattle is acting solely as a pass-through contracting entity to facilitate the collection of funds from the member lines to provide payment to Ecology on behalf of the member lines. The interagency agreement may be amended or renewed separately from the MOU at any time by the parties of the agreement without amending the MOU.

Appendix ix includes a summary of amendments.

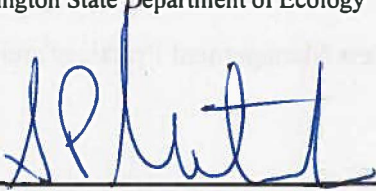
In recognition of the mutual understandings discussed herein, the parties hereto affix their signatures. This amendment shall be effective upon the date and signature of the final signing party, the Department of ecology.



Vincent McGowan, P.E.
Water Quality Program Manager
Washington State Department of Ecology

July 20, 2023

Date

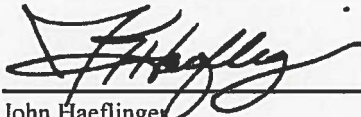


Stephen P. Metruck
Executive Director
Port of Seattle

7/25/2023

Date

Signatory Cruise Companies:



John Haeflinger
Senior Vice President of Sustainability & Maritime Policy
Carnival Corporation

28 June 2023

Date



Robert Wilkinson
Vice President Public Health and Environment
Norwegian Cruise Lines

April 4th, 2023

Date



Eidan Segev
Senior Vice President, Maritime Safety, Security & Environment
Royal Caribbean Cruise Lines

5/17/2023

Date

APPENDICES
MEMORANDUM OF UNDERSTANDING

Appendix i	CLIA Environmental Policy
Appendix ii	Navigational Chart of the waters subject to this MOU
Appendix iii	USCG Navigation & Vessel Inspection Circular and Environmental Systems Checklist
Appendix iv	WA State Dept. of Ecology Dangerous Waste Site Identification (ID) Form
Appendix v	Alaska Regulations
Appendix vi	Washington Dangerous Waste Management Best Management Practices and WA State WAC/publication
Appendix vii	Boilerplate Compliance Letter
Appendix viii	Ecology Statement of Work
Appendix ix	Bivalve Shellfish Beds
Appendix x	Summary of Amendments

Appendix i

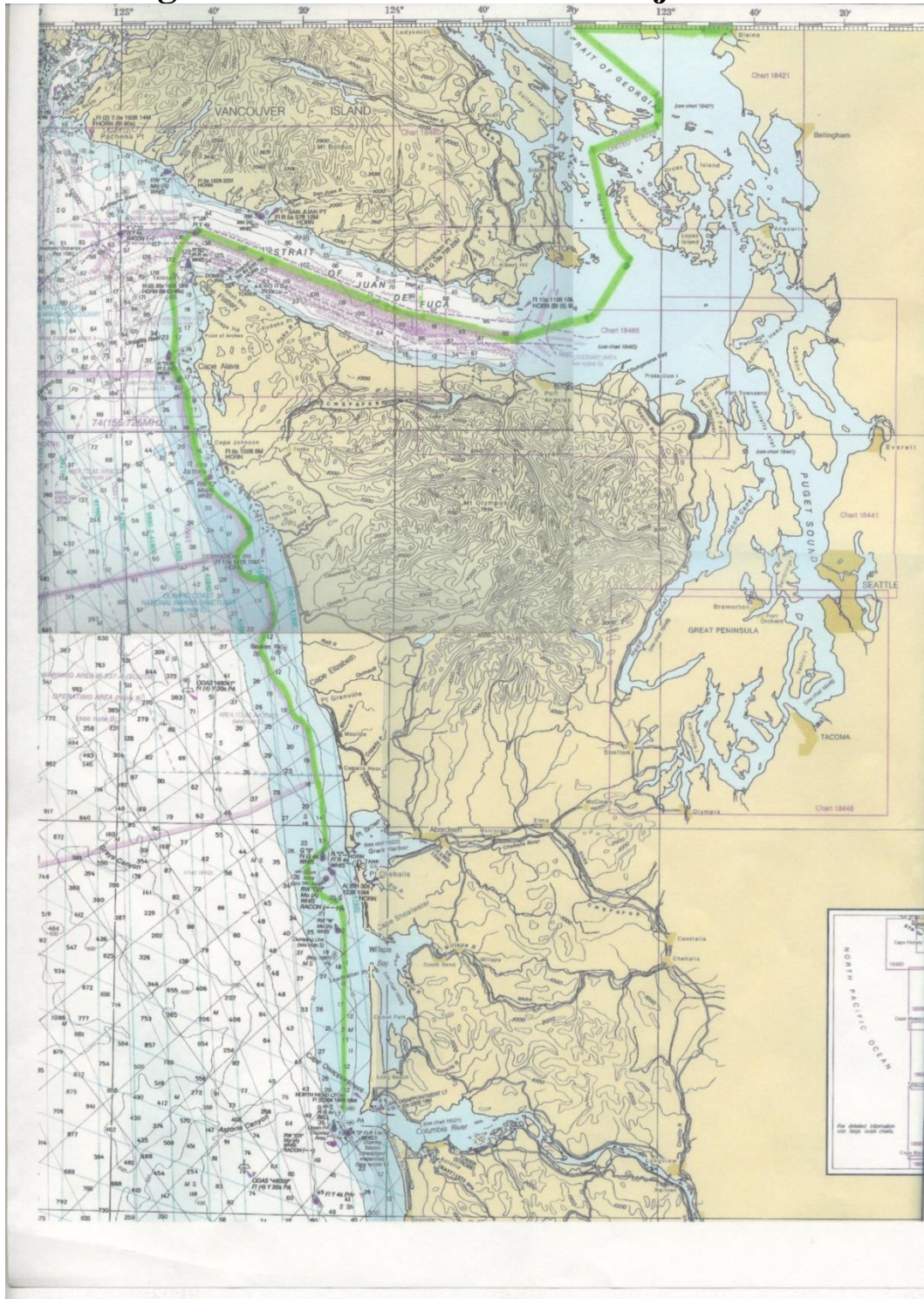
Cruise Industry Policies Environmental Protection

CLIA is the world's largest cruise industry trade association with representation in North and South America, Europe, Asia and Australasia. Dedicated to the promotion of safe and secure cruise ship environment, CLIA Members have no higher priority than the safety of guests and crew. With the advice and consent of its membership, CLIA advances policies intended to enhance shipboard safety, security, and environmental stewardship, in some cases calling for best practices in excess of existing legal requirements. Annually, the chief executive of every CLIA oceangoing Cruise Line Member specifically verifies his or her line's implementation of every CLIA policy.

Information on the CLIA Cruise Line Member's environmental policies is available from:

<https://cruising.org/en/about-the-industry/policy-priorities/cruise-industry-policies/environmental-protection>

Appendix ii: Navigational Chart of Waters Subject to this MOU



Appendix iii:

USCG Navigation & Vessel Inspection Circular and Environmental Systems Checklist

https://www.dco.uscg.mil/Portals/9/DCO%20Documents/5p/5ps/NVIC/2004/NVIC_04-04.pdf

Appendix iv

WA State Dept. of Ecology Dangerous Waste Site Identification (ID) Form

Dangerous Waste Site Identification Form now on Ecology's website via publication:

<https://apps.ecology.wa.gov/publications/documents/ecy070133.pdf>

Appendix v

Alaska Regulations

Title XIV – Certain Alaskan Cruise Ship Operations (Circa 2022)

SEC. 1404. LIMITATIONS ON DISCHARGE OF TREATED SEWAGE OR GRAYWATER.

.....

(c) Until such time as the Administrator promulgates regulations under paragraph (b) of this section, treated sewage and graywater may be discharged from vessels subject to this Title in circumstances otherwise prohibited under paragraphs (a)(1) and (a)(2) of this section, provided that—

- (1) the discharge satisfies the minimum level of effluent quality specified in 40 CFR 133.102, as in effect on the date of enactment of this Section;
- (2) the geometric mean of the samples from the discharge during any 30-day period does not exceed 20 fecal coliform/100 ml and not more than 10% of the samples exceed 40 fecal coliform/100 ml;
- (3) concentrations of total residual chlorine may not exceed 10.0 µg/l; and,
- (4) prior to any such discharge occurring, the owner, operator or master, or other person in charge of a cruise vessel, can demonstrate test results from at least five samples representative of the effluent to be discharged, taken from the vessel on different days over a 30-day period, conducted in accordance with the guidelines promulgated by the Administrator in 40 CFR Part 136, which confirm that the water quality of the effluents proposed for discharge is in compliance with paragraphs (1), (2) and (3) of this subsection. To the extent not otherwise being done by the owner, operator, master or other person in charge of a cruise vessel pursuant to section 1406, the owner, operator, master or other person in charge of a cruise vessel shall demonstrate continued compliance through periodic sampling. Such sampling and test results shall be considered environmental compliance records that must be made available for inspection pursuant to section 1406 (d) of this Title.

Title 40 CFR 133.102 Secondary treatment.

The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the parameters—BOD₅, SS and pH. All requirements for each parameter shall be achieved except as provided for in §§ 133.103 and 133.105.

(a) *BOD₅*.

- (1) The 30-day average shall not exceed 30 mg/l.
- (2) The 7-day average shall not exceed 45 mg/l.
- (3) The 30-day average percent removal shall not be less than 85 percent.

(4) At the option of the NPDES permitting authority, in lieu of the parameter BOD5 and the levels of the effluent quality specified in paragraphs (a)(1), (a)(2) and (a)(3), the parameter CBOD5 may be substituted with the following levels of the CBOD5 effluent quality provided:

- (i) The 30-day average shall not exceed 25 mg/l.
- (ii) The 7-day average shall not exceed 40 mg/l.
- (iii) The 30-day average percent removal shall not be less than 85 percent.

(b) *SS*.

- (1) The 30-day average shall not exceed 30 mg/l.
- (2) The 7-day average shall not exceed 45 mg/l.
- (3) The 30-day average percent removal shall not be less than 85 percent.

(c) *pH*. The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the publicly owned treatment works demonstrates that: (1) Inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

Appendix vi

Dangerous Waste Management and WA State WAC/publication

This Appendix is to be used as guidance for dangerous waste landed ashore in Washington. The following is a list of Resource Conservation Recovery Act (RCRA) and Washington state dangerous waste that may be found on cruise ships, and appropriate guidance for offloading from the ship.

Terms

Dangerous Waste – Includes all hazardous waste as defined by RCRA and Chapter 173-303-100 of the Washington Administrative Code (WAC), where Washington state criteria and requirements for dangerous waste are detailed.

WASTE STREAMS

Antifreeze- Conditionally excluded as a hazardous waste if recycled. (WAC 173-303-522)

Aqueous Degreasing - If the resulting waste is dangerous it can be treated to remove the hazard and the resulting effluent can be sent to the AWTS or Oily Water Separator. If no treatment is performed it can be landed ashore for proper disposal.

Batteries & Mercury Containing Thermostats - These are universal waste if sent for recycling. (Ecology Publication Number 98-407, Universal Waste Rule for Batteries and Mercury Containing Thermostats)

Spent Lead Acid Batteries - Spent lead-acid batteries are conditionally excluded if recycled. (WAC 173-303-520)

Cathode Ray Tubes (CRTs) - Excluded if recycled, otherwise are to be managed as a dangerous waste. (Ecology Publication Number 02-04-017, Interim Enforcement Policy Conditional Exclusion for Cathode Ray Tubes* and Related Electronic Wastes)

Dry Cleaner – Perchloroethylene (PERC), Isoparaffinic Hydrocarbons, and other chlorinated dry cleaning fluids, contaminated sludge and filter materials are dangerous waste and must be landed ashore in accordance with Dangerous Waste WAC 173-303 requirements.

Florescent Tubes - Handling procedures for universal waste lamps do not allow for the deliberate crushing of lamps and bulbs. When the handler decides to crush, the universal waste rules no longer apply, and the crushed bulbs and filter material from bulb crushing should be managed as Dangerous Waste. For intact bulbs and lamps - (WAC 173-303-573 and Ecology Focus Sheet, Publication # 00-04-020, Guide to Universal Waste).

<https://apps.ecology.wa.gov/publications/documents/2104017.pdf>

HVAC - CFC's or HCFC's are excluded as a dangerous waste if recycled. (WAC 173-303-506)

Filters from HVAC units that use Halogenated Organic Compounds (HOC's) as fire retardants may designate under state criteria as dangerous waste and then must be managed as such.

Mercury Switches – May be managed as a Universal Waste as Mercury-containing equipment.

Painting - Discarded Paints & Cleanup Solvents. All spent paints and solvents must be properly designated and if dangerous waste, managed as such.

PCB's - Regulated as a state dangerous waste if they come from transformers, capacitors and bushings if PCB's are above 2ppm. If PCB's are above 50 ppm they must also be managed as a TSCA waste. (WAC 173-303-9940)

Pharmaceuticals - Drugs that designate as dangerous waste, but that are not controlled substances, must be sent ashore as dangerous waste, and not to the blackwater systems. Contact the US Drug Enforcement Agency (DEA) about suitable destruction methods for any controlled substances, and then manage the residue from destruction as a dangerous waste (disposal to water, regular garbage or incineration in an unpermitted facility would be illegal). If the drug is not a dangerous waste, Washington state recommends regardless whether it is a controlled substance or not, it be) sent ashore for incineration at a facility permitted to incinerate municipal solid waste Non RCRA drugs are also prohibited from being discharged to water.

Photo Waste - Silver can be removed from fixer and the resulting effluent would be allowed to go to an advanced wastewater treatment system (AWTS), but not to graywater or to a Type 2 MSD. If the fluids can not go to the AWTS, they must be landed ashore in accordance with Dangerous Waste regulations. (Ecology Publication 94-138R, A Guide For Photo Processors)

Printer Wastes - Inks, solvents and rags, used for cleaning, will need to be properly designated, and if dangerous waste, managed as such.

Spray Cans – Cans that are not empty must be properly designated, and if dangerous waste, managed as such. Puncture unit waste and filters must be managed according to the dangerous waste regulations.

Solvent Degreasing - Solvents, when used, must be properly designated, and if dangerous waste, managed as such.

WA State Dept of Ecology follows WAC 173-303. Below link to WAC 173-303 and Ecology's How to Manage Your Waste publication.

WAC 173-303:

<https://apps.leg.wa.gov/WAC/default.aspx?cite=173-303>

Ecology's How to Manage Your Waste:

<https://ecology.wa.gov/Waste-Toxics/Business-waste/Manage-your-waste>

Appendix vii

Regional Director
Washington State Department of Ecology
Northwest Regional Office
PO Box 330316
Shoreline, WA 98133-9716

Dear Director:

Re: Washington Cruise MOU Compliance Report: XXXX (enter year) Cruise Season

Section 9 of the Memorandum of Understanding for Cruise Operations in Washington state (signed XXX (enter signature date)), requires an annual submittal detailing the compliance with the MOU for the each vessel within the member cruise lines that calls to a port in Washington for the previous cruise season. Please accept this letter on behalf of XXX (name your cruise line) for the XXXX (enter year) cruise season.

The following ships operated Washington waters during XXXX (enter year):

- Name the ship or ships; list the port of call and the dates.

XXX's operations in Washington state addressed the following key provisions of the MOU as follows:

Section 2.1 Wastewater Management. XXX managed its wastewater in compliance with this section as follows:

[Choose one or more options as appropriate]

- In compliance with Section 2.1.1 and 2.1.2, XXX held all treated and untreated gray and black water while in Washington waters and did not discharge solid waste or oily bilge water if not in compliance with applicable federal and state laws while in Washington waters. List the ships that held their effluent and describe the type of treatment system each ship in this category has. Based on a thorough review of ships' logs and records we certify that our ship(s) complied with these provisions of the MOU. XXX will make these records available to Ecology upon request.
- In compliance with Section 2.1.3 (A), XXX submitted the information required to allow discharge of treated wastewater one mile from berth to Ecology on XX date for the following ship(s): ----- . Describe the type of treatment system each ship in this category has. Approval of the information was received from Ecology on XX date.
- In compliance with Section 2.1.3 (B), XXX submitted information supporting its request to discharge treated wastewater continuously to Ecology on XX date for the following ship(s) --

---. Describe the type of treatment system each ship in this category has. Approval to discharge while at berth was received from Ecology on XX date.

Section 2.1.3 (C)(1-3) Shellfish and “upset” conditions. Based on a review of XXX ship’s logs and records, XXX certifies that we complied with the prohibition on discharging within 0.5 nautical miles of bivalve shellfish beds that are recreationally harvested or commercially approved to harvest as identified annually by the Department of Ecology and that any “upset” conditions were stopped and immediately reported to the Washington State Department of Health.

Section 2.1.3 (C)(4-10) Other discharge approval requirements. Based on a review of XXX ship’s logs and records and other knowledge, XXX certifies that the requirements in this section were met.

Section 2.1.4 Discharge of Residual Solids. Based on a review of XXX ships’ logs and records, XXX certifies that we complied with the prohibition on discharging residual solids coming from any type of treatment system within 12 nautical miles from shore and within the Olympic Coast National Marine Sanctuary. XXX will make these records available to Ecology upon request.

Section 2.1.5 Discharge of Exhaust Gas Cleaning System effluent. Based on a review of XXX ship’s logs and records, XXX certifies that we complied with the requirement for open loop scrubbers to use solid separation (if equipped) and residues generated by the exhaust gas cleaning unit were delivered ashore to adequate reception facilities, in accordance with IMO guidelines and WA State Regulations and were not discharged into the waters of the MOU.

Section 2.2.1 through 2.2.4 Dangerous Waste Management. Based on a review of XXX ship’s logs and records, XXX certifies that Dangerous Wastes were managed in accordance with these sections of the MOU. XXX will make these records available to Ecology upon request. Add a description of how dangerous waste is managed while in Washington.

Section 6. Marine Mammal Protection Act, Invasive Species Act, and the Washington Ballast Water Management Act. Based on a review of XXX ship’s logs and records, XXX certifies that the provisions of the above laws were implemented as required by these laws. XXX will make these records available to Ecology upon request. Add a description of how compliance with these laws was achieved.

Section 9. Immediate self-reporting to Ecology of any incidences of non-compliance with any provisions of the MOU. Describe any incidences of non-compliance and when they were reported to Ecology and any corrective actions taken.

I hereby certify that the above information is true and can be verified through documentation. If you have any questions or concerns, please call me at XXX-XXX-XXXX.

Sincerely,

Name
Position/Title

Company

Appendix viii

Statement of Work

Ecology is charged with protecting and conserving Washington's environmental resources in relation to the cruise industry's environmental practices in Washington. Ecology shall furnish the necessary personnel, equipment, material and/or service(s) and otherwise do all things necessary for or incidental to the performance of the work to implement the MOU. This work includes:

Task 01

Compliance Work:

Work with stakeholders on drafting necessary amendments to cruise MOU. Provide technical assistance for cruise lines and vessel staff. Field questions from the public, press, environmental groups, and cruise lines. Monitor compliance with the MOU. Work with other programs within Ecology on dangerous waste, biosolids, solid waste, spill prevention, and other MOU elements. Work with Ecology policy and fiscal staff on cruise related issues. Research issues related to vessel discharges. Work with Department of Health Shellfish program on shellfish and virus related studies and issues. Manage and update Ecology's cruise ship website.

Task 02

Inspections:

Conduct annual inspections of cruise vessels to verify the operation of the treatment systems and to evaluate compliance with the MOU. Write up inspection reports and provide recommendations for improvement. Take samples from vessels and evaluate results.

Task 03

Wastewater Discharge Approvals:

Verify documentation submitted for approval of discharges. Evaluate documentation and treatment systems for requirements of MOU to discharge and based on the information submitted and an engineering review, provide approval for discharges as appropriate.

Task 04

Annual Reports and Annual Meeting:

Draft annual assessment of cruise ship environmental effects report as necessary. Evaluate monthly sampling data results and summarize annually as necessary. Lead an annual meeting to review the effectiveness of the MOU.

Task 05

Project Management:

Oversee the cruise ship MOU program and assist as needed. Provides Administrative oversight for compliance with the MOU, represents senior program management in duties related to protection of water quality from cruise ship discharges including negotiations.

Task 06

Additional tasks may become part of this agreement by mutual concurrence of Ecology and member cruise lines, or upon extension of the agreement.

Appendix ix

Bivalve Shellfish Beds

Cruise ships that discharge treated sewage into Puget Sound under this MOU employ advanced systems that treat sewage to a very high degree using a combination of filtration, biological treatment, ultra-filtration, and disinfection. These systems are called Advanced Wastewater Treatment Systems (AWTS). The ultra-filtration process effectively removes nearly all bacteria from the treated sewage. However, viruses which tend to be smaller organisms may pass through the ultra-filtration membranes but are typically destroyed by the disinfection unit.

The Centers for Disease Control & Prevention reviews and reports norovirus outbreaks on cruise ships in the Pacific Northwest. Cruise ships discharge into shallow waters along the shipping lanes, near some commercial shellfish beds. Today, national standards provide little guidance on setting shellfish closure zones based on viral risk and there is no reliable viral indicator standard in part due to difficulties in sampling and testing for norovirus.

Because shellfish in Puget Sound and Admiralty Inlet are valuable resources for Washington State, the Washington State Legislature commissioned the Washington State Department of Health (DOH) Office of Shellfish and Water Protection (OSWP) to study the potential risk to shellfish beds from virus contamination associated with cruise ship waste water discharges. DOH contracted with the University of Washington School of Public Health and Community Medicine to perform a risk assessment, which was completed in November 2007. The study used a quantitative microbial risk assessment method coupled with water quality modeling in Puget Sound. Some key findings of the study include:

- When advanced wastewater treatment systems (AWTS) are functioning well, there is low concern for viral illness. Adequate disinfection is the key to effective norovirus inactivation.*
- Loss of disinfection could lead to potentially unacceptable virus levels in water over shellfish beds, even with the large dilution provided by ships under sail. However, using minimum dilution factors for when ships are moving at least 6 knots along the current route, dilution is estimated at 1,500,000:1 between the ship and the shore.*
- The UW study did not gather samples of norovirus concentrations in treated sewage from cruise ships or in the salt water over shellfish beds. Norovirus remains non-culturable, so there is very limited environmental data that is “norovirus specific.” In response, UW researchers used data for norovirus “surrogates” from other studies in their analysis.*
- Consumption data from Tribes that use shellfish beds closest to the path of cruise ships was used in the risk analysis. These rates are higher than for the general population. Raw oyster consumption rates were used as a conservative assumption for these areas.*

The study included many conservative assumptions, but nonetheless concluded that well functioning AWTSs would not lead to norovirus accumulation in shellfish beds such that the median annual risk of potential illness to shellfish consumers from cruise ship discharges in Puget Sound is less than 10,000,000:1. This compares quite favorably with the calculated annual risk of norovirus illness from consumption of raw oysters in the general population, which the UW researchers calculated as about 1,000:1.

As described above, the potential risk of viral contamination of shellfish beds from cruise ship is extremely low when AWTs systems are functioning well. Additionally the geography of Puget Sound and the configuration of shipping lanes provide most shellfish beds some protection from potential contamination from passing ships. However, the signatories to the MOU understand the importance of shellfish resources to Washington State and have agreed to take the actions outlined on page ___ of the MOU to protect shellfish beds and human health while operating in Washington MOU waters.

Appendix ix continued Bivalve Shellfish Beds Last verified 2021

2021 Cruise Season Boundary Points

Id	Tract Name	LATITUDE	LONGITUDE
1	Apple Tree Cove	47.81274089040	-122.48047265700
2	Apple Tree Cove	47.81255672180	-122.47941651600
3	Apple Tree Cove	47.81197112760	-122.47872458000
4	Apple Tree Cove	47.81129443870	-122.47812835500
5	Apple Tree Cove	47.81056937740	-122.47758747000
6	Apple Tree Cove	47.80992145700	-122.47684781100
7	Apple Tree Cove	47.80931916930	-122.47604614700
8	Apple Tree Cove	47.80895286530	-122.47498673900
9	Apple Tree Cove	47.80852971000	-122.47419683400
10	Apple Tree Cove	47.80812779070	-122.47315426700
11	Apple Tree Cove	47.80748647770	-122.47257436300
12	Apple Tree Cove	47.80668065230	-122.47239303200
13	Apple Tree Cove	47.80586169470	-122.47237830900
14	Apple Tree Cove	47.80507505630	-122.47246917900
15	Apple Tree Cove	47.80443177020	-122.47321819700
16	Apple Tree Cove	47.80389497510	-122.47389983000
17	Apple Tree Cove	47.80348525790	-122.47492954200
18	Apple Tree Cove	47.80310261180	-122.47598949400
19	Apple Tree Cove	47.80237402570	-122.47638256900
20	Apple Tree Cove	47.80219450150	-122.47688158400

Id	Tract Name	LATITUDE	LONGITUDE
21	President Point	47.76301811440	-122.46531995900
22	President Point	47.76227795780	-122.46478860500
23	President Point	47.76153965240	-122.46425163200
24	President Point	47.76079984240	-122.46372318400
25	President Point	47.76012732540	-122.46302154800
26	President Point	47.75945808780	-122.46231363200
27	President Point	47.75877611500	-122.46163224400
28	President Point	47.75821701680	-122.46249970800
29	President Point	47.75769964180	-122.46344179800
30	President Point	47.75709757920	-122.46424411400
31	President Point	47.75642784290	-122.46495166300
32	President Point	47.75568013190	-122.46545052600
33	President Point	47.75491428200	-122.46589325600
34	President Point	47.75413762450	-122.46629389900
35	President Point	47.75340374390	-122.46683607100
36	President Point	47.75266140050	-122.46720422800
37	President Point	47.75189295980	-122.46684018600
38	President Point	47.75123556490	-122.46610769300
39	President Point	47.75058390610	-122.46579489800
40	President Point	47.74994707310	-122.46656628000
41	President Point	47.74921684450	-122.46711888700
42	President Point	47.74848682750	-122.46768011900
43	President Point	47.74775279740	-122.46822961800
44	President Point	47.74701858040	-122.46877863300
45	President Point	47.74627675290	-122.46930377000
46	President Point	47.74561278720	-122.46984543000

2021 Cruise Season Boundary Points continued

Id	Tract Name	LATITUDE	LONGITUDE
47	Tyee Shoal	47.61916098460	-122.48420272400
48	Tyee Shoal	47.61865190330	-122.48324910700
49	Tyee Shoal	47.61814655430	-122.48229042500
50	Tyee Shoal	47.61761807860	-122.48135871800
51	Tyee Shoal	47.617118007830	-122.48033341700
52	Tyee Shoal	47.61670845870	-122.47935532600
53	Tyee Shoal	47.61609072620	-122.47855854300
54	Tyee Shoal	47.61543441750	-122.47782569300
55	Tyee Shoal	47.61469777070	-122.47729421200
56	Tyee Shoal	47.61394668260	-122.47679893700
57	Tyee Shoal	47.61317098590	-122.47657100600
58	Tyee Shoal	47.61237442300	-122.47686659800
59	Tyee Shoal	47.61162109430	-122.47735159900
60	Tyee Shoal	47.61083929010	-122.47772883400
61	Tyee Shoal	47.61005751060	-122.47810617700
62	Tyee Shoal	47.60927581650	-122.47848390200
63	Tyee Shoal	47.60847990770	-122.47877353100
64	Tyee Shoal	47.60766507680	-122.47893589300
65	Tyee Shoal	47.60687831460	-122.47927979300
66	Tyee Shoal	47.60609769090	-122.47964967100
67	Tyee Shoal	47.60531536900	-122.48000498600
68	Tyee Shoal	47.60457213290	-122.48052049900
69	Tyee Shoal	47.60398226870	-122.48118881300
70	Tyee Shoal	47.60407102430	-122.48180079600

71	Middle Point	48.15109017620	-122.82296755300
72	Middle Point	48.15156870030	-122.82260588400
73	Middle Point	48.15125511720	-122.82167106000

DATUM =
HARN 83

Apple Tree Cove and President Point Geoduck Tracts / Large Vessel Traffic Lane Intersection

- BoundaryPoint
- Geoduck Tract
- Large Vehicle Traffic Lane
.5 mile buffer

Boundary points are drawn every 100 yards where geoduck tracts intersect a .5 mile buffer of the Large Vehicle Traffic Lane.

See spreadsheet for coordinates.



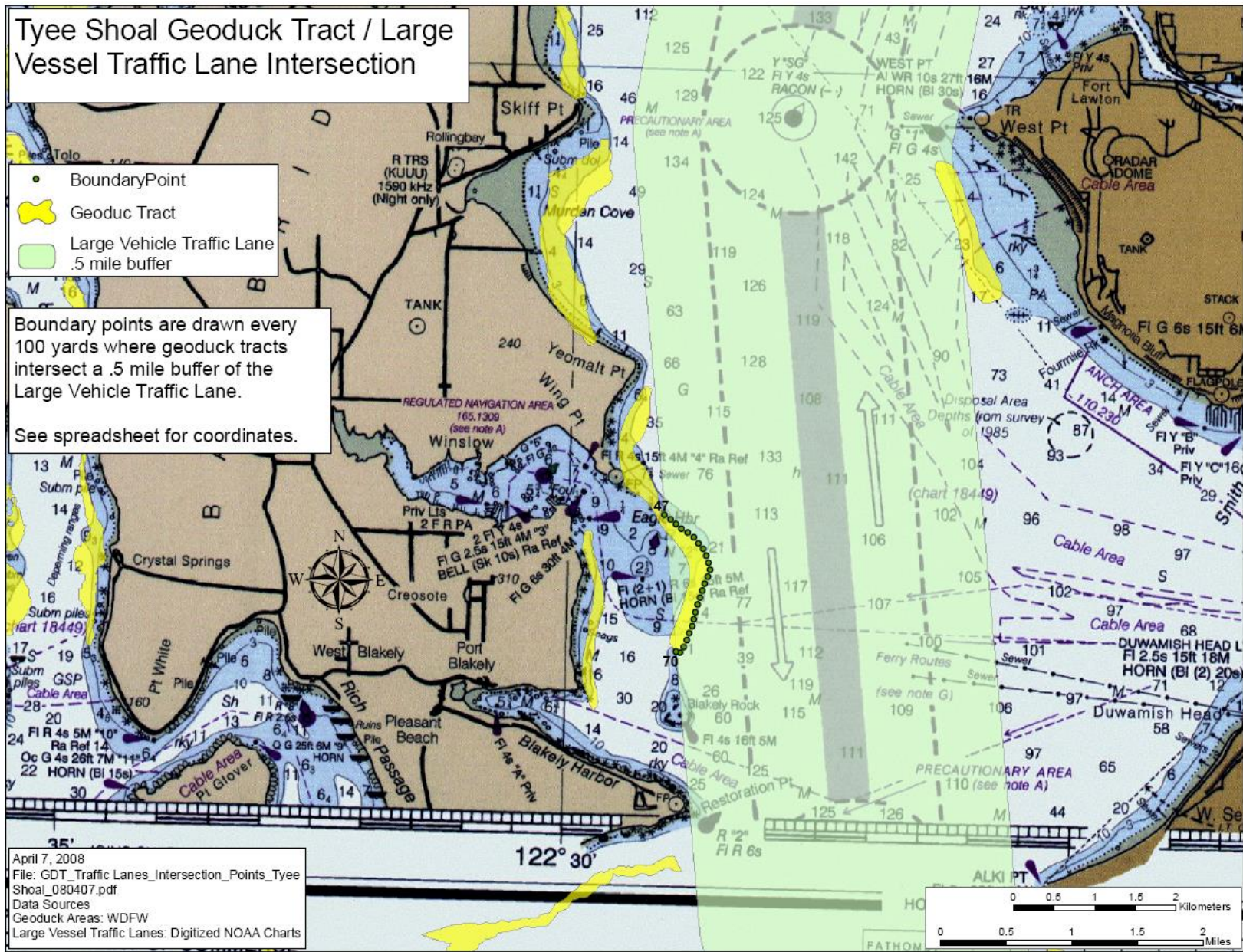
April 7, 2008
 File: GDT_Traffic
 Lanes_Intersection_Points_Apple Cove and
 President Point_080407.pdf
 Data Sources
 Geoduck Areas: WDFW
 Large Vessel Traffic Lanes: Digitized NOAA Charts

Tyee Shoal Geoduck Tract / Large Vessel Traffic Lane Intersection

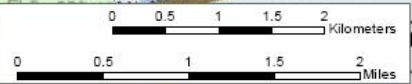
- Boundary Point
- Geoduck Tract
- Large Vehicle Traffic Lane .5 mile buffer

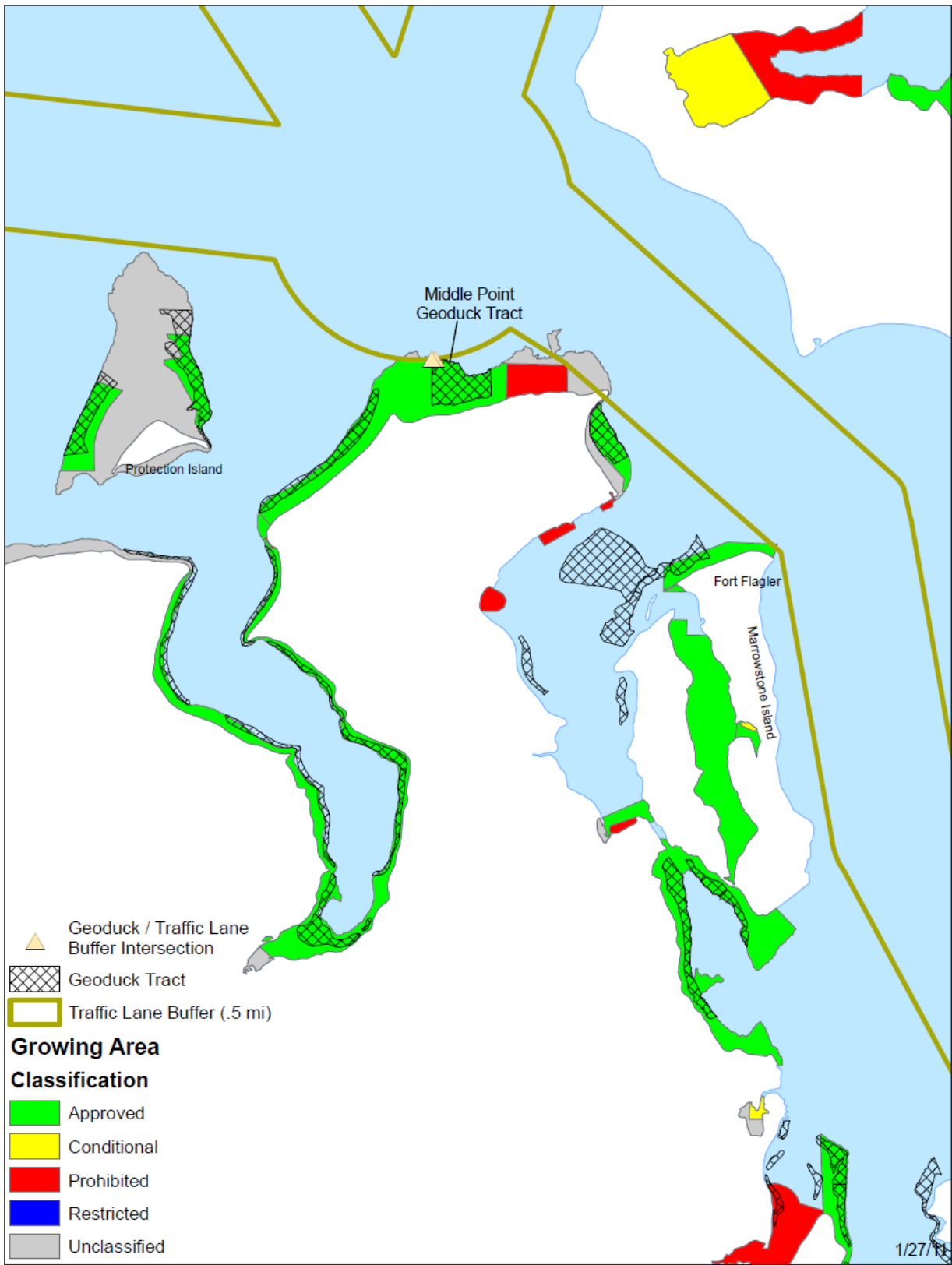
Boundary points are drawn every 100 yards where geoduck tracts intersect a .5 mile buffer of the Large Vehicle Traffic Lane.

See spreadsheet for coordinates.



April 7, 2008
 File: GDT_Traffic Lanes_Intersection_Points_Tyee Shoal_080407.pdf
 Data Sources
 Geoduck Areas: WDFW
 Large Vessel Traffic Lanes: Digitized NOAA Charts





Appendix x
MEMORANDUM OF UNDERSTANDING
CRUISE OPERATIONS IN
WASHINGTON STATE
SUMMARY OF AMENDMENTS

AMENDMENT NO. 1

Signed July 8, 2005

1. Changing references to the Seattle being the only port berthed to all ports in Washington.
 - While the ships typically call only to Seattle, there is potential for port calls to other ports.
2. Adding a requirement for all vessels within the NWCCA to submit an annual report of compliance with MOU.
 - This requirement is being added due to the need to know if ships complied with the MOU whether or not they go through the process of authorization to discharge. For ships that choose to hold their discharge while in Washington waters, it is important to know if they complied.
3. Adding regulation language referenced in Appendix v to show all effluent limits required for discharge.
 - Ships that discharge must meet the higher standards as set in Alaska which is referenced in the MOU and in appendix v.

AMENDMENT NO. 2

Signed April 28, 2006

1. Adding a requirement to prohibit the discharge of oily bilge water and a definition was also added. The purpose of this addition is to include specific prohibition language on all major sources of potential pollutants from the vessels.
2. Adding a definition for residual solids. Residual Solids has gone undefined although we have had the requirement to prohibit the discharges. This has been added to clarify exactly what types of residual solids are being managed per this MOU.
3. Adding specific language about what limits must be met for monitoring results. The purpose of this addition is to make it clear to the cruise lines and to the public what limits need to be met.
4. Changing the requirement on WET testing from once per 2 years to once per 40 port calls or turnarounds for vessels that are not homeported due to the fact that vessels come and go from this route from year to year.
5. Other minor changes for organization of the document.

Appendix x

continued

AMENDMENT NO. 3

Signed May 25, 2007

1. Changing all references and the appendix from the International Council of Cruise Lines (ICCL) to the Cruise Line International Association (CLIA) as the association changed.
2. Adding language about the interagency agreement for cost recovery and referencing the appendix.
3. Changing where residual solids (sludge) can be discharged to disallow any residual solids discharges in the entire Olympic Coast National Marine Sanctuary.
4. Clarifying the language to allow for inspections of all vessels, whether approved for discharge or not for compliance with the MOU. The language currently only allows for inspections of vessels discharging.
5. Clarifying the language to say that all vessels approved for discharge, not just those actually discharging agree to the sampling requirements set out in the MOU. The current language has been confusing for some vessels approved for discharge, but mostly holding discharges anyways.

AMENDMENT NO. 4

1. Incorporating recommendations from the Washington State Department of Health virus report:
 - a) Not allow discharges within a half mile of shellfish beds. Include an appendix identifying the areas where bivalve shellfish beds that are recreationally harvested or commercially approved within half a mile of the shipping lanes and update annually. And include an appendix with background information on the virus related elements.
 - b) Define a “disinfection system upset” condition as a disinfection below levels of four log (99.99%) inactivation of norovirus.
 - c) Require immediate shutdown capability from an upset condition of disinfection below levels of four log (99.99%) inactivation of norovirus for all vessels that have submitted documentation to discharge.
 - d) Require immediate notification to the Department of Health for an upset condition.
2. Require whole effluent toxicity testing for only those vessels that have submitted documentation for continuous discharge.
3. Other minor changes for organization of the document.

AMENDMENT NO. 5

1. Including a process for amending the MOU including a public review process. Proposed amendments will be accepted for the 2012 cruise season and then every three years thereafter.
2. Updating the name of the cruise association. In 2010, the NorthWest CruiseShip Association changed its name to the North West & Canada Cruise Association (NWCCA).
3. Including an additional shellfish area to Appendix ix.

AMENDMENT NO. 6

1. Updating the name of the cruise association. The North West & Canada Cruise Ship Association changed its name to Cruise Lines International Association – North West & Canada (CLIA-NWC).
2. Amending Section 11 and appendix viii on funding to include new language for a restructured funding mechanism and terms.
3. Updating appendix i “List of CLIA-NWC Member Lines” to include Compagnie du Ponant.
4. Updating Appendix i, “Cruise Industries Policies - Environmental Protection”.
5. Other minor changes for organization of the document.

AMENDMENT NO. 7

1. Addition of section 2.1.5 to address Exhaust Gas Cleaning System Discharges and addition in definitions section for Exhaust Gas Cleaning System.
2. Updating Wastewater Management section to not contradict the Puget Sound No Discharge Zone regulations.
3. Updating Hazardous Waste Management section to be consistent with current WA state Dangerous Waste regulations.
4. Updating Appendix iv to remove EPA memo and update WA State Dangerous Waste Identification Form.
5. Other minor changes for organization and clarification of the document.
6. Updating the name for the cruise association. Cruise Lines International Association – North West & Canada changed its name to Cruise Lines International Association.
7. Updated agreement now between Signatory Cruise Companies and removal of Cruise Lines International.