



State of Washington Department of Ecology
Cruise Ship Memorandum of Understanding, Cruise Operations in Washington State Inspection Report

Northwest Regional Office

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Inspection Date August 27, 2012	Permit Number NA	County King	Receiving Waters Marine Waters	Ecology Inspector Amy Jankowiak
Entry Time 9:07 am	Photos Taken <input type="checkbox"/> Yes <input type="checkbox"/> No	Samples Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Inspection Announced <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Discharges to: <input checked="" type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Dewater <input type="checkbox"/> POTW
Exit Time 11:09 am	Name and Location of Site Inspected: DISNEY WONDER, Disney Cruise Line Pier 91 Seattle, Washington			Additional Participants/Inspectors: Stjepo Milicic, <u>Staff Captain:</u> DCL.WDR.STCAPT.00005@disney.com
On-Site Representative(s): <i>Name/Title/Phone/e-mail</i> Ioannis Kollarois, Environmental Officer DCL.WDR.ENVOFF.00015@disney.com			Cheryl Thompson, Ecology	
Responsible Official(s): <i>Name/Title/Address/Phone/e-mail</i> Timothy Burns, Environmental Manager Disney Cruise Line 200 Celebration Place, Hollywood, FL 34747 407-566-7529; timothy.s.burns@disney.com			Other Facility Data: Notification made to Timothy Burns August 18, 2012	

Section A: Areas Evaluated

<input checked="" type="checkbox"/> Black/Gray Wastewater System	<input checked="" type="checkbox"/> Residual Solids	<input checked="" type="checkbox"/> Records/Reports	<input checked="" type="checkbox"/> Hazardous Waste/ Solid Waste	<input checked="" type="checkbox"/> Sampling/Monitoring
<input checked="" type="checkbox"/> Discharge Locations	<input checked="" type="checkbox"/> Operation & Maintenance	<input checked="" type="checkbox"/> Sludge Handling/ Disposal	<input checked="" type="checkbox"/> Oily Bilge Water	<input checked="" type="checkbox"/> Other

Section B: For Vessels Discharging ≥ 1nm from Berth and ≥ 6 Knots Only [2.1.3(A)]

<input type="checkbox"/> Schematics Match Black/Gray Wastewater System	
<input type="checkbox"/> Operations as Described in Submitted Documentation	
<input type="checkbox"/> Daily 24-hour Continuous Monitoring for Turbidity or Equivalent Monitoring	
<input type="checkbox"/> Turbidimeter or Equivalent Monitoring Equipment Functioning Properly	
<input type="checkbox"/> Auto Shut Down or Operational Controls to Insure System Shut Down if High Turbidity Occurs	
<u>Turbidity or Equivalent:</u> Last Calibration: Trigger Level for Early Alarm: Trigger Level for Shutdown: Recorded Turbidity/Equivalent Levels Above Triggers:	
<input type="checkbox"/> Daily 24-hour Continuous Monitoring for Disinfection Effectiveness	
<input type="checkbox"/> Disinfection Effectiveness Monitoring Equipment Functioning Properly	
<u>Disinfection Effectiveness Monitoring:</u>	
<input type="checkbox"/> Auto Shut Down or Operational Controls to Insure System Shut Down if Disinfection System Upset Occurs	
<input type="checkbox"/> Disinfection System Operated and Maintained Properly	
<u>Disinfection System:</u>	

NOT APPLICABLE

	logs were reviewed and appear to be consistent with MOU requirements.
<input checked="" type="checkbox"/> WA Hazardous Waste Guidelines Followed (Appendix vii)	Hazardous waste is typically offloaded in Victoria every two weeks. Only one hazardous offload this season was done in Seattle. Hazardous waste logs were reviewed and appear to be consistent with MOU requirements.
<input checked="" type="checkbox"/> Solid Waste Managed Properly (zero garbage discharge)	Solid waste is managed properly. The various solid waste streams are collected, sorted, stored, and sent ashore or incinerated as appropriate. The garbage record book was reviewed and showed consistency with requirements. Glass is recycled and not discharged.
<input checked="" type="checkbox"/> Photo/X-Ray Waste Managed Properly (fluids, cartridges,...) and landed ashore	Waste from the photo processing goes through a silver recovery system prior to offload with hazardous waste materials. X-rays are done digitally without waste.
<input checked="" type="checkbox"/> Dry-Cleaning Wastes and Byproducts (fluids, sludge, filter materials...) Managed Properly (PERC – haz waste – landed ashore)	Dry cleaning uses PERC which is off-loaded with hazardous waste. Laundry water is collected as gray water and sent to the Hamworthy AWTS.
<input checked="" type="checkbox"/> Unused/Outdated Pharmaceuticals Managed Properly (safely disposed of)	Unused or outdated pharmaceuticals are either incinerated or off-loaded back to the manufacturer when feasible. Narcotics are incinerated with witness.
<input checked="" type="checkbox"/> Fluorescent and Mercury Vapor Lamp Bulbs Managed Properly (prevent release of mercury)	Fluorescent lamps go through a bulb crusher and offloaded. Mercury filters are offloaded as hazardous waste.
<input checked="" type="checkbox"/> Waste Reduction/Reuse/Recycling Opportunities Maximized (glass, cardboard, aluminum & steel cans)	Glass, aluminum, scrap metal, some plastics, some paper and cardboard, used cooking oil and other materials are recycled. Reduction and reuse opportunities are broadly used to prevent the amount of waste.
<input checked="" type="checkbox"/> Batteries Managed Properly (recycled, reclaimed, disposed of properly)	Batteries are collected, sorted and binned to be offloaded in Victoria, Canada for recycling or disposal as appropriate.
<input checked="" type="checkbox"/> Incinerator Ash Managed Properly and minimized volume (haz waste segregation and annual testing)	Incinerator ash is offloaded in Victoria and tested every six months to ensure non-hazardous status. Recent results have passed for non-metals. Incinerators are used outside of 4nm from land.
<input checked="" type="checkbox"/> Oily Bilge Water Managed Properly (<15 ppm, no visible sheen and underway)	Oily bilge water is treated with two FACET oily water separators, the first one to less than 50 ppm and the second to less than 15 ppm) and discharged at less than 15 ppm outside of MOU related waters. Typical effluent values are between 2 and 4 ppm.
<input checked="" type="checkbox"/> Ballast Water Managed Properly (per Wash regs –reporting, treated or if open sea exchange >200 nm from outside EEZ, 50nm if not EEZ)	Ballast exchanges do not occur on this route.
<input checked="" type="checkbox"/> OCNMS rules and regs followed	No discharges occur in OCNMS waters per protocol and records reviewed showed consistency.
Additional General Questions	
<input checked="" type="checkbox"/> How is deck runoff and hull cleaning handled (scuppers...) (non-toxic/phosphate free cleaners, biodegradable)	Hull cleaning is occasionally done with divers. Fresh water only is used for washing the outside of the hull and windows.
<input checked="" type="checkbox"/> How is maintenance performed on the outside of the vessel (paint chipping, painting, etc)	Paint chipping and painting is done in port. The Staff Captain provided a copy of the form used prior to painting which includes some guidelines such as not working in winds over 18 knots or bad weather and having approval from port authorities if applicable and includes safety procedures. See details below on painting during inspection.
<input checked="" type="checkbox"/> Sculleries and Galleys – type of detergents and degreasers used (phosphate free and non-toxic)?	Galleys use Ecolab phosphate free and non-toxic detergents and degreasers.
<input checked="" type="checkbox"/> How are food waste discharges handled (prevention of erroneous materials)?	Food waste is collected in various locations, is sorted and then sent through a pulper. Pulped food waste and galley water is discharged outside of MOU related waters. Records reviewed were consistent with this protocol. There is a dumping chute for larger food waste items that cannot go in the filters such as pineapple heads. A bone crusher is also used.
<input checked="" type="checkbox"/> Medical sinks/floor drains, chem. stor areas wastes go where (plugged, blackwater, bilge)?	Medical floor drains go to the blackwater tanks and then to the Hamworthy AWTS. Biohazardous wastes are collected and incinerated. Sharps are off-loaded with hazardous waste.
<input checked="" type="checkbox"/> Where is pool and spa water discharged? Dechlorinated/debrominated and underway?	The Environmental Officer reported that pool and spa water is discharged underway after being dechlorinated with sodium thiosulfite. Although the

	matrix states that no pool or spa water discharges are to occur in Washington state waters.
<input checked="" type="checkbox"/> What type of fuel is used and percent sulfur content?	Shore power is used while in Seattle and less than 1% sulfur content fuel is used throughout the route.

Other:

Section F: Sampling Results

Parameter	Results
Brochemical Oxygen Demand 5-Day (BOD ₅)	NOT APPLICABLE
Total Suspended Solids (TSS)	
Fecal Coliform	
Residual Chlorine	
pH	
Ammonia, Nitrogen	

Section G: Summary of Findings/Comments

Introduction

Amy Jankowiak, Washington State Department of Ecology (Ecology) Northwest Regional Office, Water Quality Program (NWRO-WQ) conducted the inspection of the Disney Cruise Line (Disney) DISNEY WONDER on August 27, 2012. Cheryl Thompson, Ecology NWRO-WQ also participated in the inspection. The main contact on board the DISNEY WONDER was Ioannis Kollaris, Environmental Officer for the DISNEY WONDER. Prior notification of the visit was given on August 8, 2012 for security protocol. The purpose of the inspection was to evaluate compliance with the *Memorandum of Understanding Cruise Operations in Washington State* (MOU), as amended. The DISNEY WONDER is not approved to discharge wastewater in MOU waters.

The DISNEY WONDER launched in 1999, is 964 feet long with 11 decks and about a 25.3-foot draft. The passenger capacity is about 2834 and the crew capacity is about 920.

The DISNEY WONDER is scheduled for 15 port calls in Seattle and conducts one week cruises to Alaska turning around on Mondays between May 28, 2012 and September 3, 2012.

Inspection

We arrived and boarded the ship (photo #01) at about 9:07 am and began with introductions and a plan for the day with Ioannis Kollaris, the Environmental Officer. We discussed various waste streams and discharge protocols. We then reviewed the various discharge and environmental records. We then toured the garbage and recycling areas. Next, we viewed the Hamworthy advanced wastewater treatment system (AWTS). We then viewed the pool areas, galley/pulper system, and discussed the oily water separator system. We then viewed the outside vessel painting equipment from inside. The inspection was then finalized with a debriefing and we disembarked the vessel at about 11:09 am. After disembarking, we viewed the painting operations from outside the vessel.

Discharge Types and Protocols:

Vessel staff follow an "Alaskan Discharge Matrix" which identifies the various wastestreams and where discharges are allowed to occur. The matrix includes processed bilge water, continuous permeate (Hamworthy treated blackwater and graywater), stored permeate (Hamworthy effluent sent to a holding tank), untreated graywater, bio residual (blackwater solids), food waste, pool and spa water, boiler blowdown, incinerators, and air emissions. The matrix identifies that no discharges are to occur in Washington State waters with the exception of incinerators ["incinerators start outside 4NM and kept STOP inside of Washington or Alaskan waters STOP before port at Victoria"] and air emissions ["opacity to be maintained below 20% inside 4NM Only 3min/h allowed to exceed 20% the extra 3 minutes of AK do not apply"]. The matrix is posted in many locations including the Environmental Officer's office and the Engine Control Room (ECR)

If the vessel is in an area where a discharge is allowed, the Bridge and the staff in the ECR communicate to verify location prior to any discharges. For blackwater and graywater, the latitude and longitude coordinates are recorded in the *Sewage and Graywater Discharge Record Book* and in the deck log. The date, time and location of both the start and the stop of the discharges are recorded, along with port location, effluent type, and volumes. All wastewater discharge records that

were reviewed appeared to be in compliance with the MOU and also did not occur in MOU waters, Washington State waters or the Olympic Coast National Marine Sanctuary (OCNMS) (MOU related waters), with the exception of one that appears to be in about 500 feet outside of Canadian waters north of Port Angeles (see attached copy of discharge log and map of coordinates).

Date	Time	Latitude	Longitude
8/13/12	21:21	48° 14.0 'N	123° 29.7 'W

Screenings and grit from the Hamworthy system screen press are collected and incinerated. The solids separated out by the bioreactors are discharged outside of MOU related waters.

Oily bilge water is treated with two FACET oily water separators, the first one to less than 50 ppm and the second to less than 15 ppm) and discharged at less than 15 ppm outside of MOU related waters. Typical effluent values are between 2 and 4 ppm.

Ballast water exchanges do not occur on this route. Exchanges are not needed and a report is sent showing no discharge/exchange to each State.

The Environmental Officer reported that pool (photos #20, #21, and #22) and spa water is discharged underway after being dechlorinated with sodium thiosulfite. Although the matrix states that no pool or spa water discharges are to occur in Washington state waters.

Food waste is collected in various locations, is sorted and then sent through a pulper (photo #23). Pulped food waste and galley water is discharged outside of MOU related waters. Records reviewed were consistent with this protocol. There is a dumping chute for larger food waste items that cannot go in the filters such as pineapple heads. A bone crusher is also used. Galleys use Ecolab phosphate free and non-toxic detergents and degreasers.

Hull cleaning is occasionally done with divers. Fresh water only is used for washing the outside of the hull and windows. Paint chipping and painting is done in port. The Staff Captain provided a copy of the form used prior to painting which includes some guidelines such as not working in winds over 18 knots or bad weather and having approval from port authorities if applicable and includes safety procedures. Painting was getting underway during the on-board portion of the inspection. Staff were mixing the paint on-board into a small bucket (photo #24) and the cherry picker included a cloth tarp over the grating (photo #25). A small blue tarp was used as paint catchment. After disembarking the vessel, we observed staff beginning to paint (photos #26, #27, and #28). The small blue tarp catchment was not adequate. There was space between the tarp and the vessel below where the paint rollers were being used. This causes a risk of paint drops going directly into the water. It is recommended that staff review the protocols for painting/paint chipping and use a larger catchment for paint/chip droppings. Some vessels have also used magnets to attach catchments to the vessel to close the gap and/or have used tarping directly over the water for catchment. The cloth tarp over the grating is likely insufficient to be able to contain paint if the paint bucket were to tip over on the cherry picker. More substantial containment is recommended. The Port of Seattle best management practices for painting should also be reviewed by staff.

Laundry water drains to the graywater tanks and then to the AWTS. Dry cleaning uses Perchloroethylene (PERC) and the PERC waste is off-loaded to shore as hazardous waste.

X-rays are done digitally and therefore do not have a waste product. Photo waste goes through a silver recovery system, and is treated to less than 5 ppm and is then offloaded. Fluorescent bulbs go to a bulb crusher with a mercury vapor removal system. Hazardous waste materials include items such as oily rags, used cartridges and filters, paints, batteries (some are reused or recycled), sludge oil, aerosols (punctured) (photo #04, incinerator ash, and sharps. Hazardous waste is typically offloaded in Victoria every two weeks. Only one hazardous offload this season was done in Seattle. Hazardous waste logs were reviewed and appear to be consistent with MOU requirements.

Unused or outdated pharmaceuticals are either incinerated or off-loaded back to the manufacturer when feasible. Narcotics are incinerated with witness.

Solid waste (garbage, recyclables, etc) is collected sorted and either reused, recycled, incinerated or offloaded to shore as appropriate. The garbage record book was reviewed and showed consistency with requirements.

Glass (photo #05), aluminum, tin, scrap metal, some plastics (photo #3), some paper and cardboard (photo # 02), some electronics, batteries and used cooking oil are recycled. Reduction, reuse and recycling progress is tracked and minimization improvements are constant.

Incinerator ash is offloaded in Victoria and tested every six months to ensure non-hazardous status. Recent results have passed for non-metals.

Shore power is used while in Seattle and less than 1% sulfur content fuel is used throughout the route.

Black water and Gray water System:

Blackwater, which includes toilet waste and drains from the medical facility and graywater which includes sink and shower water, and laundry water is treated with a Hamworthy AWTS and is currently discharged outside of MOU related waters. The Hamworthy system consists of two MBR trains of identical components for redundancy and ease of maintenance.

Black water is collected by vacuum to one of three collection tanks (photo #19) and is then sent to one screen presses. Gray water is piped to one of the nine gray water collection tanks prior to going to the screen presses. Black and gray water flow moves (photo #15) to the screen press (photos #14 and #16) where the larger solids are pressed through into bags and are then sent to the incinerator. The liquid moves to the 1st stage of the membrane bioreactor (photo #18) where aeration occurs. From the 1st stage, flow moves to the Inter-stage filters (photo #17). The inter-stage filtered solids are returned back to the 1st stage of the bioreactor or are sent to the solids tank for discharge outside of MOU related waters. The AWTS engineer monitors total suspended solids and COD to evaluate the optimal time to waste the solids. The liquid from the inter-stage filters moves onto the 2nd stage of the bioreactor for further aeration. From the 2nd stage, flow is sent to the membrane modules (photo #06) for ultrafiltration. The MBRs are cleaned by weekly backwash and is sanitized with chlorine. Once a month a chemical flushing is done which takes approximately 10 hours. Effluent from the membrane modules are sent to a permeate tank where turbidity is monitored (photo #10). The permeate tanks are cleaned weekly. The turbidity on the system viewed during the inspection was 0.03 NTU. Flow then combines with the other MBR train for ultraviolet (UV) disinfection (photos #11 and #12). Disinfected effluent either goes directly overboard or to a holding tank if not in an approved area for discharge. Currently, effluent is held and discharged outside of MOU related waters. There is a sample port for treated effluent after UV disinfection.

Turbidity is measured continuously on each of the MBR permeate tanks. The UV system consists of 4 lights and the system has alarm settings. The maintenance system provides details of when all maintenance is needed. A pH continuous meter (photo #09) is also alarmed. Samples are taken throughout the system to monitor for process control. COD, TSS, e-coli, pH and free chlorine are all analyzed on the vessel in a small laboratory area (photos #07 and #08). The operator keeps a log book of operation activities (photo #13). The operator of the system had vast knowledge of the intricacies of the treatment system, both physical and biological.

Conclusions and Recommendations

It is recommended that staff review the protocols for painting/paint chipping and use a larger catchment for paint/chip droppings. The cloth tarp over the grating is likely insufficient to be able to contain paint if the paint bucket were to tip over on the cherry picker. More substantial containment is recommended. The Port of Seattle best management practices for painting should also be reviewed by staff.

It is recommended that staff review the data related to the discharge log for August 13, 2012 to verify the location of the discharge and communicate with Ecology the findings of the verification.

It is recommended that staff continue to work towards high functioning wastewater treatment systems. The staff on board the vessel were very knowledgeable of the systems and protocols.

Attachments:

Photographs
Discharge record log and map

Copies to:

Timothy Burns, Disney Cruise Line
Ioannis Kollaros, Environmental Officer, Disney Cruise Line
Mark Toy, Health
Greg Wirtz, NWCCA
Stephanie Jones Stebbins, Port of Seattle
Kevin Fitzpatrick, Ecology
Mark Henley, Ecology
Amy Jankowiak, Ecology
Central Files: Disney Cruise Line – DISNEY WONDER; WQ 6.1

Section H: Signatures

<p><u>Name and Signature of Inspector:</u> Amy Jankowiak </p>	<p><u>Agency/Office/Telephone:</u> Department of Ecology Northwest Regional Office Water Quality Program Municipal Compliance Specialist 425-649-7195</p>	<p><u>Date</u> 9/13/12</p>
<p><u>Name and Signature of Reviewer:</u> Mark Henley </p>	<p><u>Agency/Office/Telephone:</u> Department of Ecology Northwest Regional Office Water Quality Section Manager 425-649-7103</p>	<p><u>Date</u> 9/13/12</p>

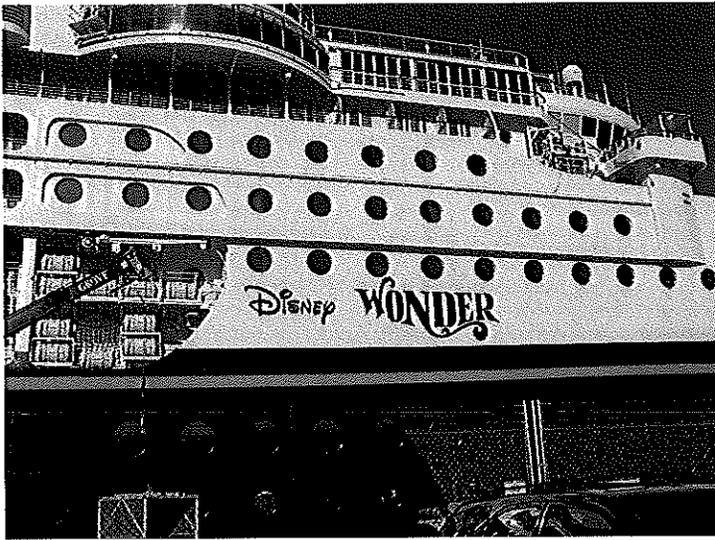


PHOTO #:01 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270001
DESCRIPTION: DISNEY WONDER VESSEL



PHOTO #:02 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270003
DESCRIPTION: TRI WALL CARDBOARD - RECYCLING



PHOTO #:03 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270004
DESCRIPTION: RECYCLING DENSIFIER



PHOTO #:04 AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270005
DESCRIPTION: AEROSOL CANISTER REMOVAL SYSTEM



PHOTO #:05 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270006
DESCRIPTION: GLASS RECYCLING

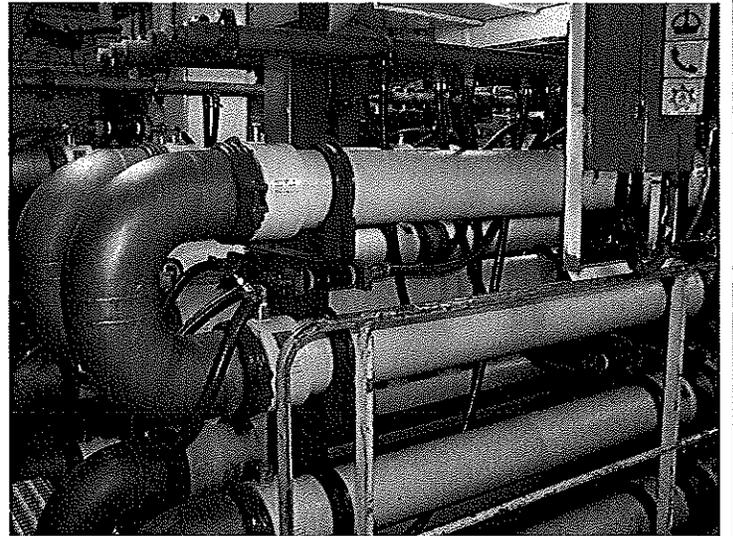


PHOTO #:06 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270008
DESCRIPTION: HAMWORTHY MEMBRANES



PHOTO #:07 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270009
DESCRIPTION: HAMWORTHY SAMPLING FRIDGE

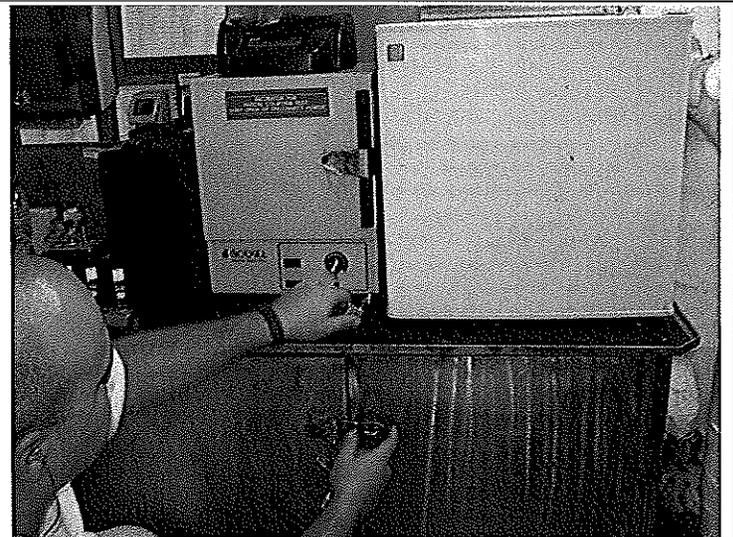


PHOTO #:08 AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270010
DESCRIPTION: HAMWORTHY SAMPLING AREA WITH INCUBATOR

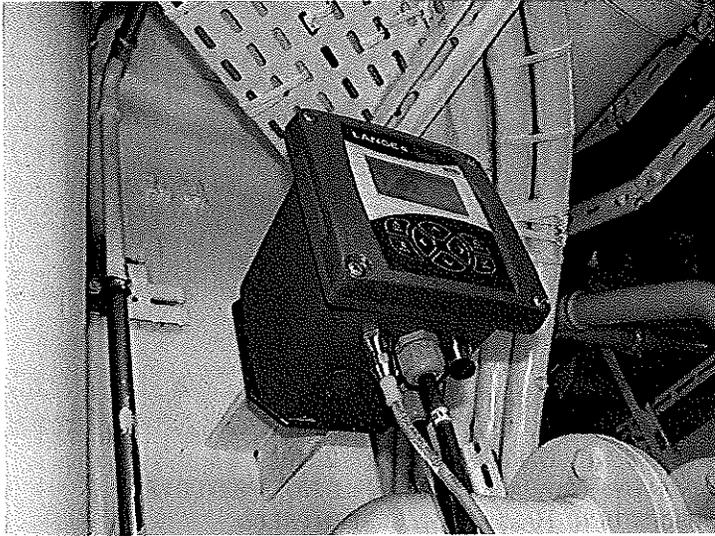


PHOTO #:09 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.:P8270011
DESCRIPTION: HAMWORTHY PH METER (7.62)

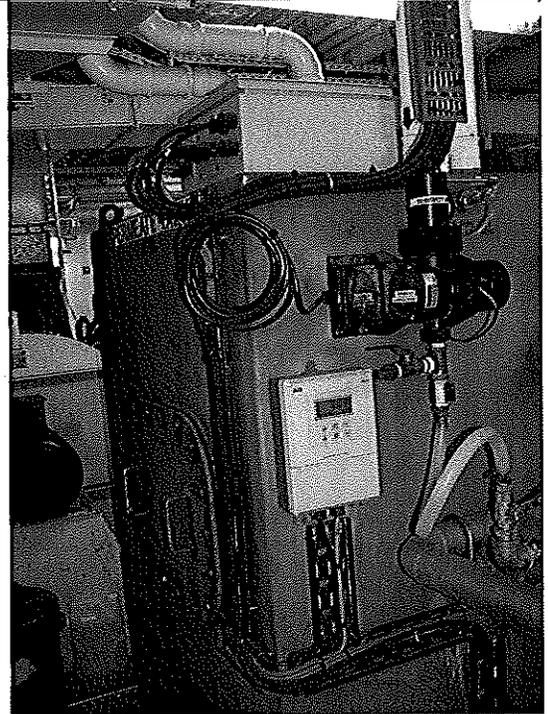


PHOTO #:10 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270012
DESCRIPTION: CONTINUOUS TURBIDIMETER ON HAMWORTHY
PERMEATE TANK (0.03)

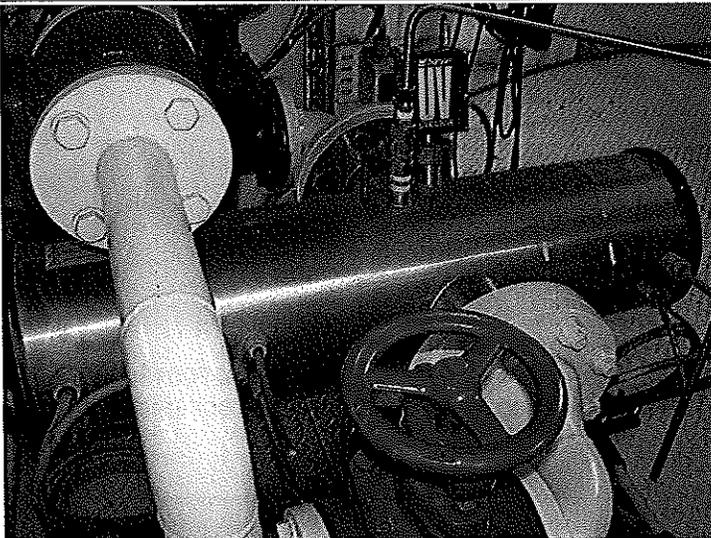


PHOTO #:11 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270013
DESCRIPTION: HAMWORTHY ULTRAVIOLET LIGHT (UV)
DISINFECTION UNIT

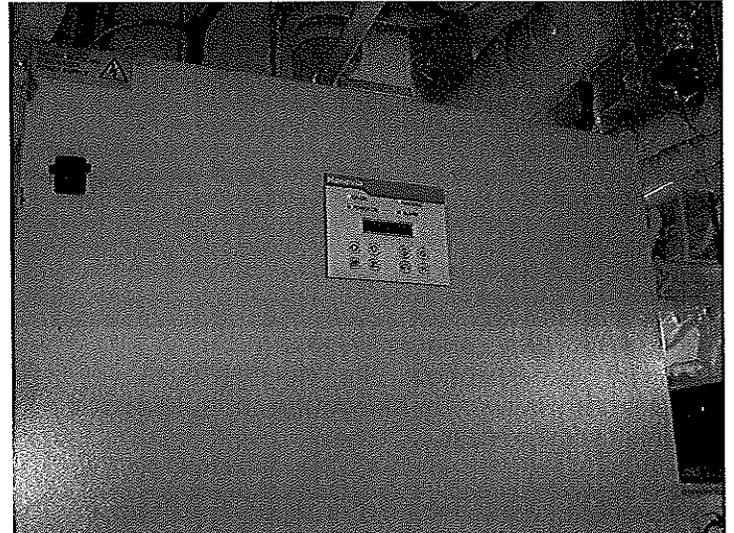


PHOTO #:12 AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270014
DESCRIPTION: HAMWORTHY UV PANEL

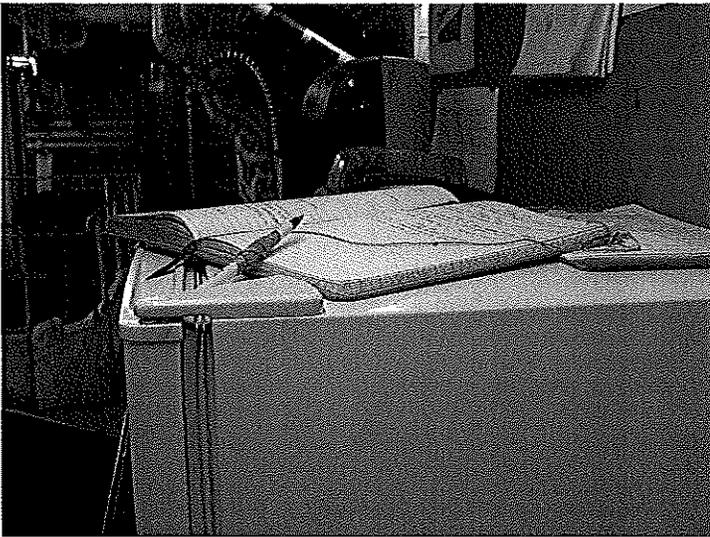


PHOTO #:13 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.:P8270016
DESCRIPTION: HAMWORTHY OPERATOR LOG BOOK

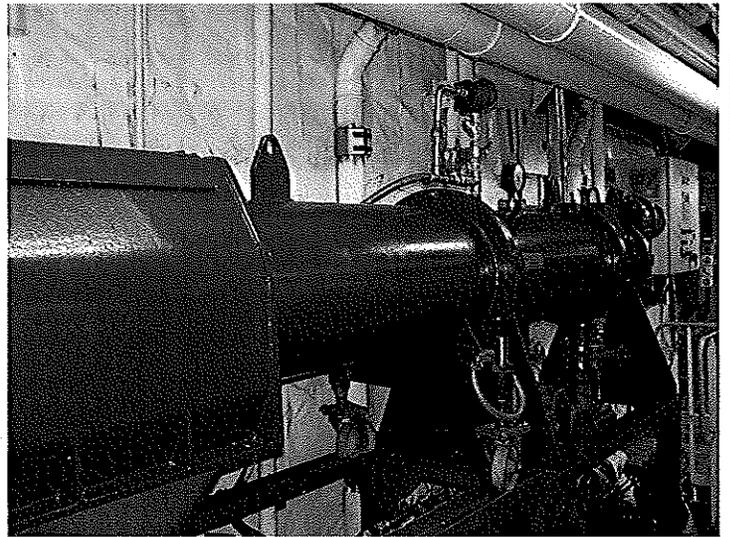


PHOTO #:14 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270017
DESCRIPTION: HAMWORTHY SCREEN PRESS

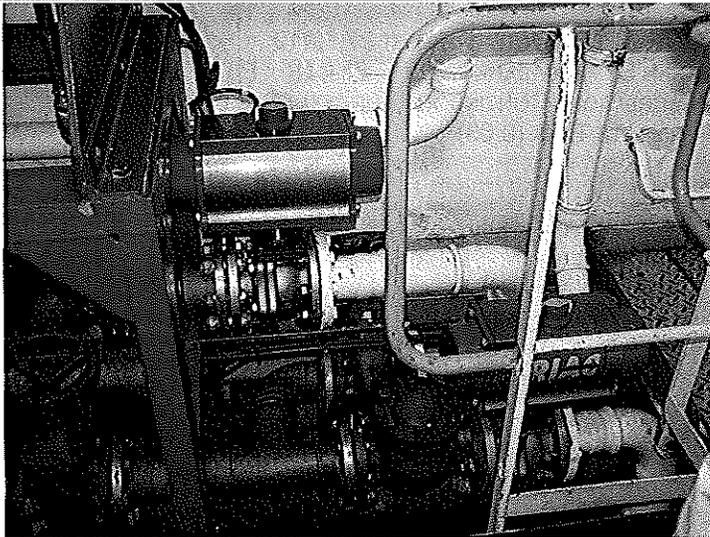


PHOTO #:15 DATE: AUGUST 27, 2012
Taken BY: AMY JANKOWIAK FILE No.: P8270018
DESCRIPTION: HAMWORTHY GRAYWATER AND BLACKWATER
ENTERING SCREEN PRESS

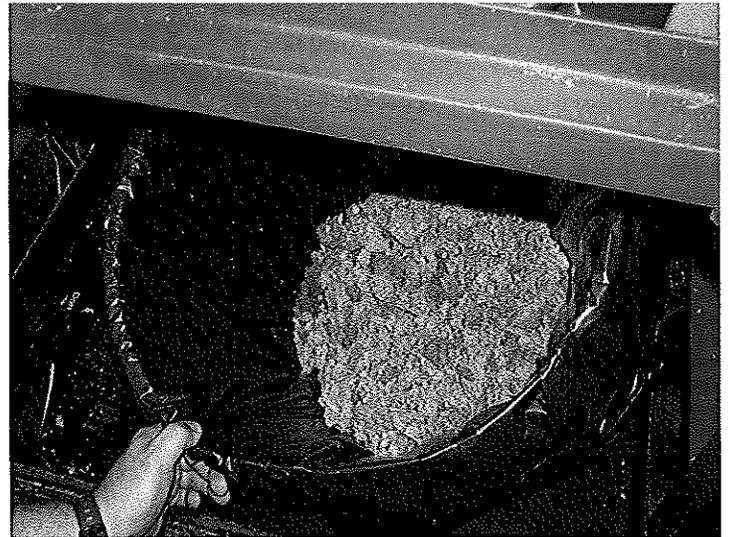


PHOTO #:16 AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270019
DESCRIPTION: HAMWORTHY SCREEN PRESS SCREENINGS

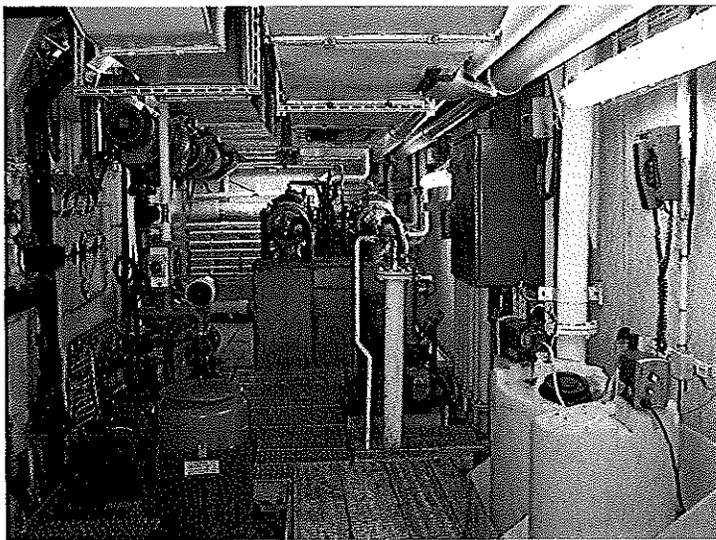


PHOTO #:17 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.:P8270020
DESCRIPTION: HAMWORTHY INTERSTAGE FILTERS (BACK)

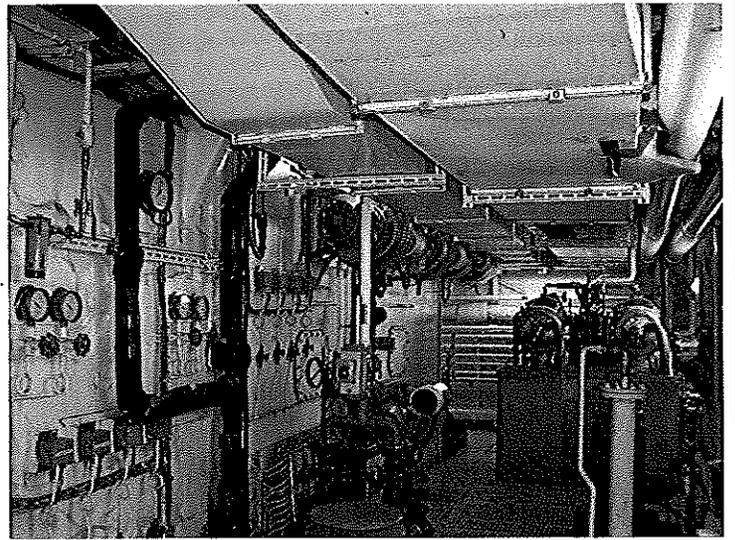


PHOTO #:18 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270021
DESCRIPTION: HAMWORTHY BIOREACTOR TANKS (LEFT)

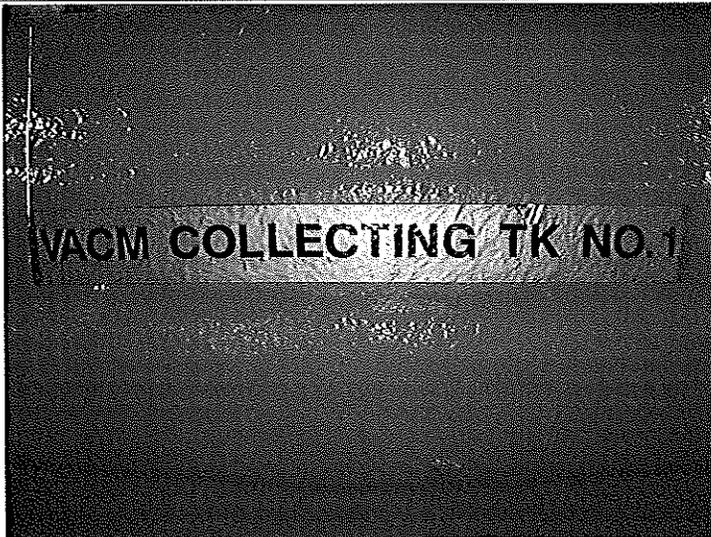


PHOTO #:19 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270022
DESCRIPTION: BLACKWATER COLLECTION TANK



PHOTO #:20 AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270023
DESCRIPTION: POOL AREA



PHOTO #:21 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270024
DESCRIPTION: POOL AREA

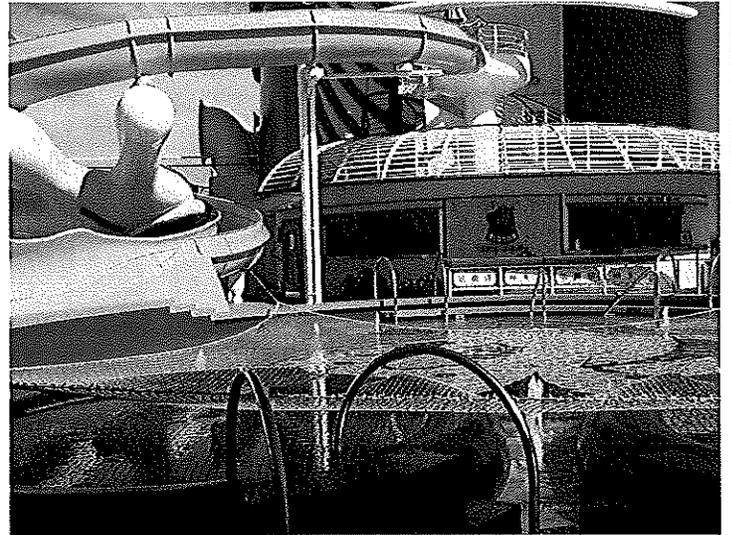


PHOTO #:22 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270025
DESCRIPTION: KID POOL AREA

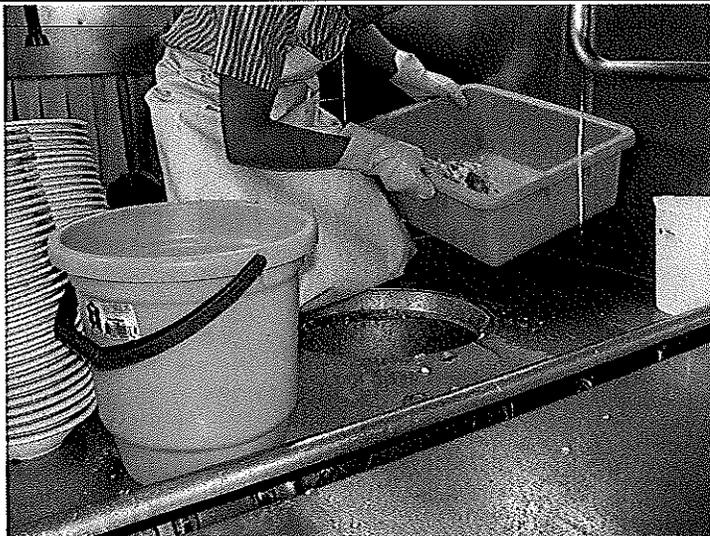


PHOTO #:23 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270026
DESCRIPTION: GALLEY PULPER AREA



PHOTO #:24 AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270027
DESCRIPTION: OUTSIDE PAINGING PREPARATION

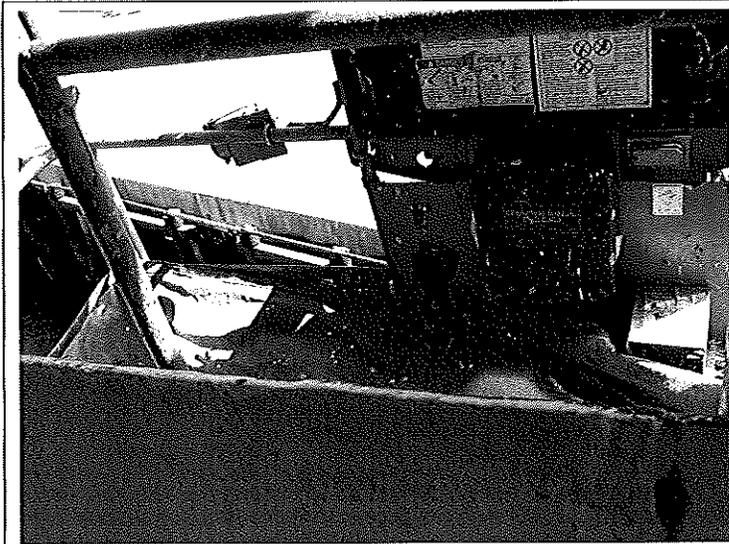


PHOTO #:25 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270028
DESCRIPTION: OUTSIDE VESSEL PAINTING CHERRY PICKER WITH
FABRIC TARP

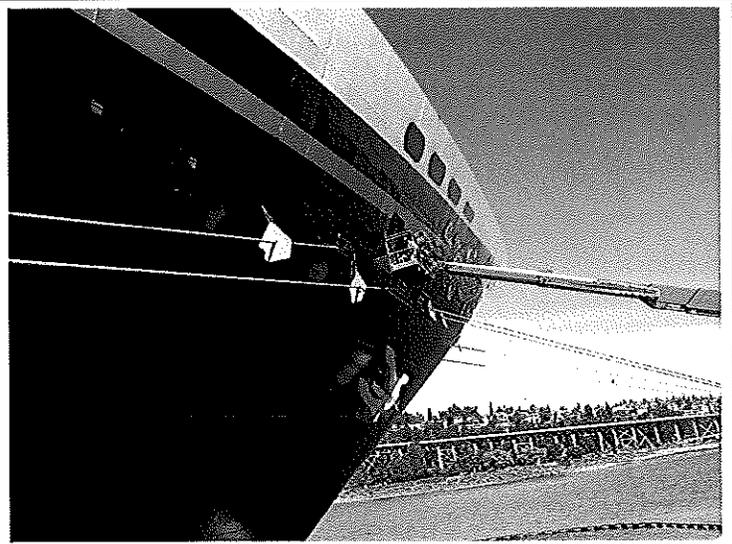


PHOTO #:26 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270029
DESCRIPTION: OUTSIDE VESSEL PAINTING

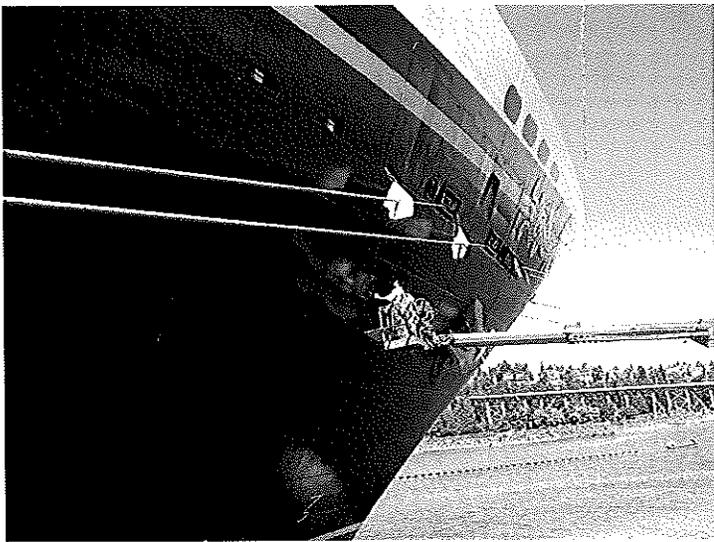


PHOTO #:27 DATE: AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270030
DESCRIPTION: OUTSIDE VESSEL PAINTING – SMALL BLUE TARP
CATCHMENT – APPROX 2 FEET AWAY FROM VESSEL

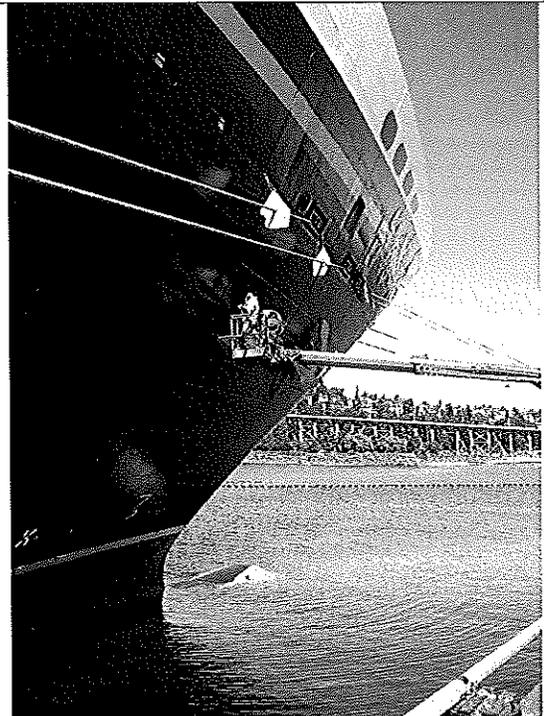


PHOTO #:28 AUGUST 27, 2012
TAKEN BY: AMY JANKOWIAK FILE No.: P8270031
DESCRIPTION: OUTSIDE VESSEL PAINTING

Ship's Name: MV Disney Wonder

IMO number: 9120819

Discharge:	Date:	Time (24hr):	Latitude:	Longitude:	Type of discharge:	Discharge port (S):	Minimum Speed: (kts)	Volume: (m3)	Flow rate: (l/min)	Person-in-Charge Signature:
Start:	8/12/17	11:00	48° 54.2' N	125° 55.5' W	PER	B	21	81	680	<i>[Signature]</i>
Stop:	8/12/17	14:00	48° 29.1' N	125° 24.6' W						<i>[Signature]</i>

Remarks:

Discharge:	Date:	Time (24hr):	Latitude:	Longitude:	Type of discharge:	Discharge port (S):	Minimum Speed: (kts)	Volume: (m3)	Flow rate: (l/min)	Person-in-Charge Signature:
Start:	08/13/12	21:24	48° 14.0' N	123° 29.7' W	PER	B	20.7	114	720	<i>[Signature]</i>
Stop:	08/13/12	24:00	48° 32.3' N	124° 52.3' W						<i>[Signature]</i>

Remarks:

Discharge:	Date:	Time (24hr):	Latitude:	Longitude:	Type of discharge:	Discharge port (S):	Minimum Speed: (kts)	Volume: (m3)	Flow rate: (l/min)	Person-in-Charge Signature:
Start:	8/14/12	00:00	48° 32.3' N	124° 52.3' W	PER	B	22	142	720	<i>[Signature]</i>
Stop:	8/14/12	04:00	49° 45.1' N	126° 43.5' W						<i>[Signature]</i>

Remarks:

Discharge:	Date:	Time (24hr):	Latitude:	Longitude:	Type of discharge:	Discharge port (S):	Minimum Speed: (kts)	Volume: (m3)	Flow rate: (l/min)	Person-in-Charge Signature:
Start:	8/14/12	01:30	48° 43.1' N	125° 42.1' W	USG	G	22	24	255	<i>[Signature]</i>
Stop:	8/14/12	03:04	49° 02.3' N	126° 25.9' W						<i>[Signature]</i>

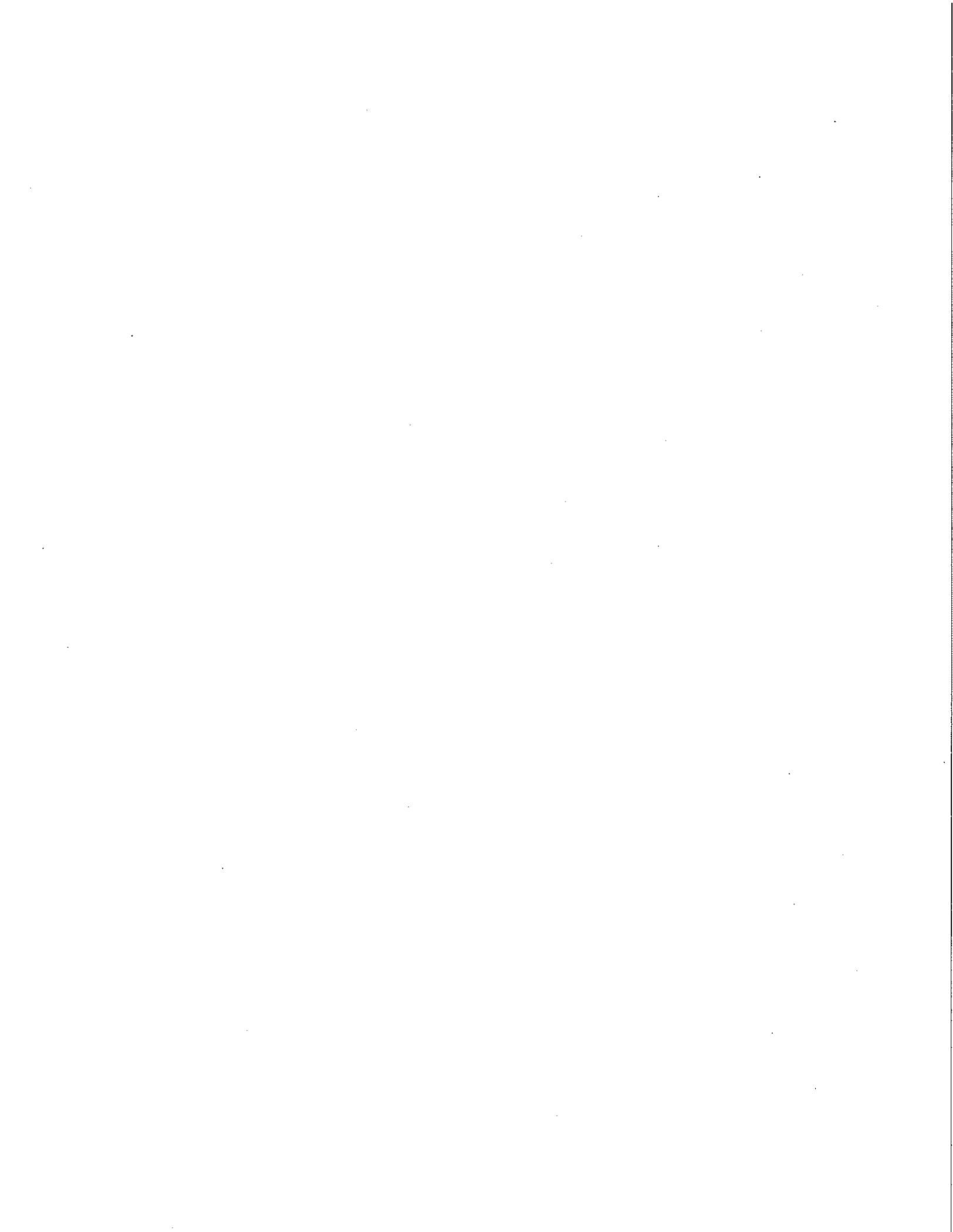
Remarks:

Discharge:	Date:	Time (24hr):	Latitude:	Longitude:	Type of discharge:	Discharge port (S):	Minimum Speed: (kts)	Volume: (m3)	Flow rate: (l/min)	Person-in-Charge Signature:
Start:	8/14/12	01:30	48° 43.1' N	125° 42.1' W	TSG	EF	27	546	3600	<i>[Signature]</i>
Stop:	8/14/12	04:00	49° 15.1' N	126° 13.5' W						<i>[Signature]</i>

Remarks: DISA Ir-73-85-13C-11-C

Signature Chief Engineer: *[Signature]* Date: 08/14/12

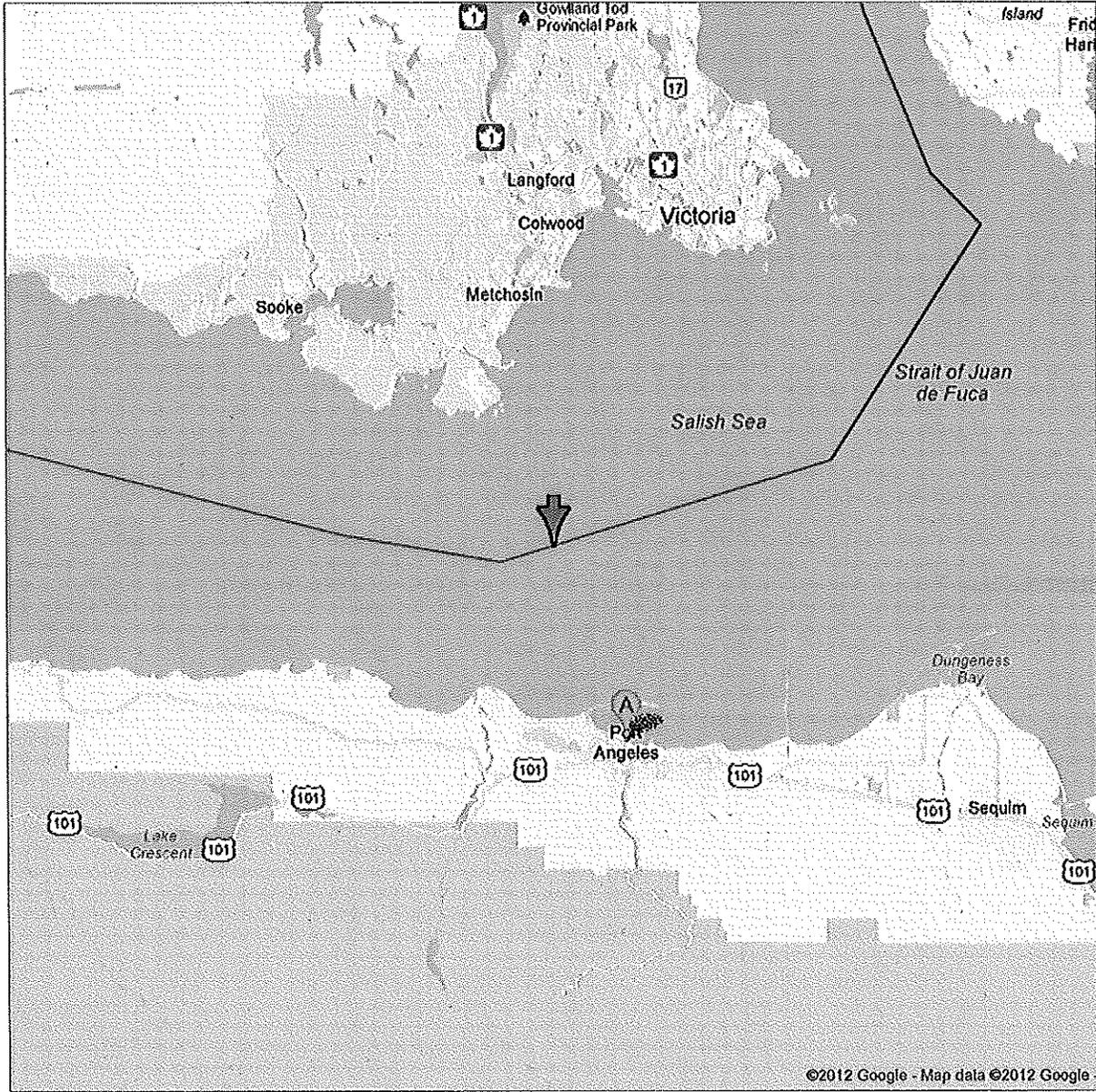
Signature Master: *[Signature]* Date: 8-14-12

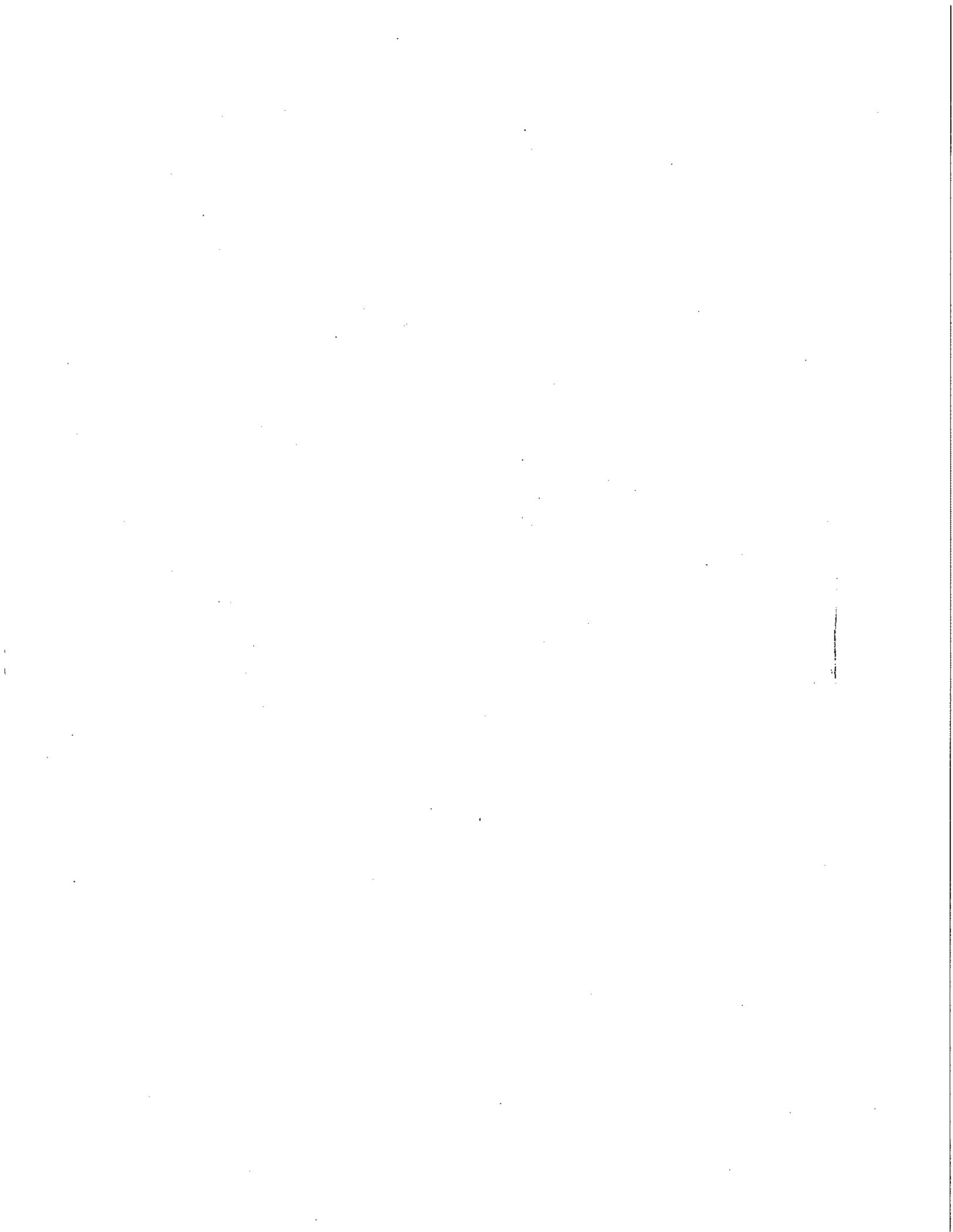




Address Port Angeles, WA

Get Google Maps on your phone
Text the word "GMAPS" to 466453

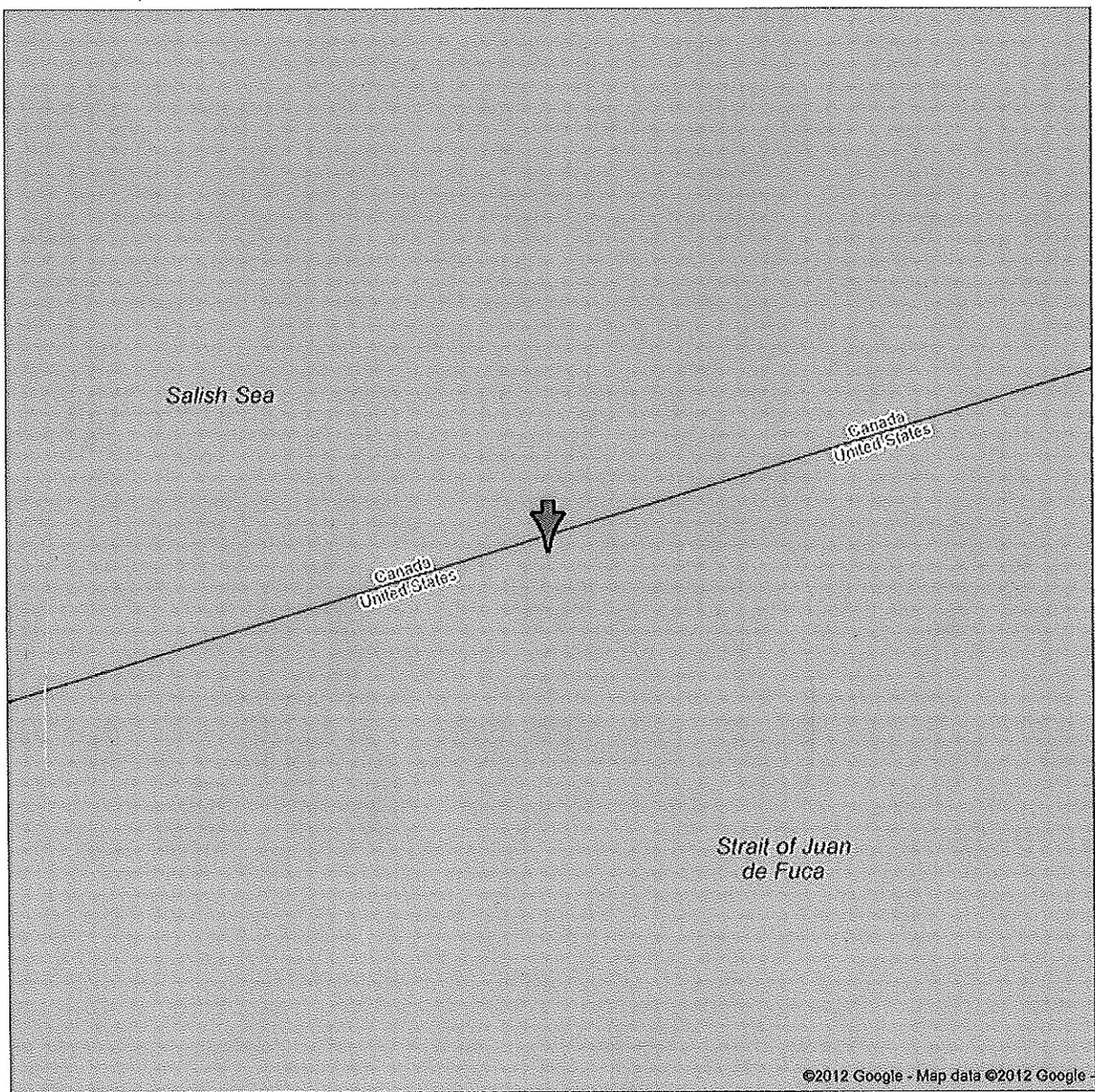


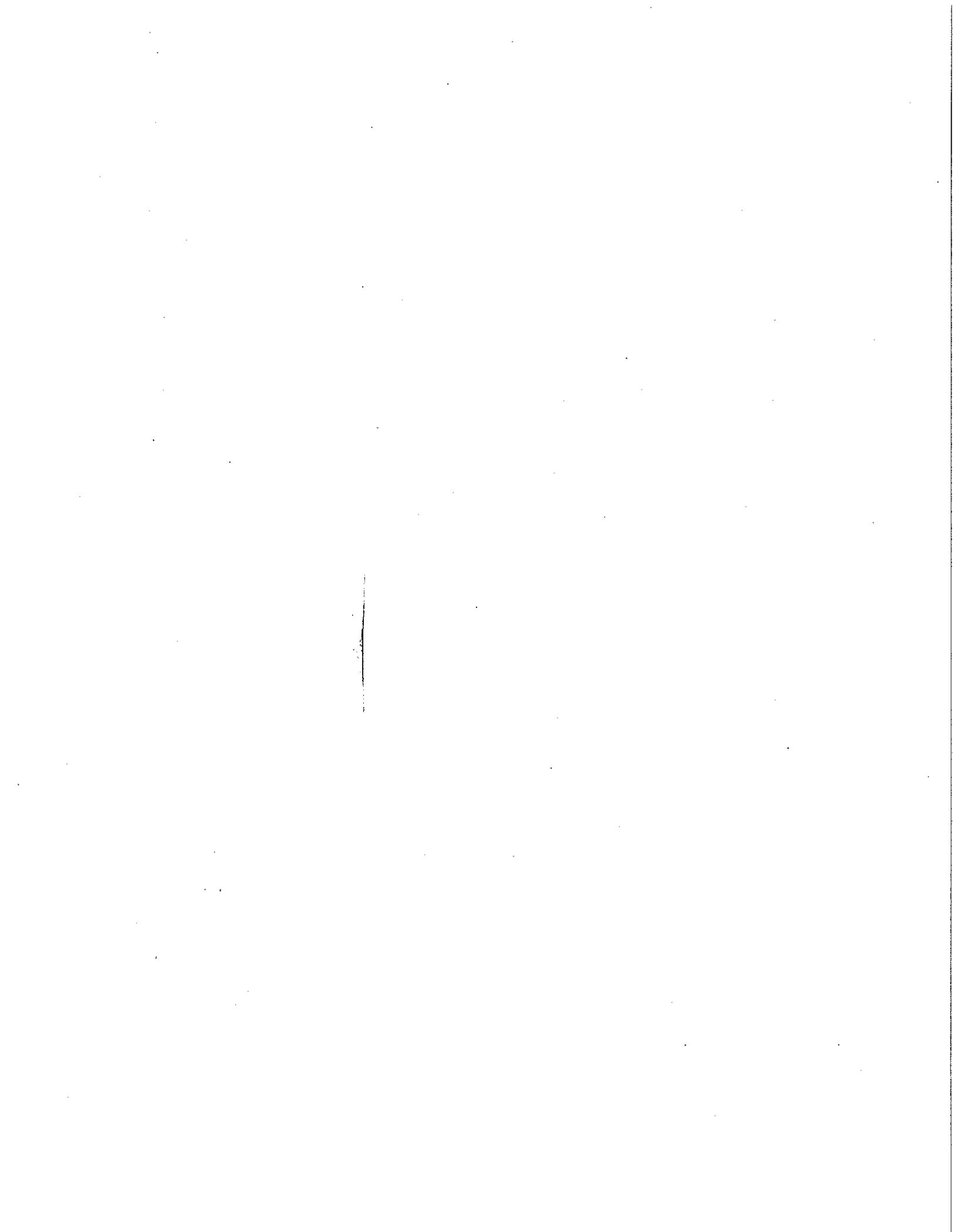




Address 2528 Lower Elwha Rd
Port Angeles, WA 98363

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Disney CRUISE LINE. Safety Management System
Outboard/Aloft/Watercraft/Island Pier Crane Work Permit



When this operation needs to be done, the Leader responsible for the work fills in the checklist and submits it to the Chief Officer to approve near the time the work begins.

Vessel: _____ **DISNEY**

Work Description _____

Work Date & Time Period: _____

Location of Work: _____

Note: Officer of the Watch will not issue radar mast key without a properly signed Permit

- All involved personnel have knowledge of the applicable portions of the *Code of Safe Working Practices for Merchant Seamen*, Chapter 15.
- Safety harness with lifeline worn or other arresting device available.
- Work over side:
 - ◆ Not while underway (except in emergency when rescue boat is ready for use)
 - ◆ Buoyancy garment worn
 - ◆ Lifebuoy with sufficient line attached is available and ready for immediate use.
 - ◆ Worker under observation of person on deck
- Work near ship's whistle: whistle power shut off. Warnings posted on bridge and in machinery spaces.
- Work near funnel: Duty engineer is informed and steps taken to reduce as far as practicable the emission of steam, harmful gases and fumes.
- Work near radio aerials: no transmissions are made that are a risk to the seafarer and a warning notice is put up in the radio station.
- Work near radar scanners: Officer on watch isolates radar and scanner. A warning notice is put on the radar.
- Bosun's chair, ropes, portable ladders, cradles and stages are examined in accordance with Code of Safe Working Practices for Merchant Seamen, Chapter 15.
- Castaway Cay large Grove crane: Officer of the Watch sees that the crane is not used in winds over 18 knots, but may authorize use in slightly higher speeds if the crane is in the ship's lee.
- Window Washing Basket, Grove, Cherry Picker: Deck radio must be held by at least one Crew Member working in the basket. Establish communication with the bridge on channel 1 before entering the basket.
- Paint Raft (or other floating work platform):
 - Approval from port authorities if applicable.
 - Warning signs placed on propulsion and thruster (Bridge and Console)
 - Radio communication established with Bridge
 - Weather conditions checked. Revoke Permit if weather conditions deteriorate and/or when necessary if the thrusters and/or main propulsion have to be activated for operational needs.

Leader responsible for work (Print, Sign, Position)

Date and Time

Officer of the Watch (Print and Sign)

Date and Time

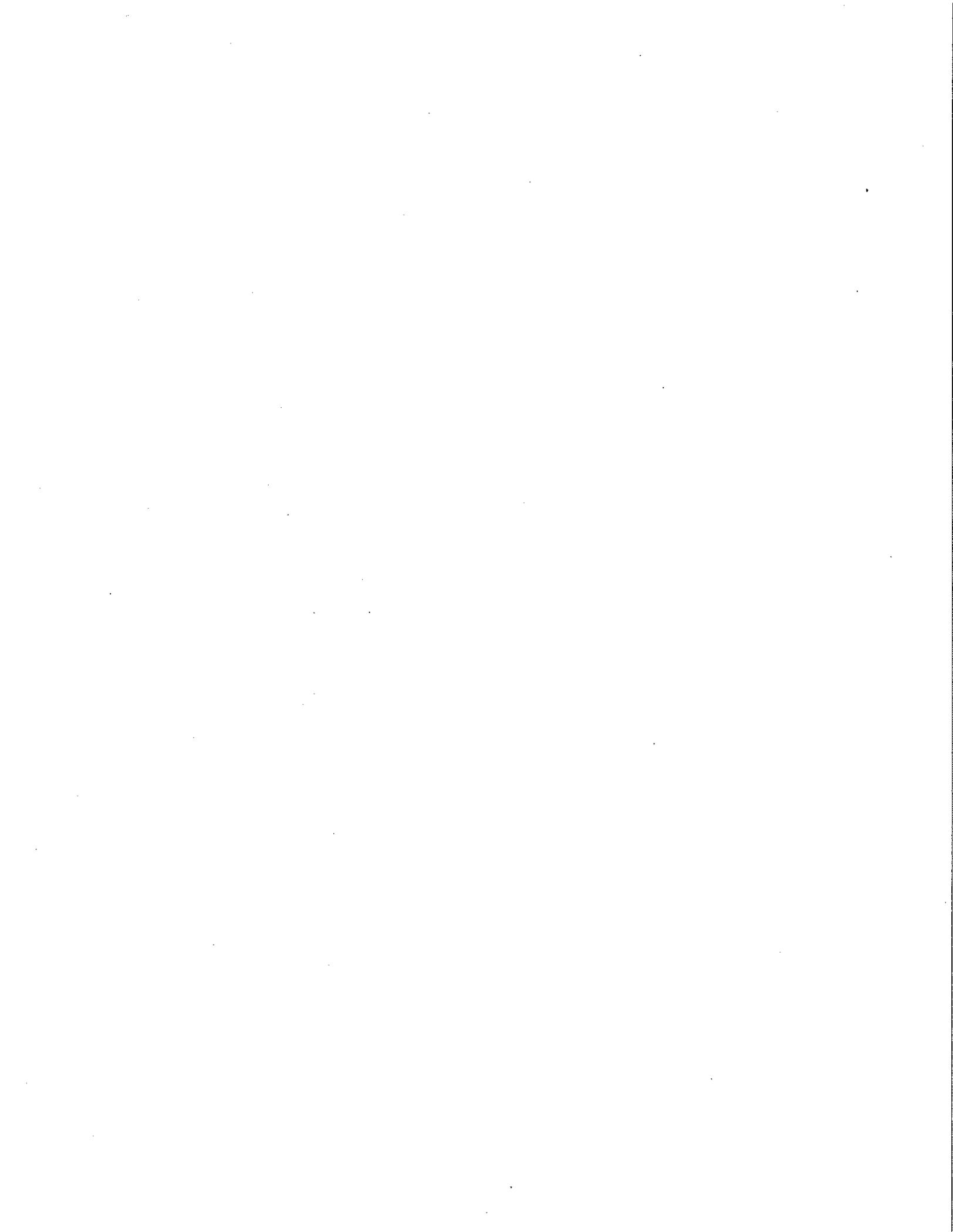
Chief Officer Signature (Print and Sign)

Date and Time

- Work done, doors locked and key returned to Officer of the Watch. Leader responsible for work signature and time completed: _____

Keep Permit accessible to the Officer of the Watch, then file and retain onboard for at least three months. If an incident occurs during the time covered by this form, contact Risk Management and Safety, Security, Environmental Policy and Compliance for retention instructions.

CONFIDENTIAL DOCUMENTS: May not be duplicated nor disclosed to others without the consent of Disney Cruise Line



Ship: DISNEY WONDER

ALASKA DISCHARGE MATRIX 2012

	Waters and Waters	General Permits	Discharge Limits (LTD)	Unfiltered Gray Waters	No. of Hull	Food Waste	Pool and Spa Water Discharge	Diesel Discharge	Incinerators	Additional Information
DAY 1 Seattle	NO DISCHARGES PERMITTED INSIDE WASHINGTON STATE WATERS									Incinerators start outside 4NM and kept STOP inside Washington or Alaska state waters Opacity to be maintained below 20 % inside 4NM. Only 3min/h allowed to exceed 10% the extra 3 minutes of AK do not apply
DAY 2 Alaska	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 12nm > 6 knots	While underway +6kts according all limitations and monitoring requirements stipulated in the Vessel's General Permit.	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 12nm > 6 knots	No discharge inside Alaska State waters and the Alexander Archipelago, otherwise outside 4nm > 6 knots	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 12nm > 6 knots	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 12nm > 6 knots	Outside US waters: under way >3NM +Dechlorinated No discharge inside Washington state waters	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 12nm > 6 knots	Incinerators start outside 4NM stop inside Alaska waters	Opacity to be maintained below 20 % inside 4NM
DAY 3 Tracy Arm	<i>All discharges stop > 1nm of park boundary</i>									Incinerators start outside 4NM stop inside Alaska waters Opacity to be maintained below 20 % inside 4NM
DAY 4 Skagway	<i>All discharges stop > 1nm of Skagway boundary</i>									Incinerators start outside 4NM stop inside Alaska waters Opacity to be maintained below 20 % inside 4NM
DAY 5 Inland	NO DISCHARGES ALLOWED	While underway +6kts according all limitations and monitoring requirements stipulated in the Vessel's General Permit.	NO DISCHARGES ALLOWED				NO DISCHARGE in SKAGWAY or TRACY ARMS and GLACIER PARKS. For US waters: when the ship is under way and the pool or spa water has been dechlorinated	NO DISCHARGES ALLOWED	Incinerators start outside 4NM stop inside Alaska waters	Opacity to be maintained below 20 % inside 4NM
DAY 6 Ketchikan	NO DISCHARGES ALLOWED	While underway +6kts according all limitations and monitoring requirements stipulated in the Vessel's General Permit.	NO DISCHARGES ALLOWED				NO DISCHARGE in SKAGWAY or TRACY ARMS and GLACIER PARKS. For US waters: Is under way and the pool or spa water has been dechlorinated	NO DISCHARGES ALLOWED	Incinerators start outside 4NM stop inside Alaska waters	Opacity to be maintained below 20 % inside 4NM
DAY 7 Kodiak - Sitka	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 12nm > 6 knots	While underway +6kts according all limitations and monitoring requirements stipulated in the Vessel's General Permit. No discharge inside Washington state waters	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 12nm > 6 knots	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 4nm > 6 knots	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 12nm > 6 knots	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 12nm > 6 knots	Outside US waters: under way >3NM +Dechlorinated No discharge inside Washington state waters	No discharge inside Alaska or Washington State waters and the Alexander Archipelago, otherwise outside 12nm > 6 knots	Incinerators start outside 4NM and kept STOP inside Washington or Alaska state waters STOP BEFORE PORT AT VICTORIA	Opacity to be maintained below 20 % inside 4NM

Additional Information

Do not test boilers, engines or any other equipment that might cause smoke emissions in any Alaska State port and if feasible in Canadian ports.

Definition of Alaskan Waters: All waters within 3 nautical miles from the baseline from which territorial seas are measured, including the waters of the Alexander Archipelago as defined in AS 46.03.490 (18) and listed in the General Permit

Pool and Spa Fecal accident if a fecal release occurs, only discharge pool or spa water beyond 12NM from shore

Marine Vessel Visible Emission Standards 18 AAC 50.070: Within 3 nautical miles of the Alaska Coastline, visible emissions, excluding condensed water vapor, may not reduce visibility through the exhaust effluent of a marine vessel by more than 20 percent except as follows:

- (1) while at berth or at anchor, visibility may be reduced by up to 100 percent for periods aggregating no more than
 - (A) three minutes in any hour; and
 - (B) and an additional three minutes during initial start up of a vessel; for purposes of this subparagraph, "initial start up" includes the period during which a vessel is testing equipment in preparation to casting off or weighing anchor;
- (2) during the hour immediately after weighing anchor or casting off, visibility may be reduced under one, but not both, of the following options:
 - (A) visibility may be reduced by up to 40 percent for that entire hour; or
 - (B) visibility may be reduced by up to 100 percent for periods aggregating no more than nine minutes during that hour; or
- (3) during the hour immediately before the completion of all maneuvers to anchor or make fast to the shore, visibility may be reduced under one, but not both of the following options:
 - (A) visibility may be reduced by up to 40 percent of that entire hour; or
 - (B) visibility may be reduced by up to 100 percent for periods aggregating no more than nine minutes during that hour; and
- (4) at any time not covered by (1) - (3) of this section, visibility may be reduced by up to 100 percent for periods aggregating no more than three minutes in any one hour.

