



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

Northwest Regional Office
 3190 160th Ave SE
 Bellevue, WA 98008
 Phone: (425) 649-7000
 Fax: (425) 649-7098

Inspection Date July 31, 2014	Permit Number NA	County King	Receiving Waters Marine Waters	Ecology Inspector Amy Jankowiak
Entry Time 9:04 am	Photos Taken <input checked="" 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 11:10 am Name and Location of Site Inspected: REGATTA, Oceania Cruises Pier 66 Seattle, Washington				Additional Participants/Inspectors: Christopher Martin, Ecology
On-Site Representative(s): <i>Name/Title/Phone/e-mail</i> Christopher Nagy, Environmental Officer REG_EnvOfficer@oceaniacruises.com				
Responsible Official(s): <i>Name/Title/Address/Phone/e-mail</i> James S. Mitchell, Director – Environment & Public Health Prestige Cruise Holdings (Oceania Cruises ~ Regent Seven Seas Cruises) 8300 NW 33 rd St, Suite 100, Miami, FL 33122 305-514-4836; JMitchell@prestigecruiseholdings.com				Other Facility Data: Notification made to James S. Mitchell on July 28, 2014

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	
Turbidity or Equivalent: Last Calibration: Trigger Level for Early Alarm: _____ Trigger Level for Shut down: _____ 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	
Disinfection Effectiveness Monitoring: 	
<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	
Disinfection System:	

NOT APPLICABLE

Section C: For Vessels Discharging Continuously [2.1.3(B)]

<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	
<p><u>Turbidity or Equivalent:</u> Last Calibration: _____ Trigger Level for Early Alarm: _____ Trigger Level for Shutdown: _____ Recorded Turbidity/Equivalent Levels Above Triggers: _____</p>		
<input type="checkbox"/>	Daily 24-hour Continuous Monitoring for Disinfection Effectiveness	
<input type="checkbox"/>	Disinfection Effectiveness Monitoring Equipment Functioning Properly	
<p><u>Disinfection Effectiveness Monitoring:</u></p>		
<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	
<p>Disinfection System: _____</p>		

NOT APPLICABLE

Section D: General (Approved to Discharge)

<input type="checkbox"/>	No Discharges Within ½ Miles From Shellfish Beds/ Protocol (President's Point, Apple Tree Cove, Tye Shoal, Middle Point (near Pt Townsend))	
<input type="checkbox"/>	Discharges Immediately Stopped When High Turbidity Occurs	
<input type="checkbox"/>	Discharges Immediately Stopped When Disinfection System Upset Occurs	
<input type="checkbox"/>	Immediate Notifications Made to WA Department of Health for Disinfection System Upset	
<input type="checkbox"/>	Sampling Conducted 2/month, 1/month in Seattle (BOD, TSS, Fecal Coliform, pH, Chlorine Residual)	
<input type="checkbox"/>	Whole Effluent Toxicity Testing 1 per 2 Years (Homeported) or 1/40 Calls for Continuous	

Section E: General

<input checked="" type="checkbox"/>	Wastewater Discharge Records Review	Discharge records were reviewed (blackwater/graywater/residual solids) and are maintained properly. No discharges appear to be in the OCNMS, MOU waters or Washington state waters (MOU related waters)
<input checked="" type="checkbox"/>	Wastewater Discharges protocol per MOU and managed properly	The discharge protocols appear to be consistent with MOU requirements to not occur in MOU related waters.
<input checked="" type="checkbox"/>	Residual Solids Managed Properly/Disposal Protocol per MOU	Residual solids appear to be handled per MOU requirements.
<input checked="" type="checkbox"/>	Hazardous Waste Managed Properly	Hazardous waste appears to be handled per MOU requirements.
<input checked="" type="checkbox"/>	WA Hazardous Waste Guidelines Followed (Appendix vii)	Hazardous waste guidelines appear to be handled per the MOU and guidelines.

<input checked="" type="checkbox"/>	Solid Waste Managed Properly (zero garbage discharge)	Solid waste appears to be managed per MOU requirements.
<input checked="" type="checkbox"/>	Photo/X-Ray Waste Managed Properly (fluids, cartridges,...) and landed ashore	Photo and x-ray waste appears to be handled per MOU requirements.
<input checked="" type="checkbox"/>	Dry-Cleaning Wastes and Byproducts (fluids, sludge, filter materials...) Managed Properly (PERC – haz waste – landed ashore)	Dry cleaning waste products appear to be managed per MOU requirements.
<input checked="" type="checkbox"/>	Unused/Outdated Pharmaceuticals Managed Properly (safely disposed of)	Unused or outdated pharmaceuticals appear to be managed per MOU requirements.
<input checked="" type="checkbox"/>	Fluorescent and Mercury Vapor Lamp Bulbs Managed Properly (prevent release of mercury)	Fluorescent and mercury vapor lamp bulbs appear to be managed per MOU requirements.
<input checked="" type="checkbox"/>	Waste Reduction/Reuse/Recycling Opportunities Maximized (glass, cardboard, aluminum & steel cans)	Waste reduction/reuse/recycling opportunities appear to be maximized per MOU requirements.
<input checked="" type="checkbox"/>	Batteries Managed Properly (recycled, reclaimed, disposed of properly)	Batteries appear to be managed per MOU requirements.
<input checked="" type="checkbox"/>	Incinerator Ash Managed Properly and minimized volume (haz waste segregation and annual testing)	Incinerator ash appears to be managed per MOU requirements.
<input checked="" type="checkbox"/>	Oily Bilge Water Managed Properly (<15 ppm, no visible sheen and underway)	Oily bilge water appears to be managed per MOU requirements.
<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 water exchanges are reported to not occur on this route.
<input checked="" type="checkbox"/>	OCNMS rules and regs followed	The discharge protocol appears to be consistent with MOU requirements to not occur in the OCNMS.

Additional General Questions

<input checked="" type="checkbox"/>	How is deck runoff and hull cleaning handled (scuppers...) (non-toxic/phosphate free cleaners, biodegradable)	Deck runoff and hull cleaning appears to be handled per MOU requirements.
<input checked="" type="checkbox"/>	How is maintenance performed on the outside of the vessel (paint chipping, painting, etc)	Outside vessel maintenance appears to be handled per MOU requirements.
<input checked="" type="checkbox"/>	Sculleries and Galleys – type of detergents and degreasers used (phosphate free and non-toxic)?	Galleys appear to use phosphate free and non-toxic detergents and degreasers.
<input checked="" type="checkbox"/>	How are food waste discharges handled (prevention of erroneous materials)?	Food waste appears to be handled per MOU requirements.
<input checked="" type="checkbox"/>	Medical sinks/floor drains, chem. stor areas wastes go where (plugged, blackwater, bilge)?	Medical sinks/floor drains appear to be handled per MOU requirements.
<input checked="" type="checkbox"/>	Where is pool and spa water discharged? Dechlorinated/debrominated and underway?	Pool and spa water appears to be handled per MOU requirements.
<input checked="" type="checkbox"/>	What type of fuel is used and percent sulfur content?	<1% sulfur content is used throughout the route.

Other:

Section F: Sampling Results

Parameter	Results
Biochemical 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 Oceania Cruises REGATTA on July 31, 2014. Christopher Martin, Ecology NWRO-WQ also attended the inspection. The main contact on board the REGATTA was Christopher Nagy, Environmental Officer (EO) for the REGATTA. Prior notification of the visit was given on July 28, 2014 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 REGATTA is not approved to discharge wastewater in MOU waters.

The REGATTA was built in 1998, and is 593.7 feet long with a width of 83.5 feet. The passenger capacity is approximately 780 with a crew capacity of about 370.

The REGATTA is scheduled for 6 port calls in Seattle and conducts a variety of length cruises between 1 week and 10 days and sometimes calls in Vancouver, B.C.

Inspection

We arrived and boarded the ship (photo #29) at about 9:04 am and began with introductions and a plan for the day with Christopher Nagy, EO. We discussed various waste streams and discharge protocols. We toured the Triton Water Membrane Bio-Reactors (MBR) advanced wastewater treatment system (AWTS) and the oily bilge water separator, the process control laboratory, the garbage and recycling areas, and the food waste pulper. We reviewed the various discharge and environmental records on the Bridge and in the Engine Control Room (ECR). The inspection was then finalized with a debriefing and we disembarked the vessel at about 11:10 am.

Discharge Types and Protocols in MOU waters, Washington State waters or the Olympic Coast National Marine Sanctuary (OCNMS) (MOU related waters):

The discharge protocol starts with a plan before departure to be consistent with company rules and local requirements and daily check-ins with navigation officers for instructions and tank volume checks. Both paper and electronic navigational charts (photos #01 and #03) are used to mark and verify areas of allowed discharges. Discharges of blackwater, graywater, wastewater residual solids (biosludge), bilge water and food waste occur outside of 12 nautical miles from land (outside of MOU related waters). The Bridge staff calls the ECR notifying the ECR staff when they are in discharge locations. The Bridge logs any discharges upon notification from ECR. The discharge ports or chutes are padlocked and the ECR engineer on watch has access to the keys. All discharges are logged in the ECR and reviewed and compared to the Bridge log by the EO. There have been no reported problems with the communications between the Bridge and the ECR or with any discharges. No discharges of any kind occur in the Olympic Coast National Marine Sanctuary (OCNMS). For black water and gray water, the latitude and longitude coordinates are recorded in the *Sewage and Graywater Discharge Record Book*. 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 did not occur in MOU waters, Washington State waters or the Olympic Coast National Marine Sanctuary (OCNMS) (MOU related waters). A few records were copied and later verified to be outside of MOU related waters.

Screenings from the AWTS are collected in bags and offloaded or incinerated and biosludge from the AWTS is collected and then discharged 12 miles outside of MOU related waters.

Oily bilge water is treated with a Westfalia oil water separator (photo #17). A white box (photo #19) is used to only allow discharges (photo #18) at less than 15 ppm oil content maximum and discharges occur outside of MOU related waters.

Ballast water exchanges do not occur on this route. The vessel has solid ballast.

Pool and spa water is discharged overboard outside of MOU related waters approximately every 72 hours. Spa water can go to the graywater collection tanks if necessary.

Food waste is collected in various locations, bagged, brought to the waste storage area and is then processed through the pulper (photo #25). Pulped food waste and galley water is discharged outside of MOU related waters. Pulper water is recirculated and eventually wasted to a graywater collection tank. Some food items and grease is collected and off-loaded ashore. A food chute is used for food waste including bones, shells, and other food waste which the pulper can't take. The chute is padlocked and monitored (photo #28). Garbage records were reviewed and were consistent with the protocols. Sorting is periodically checked and monitored to ensure only allowed food waste gets discharged. Galleys use phosphate free and non-toxic detergents and degreasers. Used cooking oil is discharged with food waste.

Deck runoff goes to scuppers to capture large particulates and then overboard. There is no chemical storage on the decks. NPDES Vessel General Permit (VGP) requirements are followed for deck runoff. Above water hull cleaning is done with fresh water only. Paint chipping and painting is rarely done in port and if so is only above decks where materials could be captured.

Dry cleaning is currently with PERC which is collected, labeled and offloaded to shore as hazardous waste. Note that most large cruise ships have already or are in the process of either using dry cleaning systems that use less toxic chemicals and have less by-products than a PERC system or have done away with dry cleaning on the vessel completely.

There is no photo waste as all photos are digital. X-rays do produce waste which is collected, and off-loaded as hazardous waste. The vessel has a new digital x-ray machine onboard awaiting installation. Fluorescent bulbs are crushed with a newly installed Bulb Eater mercury vapor removal system (photo #23). When the filters are changed out, they are off-loaded as hazardous waste. Hazardous waste materials include items such as paints, chemicals, some aerosols which are punctured with an aerosol removal system, sharps, used cartridges and filters, electronics and some batteries. Hazardous waste is typically off-loaded in Canada. Hazardous waste logs were reviewed and appear to be consistent with MOU requirements.

Unused or outdated pharmaceuticals and narcotics are incinerated. Drains from the medical facility go to the blackwater tanks. Sharps are off-loaded as bio-hazardous waste and red bagged medical waste is incinerated. Oily rags, dry garbage, paper, and some cardboard are incinerated (photo #27). Incinerator ash is off-loaded as regulated waste and tested annually to ensure non-metals status. Recent results have passed for non-metals.

Solid waste (garbage, recyclables, etc) (photo #22) is collected, sorted, and either reused, recycled, incinerated or off-loaded to shore as appropriate. The garbage record book was reviewed and showed consistency with requirements.

Glass, broken china, some plastics (photo #26), scrap metals, aluminum and tin cans (photo #24), some cardboard, some batteries and paper and other items are recycled.

Less than 1% sulfur content fuel is used throughout the route.

Freshwater is bunkered in while in port and can also be produced on board via evaporators.

Black water and Gray water System:

The REGATTA uses two Triton Water MBR AWTS for blackwater and the majority of graywater. Some graywater may be held untreated and discharged outside of MOU related waters. The vessel has about three days of holding capacity for graywater and about five days holding capacity for blackwater. The system was installed on the vessel about three years ago. There are two separate Triton MBR units on the vessel with control panels (photo #07) for operation. Black water and graywater are sent to separate holding tanks (photo #04). Wastewater is then sent to a screen (photo #16). The screens are cleaned automatically but can be cleaned manually if necessary. The solids from the screen are bagged and off-loaded or incinerated. From the screens, blackwater and graywater is sent to the MBR aeration bioreactor tanks where air is added for biological treatment. Biosludge from the MBRs is sent to a solids tank when turbidity/TSS levels indicate and then discharged outside of 12 miles and outside of MOU related waters. Wastewater then flows through the membrane filters (photo #06). The filters are cleaned with chemicals (chlorine and citric acid) about every 4-5 months and use forced air to enhance biological activity (photo #13). A defoamer is also used as necessary (photo #14) injected into the MBR. Chemical treatment for pH control is dosed (photo #15) to the MBR effluent. The effluent from the filters then goes through ion exchangers (photo #05) and exits as permeate. The permeate is then sent either to a ultraviolet light (UV) disinfection unit (photos #08 and #09) and then discharged overboard (photos #11 and #12) or circulated back to the aeration tanks for re-processing until in an area of allowed discharge. The UV disinfection unit consists of two Trojan UV units, one for each Triton effluent train. Currently, effluent from the UV unit is held and discharged outside of MOU related waters.

There is one dedicated engineer, Baldo Lucic, who operates and maintains the Triton systems along with the EO. The Triton system includes continuous monitoring of pH (photo #10), turbidity and total suspended solids (TSS). If the system has a TSS greater than 20, the system diverts the waste stream back into the system and does not allow discharges to occur. There is also a small lab (photos #20 and #21) on board for sampling and analyzing chlorine, TSS, coliform, pH, biochemical oxygen demand (BOD) and chemical oxygen demand (COD). The ability to monitor and analyze on the vessel allows for quick adjustments for process control of the system.

The Triton system was installed in 2011 and runs continuously, however, the membranes had to be replaced in 2012 due to a release of high chlorine/chemical cleaners to the system which caused foaming and bacterial die off. The staff is now more careful about how chlorine and chemicals are added to the Triton system.

Conclusions and Recommendations

It is recommended that staff continue to maintain the high functioning wastewater treatment systems. The protocols for discharges are very clear. Records were orderly and appeared consistent with the MOU. Staff was very knowledgeable of protocols and treatment systems. It is also recommended that on-board and shore staff evaluate alternate dry-cleaning alternatives in hopes of removing the use of PERC as a cleaning agent.

Attachments:
Photographs

Copies to:
James S. Mitchell, Director – Environment & Public Health, Prestige Cruise Holdings
Christopher Nagy, Environmental Officer, REGATTA
Mark Toy, Health
Greg Wirtz, NWCCA
Stephanie Jones Stebbins, Port of Seattle
Kevin Fitzpatrick, Ecology
Mark Henley, Ecology
Amy Jankowiak, Ecology
Central Files: Oceania Cruises – REGATTA; WQ 6.1

Section H: Signatures

<u>Name and Signature of Inspector:</u>	<u>Agency/Office/Telephone:</u>	<u>Date</u>
Amy Jankowiak 	Department of Ecology Northwest Regional Office Water Quality Program Municipal Compliance Specialist 425-649-7195	8/4/14
Mark Henley 	Department of Ecology Northwest Regional Office Municipal Unit Supervisor 425-649-7103	8/5/14



PHOTO #:01 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE NO.: P1010122
DESCRIPTION: NAVIGATIONAL PAPER MAP WITH MARKINGS

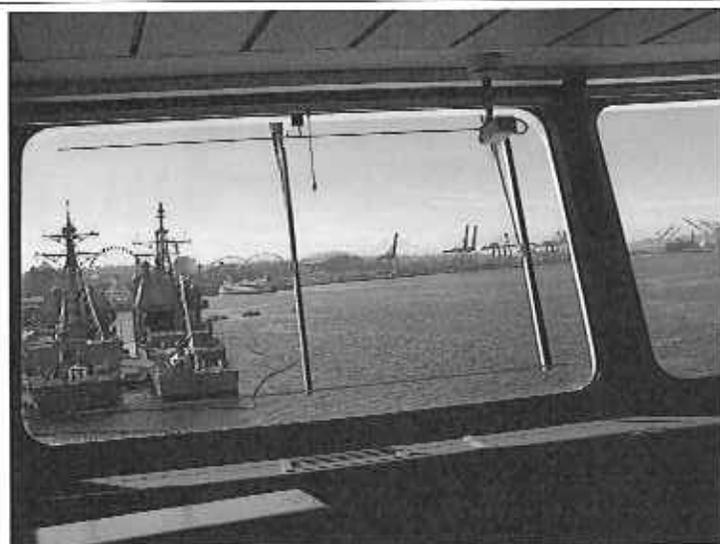


PHOTO #:02 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE NO.: P1010123
DESCRIPTION: VIEW FROM BRIDGE



PHOTO #:03 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE NO.: P1010124
DESCRIPTION: NAVIGATIONAL ELECTRONIC MAP WITH OCNMS



PHOTO #:04 JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE NO.: P1010125
DESCRIPTION: TRITON GREY WATER COLLECTION TANK (1 OF 6)



PHOTO #:05 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010127
DESCRIPTION: TRITON MBR FILTER TANK AND ION EXCHANGERS



PHOTO #:06 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010128
DESCRIPTION: TRITON MBR FILTER TANK

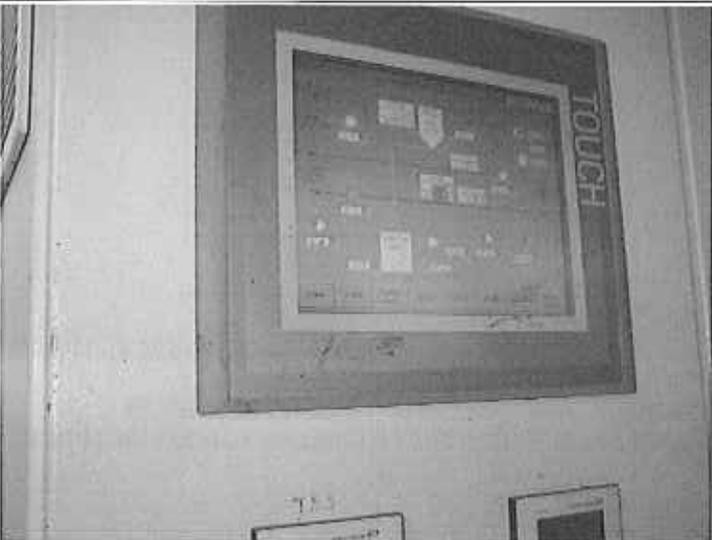


PHOTO #:07 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010129
DESCRIPTION: TRITON CONTROL SCREEN

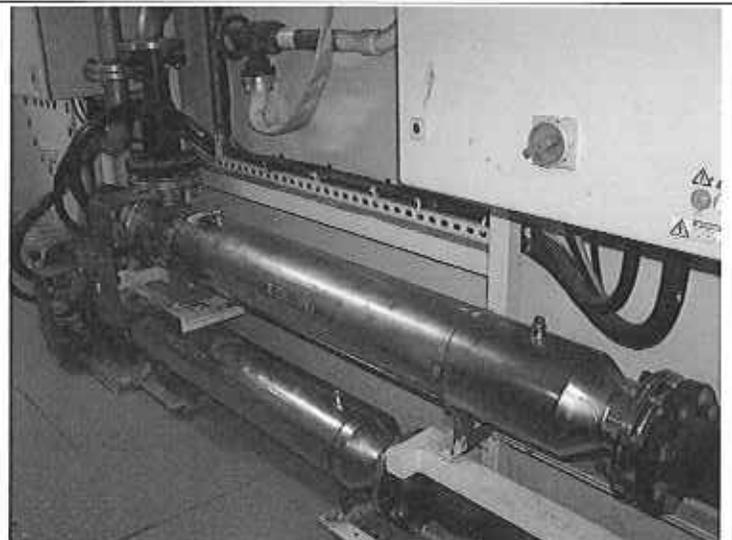


PHOTO #:08 JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010130
DESCRIPTION: ULTRAVIOLET LIGHT (UV) DISINFECTION SYSTEM



PHOTO #:09 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010131
DESCRIPTION: UV CONTROL PANEL

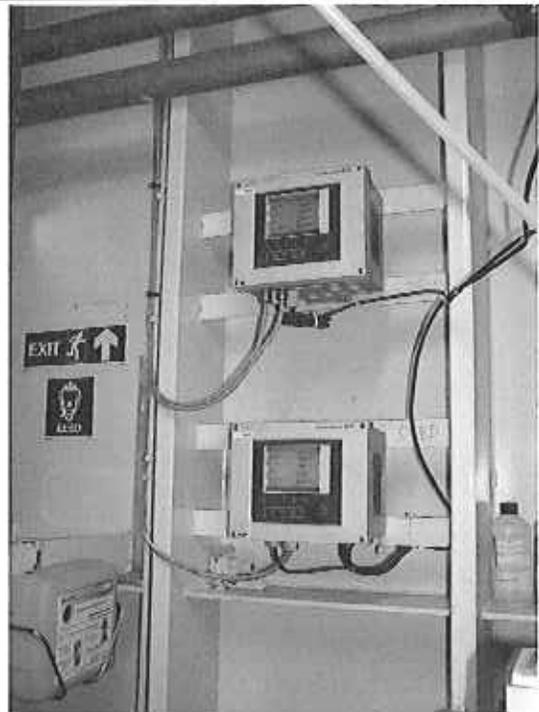


PHOTO #:10 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010132
DESCRIPTION: TRITON EFFLUENT PH METTERS



PHOTO #:11 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010133
DESCRIPTION: TRITON OVERBOARD DISCHARGE PORT

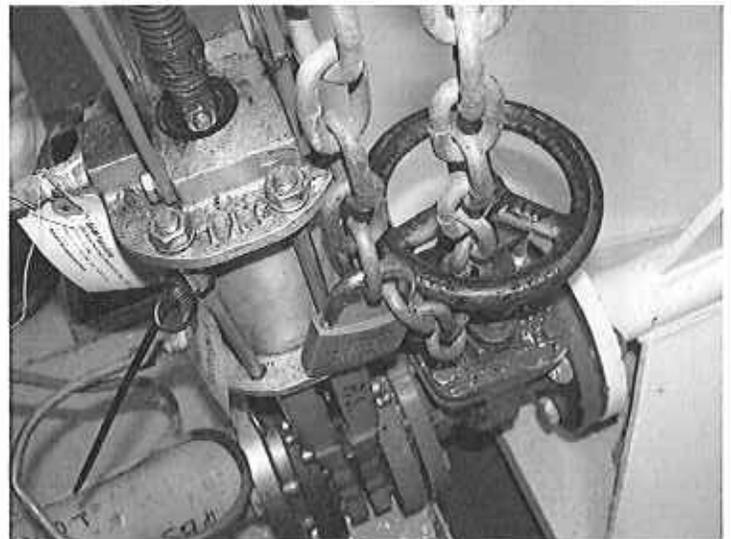


PHOTO #:12 JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010134
DESCRIPTION: TRITON OVERBOARD DISCHARGE PORT PADLOCK

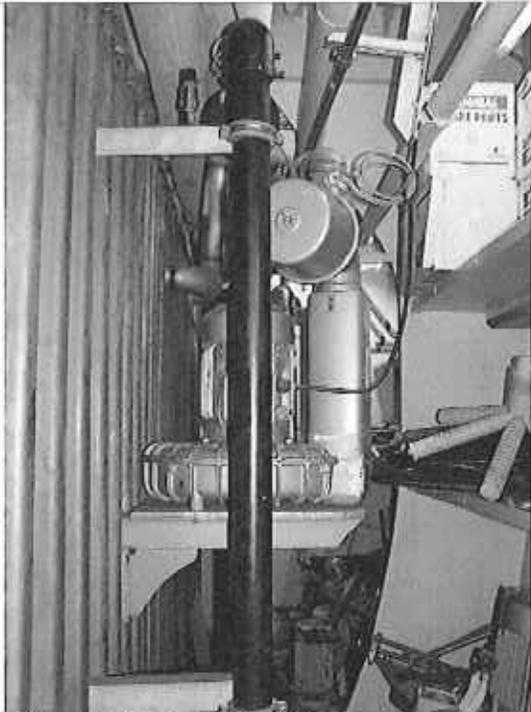


PHOTO #:13 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010135
DESCRIPTION: BLOWERS FOR TRITON MEMBRANE FILTERS



PHOTO #:14 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010136
DESCRIPTION: TRITON DEFOAMER DOSING

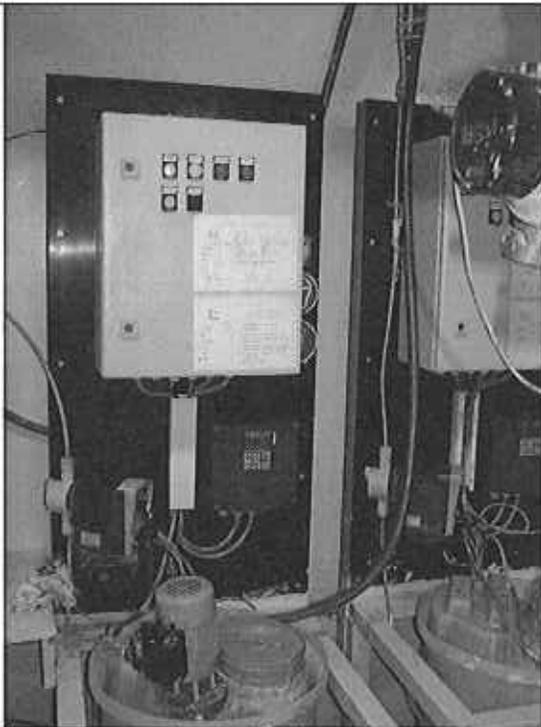


PHOTO #:15 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010137
DESCRIPTION: TRITON PH CONTROL DOSING



PHOTO #:16 JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010138
DESCRIPTION: TRITON SCREENS



PHOTO #:17 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010140
DESCRIPTION: BILGE - OILY WATER SEPARATOR (OWS)

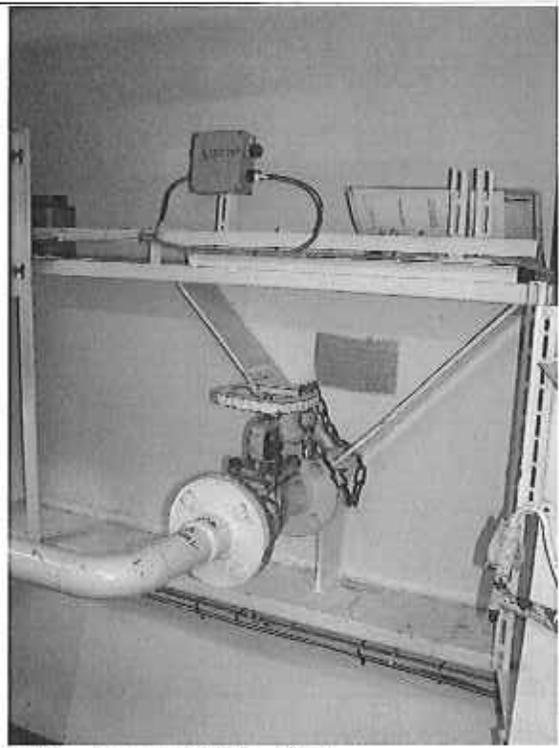


PHOTO #:18 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010141
DESCRIPTION: OWS DISCHARGE PORT

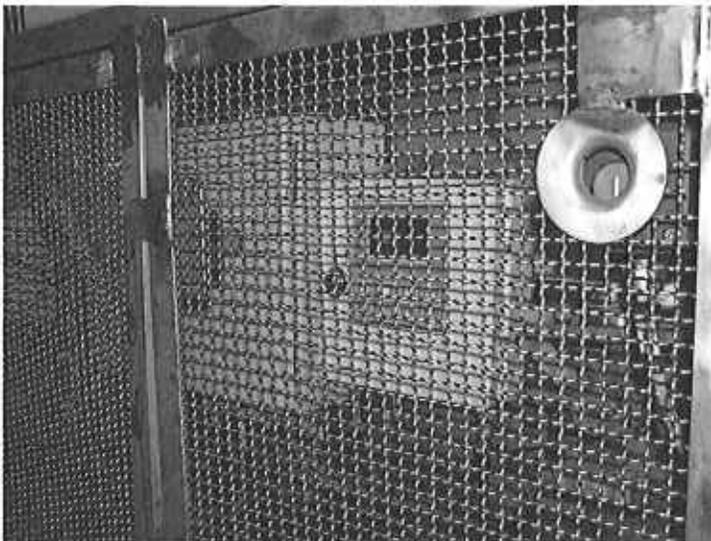


PHOTO #:19 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010142
DESCRIPTION: OWS WHITE BOX



PHOTO #:20 JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010144
DESCRIPTION: PROCESS CONTROL LABORATORY



PHOTO #21 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010145
DESCRIPTION: PROCESS CONTROL LABORATORY



PHOTO #22 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010150
DESCRIPTION: COLD ROOM GARBAGE STORAGE



PHOTO #23 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010147
DESCRIPTION: FLUORESCENT BULB EATER (BACK RIGHT)



PHOTO #24 JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010148
DESCRIPTION: CAN COMPACTOR



PHOTO #:25 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010149
DESCRIPTION: FOOD WASTE PULPER



PHOTO #:26 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010151
DESCRIPTION: PLASTICS COMPACTOR



PHOTO #:27 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010152
DESCRIPTION: INCINERATOR RECEIVER



PHOTO #:28 JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010153
DESCRIPTION: GARBAGE AND FOOD WASTE CHUTE (TAPED OFF LATCHED AREA)



PHOTO #:29 DATE: JULY 31, 2014
TAKEN BY: AMY JANKOWIAK FILE No.: P1010154
DESCRIPTION: VESSEL