

WASHINGTON ANNUAL CRUISE MEMORANDUM OF UNDERSTANDING & CRUISE SHIP UPDATE MEETING

Date/Time: January 22, 2009; 9:30 am to 2:30 pm

Groups: Port of Seattle, WA Department of Ecology, Cruise Line Representatives, WA Department of Health

Location: Department of Ecology, Northwest Regional Office

Attendees:

Norm Davis, Department of Ecology
Randy Fiebrandt, Norwegian Cruise Line
Kevin Fitzpatrick, Department of Ecology
Marie Fritz, Port of Seattle
John Hansen, Northwest Cruiseship Association
Amy Jankowiak, Department of Ecology
Stephanie Jones Stebbins, Port of Seattle
Lincoln Loehr, Northwest Cruiseship Association
Andrew Lorenzana, Princess Cruises
Mike McLaughlin, Port of Seattle
Bill Morani, Holland America Line
Rich Pruitt, Royal Caribbean Cruises
Peter Ressler, Port of Seattle
Marietta Sharp, Department of Ecology
Bob Stone, Royal Caribbean Cruises
Mark Toy, Department of Health
Jon Turvey, Holland America Line

Agenda

9:30 AM – 9:45 AM	Welcome, Introductions	(Amy Jankowiak, All)
9:45 AM – 10:15 AM	Compliance with the 2008 season Findings from 2008 season inspections/records review DOH changes – how it went, what's in store for 2009	(Amy Jankowiak, Mark Toy)
10:15 AM – 10:30 AM	Biomass Update	(Port of Seattle, All)
10:30 AM – 10:45 AM	Whole Effluent Toxicity Update	(Ecology, Cruise line reps)
10:45 AM – 11:00 AM	BREAK	
11:00 AM – 12:00 PM	EPA Vessel Discharge Permit Summary of Requirements Comparison to MOU Comments	(Amy Jankowiak, All)
12:00 PM – 1:30 PM	LUNCH	
1:30 PM – 2:00 PM	MOU Amendments Changes due to EPA permit Other changes	(All)

2:00 PM – 2:15 PM	Funding for the MOU <u>Where we are</u>	(Amy Jankowiak, All)
2:15 PM – 2:30 PM	Comments/Open Discussion Looking Ahead	(All)

Welcome, Introductions

Welcome and introductions

Compliance with the 2008 Season, Amy Jankowiak, Department of Ecology DOH Changes, Mark Toy, Department of Health

Began by going through PowerPoint slides on Compliance for the 2008 season. (link to PowerPoint included on Ecology website)

2008 Approvals

- 100% port calls from large cruise ships under the MOU, 4 vessels approved; 207 port calls
- >1 nm and > 6 knots
 - NONE
- Continuously
 - NORWEGIAN PEARL
 - NORWEGIAN STAR
 - GOLDEN PRINCESS
 - STAR PRINCESS

Compliance Evaluation consists of:

- Monthly Sampling Data
 - Sampling done per MOU, submitted, meets requirements
- WET Testing
- Inspections
 - Allowed a minimum of once/season to verify compliance with MOU
- Other Provisions
- Compliance/Non-Compliance Notifications
- Annual Compliance Reports

Typical Inspection includes

- Introductions/overview of plan for the day (prior notification given)
- Control room
 - Run-through of how system works
 - Variety of questions on staffing, training, protocols...
 - Review of records
- Tour of treatment system(s)
- Observations of other waste streams on the ship
- Sampling
- Conclude
- Approximately 2-3 hours in length
- Similar to inspections for on-land plants

2008 Inspections

- Inspections Conducted

- 11 inspections conducted (all homeported vessels plus 4 additional)
- Inspection findings
 - Operating well; more sampling on board for process control
 - Discharge protocols thorough with verification
 - Recommendations made –
 - Vessel due for WET testing
 - No discharge until UV operational (the UV system was not yet installed)
 - Copy of the MOU should be available
 - 2 vessels operational problems with AWTS – not discharging
 - 3 of 11 inspected traditional MSDs
 - Waste Minimization efforts impressive
- Copies of discharge documents requested/reviewed
NWCA vessels not inspected, and for time period since inspection - submitted and reviewed – in compliance

DATE OF INSPECTION	VESSEL
June 7, 2008	HAL OOSTERDAM
June 22, 2008	HAL WESTERDAM
June 22, 2008	STAR PRINCESS
July 18, 2008	CELEBRITY INFINITY
July 26, 2008	NORWEGIAN STAR
July 26, 2008	GOLDEN PRINCESS
August 22, 2008	HAL AMSTERDAM
August 29, 2008	RCCL RHAPSODY OF THE SEAS
September 14, 2008	NORWEGIAN PEARL
September 22, 2008	CELEBRITY MERCURY
October 1, 2008	CELEBRITY MILLENIUM

2008 Sampling

- Sampling data received and evaluated. Summary of data and data will be included in the 2008 annual report
 - pH all within 6.0-9.0, but some lower than WA WQ standard of 7.0
 - One BOD result higher (65 mg/l), TSS max of 11 mg/l
 - Chlorine all ND
 - Fecal mostly ND, highest was 12 #/100 ml
 - Ammonia ranged from 6.6 mg/l to 71 mg/l (avg = 32)

There was a discussion about the dissolved metals results that are required in Alaska. One issue is that water bunkered in Seattle is very high in zinc.

- WET testing
 - Required for vessels approved for continuous discharge
 - Once every two years if homeported (20 visits) or
 - Once every 40 port calls or turnarounds
 - Results submitted for NORWEGIAN STAR and NORWEGIAN PEARL
 - WET testing also required for the GOLDEN PRINCESS. Results were not submitted.

An e-mail providing some detail on the vessels results from Ecology's WET expert (Randy Marshall could not be at the meeting) was discussed. The e-mail provides a synopsis of the results from the two vessels. Ammonia levels were higher for the PEARL, though the STAR had more toxic results. Due to other indicators such as conductivity and the relative sensitivity of fish and mysids to the samples, another toxicant besides ammonia may be present. Surfactants from detergents or metals may be possible toxicants.

The cruise line reps requested that Ecology provide feedback to the cruise lines on the sampling results, and do some timely. There was concern from the cruise lines about how

results would be worded in Ecology's annual report. Ecology offered to send the draft language to the cruise lines prior to finalization, but this is an Ecology authored report and Ecology has final say in what goes into the final report.

There was also a discussion about how dilution/mixing should be applied to the results. A study is being finalized (preliminary results out now) from Alaska Department of Environmental Conservation/EPA on dilution from cruise ships while stationary. Preliminary analysis indicates that the average dilution factor at a distance between 5 to 15 meters away from the cruise ships ranged from a factor of 22 to 50. The cruise line reps requested that we look at the results received thus far while applying the dilution factors.

2008 Compliance Notifications

- Compliance notifications
 - No reported incidents for 2008 season to date
 - Compliance letters
 - All in, no exceptions reported

2007 Assessment of Cruise Ship Environmental Effects in Washington

- Recommendations
 - Ecology recommends MOU continue to be used as a complement to environmental regulations until regulations specific to cruise ship waste management in Washington are put in place
The EPA VGP is a factor now, but there are still no specific State regs on cruise ship wastes.
 - Ecology continue to inspect ships that discharge, including closely looking at wastewater management and other waste streams
Ecology continues to inspect the vessels
 - Parties of MOU continue to work on WET testing evaluation
Meetings were held over the last year discussing WET testing. An amendment was made in the MOU with the purpose of focusing on vessels approved to discharge continuously and the guidelines for WET testing were updated.
 - Parties of MOU and KC continue to work together in evaluating options for sewage sludge (biomass) handling
The Port has been leading a study on this issue.
 - Ecology, cruise lines, and Health work to amend MOU incorporating DOH report recommendations
Amendments were made in 2008 incorporating the recommendations.
 - Cruise lines to conduct a thorough review of records on an on-going basis and at end of season to evaluate compliance and inspection recommendations to be implemented.

Department of Health, Virus's and the MOU update

- WA Department of Health provided an update on compliance with the virus conditions of the MOU for 2008.
- Discussion on how vessels approved for discharge dealt with the requirement to stay ½ mile away from shellfish beds. 2 of 4 vessels did not discharge at all (Princess Cruises). The other two vessels (Norwegian Cruise Line) had clear protocols in place on how to stay clear of discharging in those areas (the two protocols varied slightly).
- Discussion on virus test kits and the limitations of results from the kits. DOH will e-mail California results to those interested.

- DOH to review shellfish bed areas for 2009 season and should be able to provide an update by March 1, 2009. If there are changes to the beds, the MOU will be updated (if no other MOU amendments, may be able to just update appendix and distribute).
- There was also a discussion about what information is needed for the cruise lines to submit to Ecology on the new UV system requirements for virus protection. Ecology will send a summary of what is required to the cruise lines. There was also a discussion about how tracer dyes might interfere with UV systems.

Biomass Update, Stephanie Jones Stebbins, Port of Seattle

The Port of Seattle provided an update on the *Cruise Vessel Biomass Management Study*. The draft for Phase 1A is open for public comment until February 6, 2009. There was an update given by Port staff to the Commission a couple of weeks ago. Details of the Commission briefing were given. The Port will incorporate comments from the public comment period as they can and hope to have the final report out late February or March. The Port of Seattle will then provide recommendations to the commission on next steps. There was some discussion about what future steps could be taken and how to fund those steps.

Whole Effluent Toxicity Update, Amy Jankowiak, Department of Ecology

As there was already a discussion on WET testing during the Compliance timeslot, no further discussion on WET testing was necessary.

EPA Vessel General permit, Amy Jankowiak, Department of Ecology

Ecology provided an update on the VGP including Ecology's decision to not certify nor to decertify the permit and that EPA has interpreted this as a waive. Therefore the VGP applies to vessels in Washington state waters without any certification conditions. There was also a discussion on appeals to the permit, lawsuits and potential next steps. Ecology stated that if it comes to the State(s) issuing their own permit, Ecology plans to attempt a West Coast approach. The West Coast states (WA, OR, CA, AK, and HI) have discussed this possible approach and are open to it. The idea would be to have as consistent requirements as possible along the west coast waters while also being protective of the waters in the various states.

Ecology had provided a spreadsheet prior to the annual meeting which includes a comparison of requirements for the MOU and requirements for the VGP. There was discussion on the requirements and if contradictions might be there. There was a discussion about how the MOU would be affected by the VGP. Ecology proposed to leave the MOU conditions as is (unless there are contradictions to work out, haven't seen any as yet), but to refer to the VGP. After discussion, there appears to be no need to refer to the VGP, so no amendment due to the VGP is proposed at this time.

MOU Amendments

The previous discussion on the VGP concluded to not propose any MOU amendments due to the permit. As discussed earlier, the Department of Health will review shellfish bed areas for the 2009 season and should be able to provide an update by March 1, 2009. If there are changes to the beds,

the MOU will be updated (if no other MOU amendments, may be able to just update appendix and distribute).

Funding for the MOU, Amy Jankowiak, Department of Ecology and Marie Fritz, Port of Seattle

A detailed synopsis of funding amounts since the inception of funding in 2006 was given by Ecology.

- In 2006, the Port collected \$75,000, due to some Ecology constraints on being able to go back to parts of 2006, Ecology only invoiced for \$27,744.62. This left a credit of about \$47,260.55.
- In 2007, the Port did not collect fees due to the credit available. Ecology invoiced for \$22,188.13. This left a credit of about 25,072.42.
- In 2008, the Port collected \$88,218.61. The original plan was for the Port to not collect fees for 2008 due to the credit, but the timing didn't work out and fees were collected. Slightly higher fees were collected than the plan of \$75,000. Ecology's invoice for 2008 is not yet available. A projected credit of about \$75,000-\$80,000 is projected after 2008.
- For the 2009 season the Port is not collecting fees.

With the likely credit, at least the 2009 season and the 2010 season should be paid for with the credit. The Port is not likely going to be able to collect any more fees due to the difficulty we have had with collecting and invoicing the same amounts. After the 2010 season, a new funding mechanism will have to be discussed.

Comment/Open Discussion, All

The cruise lines brought up a discussion about air quality issues. There was discussion about whether or not there would be a separate MOU for air quality. The Puget Sound Clean Air Agency would have the lead on these issues, not Ecology. Several years ago, there had been discussion about the potential for a separate MOU, but the discussions did not lead to one. There was some discussion on what the various cruise lines are doing and trying out in relation to energy efficiency and air quality. Holland America Line gave an update on the WET Scrubber study and how this might affect water quality.

The cruise lines support the present regime of air issues being addressed under the NW ports clean air strategy/ Puget Sound Clean Air Agency, separate from the MOU.

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Date/Time: January 22, 2009; 4:00 pm to 5:30 pm (actually finished at about 6:15 pm)

Location: Department of Ecology, Northwest Regional Office

Attendees:

Norm Davis, Department of Ecology
Fred Felleman, Friends of the Earth
Randy Fiebrandt, Norwegian Cruise Line
Kevin Fitzpatrick, Department of Ecology
Marie Fritz, Port of Seattle
David Fyfe, Northwest Indian Fisheries Commission
John Hansen, Northwest Cruiseship Association
Amy Jankowiak, Department of Ecology
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Peter Ressler, Port of Seattle
Marietta Sharp, Department of Ecology
Bob Stone, Royal Caribbean Cruises
Mark Toy, Department of Health
Heather Trim, People for Puget Sound
Jon Turvey, Holland America Line
Mike Young, Cruise Terminals of America

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4:00 PM – 4:20 PM	Welcome, Introductions	(Amy Jankowiak, All)
4:20 PM – 4:30 PM	Compliance with the 2008 season Findings from 2008 season inspections/records review DOH changes – how it went, what’s in store for 2009	(Amy Jankowiak, Mark Toy, cruise line reps)
4:30 PM – 4:45 PM	Updates Biomass EPA Vessel Discharge Permit MOU Amendments MOU Funding	(Port of Seattle) (Amy Jankowiak, cruise line reps) (Parties of the MOU) (Amy Jankowiak, Port of Seattle)
4:45 PM – 5:00 PM	Looking Ahead	(Parties of the MOU)
5:00 PM – 5:30 PM	Comments/Discussion from interested parties	(Amy Jankowiak, All)

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DOH Changes, Mark Toy, Department of Health**

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There was a recommendation/request to compare the WET testing results received thus far to the on-land King County plants for the annual report.

There was a comment made about the results received thus far being high in toxicity, and if AWTS' are better than land-based plants, then why the high toxicity.

There was also a discussion about how dilution/mixing should be applied to the results. A study is being finalized (preliminary results out now) from Alaska Department of Environmental Conservation/EPA on dilution from cruise ships while stationary. Preliminary analysis indicates that the average dilution factor at a distance between 5 to 15 meters away from the cruise ships ranged from a factor of 22 to 50.

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The MOU parties previously discussed how the MOU would be affected by the VGP. Ecology proposed, and the parties agreed to leave the MOU conditions as is (unless there are contradictions to work out, haven't seen any as yet).

Updates: MOU Amendments, parties of the MOU

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The cruise lines support the present regime of air issues being addressed under the NW ports clean air strategy/ Puget Sound Clean Air Agency, separate from the MOU.

Updates: MOU Funding, Amy Jankowiak, Department of Ecology

A synopsis of funding was given by Ecology. Funding is in good shape at least through 2010 and then a funding mechanism may need to be revisited.

Looking Ahead, Parties of the MOU

No expected changes coming legislatively or otherwise.

Comments/Discussion from interested parties, All

Comments and discussion provided.
