

**UNITED STATES DISTRICT COURT**  
**DISTRICT OF CONNECTICUT**

UNITED STATES OF AMERICA,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	CRIMINAL NO. 3:07-CR-134 (JBA)
	)	
IONIA MANAGEMENT S.A.,	)	
	)	
Defendant.	)	

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**SPECIAL MASTER’S FOURTH REPORT**

**I. Introduction and Status of Work**

This report is made pursuant to the Special Master Appointment and Scope of Work order dated April 18, 2008, in the above matter (the “Special Master Order”).

The Special Master Order contemplates special master hearings will be held in the first weeks of December and June each year. However, scheduling difficulties on the part of the parties and the Special Master and the fact that the M/T FIDIAS was scheduled for an ongoing, underway audit in June, 2010, made a July date more appropriate. The fourth Special Master hearing was held on July 14, 2010.

After the Special Master’s third hearing in January, 2010, the Independent Environmental Consultant (“IEC”) conducted an ongoing, underway audit of the M/T THEO T in the Singapore Straits on February 19-22, 2010. The IEC conducted an ongoing, underway audit of the M/T FIDIAS at anchor and underway off Piraeus, Greece on June 7-8, 2010.

The Special Master’s fourth hearing was held on July 15, 2010, in New Haven, Connecticut. Prior to the hearing on May 11, 2010, the undersigned provided the parties with a

list of topics that would be addressed at the hearing. The parties were invited to suggest additional topics and the United States did so on June 7, 2010. On June 10, 2010, the undersigned provided the parties with a list of additional topics that would be addressed at the hearing. The parties were required to produce copies of all documents they wished to produce at the hearing to the Special Master and the opposing party fifteen calendar days before the hearing date. The parties complied with all pre-hearing requirements.

Due to unexpected medical issues, the undersigned was unable to personally preside at the hearing in New Haven. Instead, with the able assistance of the staff of the United States District Court, the undersigned participated by video conference. All other counsel and witnesses were present at the courtroom in New Haven.

## **II. July 15, 2010 Hearing**

### **A. Summary of proceedings and evidence**

A hearing was held July 15, 2010, at the United States District Court in New Haven, Connecticut. The United States was represented by Assistant United States Attorney William M. Brown. Ionia was represented by Michael Chalos and George Kontakis. Also present were United States Probation Officer Patrick Norton; United States Coast Guard Lieutenant Commander Channing D. Burgess; United States Coast Guard Lieutenant Commander John D. Cashman; IEC Captain Richard Wiggat; and Independent Corporate Consultant (“ICC”) James Sandborn. Also present on behalf of Ionia were Krystyna Tsochlas, Ionia’s Safety and Quality Manager, Environmental Management Representative (“EMR”) and Designated Person Ashore, and George Karagiorgis, Ionia’s Technical Manager and Corporate Compliance Manager (“CCM”) (designated pursuant to Section II of the Special Master Order).

Evidence at the hearing consisted principally of the testimony of Ms. Tsochlas supplemented with brief testimony by Mr. Karagiorgis. With the aid of a PowerPoint presentation Ms. Tsochlas' testimony was directed to the following issues, all as set out in the Special Master's pre-hearing communication with the parties:

1. Progress in fully implementing the Special Waste Oil Monitoring System ("SWOMS").
2. Training.
3. Fleet engineering survey.
4. Ionia internal audits.
5. Ionia vessels calling on U.S. ports.
6. Environmental management plan.
7. Antwerp pollution incident.
8. Ongoing audit of the M/T THEO T.
9. Ongoing audit of the M/T FIDIAS.

The testimony was taken in a somewhat informal manner. Ms. Tsochlas was placed under oath and allowed to testify in a narrative with the assistance of the PowerPoint, but questions were interposed during her narrative by the Special Master, the IEC, the ICC, the government representatives, and Ionia's counsel. Mr. Karagiorgios was also placed under oath and testified briefly to supplement Ms. Tsochlas' testimony or in response to questions from the parties. The IEC and the ICC also stated their views on issues raised at the hearing. A transcript of the hearing is attached as Appendix A.

## **B. Findings**

Based on the testimony at the hearing, the documents presented and the reports of the ongoing audits of the M/T THEO T and the M/T FIDIAS, I make the following findings by preponderance of the evidence:

### **1. General**

a. Krystyna Tsochlas continues to serve as Ionia's Safety and Quality Manager, EMR and Designated Person Ashore. She has been directly and substantially involved in Ionia's efforts to comply with the terms of probation and the requirements of the Special Master Order. She reports directly to Ionia's Managing Director.

b. Georgios Karagiorgis is head of Ionia's Technical Management Department and CCM. He began his employment with Ionia on January 2, 2009. Mr. Karagiorgis is familiar with the duties required of the CCM under the Special Master Order and has been directly and substantially involved in carrying out Ionia's efforts to comply with the terms of probation and the requirements of the Special Master Order. He reports directly to Ionia's Managing Director.

c. An ongoing audit of the M/T THEO T was conducted while the vessel was underway and at anchor in the Singapore Straits February 19-22, 2010. The IEC's report of the audit is attached as Appendix B and is adopted as a finding, except as specifically discussed below.

d. An ongoing audit of the M/T FIDIAS was conducted while the vessel was anchored off Piraeus roads and later underway around Piraeus. The underway portion of the audit was carried out while the vessel steamed out to sea, 60 nautical miles off Piraeus, before returning to Piraeus anchorage for orders. The audit was conducted

June 7-8, 2010. The IEC's report of the audit is attached as Appendix C and is adopted as a finding, except as specifically discussed below.

e. The M/T THEO T called at two U.S. ports during 2010. The vessel called at Guam on May 13, 2010, and was subject to a port state inspection by the United States Coast Guard. The M/T THEO T called at Long Beach, California, June 20-25, 2010; no port state inspection was conducted by the United States Coast Guard. Ionia has requested that two additional vessels be permitted to call a U.S. port, the M/T ESTIA and M/T PLOUTOS.

f. Since the Special Master's Hearing in January, 2010, Ionia has submitted records relevant to waste oil generation and management and processing aboard the M/T FIDIAS and the M/T THEO T (the "covered vessels") on a monthly basis. The records have been submitted within 40 days of the end of the month in which the records were generated. Given the trading schedule of the vessels and the necessity of transmitting many of the records by post from ports of call, the time for transmission to the required recipients has been reasonable. The IEC and ICC have communicated with Ionia Management periodically on topics related to progress on implementing the SWOMS, training issues and document production. At the hearing, the IEC requested that Ionia provide the IEC with the spreadsheets Ionia prepares to facilitate comparison of manual and SWOMS data, a request I find to be reasonable.

2. The Special Waste Oil Monitoring System "SWOMS"

a. The SWOMS is fully commissioned and operational on both the M/T THEO T and the M/T FIDIAS. Because of discrepancies identified between manual soundings and SWOMS ratings, in February and May 2010, technicians from Ashland,

Inc., a contractor of Vigilant Marine, the SWOMS manufacturer, visited the vessels and recalibrated all SWOMS sensors. While some discrepancies continue between SWOMS transmissions and manual soundings, these appear to be now within manageable limits. As related in the Special Master's Third Report, Ionia intended to reconfigure to the SWOMS so that hourly SWOMS data could be transmitted daily to Ionia Headquarters. However, Vigilant Marine advised that the memory capacity of the units presently does not allow for that process. Vigilant Marine is attempting to devise a solution. At present, although SWOMS data is recorded hourly, SWOMS data is transmitted showing readings only at 00 GMT each day. Manual soundings, to which the SWOMS data is compared, are taken at various times during the day, depending on the time zones in which the vessels are navigating. Comparison between SWOMS data and manual soundings would be more meaningful if manual soundings could be compared with SWOMS data taken at the time closest to the manual soundings.

b. The SWOMS is currently operating on the covered vessels in compliance with requirements contained in the Special Master Order, Section IV.b.

c. Ionia conducted a survey during required implementation of the SWOMS among technical management staff and seafarers throughout the fleet. The results of the opinion survey indicated the seafarers are divided on whether the SWOMS added to the engine room personnel's workload, but believe that the SWOMS readings are accurate, the operation of the SWOMS is trouble free, that it is not possible to tamper with the SWOMS, and with SWOMS on board, it is not possible to contravene MARPOL oily waste provisions.

d. At Ionia's request, ABS, its classification society, amended Form B of the covered vessels' International Oil Pollution Prevention ("IOPP") Certificates to include two oil tanks not monitored by the SWOMS: the fuel oil overflow drain tank and the scavenger air box drain tank. Both of those tanks are required to be listed on the IOPP Certificate because they hold oil or oily residue. However, SWOMS sensors in those tanks would be of little value for the following reasons. The fuel oil overflow drain tank catches fuel that is drained or may overflow from the vessels machinery. The fuel is re-circulated to the vessels fuel tank and consumed. The contents of the tank are not treated as waste, but as usable fuel. The scavenger air box drain tank is quite small, with a capacity of approximately 0.5 m<sup>3</sup>. The tank is pressurized and operates at high temperature adjacent to the main engine scavenge space. It drains directly into the incinerator waste oil tank, and its contents cannot be redirected. Installation of a SWOMS sensor under the high pressure and temperature of the scavenger air box drain tank would not be practical or useful.

e. The SWOMS data is transmitted to Ionia offices to the attention of the Technical Manager, who is also the CCM. A technical coordinator carries out the data entry necessary for the review and analysis. Two superintendent engineers review and analyze the SWOMS data in comparison to the manual information submitted monthly by the vessels. Ionia has developed a spreadsheet to facilitate a comparison of the data to identify any discrepancies. The spreadsheet also automatically generates graphical comparisons of the data.

f. The process of SWOMS data review is as follows: 1) SWOMS data is transmitted daily to the Ionia officer in Greece and entered into spreadsheets; 2)

data from manually generated documentation submitted by the vessels on a monthly basis are entered onto the spreadsheet when received; 3) discrepancies between electronic data and manual data are calculated and charts are produced and reviewed by a technical superintendent. In addition, the technical superintendent reviews machinery alarm printouts and compares them to oil record book entries. Further, during the process, waste generation and waste disposal quantities are cross-checked and their accuracy is verified to the extent possible.

3. Training.

a. Status of implementation of computer based training system (“CBT”). Ionia has implemented computer based training on all of its vessels, including the covered vessels, and for its shoreside staff. The last vessel on which the CBT was implemented was the M/T ESTIA on February 1, 2010.

b. Evaluation of CBT training. Ionia conducted a survey on the CBT throughout the fleet and shoreside facilities. Ionia compiled feedback which indicated the CBT units are being used by nearly every seafarer, that the seafarers are enthusiastic about CBT and believe CBT improves their fund of knowledge.

c. Implementation of Ionia’s training at manning agents and schools in the Philippines. In the Philippines, Ionia carries on its training through a manning agent and independent training providers. The CBT training program was instituted at the manning agent in July, 2009. The Competency Evaluation Assessment of candidates to join Ionia’s crews began in January, 2010. Since then, 14 deck officers and 15 engine officers have been assessed. The Shipboard Environmental Management System training program was carried out at the manning agent in the Philippines by Exact, a well known



independent training organization in the Philippines. The program commenced in October, 2009.

d. Training program evaluation. Ionia has instituted a program designed to measure the success of its training program by establishing a number of key performance indicators, principally based on numbers of deficiencies found in external and internal audits and port state inspections. Ionia expects the percentage of deficiencies identified in those audits will decrease if the training programs are effective. Since the training programs have generally been in effect for less than a year, it is too early to determine the success of the training programs, based on an analysis of the key performance indicators.

Ionia conducted a survey of shore based and seafarers to determine their satisfaction with the training program. The vast majority of seafarers and shore based personnel were satisfied, or very satisfied with the training program.

4. Fleet Engineering Survey.

a. Ionia implemented a more detailed fleet engineering survey on March 22, 2010. The original questions in the fleet engineering survey were taken from the Special Master Order, Attachment B. With the assistance of the ICC and IEC, Ionia simplified each question, and added a series of specific questions intended to obtain more specific and useful answers from the seafarers. So far, Ionia has instituted no changes in policies and procedures resulting from the fleet engineering surveys. One suggestion from the seafarers that is under consideration is a proposal to establish a photo file of engine room seals to help auditors and superintendents verify implementation of the sealing program.

5. Internal Audits.

a. Description. Ionia has an established a protocol for internal audits of its vessels and shoreside facilities. Each company department and vessel is audited at least annually, or sooner, if the need arises, for example, in the event of an incident indicating a problem with company systems. Ms. Tsochlas, as the company's EMR, issues the annual audit schedule, appoints the internal auditor, and defines the criteria, method and scope of the audit. The aim of the audits is to: 1) determine whether company policies, programs and processes are in place as required by company manuals; 2) verify actions taken in response to previous audits; 3) examine the effective and efficient use of resources; 4) identify opportunities for improvement; and 5) record identified non-conformities. Upon completion of the audit, the audit report and supporting material is submitted to the EMR within ten (10) days, who reviews the report and circulates it to the Managing Director and the relevant heads of departments. Proposed corrective and preventative actions are reviewed and evaluated by the EMR. The EMR places a review of the annual internal audit results on the agenda of the annual environmental management review meeting. Thus far, in 2010, internal audits have been carried out on each vessel in the Ionia fleet.

b. Identified Deficiencies. Ionia compiles a table of non-conformities discovered during internal audits, the root cause of each non-conformity, the corrective action taken and the preventative action, if any, that may be required.

6. U.S. Ports. In previous hearings, Ionia requested that the M/T THEO T and the M/T FIDIAS be allowed to call at U.S. ports. The Special Master so recommended and

the Court adopted the recommendation. Ionia has recently requested permission for two additional vessels in its fleet, the M/T PLOUTOS and the M/T ESTIA to call at U.S. ports.

a. Ionia vessels trading schedule to U.S. ports. With the exception of the visits to Guam and Long Beach, California by the M/T THEO T in 2010, no additional calls at U.S. ports are scheduled by any of Ionia's fleet.

b. The EPA General Permit for Discharges Incidental to the Normal Operation of Vessels ("VGP"). Ionia has filed a notice of intent to be covered by the VGP for all of its vessels, except the M/T KRITON.

c. Whether the M/T PLOUTOS and the M/T ESTIA have satisfied requirements contained in the Special Master Order. At present, neither the M/T PLOUTOS nor the M/T ESTIA is in full compliance with the requirements of the Special Master Order. Specifically, the M/T ESTIA has not yet completed installation of the SWOMS onboard and the M/T PLOUTOS has installed the SWOMS equipment onboard as of April 23, 2010, but has not yet completed the communications system required for transmission of SWOMS data. Both vessels have implemented the Environmental Management Plan and commenced submission of documentation required under the Special Master Order Scope of Work. When the SWOMS is fully-commissioned on each vessel, Ionia will request an initial audit to be carried out by the IEC.

7. Environmental Management Plan.

a. IONIA's Environmental Management Plan, denominated the Shipboard Environmental Management System ("SEMS"), has been implemented on all of the vessels in Ionia's fleet. The last vessel in which the SEMS was implemented was the M/T ESTIA on January 28, 2010, because of a delay resulting from her trading

schedule in West Africa. SEMS onboard training has been carried out on each of the vessels in Ionia's fleet, the last of which, again, was the M/T ESTIA on April 30, 2010.

b. An opinion survey was distributed throughout the fleet and the company designed to obtain feedback from seafarers and shoreside personnel regarding the SEMS. The results from both shoreside personnel and seafarers indicated a high degree of satisfaction with implementation of the SEMS.

c. As a result of the survey, several amendments have been made to the SEMS which improve its effectiveness.

#### 8. Antwerp Pollution Incident.

As related in the Special Master's Third Report, while the Ionia vessel M/T KRITON was receiving bunkers on September 17, 2009, at Antwerp Belgium, fuel oil was observed leaking from the oil discharge monitoring equipment (ODME) overboard discharge pipe that passes through the vessel's fuel oil tank. Corrective actions were immediately taken by the company and the vessel was released following repair of the ODME discharge pipe to the satisfaction of the vessel's classification society on September 24, 2009.

Ionia instituted an internal investigation of the incident, and as a result, established corrective and preventive actions as follows:

a. Ionia's Technical Manager has instructed the vessel staff to thoroughly inspect the port fuel tank (the incident involved the starboard fuel tank) at the first convenient opportunity to insure the conditions in the starboard fuel tank that caused the spill are not present in the port tank. The inspection has not been carried out because the vessel has been trading in West Africa and inspection requires the fuel tank to be empty, but Ionia intends to fully inspect the port tank at the first opportunity to do so.

b. The Technical Manager is required to carry out a study of the fleet in order to ensure no similar situation exists on any other vessel. That technical study has been completed and Ionia has determined that no similar piping arrangement exists on any of its other vessels.

c. The Technical Manager has provided a maintenance schedule for the M/T KRITON to ensure a similar accident does not reoccur, and the schedule has been included in the vessel's planned maintenance system.

d. The Technical Manager has proposed a procedure requiring a risk assessment to be carried out for each vessel in the fleet prior to the vessel's dry docking in order to identify any similar situations that may be remedied before a pollution incident. The procedure has been included in Ionia's Safety Management System.

e. The M/T KRITON has been trading in West Africa and there has yet been no opportunity to make planned modifications to the vessel's piping to prevent a similar incident.

9. Ongoing audit of the M/T THEO T. The IEC conducted an ongoing environmental audit of the M/T THEO T while the vessel was underway and at anchor in the Singapore Straits, February 19-22, 2010. The auditor found the environmental procedures and requirements to be well implemented, the officers and crew to be very cooperative and positive throughout the audit, the senior officers to be knowledgeable of the scope and requirements of the environmental management plan (Shipboard Environmental Management System – SEMS) and fully committed to the philosophy of the SEMS. The IEC made specific observations and recommendations, some of which called for corrective action or merit further discussion. Those areas are addressed as follows:

a. Anonymous reporting of environmental concerns. Some crewmembers questioned by the IEC seemed unaware of the anonymous reporting options available to crewmembers. The IEC also noted that the name and contact information for the CMM is posted in various locations, but there is no explanation of the role of the CMM in the anonymous reporting process. Ionia responded to the IEC's finding regarding crew knowledge of the anonymous reporting procedure by taking the following actions: 1) the anonymous reporting procedure has been included in the company's code of ethics pamphlet which is provided onboard all vessels; 2) seafarers are informed of the procedure during the pre-joining familiarization process; 3) the procedure has been included in the SEMS; and 4) posters concerning the anonymous reporting process have been provided and are posted at prominent locations on each vessel.

b. Full operational testing of the OWS. The IEC noted that the crew appeared to be unfamiliar with the full operational testing procedure for the OWS. Ionia noted that no international standards require a full operational test to be periodically carried out on the OWS. However, the company's requirements have been revised to require a full operational test of the OWS to be carried out pursuant to the procedure the OWS manufacturer specified.

c. Inclusion of maintenance procedures for the OWS and sewage treatment plant in the preventative maintenance system. The IEC noted that the vessel has a preventative maintenance system ("PMS") which utilizes the Ulysses software. The PMS contains detailed maintenance procedures for the vessels' systems including machinery such as the incinerator, which are in line with the manufacturer's

recommendations. However, maintenance procedures included for the OWS and the sewage treatment plant did not appear to be in full alignment with the manufacturer's recommendation. In response, Ionia reviewed the PMS and has verified that the maintenance tasks regarding the OWS and sewage treatment plant are in line with the manufacturer's instructions.

10. The IEC conducted an ongoing audit of the M/T FIDIAS at anchor and underway off of Piraeus, Greece, June 7 and 8, 2010. On June 23, 2010, the IEC filed his report of the audit. The IEC concluded that overall, the environmental procedures and requirements were well implemented on the M/T FIDIAS; the officers and crew were cooperative and supportive of the audit; senior officers, including the Master, Chief Engineer, and Chief Officer were knowledgeable of the Scope of Work requirements; and the commitment of the management was obvious through the Environmental Management Manual implemented on board. The report contained a number of observations and recommendations, some of which called for response from Ionia. Those recommendations calling for a response are discussed as follows:

a. The IEC recommended that Ionia's Declaration of Environmental Commitment which is included in its recently implemented Environmental Management Manual, and is required to be signed and acknowledged by each seafarer, should be changed to substitute a generic declaration. Ionia disagreed and believes its current Declaration of Environmental Commitment is sufficient. After discussion, the IEC agreed that the current declaration is sufficient for its purposes, and I so find.

b. The IEC found that the Declaration of Environmental Compliance, signed upon sign off is completed only by senior officers, engineers and electricians. The

IEC recommended the form be revised to reflect the responsibilities of crew signing off the vessel and be completed by all crew members upon sign off.

Ionia revised the Declaration of Environmental Compliance to be completed by all crew members upon sign off. The revision was distributed to the fleet on June 10, 2010.

c. The IEC recommended that Ionia's current Environmental Procedures for Non-crewmembers form, which is required to be signed by all non-crewmembers that come aboard, be eliminated in favor of a readily visible notice posted at the gangway and other highly visible places on the ship.

Ionia has removed the form as recommended and the vessels have been instructed to post a notice at the gangway. The revision was distributed to the fleet on June 10, 2010.

d. The IEC noted that the incinerator capacity listed on the supplement to the IOPP certificate for oil residues is 49.9 Kg/h. The manual specifications indicate a capacity of 38 Kg/h. The IEC recommended that the accuracy of the supplement to the IOPP certificate be verified by class society.

Ionia pointed out that the incinerator capacity recorded in the supplement to the IOPP certificate (49.9 Kg/h) was based on the incinerator's combustion capacity as recorded on the test certificate included in the unit's manual. Ionia provided a copy of the test certificate and the IEC stated that satisfied the audit's concern.

e. The IEC pointed out Ionia's Garbage Management Plan ("GMP") was a fleet-wide plan with no ship-specific information. The IEC recommended ship-specific information be added in the form of a ship-specific appendix.



Ionia responded that it is currently amending its GMP to include ship-specific information detailing location of garbage storage, garbage handling, machinery available and the relevant instructions for use. The color coding of garbage containers is being reviewed and revised in order to ensure that it is uniform throughout the fleet.

f. The IEC pointed out that hazardous wastes are appropriately being segregated from non-hazardous garbage and disposed of ashore. Also, shoreside receipts specifically listing the categories of hazardous waste being sent ashore are being maintained by the Chief Officer. Nonetheless, there are no procedures for the disposal of hazardous waste contained in the GMP.

Ionia advised that the waste stream management procedure in the EMP has been revised to reflect the specific treatment of hazardous waste and the GMP is being amended in order to include the waste stream management process.

g. The IEC noted that the type of engine room seals used by Ionia are generally of poor quality and often break during routine maintenance and painting operations. Although the vessel's master maintains an appropriate spare seal inventory log and the chief engineer maintains an appropriate engine room seal log, broken and lost seals are not accounted for. The IEC noted that broken seals due to engine room operating temperatures and conditions are a common problem in the industry. Ionia advised that the CCM is reviewing the process and expects to establish a procedure to account for all seals, including those that were broken or lost. Ionia is also investigating other types of seals that may be more durable, but will not impede emergency operations.

h. During the ongoing audit, an operational test of the OWS was carried out on June 8, 2010. The OWS performed satisfactorily. However, because the bilge holding tank had been pumped ashore shortly before the auditor arrived, a one-hour sea test of the OWS could not be carried out to test the rated capacity. This was likely due to the fact that the audit was arranged on short notice. Ionia has indicated it will ensure sufficient contents of the bilge holding tank to conduct the one-hour sea test will be maintained in future audits.

i. The IEC noted that the computerized preventative maintenance system does not contain procedures for OWS and sewage treatment plant maintenance in full alignment with the manufacturer's recommendation. Ionia verified that the PMS was updated on June 10, 2010, to include the maintenance tasks regarding the OWS and the sewage treatment plant, consistent with the manufacturer's instructions.

j. The IEC noted that the vessel maintains a sounding log as required by Section IV and Attachment B to the Scope of Work contained in the Special Master's Order. The IEC noted that a revised form eliminated the remarks column and the certification statement. The IEC recommended both be added back in order to explain any significant changes in soundings from one day to the next, e.g. operation of OWS, incinerator, or transfers to a slop tank. Ionia indicated the form has been revised as recommended.

k. The IEC compared the SWOMS data for tank soundings against manual tank soundings. Some soundings showed substantial differences. However, the IEC observed that given the small capacity of some of the tanks, the differences are not

alarming. However, to ensure the integrity of a manual soundings, the IEC recommended that the soundings be taken three times, and the calculated average of the three used.

Ionia responded that it preferred not to make any changes in its procedures, but allowed that greater assurance of reliability of manual soundings could be accomplished by requiring the crew to take more than one sounding of each tank and compare them informally, rather than requiring a detailed mathematical averaging. The IEC agreed that this procedure may be satisfactory. Accordingly, I find the use of multiple soundings should be required by Ionia, although not necessarily in the form of a strict mathematical calculation, but as a method of verification.

1. The IEC noted that the ODME is tested monthly by the Chief Officer and the results appropriately recorded in an ODME test log. Also, during the audit, the ODME was tested with no deficiencies noted. However, the ODME testing was not recorded in the oil record book. The IEC recommends that monthly ODME testing be recorded in the oil record book.

Ionia has revised instructions in the EMP in order to require the monthly testing of the ODME to be recorded in Part II of the oil record book. The revisions were distributed to the fleet on June 8, 2010.

m. The IEC noted that Ionia's written oil transfer procedures are not in full alignment with 33 C.F.R. § 155.720.

Ionia is currently reviewing the Shipboard Operations Manual containing the oil transfer procedures and will make any necessary corrections so they conform with applicable U.S. regulations. Completion of the review is expected by September, 2010.

n. The IEC noted that even if flexible hoses are inventoried and tagged, it may be a better practice to provide additional controls of how the hoses are issued and used. Since the audit did not give clear notice of that issue, Ionia has agreed to consider the matter and the IEC will address it in future audits.

o. The IEC noted that a pre-training form for proper care and disposal of oily waste does not seem to be relevant to the seafarer's rank and is not given to all crew members. Ionia advises that the form observed by the IEC is an obsolete form and the manning agent neglected to discontinue the form. The manning agent has been instructed to discontinue the obsolete form and use only Ionia's current declaration of environmental commitment.

p. The IEC noted that no mention of the seal log or seal inventory was found in the most recent chief engineer's handover report. Ionia advises that it appears that there are two handover reports, one of which is devoted to environmental matters, which contains the seal log and seal inventory.

q. The IEC notes that although a requisition was submitted by the Chief Engineer for OWS filter elements in November, 2009, as of the audit date no spares were received by the vessel. Ionia responded, with documentation, that the requisition was noted by the company, but that the requested parts were not available from the manufacturer at that time. The OWS filter elements had been received by the vessel as of the date of the hearing. Ionia confirmed that it is the company's policy to treat requisition of waste management machinery spares as a priority.

r. The IEC recommended that all senior officers in the fleet be trained on the Scope of Work applicable to the covered vessels.

Ionia responded that it attempts to rotate the same senior officers on the vessels as far as practicable, and additional pre-training is given to new officers boarding the two covered vessels. Should two additional vessels, the M/T ESTIA and the M/T PLOUTOS, be cleared for trading at U.S. ports, Ionia expects it will be easier to ensure all senior officers assigned to the vessels are appropriately familiar with scope of work requirements.

s. The IEC noted that a chief engineer's reports showed more sludge burned than generated in the one week.

Ionia noted that the discrepancy was the result of a scribing error by the chief engineer. The error was caught within one week by Ionia's technical staff and appropriately corrected.

### **III. Conclusions**

1. Ionia continues to make progress in compiling equipment and instituting procedures to achieve a high level of compliance with the United States and international industry and environmental standards. Ionia's EMR and its CCM both demonstrate well considered, systematic approaches to ensure high standards of environmental accountability.

2. Ionia has installed a SWOMS in substantial compliance with the requirements and terms and conditions of its probation and the Special Master Order.

3. Ionia has instituted an EMP pursuant to the recommendations of the IEC. Ionia has demonstrated a commitment to implementation of the EMP and training of shoreside and seagoing personnel in its operation. Ionia has established and implemented a comprehensive training program, including computer-based training. Ionia has established a procedure for

evaluation under the training program based on key performance indicators, but the program is too new for any significant results to be available for analysis.

4. Ionia has submitted its shipboard records as required in Paragraph IV (a) of the Special Master's Order.

5. Ionia has requested that an additional two vessels, M/T ESTIA and the M/T PLOUTOS be cleared for trading in the United States. The installation and commissioning of the SWOMS on those two vessels have not yet been completed. When the SWOMS commissioning is complete, and an initial audit has been performed by the IEC, the full consideration of Ionia's request will be possible.

#### **IV. Recommendations**

1. Ionia should continue to conduct internal audits as specified in its environmental management plan and to address properly any weaknesses or non-conformities identified in the course of the audits.

2. Ionia should provide the ICC and the IEC with results of the evaluation of its training program.

3. Ionia should provide the ICC and IEC with the results of its fleet engineering survey.

4. Ionia should provide the IEC with the Excel spreadsheets generated by it for comparison of the SWOMS data with the manual soundings.

5. Ionia should continue to work with Vigilant Marine to enable the SWOMS to transmit hourly tank soundings, so a more meaningful comparison can be made with manual tank soundings.

6. Ionia should expedite inspection of the ODME piping through the port fuel tank in the M/T KRITON.

7. Ionia should institute a procedure that will not only tag and number, but will also secure all on-board flexible hoses.

8. Ionia should institute a procedure whereby manual tank soundings are verified by additional manual soundings during the sounding process.

9. Because the last three hearings have occurred on a January-July schedule, it is recommended the next in-person hearing should be held in New Haven, Connecticut, during the month of January, 2011.

Respectfully submitted this 26<sup>th</sup> day of August, 2010.

/s/ Robert C. Bundy

Robert C. Bundy, Special Master

## SERVICE LIST

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| <p>(b) U.S. Department of Justice<br/>Environmental Crimes Section<br/>601 "D" Street, NW<br/>Washington, D.C. 20004</p> <p>ATTN: Ms. Lana Pettus<br/>(202) 305-0403<br/>(202) 305-0397 (fax)<br/>Email: <a href="mailto:lane.pettus@usdoj.gov">lane.pettus@usdoj.gov</a></p>                                      | <p>(e) Chalos, O'Connor &amp; Duffy, LLP<br/>366 Main Street<br/>Port Washington, NY 11050</p> <p>Attn: Mr. Michael Chalos, Esq.<br/>Email: <a href="mailto:mchalos@codus-law.com">mchalos@codus-law.com</a></p>  |
| <p>(c) U.S. Coast Guard<br/>Commandant (CG-543)<br/>Office of Vessel Activities<br/>Foreign Vessel/Offshore Activities Div.<br/>2100 Second St., S.W.<br/>Washington, D.C. 20593-0001<br/>Attn: LT Channing D. Burgess<br/>Email: <a href="mailto:Channing.D.Burgess@uscg.mil">Channing.D.Burgess@uscg.mil</a></p> |   |