October 13, 2003

MR’S ADVISORY TO SHIPPING No. A-38-2003

TO: All Steamship Agents, Owners, and Operators

SUBJECT: PCSOPEP and OSRO Requirements for the Panama Canal (Revision 1)

Since the publication of Advisory A-28-2003 on subject matter, the Panama Canal has received inquiries with common concerns from interested parties. These concerns were clarified through Advisory A-30-2003. Recent recommendations made by the maritime community have resulted in a revision to the guidelines in an effort to further clarify concepts and ease the implementation process of the Panama Canal Ship Oil Pollution Emergency Plan (PCSOPEP), and the transitional deadlines for the requirement of Oil Spill Removal Organizations (OSROs).

The enclosed document, PCSOPEP and OSRO Requirements of the Panama Canal, provides a revised implementation program and procedures for these regulations.

We appreciate the comments provided by our customers in an effort to foster safety and the quality of the environment in the Panama Canal.

ORIGINAL SIGNED

Jorge L. Quijano
Maritime Operations Director

Enclosure
PCSOPEP and OSRO Requirements in the Panama Canal

Table of Contents

1. PCSOPEP Guidelines and Instructions
   1.1. Purpose and Applicability
   1.2. Plan Requirements
   1.3. Plan Submission
   1.4. Activation of Plan
   1.5. Vessel Exercises and Records
   1.6. Verification Form and Notice of Acknowledgement

2. OSRO Requirements and Classification
   2.1. Introduction
      2.1.1. Applicability
      2.1.2. Response Areas
   2.2. OSRO Classification
      2.2.1. Tier Classification
      2.2.2. Description of OSRO Criteria for Classification
      2.2.3. Resources
      2.2.4. Response Time
   2.3. Equipment Requirements
      2.3.1. General Parameters
      2.3.2. Alternative Compliance Methods
   2.4. OSRO Preparedness Requirements
      2.4.1. Preparedness and Response Narrative
      2.4.2. Personnel, Training Records, and Exercises
      2.4.3. Equipment Maintenance and Records
   2.5. Verification
      2.5.1. Verification Process
      2.5.2. Change in Capability
      2.5.3. Deficiencies and Corrections
      2.5.4. Periodic Verifications
      2.5.5. OSRO Notice of Verification


Appendix A: Acronyms
Appendix B: Glossary
Appendix C: PCSOPEP Sample Format

List of Tables

Table 1: OSRO Classification Requirements
Table 2: Minimum Boom Specifications for Lake Areas
Table 3: Minimum Boom Specifications for the Pacific and Atlantic Canal Anchorage and Channel Areas
1. PCSOPEP Guidelines and Instructions

1.1. Purpose and Applicability

The Panama Canal Ship Oil Pollution Emergency Plan (PCSOPEP) seeks to implement emergency preparedness strategies for vessels arriving at Panama Canal waters. The PCSOPEP will aid the Panama Canal Authority (ACP) to minimize consequences of spills and emergencies by safeguarding life, reducing the impact on the environment, and ensuring the continuous operation of the Canal.

The provisions in this document apply to arriving vessels at Panama Canal Waters with carrying capacity of 400 METRIC TONS or more of oil as cargo and/or fuel. The carrying capacity of a vessel is equal to the sum of oil cargo tank and fuel tank capacities. A vessel that meets this criterion shall submit, to the ACP for verification, a PCSOPEP and comply with OSRO requirements according to the transitional provisions stated in Section 3 of this document as well as a Copy of the International Oil Pollution Prevention Certificate.

Furthermore, vessels shall present, where applicable, the following documents to the ACP for verification:

- A copy of the International Oil Pollution Prevention Certificate
- A copy of the Panama Canal Ship Oil Pollution Emergency Plan (PCSOPEP), prepared specifically for the vessel.

A copy of the Shipboard Oil Pollution Emergency Plan (SOPEP), Annex I, MARPOL and a copy of the Shipboard Marine Pollution Emergency Plan (SMPEP), Annexes II and III, MARPOL must be available upon request.

The vessel shall implement the PCSOPEP in accordance with Article 10 of the Regulation on Navigation in Panama Canal Waters that reads: The ACP “shall have the authority to take charge of and respond to all vessel emergencies in Canal waters, as well as to adopt the pertinent decisions in case any event of this nature occurs in the area.

It shall also be responsible for maintaining communications and notifying the pertinent authorities, and of coordinating the work of any public or private organizations that may participate in the operations.”

Vessels shall have the primary responsibility of implementing the PCSOPEP and participate in the response as stated in Section Four of the Regulation on Navigation in Panama Canal Waters following the procedures developed herein.
1.2. Plan Requirements

1.2.1. A PCSOPEP shall include the following information, as minimum:

   a. Incident specific prevention measures for Panama Canal Waters
   b. Spill notification procedures in a prioritized sequence
   c. Spill response procedures
   d. Crew training program for the reaction to shipboard and shore spill incidents.
   e. Written contract, or written proof of the agreement, between a vessel and Oil Spill Removal Organizations (OSROs), as required. Such OSRO(s) shall be verified by the ACP.
   f. Record of exercises
   g. Written document of the designation of a Qualified Individual (QI) and Alternate QI to represent the vessel, according to the requirements herein.
   h. Resume of the QI and its alternate indicating training profile or certifications granting their general knowledge and skills in the Incident Management System and emergency preparedness. Knowledge of spill response operations is optional, but certainly in the best interest of the plan holder.

With proper cross-references, an existing SOPEP may be used as a basis to the preparation of the PCSOPEP. However, neither the SOPEP nor the SMPEP alone can substitute the PCSOPEP. If the PCSOPEP is prepared as an appendix to an existing SOPEP, the complete copy of the SOPEP shall be submitted for verification.

1.2.2. The QI or its alternate shall represent the vessel and be the liaison between the ACP and the vessel, must speak Spanish and English, reside in the Republic of Panama, be available 24 hours a day all year round, and must be authorized to commit funds for OSROs services.

The QI or its alternate will be responsible for contacting the OSRO for confinement, removal, and any other services to minimize or mitigate damage to public health, the environment, and property, when instructed by the ACP.

1.2.3. There must be a written contract, or written proof of the agreement, between a vessel and OSRO(s) that identifies and ensures the availability of personnel and equipment to respond to an oil spill within the estimated time, according to the applicable classification tiers.

1.3. Plan Submission

1.3.1. PCSOPEPs may be submitted to the ACP for verification preferably through electronic mail at pcsopep@pancanal.com in Rich Text Format (filename extension .rtf)
and it shall be provided not less than 96 hours in advance to the vessel's arrival at Panama Canal Waters. Also, PCSOPEPs may be delivery to:

Panama Canal Authority
Emergency and Contingency Management Division
Building 752
Arnulfo Arias Madrid Street, Balboa
Panama, Rep. of Panama

1.3.2. The ACP will issue a Notice of Acknowledgement to the vessel, valid for two years, if the PCSOPEP fulfills the requirements as set in Section Four of Chapter IX of the Regulations on Navigation in Panama Canal Waters. This Notice of Acknowledgment shall be presented when requested by the ACP, unless significant changes are made to the PCSOPEP rendering it invalid.

Any of the following conditions will invalidate the Notice of Acknowledgment:

a. Significant changes in vessel configuration which affects information included in the Plan
b. Change in OSRO
c. Ten percent (10%) decrease in any of the criteria from d through g listed in Table 1
d. Significant changes in a vessel's emergency response structure or procedures
e. Change of the (QI) or alternate
f. Any non-compliance condition found during random inspection by the ACP
g. Change in vessel name, ownership, or administration that affects the relationship with its OSRO or QI.

1.3.3. If the PCSOPEP does not fulfill the requirements, the ACP will notify the vessel through a PCSOPEP Verification Form. The ACP will grant the vessel a grace period, not to exceed six months, to make the necessary changes in the plan. During the grace period, the ACP will assign additional resources, as deemed necessary, to mitigate risk. The additional resources and expenses resulting from these conditions shall be billed to the vessel.

1.3.4. Upon expiration of the Notice of Acknowledgement, vessels will resubmit updated PCSOPEPs following the same instructions stated above. There are two options for resubmission:

a. Submission of the entire new plan in case that a complete rewrite is needed to fully update the plan
b. Only submittal of those changes considered necessary to update the plan.

1.3.5. Updated versions shall be sent at least 30 days ahead of the implementation of changes and not less than 96 hours before arriving at Panama Canal Waters. All changes must be highlighted or otherwise indicated.
1.3.6. The Panama Canal will charge a fee for the verification of the plan based on its official tariff list. (Note: the fee will also apply even if no Notice of Acknowledgment is issued)

1.3.7. Any questions regarding the PCSOPEPs must be sent to pcsopep@pancanal.com or call to (507)-272-7735.

1.4. Activation of Plan

1.4.1. The PCSOPEP is activated with the notification to the ACP as soon as a leak or potential leak of any oil is detected providing the following information:

- Name of the vessel
- Country of registry
- Official number
- Incident location
- Date and time of incident
- Planned transit route
- Nature of incident
- Estimated volume of the spilled substance
- Identification of spilled product and any toxic or explosion hazard
- Size and appearance of the slick
- Weather conditions
- Actions taken or planned by personnel on scene and vessel conditions
- Injuries or deaths
- Any other information as deemed appropriate.

1.4.2. Spill notification shall not be delayed during the information gathering.

1.4.3. Upon activation of the PCSOPEP, the ACP will respond to the discharge and/or may instruct the vessel to contact the QI & OSRO to respond to the incident.

1.5. Vessel Exercises and Records

1.5.1. Vessels must perform PCSOPEP notification exercises to the QI at least twice a year. The vessel must document such exercises for verification by the ACP as stated in 1.2.1(f) under Plan Requirements.

1.5.2. At any time, the ACP may require a vessel to perform a PCSOPEP notification exercise and/or to participate in response drills with OSROs. The vessel must also properly document such exercises and/or drills.

1.5.3. Records must be kept for at least three years.
1.6. Verification Form and Notice of Acknowledgement

The following pages show a sample of a Verification Form and a PCSOPEP Notice of Acknowledgement.
# PANAMA CANAL AUTHORITY
# MARITIME OPERATIONS DEPARTMENT
# PCSOPEP VERIFICATION FORM

<table>
<thead>
<tr>
<th>Vessel Name</th>
<th>SIN</th>
<th>Flag</th>
<th>Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vessel Type</td>
<td>Vessel Length</td>
<td>Vessel Beam</td>
<td>Max Tropical Fresh Water Draft</td>
</tr>
<tr>
<td>Gross Tonnage</td>
<td>Net Tonnage</td>
<td>Fuel Tank Tonnage</td>
<td>Dead Weight Tonnage</td>
</tr>
</tbody>
</table>

## PLAN SECTION

<table>
<thead>
<tr>
<th>Compliance</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Incident specific prevention measures for Panama Canal Waters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Spill notification procedures in a prioritized sequence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Spill response procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Crew training program for reaction to shipboard and shore spill incidents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. OSRO written contract or proof of the agreement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Record of exercises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Document of the designation of a QI and its alternate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Resume of the QI and its alternate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments: [ ] All included here, or [ ] See attached pages

## EVALUATION

After verifying all documents, the ACP has determined that:

[ ] The vessel fulfills the requirements.

[ ] The vessel does not fully comply. You must submit the documentation or information described in the above section by ________________ (*).

(*) The ACP may assign additional resources to the vessel at the cost of the vessel while this condition persists. ________________________________

Evaluator’s name | Evaluator’s signature | Verification date

Duty Canal Port Captain’s name | Duty Canal Port Captain’s signature
PANAMA CANAL AUTHORITY
MARITIME OPERATIONS DEPARTMENT

The ACP hereby acknowledges that:

**Ship Name / SIN No.**

has presented the PCSOPEP documentation required under Section Four of Chapter IX of the Regulation on Navigation in Panama Canal Water.

..........................................................  Date ........................................
Jorge L. Quijano
Maritime Operations Director

This document is valid for two years after its date of issuance. Any changes in conditions as set out in Section Four of Chapter IX of the Regulation on Navigation in Panama Canal Water renders it invalid.
2. OSRO Requirements and Classification

2.1. Introduction

The Panama Canal Authority (ACP) has established a classification program for Oil Spill Removal Organizations (OSROs). A vessel in Panama Canal Waters will have to meet or exceed the OSRO requirements herein as part of the PCSOPEP.

The response sequence to an oil spill starts with activation of the PCSOPEP by the vessel. Besides internal actions taken by the vessel, the ACP may respond with its own resources by interacting with the Qualified Individual of the vessel. Response actions of OSRO shall be in accordance with the Incident Management System of the Panama Canal.

2.1.1. Applicability

This document applies to vessels with carrying capacity of 400 METRIC TONS (MT) or more of oil as cargo and/or fuel. The carrying capacity of a vessel is equal to the sum of oil cargo tank and fuel tank capacities. Vessels shall contract OSROs based on the following criteria:

- Tier S for vessels with carrying capacity of 400 and up to 1,000 MT of oil.
- Tier 1 if carrying capacity is more than 1,000 and up to 7,000 MT of oil.
- Tier 1 and Tier 2 if carrying capacity is more than 7,000 and up to 15,000 MT of oil.
- Tier 1, Tier 2, and Tier 3 if carrying capacity is more than 15,000 MT of oil.

Exemptions: Vessels with less than 400 MT of oil.

The OSRO shall respond to an oil spill at any given location within Panama Canal waters.

Vessels may contract one OSRO to cover all response areas and response levels (Tier S, Tier 1, Tier 2, and Tier 3) or several OSROs to cover each response area and each response level separately.

2.1.2. Response Areas

For the purpose of oil spill response planning, the Canal can be divided into three main response areas: the Pacific Anchorage and Channel Area, the lake areas, and the Atlantic Anchorage and Channel Area. Both the Pacific and Atlantic areas are salt-water bodies of the Canal, whereas the lakes are freshwater bodies. These areas differ mainly in the specifications required for equipment and response strategies.
2.2. OSRO Classification

2.2.1. Tier Classification

The Panama Canal has established a four-tier program requirement for OSROs based on four response levels: Tier S (TS), Tier 1 (T1), Tier 2 (T2), and Tier 3 (T3).

2.2.2. Description of OSRO Criteria for Classification

OSRO response levels TS, T1, T2, and T3 are classified according to resources and response Time. Table 1 specifies these requirements for each tier. OSROs may cover only one tier and response area, all tiers and response areas, or a combination of these. Depending on the classification and response area of an OSRO, a vessel may have to contract one or more OSROs to cover all response areas where the vessel will operate.

As an example, an OSRO that aims to qualify as a T1 and T2 OSRO requires the equipment listed in criteria for T2. However, it will have to meet the resource location, resource status, and response time of T1 for the amount of equipment of the T1 classification. Response time will be calculated separately for the resources of each tier. If this OSRO intends to cover all response areas of the Canal, it will have to place T1 equipment at different locations to meet the 6-hour response time everywhere in the Canal where spills may occur.

For classification purposes, an OSRO must show the ability to deploy all resources listed in its tier level within the response time indicated for the respective tier. The response time will be calculated based on the farthest distance of a possible spill location in each response area where the OSRO intends to operate.

2.2.3. Resources

Resource requirements cover core equipment, support equipment, and personnel.

a. Core Equipment

Core equipment includes protection and containment boom, effective daily recovery capacity (EDRC), and temporary storage capacity (TSC). The specific amounts for each tier are listed in Table 1.

b. Support Equipment

Support equipment includes response vessels, vacuum trucks, road transportation, and other equipment necessary to deploy and operate core equipment. An OSRO shall consider other support equipment and logistic
arrangements to transfer oil from a temporary storage to other facilities to maintain a continuous operation during at least 72 hours. It is the responsibility of the OSRO to comply with ACP regulations and guidelines for response vessels and transportation equipment (e.g., navigation lights, safety equipment, licenses).

**Table 1: OSRO Classification Requirements**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Tier S</th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Resource Location</td>
<td>All resources placed on-site</td>
<td>All resources placed on-site</td>
<td>All resources located nationally</td>
<td>May be located internationally</td>
</tr>
<tr>
<td>b. Resource Status</td>
<td>Dedicated and owned</td>
<td>Dedicated and owned</td>
<td>May be contracted or arranged by agreement</td>
<td>May be contracted or arranged by agreement</td>
</tr>
<tr>
<td>c. Response Time</td>
<td>No more than 6 hours</td>
<td>No more than 6 hours</td>
<td>No more than 12 hours</td>
<td>No more than 48 hours</td>
</tr>
<tr>
<td>d. Protection Boom</td>
<td>3,000 feet</td>
<td>10,000 feet</td>
<td>25,000 feet</td>
<td>30,000 feet</td>
</tr>
<tr>
<td>e. Containment Boom</td>
<td>1,000 feet</td>
<td>1,000 feet plus 300 feet per skimming system</td>
<td>1,000 feet plus 300 feet per skimming system</td>
<td>1,000 feet plus 300 feet per skimming system</td>
</tr>
<tr>
<td>f. EDRC (Bbls/day)</td>
<td>2,000</td>
<td>5,000</td>
<td>20,000</td>
<td>50,000</td>
</tr>
<tr>
<td>g. TSC (Bbls)</td>
<td>4,000</td>
<td>10,000</td>
<td>40,000</td>
<td>100,000</td>
</tr>
<tr>
<td>h. Shallow Water Capability</td>
<td>For 25 % of resources</td>
<td>For 25 % of resources</td>
<td>For 25 % of resources</td>
<td>For 25 % of resources</td>
</tr>
<tr>
<td>i. Special Equipment</td>
<td>See part 2.2.3.d</td>
<td>See part 2.2.3.d</td>
<td>See part 2.2.3.d</td>
<td>See part 2.2.3.d</td>
</tr>
</tbody>
</table>

Support equipment for T2 and T3 will include additional cleanup and special equipment to complete the clean up operation. The inventories to satisfy this requirement will be verified by the ACP to ensure proper planning and preparedness.

Support equipment is not specified in Table 1 but shall be accounted for by the OSRO. Support equipment is not calculated in a standard basis for classification and requirements. However, a shortfall in the OSRO response strategy will warrant further discussion with the OSRO or vessel to assure compliance with regulations before a PCSOPEP Notice of Acknowledgment is issued.
c. Personnel

Personnel must be sufficient to mobilize, deploy and operate all equipment necessary for a response, and consider manufacturers recommendations to meet response time requirements at the sites specified by the OSRO for coverage of the farthest locations of the OSRO response areas.

d. Special Equipment

An OSRO shall plan for the need of special equipment to protect and clean shores of their response areas. Such equipment comprises resources for techniques where conventional methods of protection and cleanup are shown to be ineffective. The need for special equipment will arise from knowledge of the response areas and exercise results, an outcome that relies on proper planning and preparedness.

e. Shallow Water Capability

A specified percentage of equipment in each classification shall be able to operate in shallow waters. This requirement is intended to reach oil in areas with drafts of less than 6 feet, particularly in wide shallow shores.

2.2.4. Response Time

OSROs are required to meet the response times specified in Table 1 for each tier level. To compute response times, the OSRO shall include: the time for notification and mobilization of personnel; the time for transportation of personnel and resources to any spill location within the response area; the time for deployment of resources; and the time for startup of operation. The overall calculation must be within the response time parameters for each tier level in Table 1. Ultimately, response times will be verified with exercises to ensure compliance and proper planning.

2.3. Equipment Requirements

2.3.1. General Parameters

Equipment used for response in the lake areas must be able to operate in waters with 3 feet-wave-heights. For the Pacific and Atlantic anchorage and channel areas, equipment must be able to operate in waters of 4 feet-wave-heights. Minimum standards for boom are listed in Tables 2 and 3.
Table 2: Minimum Boom Specifications for the Lake Areas

<table>
<thead>
<tr>
<th>Boom Specifications</th>
<th>Protection Boom</th>
<th>Containment Boom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height - freeboard / draft (total), inches</td>
<td>6 / 12 (18)</td>
<td>8 / 18 (26)</td>
</tr>
<tr>
<td>Reserve Buoyancy-to-weight ratio</td>
<td>2:1</td>
<td>&gt;2:1</td>
</tr>
<tr>
<td>Total tensile strength (lbs)</td>
<td>4,500</td>
<td>&gt;15,000</td>
</tr>
<tr>
<td>Skirt fabric tensile strength (lbs)</td>
<td>200</td>
<td>&gt;300</td>
</tr>
<tr>
<td>Skirt fabric tear strength (lbs)</td>
<td>100</td>
<td>&gt;100</td>
</tr>
</tbody>
</table>

Table 3: Minimum Boom Specifications for the Pacific and Atlantic Anchorage and Channel Areas

<table>
<thead>
<tr>
<th>Boom Specifications</th>
<th>Protection Boom</th>
<th>Containment Boom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height - freeboard / draft (total), inches</td>
<td>8 / 18 (26)</td>
<td>12 / 24 (36)</td>
</tr>
<tr>
<td>Reserve Buoyancy-to-weight ratio</td>
<td>&gt;2:1</td>
<td>3:1 to 4:1</td>
</tr>
<tr>
<td>Total tensile strength (lbs)</td>
<td>&gt;15,000</td>
<td>&gt;20,000</td>
</tr>
<tr>
<td>Skirt fabric tensile strength (lbs)</td>
<td>&gt;300</td>
<td>500</td>
</tr>
<tr>
<td>Skirt fabric tear strength (lbs)</td>
<td>&gt;100</td>
<td>125</td>
</tr>
</tbody>
</table>

Table 3 lists more stringent specifications than Table 2. Booms for Pacific and Atlantic anchorages and channel areas can be used for the lake areas; however, the reverse is not suitable.

2.3.2. Alternative Compliance Methods

OSROs may request, in writing to the ACP, consideration for alternative compliance methods that may achieve the same or better results than the ones intended with this program. If such methods are accepted, they will be valid for a specified period for verification or until the ACP rescinds them.

2.4. OSRO Preparedness Requirements

2.4.1. Preparedness and Response Narrative

OSROs will prepare and submit to the ACP, for each tier and each response area, a logistic narrative providing enough information to document that it has considered the myriad and complex logistics support requirements for the mobilization, transportation, deployment and operation of the response equipment and personnel from each resource site to each Canal response area. The narrative is a requirement for issuance of an OSRO Notice of Verification and shall contain, but should not be limited to, the following:
• Methods to notify and gather personnel for a response
• Methods of loading resources for mobilization
• Methods of resource transport to an incident or staging area, including custom procedures, as applicable in the case of international Tier 3 resources
• Methods of mobilizing, deploying, and supporting resources
• Special response resource staging (e.g., prepackaging, palletizing, preloading)
• Necessary site support services (e.g., tractors, trailers, drivers, cranes, etc.)
• List of vessels serviced by the OSRO within the PCSOPEP program.

Annually, OSROs shall provide the ACP an updated list of vessels serviced by them.

International T3 OSROs, in addition, shall indicate the number of years it has been in service, a phone number and a point of contact. Moreover, for reference purposes, it shall provide a list of important costumers.

2.4.2. Personnel, Training Records, and Exercises

OSROs will maintain records of personnel training that shall be kept for three years after completion. Personnel training must be based on a written program that identifies key skills needed in a response, describe the methods employed and the frequency of training to reinforce the required knowledge. All records must be available for verification.

An effective response training program should include, but is not limited to, the following:

• Actions to take in accordance with designated job responsibilities
• Communications
• Training on specific response equipment identified in the OSRO classification

OSROs tier 5, 1, 2, and locally established tier 3 shall conduct, at least, one full scale exercise (including an organizational and deployment evaluation) per year and per classified tier to validate strategies considered in response plans. Those classified for more than one response area, shall conduct exercises subsequently in their response areas until completing a cycle of coverage. For example, an OSRO classified for tier 1 and tier 2 for all areas will require two exercises during the first year, one for tier 1 and other for tier 2, in any chosen area. The following year, this OSRO will also require two exercises, but in different areas for each tier. The cycle will be completed in the third year when exercises are conducted in the last remaining areas for each tier. At such time the cycle will start again. Simple equipment drills do not count as an exercise. The organizational part of exercises will aim to test and evaluate the coordination and communication in the entire hierarchy of the response members.

Internationally located tier 3 OSROs are exempt of field exercises in the Canal. However, they shall conduct organizational exercises specifically for the Canal on an
annual basis. These exercises shall simulate mobilization arrangements and deployment to Canal waters.

All exercises shall be documented and planned based on objectives containing an evaluation and follow up section to enhance response capabilities. These follow up actions shall be implemented by the OSROs. The planning process, as well as the results and evaluation of exercises, will be conducted by the OSRO and will be available for verification by the ACP.

2.4.3. Equipment Maintenance and Records

An OSRO must ensure that response resources listed in its response resource inventory are inspected periodically and maintained in good operating condition, in accordance with the manufacturer’s recommendations or best commercial practices.

All inspections and maintenance must be documented. These records shall be kept available for three years.

2.5. Verification

2.5.1. Verification Process

The ACP reserves the right to perform initial and periodical on-site visits to the OSROs to verify that resources comply with the OSRO’s classification.

For the verification process, the ACP will charge a fee to the OSRO based on its official tariff list.

2.5.2. Change in Capability

An OSRO with a 10% decrease in equipment or personnel that affects its tier classification shall notify the contracting vessel and the ACP. Failure to do so will invalidate the PCSOPEP.

2.5.3. Deficiencies and Corrections

The ACP will verify the equipment listed by the OSRO. If an equipment is found to be incomplete or cannot operate adequately, the ACP may allow the OSRO to retain its classification as long as the deficiency does not reduce, by more than 10%, the OSRO’s overall response readiness, provided that the OSRO has programmed the repair or replacement of equipment in a reasonable period of time. Serious erosion of overall response shall result in revoking the classification altogether.
An OSRO could be granted a grace period, not to exceed 30 days, to make the necessaries corrections, at which time the ACP may conduct a second OSRO site verification. Failure to comply with the requested corrections will result in the suspension of the OSRO classification. ACP will inform affected parties of the invalidation of the related OSRO Notice of Verification and PCSOPEP Notice of Acknowledgement. For issuance of a new OSRO Notice of Verification and PCSOPEP Notice of Acknowledgement, vessels will have to proceed as described in 1.3.4 under Plan Submission.

2.5.4. Periodic Verifications

The OSRO will be subjected to on-site visits. Such visits may be triggered by any of the following reasons:

- Unsatisfactory verification list
- OSRO’s poor performance during spills or exercises
- OSRO Request
- Vessel Request
- Change in ownership

2.5.5. OSRO Notice Verification

Issuance of a Notice of Verification to an OSRO by the ACP will entitle vessels to identify such OSRO within its PCSOPEP. The following page shows a sample OSRO Notice of Verification.
PANAMA CANAL AUTHORITY
MARITIME OPERATIONS DEPARTMENT

OSRO NOTICE OF VERIFICATION

OSRO Name / OSRO Identification No.

has been verified as an OSRO tier ___ in the response areas of

☐ Atlantic Anchorage and Channel Area

☐ Lake area

☐ Pacific Anchorage and Channel Area

following the requirements implemented by Section Four of the amendment to Chapter IX of the Regulation on Navigation in Panama Canal Waters.

.............................................................. Date: ...........................................
Jorge L. Quijano
Maritime Operations Director

3.1. Compliance by January 1, 2004:

Each vessel shall submit its PCSOPEP 96 hours prior to its first visit to Canal Waters occurring on or after Jan 1, 2004; however, such PCSOPEPs are not required to identify an OSRO nor a QI during this period.

The ACP anticipates receipt of numerous plans before December 31, 2003, particularly from those customers scheduled to arrive at Panama Canal waters in early January 2004. Accordingly, we strongly recommend submittal of the PCSOPEP at least one month before the scheduled arrival.

3.2. Compliance by July 1, 2004:

Vessels shall include the QI as part of the PCSOPEP. Additionally, vessels shall comply with OSROs Tier 2 and Tier 3 according to 2.1.1 Applicability.

3.3. Compliance by October 1, 2004:

Vessels shall comply with OSRO requirements Tier S and Tier 1 as established in 2.1.1 Applicability.
### Appendix A: Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bbls</td>
<td>Barrels</td>
</tr>
<tr>
<td>EDRC</td>
<td>Effective Daily Recovery Capacity</td>
</tr>
<tr>
<td>MT</td>
<td>Metric Ton</td>
</tr>
<tr>
<td>OSRO</td>
<td>Oil Spill Removal Organization</td>
</tr>
<tr>
<td>PCSOPEP</td>
<td>Panama Canal Ship Oil Pollution Emergency Plan</td>
</tr>
<tr>
<td>TSC</td>
<td>Temporary Storage Capacity</td>
</tr>
<tr>
<td>TS</td>
<td>TIER S</td>
</tr>
<tr>
<td>T1</td>
<td>TIER 1</td>
</tr>
<tr>
<td>T2</td>
<td>TIER2</td>
</tr>
<tr>
<td>T3</td>
<td>TIER3</td>
</tr>
</tbody>
</table>
# Appendix B: Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic Anchorage and Channel Area</td>
<td>Response area that includes the anchorages at the Atlantic entrance and channel area, Limon Bay, and the approach channel to Gatun Locks.</td>
</tr>
<tr>
<td>Dedicated Response Resources</td>
<td>Equipment and personnel dedicated primarily to oil spill response and confinement. Such equipment and personnel should not be used for any other activity that would adversely affect their ability to provide oil spill services.</td>
</tr>
<tr>
<td>Lake Areas</td>
<td>Response area that includes freshwater bodies confined within the Gatun Lake, Culebra Cut, Miraflores Lake, and within of the Locks.</td>
</tr>
<tr>
<td>Oil</td>
<td>All substances listed in Appendix I of Annex I of MARPOL.</td>
</tr>
<tr>
<td>Oil Spill Removal Organization (OSRO)</td>
<td>Any organization that owns and controls oil spill removal resources designed for, or capable of, removing oil from water or shoreline.</td>
</tr>
<tr>
<td>Pacific Anchorage and Channel Area</td>
<td>Response area that includes the anchorages at the Pacific entrance and channel area, Balboa Basin, and the approach channel to the Miraflores Locks.</td>
</tr>
<tr>
<td>Panama Canal Waters</td>
<td>Refers to all waters within the Canal Operation Compatibility Area, defined in item a of the Annex of the Regulation for Navigation in Panama Canal Waters as the geographic area, including its lands and waters, where only activities compatible with the operation of the Canal may be carried out. (Item a. of the Annex reads as follows: Canal Operation Compatibility Area. Described as a continuous area generally following the course of the Panama Canal, and generally contiguous to it, running from the Atlantic ocean to the Pacific ocean. It includes the Atlantic entrance and its anchorage areas, the port of Cristobal, Gatún Locks, Gatún Dam, Gatún Spillway, Gatún power station, Portions of Gatun Lake, Culebra Cut, Pedro Miguel Locks, Miraflores Lake, Miraflores Locks, Miraflores Spillway, Miraflores Filtration Plant, Miraflores power station, the Port of Balboa, the Pacifica entrance and its anchorage areas, as well as the land and water areas encompassing them.)</td>
</tr>
<tr>
<td>Resources Placed On-Site</td>
<td>Resources located as close as possible to the scene of a spill to meet the Tier S and Tier 1 response time requirements.</td>
</tr>
<tr>
<td>Tier S, 1, 2, and 3</td>
<td>The combination of response resources and the times within which the resources must be capable of arriving on-scene to meet Panama Canal requirements.</td>
</tr>
</tbody>
</table>
Appendix C: PCSOPEP Sample Format

The following document is a sample format that may be used as a guide for the preparation of a PCSOPEP as an appendix to an existing SOPEP. If this option is utilized, the PCSOPEP with a complete copy of the SOPEP shall be submitted for verification.
APPENDIX to SOPEP
Panama Canal Ship Oil Pollution Emergency Plan (PCSOPEP)

Table of Contents
1. Introduction
2. Spill Notification Procedures
3. Spill Response Procedures
4. Incident Specific Prevention Measures for Panama Canal Waters
5. Procedures for Initial Response
6. Crew Training Program
7. Qualified Individual and Alternate
8. Resources and OSROs
9. Record of Exercises

List of Annexes

1. Introduction

The Panama Canal Ship Oil Pollution Emergency Plan (PCSOPEP) can be an Annex to the MARPOL–Annex I SOPEP. It implements emergency preparedness strategies for vessels arriving at Panama Canal waters according to Section Four of Chapter IX of the Regulation on Navigation in Panama Canal Waters.

Section Four of the regulation is implemented through the procedures of the PCSOPEP and OSRO Requirements in the Panama Canal.

The PCSOPEP helps vessels prepare for emergencies in the Panama Canal by the following strategies: it identifies a Qualified Individual (QI) that resides locally (in Panama) and represents the vessel in case of an emergency; it identifies the contracted Oil Spill Removal Organizations (OSROs) that will carry the response and clean up tasks to and end; and it indicates other activities required by regulation, such as training, record keeping and exercising.

2. Spill Notification Procedures

The vessel activates its PCSOPEP with the notification process.

In the event of an emergency in Canal waters, the vessel shall notify the ACP through the Panama Canal Pilot onboard or, in the case that the vessel do not have a Panama Canal Pilot onboard, notifications shall be made to the ACP via:

VHF radio Channels 12 or 16,

as described in Article 29 of the ANNEX of the Regulation for Navigation in Canal Waters (Agreement No. 13).

When instructed by the ACP, the vessel will contact its QI or alternate at:

QI  #### ######  24 hours
Alternate QI  #### ######  

Upon activation of the plan, the vessel’s QI shall establish and maintain communication with the Marine Traffic Control Center at (507) 272-4201/4202. The Panama Canal may request the QI to report to the emergency operations center.

Notification starts as soon as a leak or potential leak of any oil is detected and shall not be delayed during the process of information gathering.

The vessel may use or reference SOPEP forms for initial notification observing that such forms include all information required in part 1.4.1 of the PCSOPEP Guidelines and Instructions.
3. Spill Response Procedures

This section can be referenced to the SOPEP.

4. Incident Specific Prevention Measures for Panama Canal Waters

Before arriving to Panama Canal Waters, crewmembers shall review this Annex and perform exercises to comply with part 1.5 (Vessel Exercises and Records) of the PCSOPEP and OSRO Requirements in the Panama Canal, as necessary.

This section should incorporate specific measures communicated by the ACP and/or OSROs derived from planning activities and exercises.

This section should also incorporate or reference specific measures stated in the Regulation on Navigation in Panama Canal Waters.

5. Procedures for Initial Response

By regulation, the Panama Canal may intervene and provide initial response at the expense of the vessel, operator, owner or party that generated the spill, and at its discretion, instruct the vessel through the master or officer onboard, the QI, or contracted OSRO to take the necessary steps for mitigation and cleanup tasks.

In addition, the vessel may reference the SOPEP for initial response procedures and mitigation activities of the ship and ship to shore interface.

6. Crew Training Program

Describe the vessel’s crew-training program used to comply with the responsibilities stated in the SOPEP and PCSOPEP. The vessel may reference the SOPEP training sections and incorporate the PCSOPEP requirements of part 1.5 (Vessel Exercises and Records) of the PCSOPEP and OSRO Requirements in the Panama Canal.

This part emphasizes the importance of crew reaction drills and notification exercises to the QI and OSRO.

7. Qualified Individual and Alternate

Vessels in Canal waters relay in a QI or its alternate to coordinate response issues with the Panama Canal.

The vessel Qualified individual is:

Name Last Name

And its alternate:

Name Last Name

Annex I provides the resume (curriculum vitae) of the QI and its alternate and a written authorization for complete activation of OSRO services and PCSOPEP requirements.

8. Resources and OSROs

Vessels in Canal waters relay in OSROs to provide the resources for spill removal and cleanup. State the criteria that the vessel applied to be classified under part 2.1.1 (Applicability) of the PCSOPEP and OSRO Requirements in the Panama Canal and state the tier compliance that applies.

Annex II shows the written contract, or written proof of the agreement, between the vessel and the OSRO(s) that ensures the availability of personnel and equipment to respond to a spill within the estimated time according to the classification for the applicable tiers.
9. Record of Exercises

State how the vessel maintains records of exercises to comply with the PCSOPEP.

The vessel may reference records through the SOPEP providing that they comply with the PCSOPEP requirements. Else, such records may be kept in an Annex III.

List of Annexes