

**Panama Canal Shipboard Oil Pollution  
Emergency Plan (PCSOPEP)  
Requirements**

**Revision 2: June 4, 2004**

# **Panama Canal Shipboard Oil Pollution Emergency Plan (PCSOPEP) Requirements**

---

## **Table of Contents**

1. Guidelines and Instructions	1
1.1. Purpose	1
1.2. Applicability	1
1.3. Plan Requirements	2
1.4. Plan Submission	3
1.5. Activation of Plan	4
1.6. Vessel Exercises and Records	4
1.7. Verification Form and Notice of Acknowledgement	4
2. Oil Spill Preparedness Program	7
2.1. Introduction	7
2.2. Response Areas	7
2.3. Classification of ACP Resources	7
2.3.1. Tier Classification and Criteria	7
2.3.2. Resources	7
2.3.3. Response Time	9
2.4. Fees	9
Appendix A: Acronyms	
Appendix B: Glossary	
Appendix C: PCSOPEP Preparation Guide	

## **List of Tables and Forms**

PCSOPEP Verification Form	5
Notice of Acknowledgement	6
Table 1: Equipment Classification	8

## **1. Guidelines and Instructions**

---

### **1.1. Purpose**

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

Vessels shall have the primary responsibility of implementing the PCSOPEP and participating in the response, as stated in Section Four of Chapter IX of the Regulation on Navigation in Panama Canal waters, following the procedures developed herein. However, all efforts shall be in accordance with Article 10 of the Regulation on Navigation in Panama Canal waters.

### **1.2. Applicability**

The provisions in this document apply to toll-paying vessels that transit the Panama Canal with a 400 Metric Ton (MT) or more carrying capacity of oil as cargo and/or fuel. The carrying capacity of a vessel is equal to the sum of the capacities of all oil cargo tanks and fuel tanks. A vessel that meets this criterion shall submit their PCSOPEP to the ACP for verification, and shall be classified according to the following categories:

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

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

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

Additionally, either a copy of the Shipboard Oil Pollution Emergency Plan (SOPEP), Annex I, MARPOL, or a copy of the Shipboard Marine Pollution Emergency Plan (SMPEP), Annex II, MARPOL, must be available upon request.

### 1.3. Plan Requirements

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

- Oil pollution prevention measures for Panama Canal waters
- Spill notification procedures in a prioritized sequence
- Spill response procedures
- Crew training program for the reaction to shipboard and shore spill incidents
- Record of exercises
- Identification of the Authorized Person and telephone and facsimile where they can be reached on a 24-hour basis.

With proper cross-references, an existing SOPEP or SMPEP may be used as a basis for 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 or SMPEP, the complete copy of the SOPEP or SMPEP shall be submitted in order for the PCSOPEP to be verified.

1.3.2. Appendix C provides a guide for the preparation of a PCSOPEP as an appendix to an existing SOPEP.

1.3.3. The Authorized Person shall be fluent in either English or Spanish and should have general knowledge and skills or experience 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. The Authorized Person shall understand the vessel's PCSOPEP.

1.3.4. From the onset of an oil spill, the vessel shall contact the Authorized Person. He or she will, in turn, ensure communication capabilities to interact with the Panama Canal Authority's Incident Management System.

1.3.5. PCSOPEPs shall be developed by organizations or individuals experienced in pollution prevention and response that comply with the following requirements:

- Provide proof that the organization or individual has experience in the development of plans for marine oil or dangerous substance spills.
- Provide a list of plans for marine oil or dangerous substance spills developed by the organization or individual.
- Provide a training profile or proof of knowledge and skills in this type of work.

The ACP may, at any time, request written proof of these requirements to plan developers or to the vessel's owner or operator holding a PCSOPEP.

## 1.4. Plan Submission

1.4.1. PCSOPEPs may be submitted to the ACP for verification, preferably through electronic mail, at [pcsopep@pancanal.com](mailto:pcsopep@pancanal.com), in Portable Document Format (\*.pdf) and shall be provided not less than 96 hours prior to the vessel's arrival at Panama Canal waters. PCSOPEPs may also be delivered to:

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

1.4.2. The ACP will issue a Notice of Acknowledgement to the vessel, valid for two years, if the PCSOPEP fulfills the requirements as set forth in Section Four of Chapter IX of the Regulations on Navigation in Panama Canal waters. This Notice of Acknowledgment shall be carried onboard the vessel and presented as a transit requirement when requested by the ACP. Any of the following conditions will invalidate the Notice of Acknowledgment:

- Significant changes in vessel configuration that affects information included in the Plan.
- Significant changes in a vessel's emergency response structure or procedures.
- Any non-compliance condition found during random inspections by the Panama Canal Authority.
- Change in vessel name, ownership, or administration that affects the relationship with the ACP and the Authorized Person.

1.4.3. 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 this period, the vessel will be permitted to transit, subject to the conditions indicated in the PCSOPEP Verification Form.

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

- Submission of an entire new plan, or
- Submission of only those changes considered necessary in order to update the plan. All changes must be highlighted or otherwise clearly indicated.

1.4.5. Updated versions shall be sent not less than 96 hours prior to the vessel's arrival at Panama Canal waters.

1.4.6. Questions regarding PCSOPEPs may be addressed to [pcsopep@pancanal.com](mailto:pcsopep@pancanal.com) or by telephone to (+507) 272-7735.

## **1.5. Activation of Plan**

1.5.1. The PCSOPEP is activated as soon as initial notification is made to the ACP of an actual or probable oil leak. This notification shall be followed with the information listed:

- Name of the vessel
- Country of registry
- IMO number and Panama Canal Ship Identification Number (SIN)
- Incident location
- Date and time of incident
- Planned transit route
- Nature of incident
- Identification of spilled product and any toxic or explosive hazard
- Estimated volume of the spilled product
- Size and appearance of slick
- Weather conditions
- Actions taken or planned by on scene personnel and vessel conditions
- Injuries or deaths
- Any other information as deemed appropriate

1.5.2. The vessel is responsible for notifying its Authorized Person

1.5.3. Initial spill notification shall not be delayed during the process of gathering information.

1.5.4. Upon activation of the PCSOPEP, the ACP will respond to the discharge.

## **1.6. Vessel Exercises and Records**

1.6.1. Vessels must perform PCSOPEP notification exercises to the Authorized Person at least twice a year, and must document them for verification by the ACP. These exercises may be conducted outside Panama Canal waters.

1.6.2. At any time, the ACP may require a vessel to perform a PCSOPEP notification exercise and/or to participate in response drills and exercises with the ACP. The vessel must properly document such drills and exercises. Joint exercises, with the participation of vessels and the ACP, will be previously coordinated and will not delay transits.

1.6.3. Vessel exercise records must be kept for at least three years.

## **1.7. Verification Form and Notice of Acknowledgement**

A sample Verification Form and PCSOPEP Notice of Acknowledgement is attached.

**PANAMA CANAL AUTHORITY  
MARITIME OPERATIONS DEPARTMENT  
PCSOPEP VERIFICATION FORM**

<b>GENERAL INFORMATION</b>	Vessel Name	SIN	Flag	Agent		
	Vessel Type	Vessel Length	Vessel Beam	Max Tropical Fresh Water Draft		
	Gross Tonnage	Net Tonnage	Fuel Tank Tonnage	Dead Weight Tonnage		
<b>PCSOPEP REQUIREMENTS</b>	PLAN SECTION				Compliance	
					Yes	No
	1. Oil pollution prevention measures for Panama Canal waters					
	2. Spill notification procedures in a prioritized sequence					
	3. Spill response procedures					
	4. Crew training program for the reaction to shipboard and shore spill incidents					
	5. Record of exercises					
6. Identification of the Authorized Person						
Comments: <input type="checkbox"/> All included here, or <input type="checkbox"/> See attached pages						
<b>EVALUATION</b>	After verifying all documents, the ACP has determined that:					
<input type="checkbox"/> The vessel fulfills the requirements.						
<input type="checkbox"/> The vessel does not fully comply. You must submit the documentation or information described in the above section by _____.						
<input type="checkbox"/> The following conditions for transit apply: _____						

Evaluator: .....  
Name
Signature
Verification date

Canal Port  
 Captain: .....  
Name
Signature

---

**PANAMA CANAL AUTHORITY  
MARITIME OPERATIONS DEPARTMENT  
PCSOPEP NOTICE OF ACKNOWLEDGEMENT**

---

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 Waters.

..... Date .....

Jorge L. Quijano  
Maritime Operations Director

This document is valid for two years after its date of issuance. Any change in conditions as set forth in Section Four of Chapter IX of the Regulation on Navigation in Panama Canal Waters renders it invalid.

## **2. Oil Spill Preparedness Program**

---

### **2.1. Introduction**

The Panama Canal Authority (ACP) has established a preparedness program for oil spill emergencies in Panama Canal waters. In the response sequence to an oil spill, the activation of the PCSOPEP is the responsibility of the vessel. Besides internal actions taken by the vessel, the ACP will respond in accordance with the Incident Management System of the Panama Canal.

### **2.2. Response Areas**

For the purpose of oil spill response planning, Panama Canal waters have been 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 saltwater bodies of the Canal, whereas the lakes are freshwater bodies. As such, the specifications required for equipment and response strategies differ for each of these areas.

### **2.3. Classification of ACP Resources**

#### 2.3.1. Tier Classification and Criteria

Resources are classified in four tiers or response levels: Tier S (TS), Tier 1 (T1), Tier 2 (T2), and Tier 3 (T3) that differ in resources and response time. Table 1 specifies requirements for each tier.

#### 2.3.2. Resources

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

##### a. Core Equipment

Core equipment includes protection and containment booms, 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, other equipment necessary to deploy and operate core equipment, and additional equipment and materials to complete the clean-up operation.

**Table 1: Equipment Classification**

<b>Criteria</b>	<b>Tier S</b>	<b>Tier 1</b>	<b>Tier 2</b>	<b>Tier 3</b>
a. Resource Location	All resources placed on-site	All resources placed on-site	All resources located nationally	May be located internationally
b. Response Time	Not to exceed 6 hours	Not to exceed 6 hours	Not to exceed 12 hours	Not to exceed 72 hours
c. Protection Boom	3,000 feet	10,000 feet	25,000 feet	30,000 feet
d. Containment Boom	1,000 feet	1,000 feet plus 300 feet per skimming system	1,000 feet plus 300 feet per skimming system	1,000 feet plus 300 feet per skimming system
e. EDRC (Bbls/day)	2,000	5,000	20,000	50,000
f. TSC (Bbls)	4,000	10,000	40,000	100,000
g. Shallow Water Capability	For 25 % of resources	For 25 % of resources	For 25 % of resources	For 25 % of resources
h. Special Equipment	See part 2.3.2.d	See part 2.3.2.d	See part 2.3.2.d	See part 2.3.2.d

c. Personnel

Personnel consist of the human resources required to mobilize, deploy and operate all equipment necessary for a response.

d. Special Equipment

Special equipment comprises resources for techniques where conventional methods for protection and clean-up are shown to be ineffective.

e. Shallow Water Capability

A specified percentage of equipment in each tier classification shall be of the type capable of operating in shallow waters. This requirement is intended to reach oil in areas with drafts of less than six feet, particularly in wide shallow shores.

2.3.3. Response Time

The ACP preparedness program establishes an initial response time of six hours, which includes: 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 start-up of operation.

**2.4. Fees**

The ACP will charge a fee per transit to all to-paying vessels with a 400 Metric Ton (MT) or more carrying capacity of oil as cargo and/or fuel making a full or partial transit in accordance with their PCSOPEP tier classification and vessel hull construction, e.g. double hull or single hull. Vessels granted a grace period to comply with the PCSOPEP requirements are bound to pay such fee without prejudice of payment of additional resources, if required, as indicated in the PCSOPEP Verification Form.

## **Appendix A: Acronyms**

---

<b>Bbls</b>	Barrels
<b>EDRC</b>	Effective Daily Recovery Capacity
<b>MT</b>	Metric Ton
<b>PCSOPEP</b>	Panama Canal Shipboard Oil Pollution Emergency Plan
<b>TSC</b>	Temporary Storage Capacity
<b>TS</b>	TIER S
<b>T1</b>	TIER 1
<b>T2</b>	TIER2
<b>T3</b>	TIER3

## Appendix B: Glossary

---

<b>Atlantic Anchorage and Channel Area</b>	Response area that includes the anchorages at the Atlantic Entrance and channel Area, Limon Bay, and the approach channel to Gatun Locks.
<b>Authorized Person</b>	The person who acts as a liaison between the vessel and the Authority to obtain and consign, on behalf of the vessel, acceptable guarantees, to the satisfaction of the Authority, to cover the costs of the response and cleanup of oil spills in Canal waters. The Authorized Person shall reside in the Republic of Panama.
<b>Incident Management System</b>	The organizational structure adopted by the ACP to administer emergencies whereby individual roles and responsibilities, lines of communications, and span of control are pre-established.
<b>Lake Areas</b>	Response area that includes freshwater bodies confined within the Gatun Lake, Culebra Cut, Miraflores Lake, and within the Locks.
<b>Oil</b>	All substances listed in Appendix I of Annex I of MARPOL.
<b>Pacific Anchorage and Channel Area</b>	Response area that includes the anchorages at the Pacific Entrance and Channel Area, Balboa Basin, and the approach channel to the Miraflores Locks.
<b>Panama Canal Waters</b>	Refers to all waters within the Canal Operation Compatibility Area, defined in item <b>a.</b> 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. <i>(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, Gatun Spillway, Gatun 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 Pacific entrance and its anchorage areas, as well as the land and water areas encompassing them.)</i>
<b>Resources Placed On-Site</b>	Resources located as close as possible to the scene of a spill to meet the response time requirements of Tier S and Tier 1.
<b>Tier S, 1, 2, and 3</b>	The combination of response resources and times within which the resources must be capable of arriving on-scene to meet Panama Canal requirements.

## **Appendix C: PCSOPEP Preparation Guide**

---

The following document is provided as a guideline for the preparation of a PCSOPEP as an appendix to an existing SOPEP, and its use shall not be construed as a guarantee that the plan holder will be granted a Notice of Acknowledgement as set forth herein.

Accordingly, the ACP does not accept any liability and/or responsibility whatsoever for the content of this guide and/or its efficacy.

**Guide for the preparation of a Panama Canal Shipboard Oil Pollution Emergency Plan (PCSOPEP) as an Appendix to a SOPEP or SMPEP.**

---

**Table of Contents**

1. Introduction
  2. Spill Notification Procedures
  3. Spill Response Procedures
  4. Oil Pollution Prevention Measures Specific for Panama Canal Waters
  5. Crew Training Program
  6. Authorized Person
  7. Classification Criteria
  8. Record of Exercises
- 

**1. Introduction**

The Panama Canal Shipboard Oil Pollution Emergency Plan (PCSOPEP) may be an Annex to the MARPOL–Annex I SOPEP. It implements emergency preparedness strategies for 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 Requirements*.

The PCSOPEP assists vessels to prepare for emergencies in the Panama Canal by: identifying an Authorized Person that represents the vessel in case of an emergency; identifying the resources required to prepare for an oil spill emergency and carrying out the response and clean-up tasks to an end; and indicating 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 Panama Canal waters, the vessel shall notify the ACP through the Panama Canal pilot onboard or, in the event that a Panama Canal pilot is not onboard, notification 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).

The vessel shall also contact its PCSOPEP Authorized Person at the following 24-hour contact information:

**Authorized Person**                      **Phone:** \_\_\_\_\_                      **Fax:** \_\_\_\_\_

Upon activation of the plan, the vessel’s Authorized Person may establish and maintain communication with the **Marine Traffic Control Center at (+507) 272 4201 or (+507) 272 4202**. The Panama Canal may request the Authorized Person to report to an Emergency Operations Center.

Notification begins as soon as an actual or probable oil leak is detected and shall not be delayed during the process of gathering information.

The vessel may use or reference SOPEP specific forms for initial notification, observing that such forms include all information required in part 1.5 of the *PCSOPEP Requirements*.

### **3. Spill Response Procedures**

The Panama Canal Authority will perform spill response and clean-up operations at the expense of the vessel that generated the spill.

The vessel may make reference to specific parts of their SOPEP covering spill response procedures and mitigation activities of the ship and ship to shore interface.

### **4. Oil Pollution Prevention Measures Specific for Panama Canal Waters**

The master shall review the PCSOPEP and perform exercises to comply with part 1.6 of the *PCSOPEP Requirements*, as necessary.

This section should incorporate or reference specific measures stated in the Regulation on Navigation in Panama Canal waters and other measures communicated by the Panama Canal Authority, derived from planning activities and exercises.

**4.1. Prevention Measures:** During a transit, vessels accomplish most of their navigation through fresh water bodies used for human consumption, and through environmentally sensitive areas, which are also important to tourism. These areas are accessed via confined navigation channels and Locks structures. Prior to transit, the master shall verify compliance with all applicable ACP regulations to include prevention of incidents in the Panama Canal, specifically noting that:

- The vessel shall not perform any activity that implies a risk of, or results in, pollution of waters within the Area of Compatibility with Canal Operations.
- The vessel shall not conduct any repairs, cleaning, or other activities, which may cause pollution.
- The vessel shall not discharge or throw into Panama Canal waters any ballast, ashes, boxes, barrels, straw, paper, or other solid matter; nor discharge heavy slops, engine or fire room bilge water, sewage water, oil, radioactive substances, or any other contaminating substances.
- The master and crew shall review activities, including drills or exercises and response procedures, and increase alertness and readiness to react to any incident, taking into account specific considerations of the environment.
- The master shall incorporate information published in Advisories to Shipping into the PCSOPEP, as necessary.
- The master shall verify compliance with the ACP regulations regarding specific provisions for navigation in the Panama Canal and for the prevention of collisions.
- The master shall ascertain that all required measures are in place to comply with these preventive requirements.

When preparing a response plan for Panama Canal waters, special attention must be given to the fact that vessels in Canal waters transit through confined navigational channels and locks structures which require specific attention in the way a response is performed. For instance, a vessel that reports a spill in a lock

chamber must consider that vapors may affect lock operations and personnel, as well as other vessels or assisting tugs and launches that may be in the same lock chamber.

**4.2. In Case of an Incident:** Primary shipboard oil pollution response activities shall be conducted in compliance with the ACP regulations and the PCSOPEP of the vessel. The master shall make all efforts to coordinate activities with the ACP, as soon as practicable, in order to minimize impact to the Panama Canal.

## 5. 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 make reference to the specific training sections of its SOPEP and incorporate the requirements of part 1.6 of the *PCSOPEP Requirements*. This part emphasizes the importance of crew reaction drills and other exercises.

## 6. Authorized Person

The following Authorized Person resides in the Republic of Panama and will serve as a liaison between this vessel and the Incident Management System of the Panama Canal Authority to procure and consign, on behalf of the vessel, acceptable warranties to cover the costs of the response and cleanup of oil spills:

Authorized Person:	<i>First Name</i>	<i>Last Name</i>
--------------------	-------------------	------------------

## 7. Classification Criteria

State the criteria applicable to the vessel under part 1.2, part 2.2 and part 2.3 of the *PCSOPEP Requirements* and the applicable tier compliance. For example:

<i>Total Capacity HFO:</i>	<i>1000 m<sup>3</sup></i>
<i>Total Capacity MDO:</i>	<i>200 m<sup>3</sup></i>
<i>Gas Oil Tank:</i>	<i>50 m<sup>3</sup></i>
<i>Capacity Overflow Tank:</i>	<i>100 m<sup>3</sup></i>
<b><i>Total:</i></b>	<b><i>1,350 m<sup>3</sup></i></b>

*According to this calculation, the criterion that applies to the vessel is **Tier 1: carrying capacity of more than 1000 MT up to 7000 MT.***

## 8. Record of Exercises

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

The vessel may make reference to its existing SOPEP records, provided that they it complies with the PCSOPEP requirements. Such records may also be kept as an Annex.