



Guidelines for the application of Annex 18 of Ordinance
No. 08/98, Book 6 – DPMA (Environment Protection Direction)

There are 3 possible cases:

1st – Foreign flag tanker vessels navigating pursuant to exemption regulatory orders to the Internal Navigation Law (*Ley de Cabotaje*)

- They shall have contingency plans according to annexes 18 and 21 (Tanker Vessel Owner Companies and Vessels) approved by this Direction.

2nd – Foreign tanker vessels carrying out non habitual trips:

- They shall comply with the provisions set forth in Annex I Regulation 26 or Annex II Regulation 16, as the case may be, of MARPOL 73/78 (updated SOPEP).
- The vessel owner representative in the country (Maritime Agent) shall be responsible for reporting, with sufficient time, the availability of response resources necessary to respond or otherwise inform which the company devoted to oil spill control appointed to act in the event of pollution of the vessel shall be.
- Jurisdictional PNA Units shall evaluate acceptability of the information filed by the maritime agency, sending the proceedings to this Direction.

3rd – Foreign line tanker vessels with regular track:

- Vessel Owner or Maritime Agent, on behalf thereof, shall file with this Direction, within a term of at least thirty (30) days prior to entrance by the vessel to waters under the jurisdiction of the Republic of Argentina, an Emergency Plan in Spanish, in two copies, which shall follow the guidelines included in Annex 18 of the aforementioned Ordinance.

ARGENTINE NATIONAL CONTINGENCY PLAN

(PLANACON)

ANNEX 18

GUIDELINES FOR PREPARING RESPONSE PLANS BY OIL TANK VESSELS' OWNERS OR OPERATORS

Article 1. Purpose.

The purpose of this Annex is to establish requirements for preparing and complying with response plans for spills caused by oil tank vessels, with or without self-propulsion, transporting and/or operating with oil, noxious liquid substances and other hazardous substances, which spill response may be produced by the means required herein. The planning criteria applied herein are intended for use in response development of the Response Plan of Argentine or foreign Vessels' Owners and Operators and the identification of the resources necessary to respond to the oil spill scenarios prescribed during the planning processes. The development of this response plan allows the vessel's owner or operator and the vessel's crew to respond to a spill caused by oil, noxious substances or hazardous substances. The specific criteria for response resources and their arrival times are based upon a set of assumptions that may not exist during an actual spill incident.

Article 2. Applicability.

1. Except as provided in subsection 3 of this Article, this Annex applies to each vessel with or without propulsion, of Argentine or foreign flag, included those storage floating units and production, storage and discharge floating facilities built or adapted to carry and/or to operate with oil in bulk, animal fat, vegetable oil, other non-petroleum oil, or hazardous and noxious substances, as cargo or cargo residues, which response may be produced by the means required in this Annex and which navigates or operates in waters of Argentine jurisdiction.

2. This Annex also applies to the vessels and units above described, which engage in oil lightening operations or which are operating or navigating in the Contiguous Zone and Argentine Exclusive Economic Zone, pursuant to the provisions of Articles 33 subsection b) and 56 subsection b) iii) of the United Convention on the Law of the Sea (CONVEMAR), approved by Act 24,543, with oil in bulk, animal fat, vegetable oil, non-petroleum oil, or hazardous and noxious substances, which response to spill may be produced with the means required in this Annex.
3. This Article shall not apply to the following ships:
 - 3.1. Military vessels defined in Section 29 of the United Convention on the Law of the Sea (CONVEMAR), approved by Act 24,543, when no commercial operations are carried out.
 - 3.2. Police vessels defined in Section 3 hereof, when being in the same circumstances as those of the previous subsection.
 - 3.3. Vessels that although constructed or adapted to carry oil in bulk, animal fat, vegetable oil, other non-petroleum oil, hazardous and noxious substances, as cargo or cargo residue, are not operating with, storing or transporting them.
 - 3.4. Dedicated response vessels when conducting response operations.
 - 3.5. The vessels of “opportunity”, defined in Article 3 hereof, when conducting response operations.
 - 3.6. “Offshore supply” vessels as defined in Article 3 hereof.
 - 3.7. Foreign flag vessels engaged in innocent passage and/or in-transit passage, pursuant to the provisions set forth in Sections 17, 18 19 y 38 of the United Convention on the Law of the Sea (CONVEMAR), approved by Act 24,543.
 - 3.8. Tank vessels carrying hazardous and noxious substances in international maritime navigation, until SNPP-2000 protocol of OPRC-90 Convention shall be in force internationally and shall be incorporated to the Argentine applicable law.

Article 3. Definitions.

For the purposes of this Annex the following definitions shall rule:

1. VEGETABLE OIL means oil deriving from plant seeds, dry fruits, fruit or plants not specifically identified elsewhere in this Annex. Non-petroleum or animal fat byproducts shall not be considered.
2. RESPONSE ACTIVITY means the containment and removal of oil from the water and shorelines, the temporary storage and disposal of recovered oil, or the taking of other actions as necessary to minimize or mitigate damage to public health or the environment.

3. INLAND WATERS mean bodies of water confined within the inland area, including waters within the inland sea baseline and which are part of the internal waters of a country. Lakes, higher volume port areas and bays are excluded herefrom.
4. NAVIGABLE WATERS mean seas, rivers, lakes, canals and other waters within the country that are used for inter-jurisdictional traffic and trade. The term also includes the places defined in Section 4 of CHAPTER III “Scope of action” of Act No. 18,398 (General Law of *Prefectura Naval Argentina*).
5. LOCAL PNA UNIT JURISDICTIONAL SCOPE means the divisions of PNA scope of action in the different operating Dependent Offices, such as PNA Sub-units, PNA Units and PNA Districts.
6. SUBSTANTIAL THREAT OF A DISCHARGE means any incident involving a vessel that may create a significant risk of discharge of cargo oil. Such incidents include, but are not limited to, grounding, stranding, collision, hull damage, fire, explosion, loss of propulsion, on-deck spills, or other similar occurrences.
7. SPECIFIC GEOGRAPHIC AREA: (See Local PNA Unit Jurisdictional Scope).
8. OFFSHORE AREA means the area beyond the outer boundary of the territorial sea, extending seaward to twenty four (24) nautical miles, from the base lines set forth in Section 1 of Act No. 23,968.
9. NEARSHORE AREA means the area extending seaward twelve (12) nautical miles from the base lines set forth in Section 1 of Act No. 23,968.
10. PORT AREAS AND HIGHER VOLUME PORT AREAS mean the following areas, including any area within the 24 nautical miles from specific port entrance:
 - 10.1 Port of Formosa.
 - 10.2 Ports of Paraná River.
 - 10.3 Ports of the River Plate.
 - 10.4 Port of Concepción del Uruguay.
 - 10.5 Port of Mar del Plata.
 - 10.6 Port of Quequén.
 - 10.7 Port of Necochea.
 - 10.8 Port of Bahía Blanca.
 - 10.9 Puerto Rosales.
 - 10.10 Port of San Antonio Oeste.
 - 10.11 Puerto Madryn.
 - 10.12 Port of Comodoro Rivadavia.
 - 10.13 Port of Caleta Córdoba.
 - 10.14 Port of Caleta Olivia.
 - 10.15 Port of Caleta Paula.
 - 10.16 Puerto Deseado.
 - 10.17 Santa Cruz Port.
 - 10.18 Río Gallegos Port.

- 10.19 Area of Magallanes Strait.
- 10.20 Cullen River.
- 10.21 San Sebastián Bay.
- 10.22 Port of Río Grande.
- 10.23 Port of Ushuaia.
- 10.24 Any other port that in the future PNA may designate.

1. VESSEL OF OPPORTUNITY means a vessel engaged in spill response activities that is normally and substantially involved in activities other than spill response and not a vessel carrying oil.
2. DEDICATED RESPONSE VESSEL means a vessel of which the service is limited exclusively to oil and hazardous and noxious substances spill response-related activities, including spill recovery and transport, tanker escorting, deployment of spill response equipment, supplies and personnel, and spill response-related training, testing, exercises and research.
3. POLICE VESSEL means any vessel belonging to the Security or Police Forces from a country carrying the external signs of the vessels of such bodies of that nationality, under the command of an official duly appointed by the government of that country, which name appears in the relevant roll of officials or an equivalent thereto, and which personnel is subject to the discipline of the regular security or police forces.
4. OFFSHORE SUPPLY VESSEL means a motor vessel regularly transporting products, supplies, people apart from crew, or exploration, exploitation or production of minerals or energy resources support equipment in open sea.
5. TANKER means a self-propelled tank vessel constructed or adapted primarily to carry hazardous material in bulk in the cargo spaces.
6. VESSEL CARRYING OIL means all vessels, except response dedicated vessels, carrying oil in bulk as cargo or cargo residue pursuant to a Certificate of Oil Pollution Prevention.
7. CARGO: means oil that is transported and off-loaded at a destination by a vessel. It does not include:
 - 17.1 Oil carried in integral tanks, marine portable tanks, or independent tanks to be used by machinery, helicopters, and boats carried aboard the vessel, or for use by helicopters that are directly supporting the vessel's primary operations; or
 - 17.2 Oil transferred from a towing vessel to a vessel in its tow to operate installed machinery, other than the propulsion plant.
1. BULK means any volume of oil carried in an integral tank of the vessel and oil transferred to or from a marine portable tank or independent tank while on board a vessel.

2. ADVERSE WEATHER means the weather conditions that will be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include, but are not limited to, significant wave height, ice, temperature, weather-related visibility, and currents within the jurisdiction of the local PNA unit in which the systems or equipment are intended to operate.
3. CONTRACTS OR OTHER APPROVED MEANS include:
 - 1) A written contractual agreement between a vessel owner or operator and an oil spill removal organization. The agreement must identify and ensure the availability of specified personnel and equipment required under this annex within specified geographic areas.
 - 2) Certification by vessel owner or operator that the specified personnel and equipment required under this annex are owned, operated, or under the direct control of the vessel owner or operator and are available within stipulated response time in the specified geographic areas.
 - 3) Active membership in a local spill removal organization that has identified specified personnel and equipment required under this Annex that are available to respond to a discharge within stipulated response time in the specified geographic areas.
 - 4) A document which:
 - i) Agrees between vessel owners or operators of different companies, the equivalent considerations of personnel, equipment and services capable of being supplied by each of the intervening parties within stipulated response times in the specific geographic area.
 - ii) Agrees between vessel owners or operators and those responsible for facilities, personnel, equipment and services, within the area of jurisdiction of the latter, and are available within stipulated response times in the specified geographic areas.
 - iii) Sets out the parties' acknowledgment to mutually commit the resources in the event of a response.
 - iv) Sets forth that personnel, equipment and services shall be located in the territory of the Republic of Argentina.
 - v) Permits *Prefectura Naval Argentina* (PNA) to verify the availability of the identified response resources through tests, inspections and exercises; and,
 - vi) Is referenced in the response plan.

1. SPECIFIC GRAVITY means the ratio of the mass of a given volume of liquid at 15 °C (60 degrees F), to the mass of an equal volume of pure water at the same temperature.
 2. AVERAGE MOST PROBABLE DISCHARGE means a discharge of up to 10m³ of the cargo from the vessel during cargo oil transfer to or from the vessel.
 3. OIL SPILL REMOVAL ORGANIZATION means those companies that render services to third parties engaged in controlling spills by oil and other hazardous and noxious substances, which authorization, registration and renewal of registration shall meet the requirements set forth in the regulations set forth by PNA and in the guidelines set forth in Appendix A hereto.
 4. RESPONSE LEVEL means the combination of the required response resources and the times within which the resources must arrive on scene. Levels are applied in the following categories:
 - 24.1 Higher volume port areas;
 - 24.2 Lakes;
 - 24.3 Rivers;
 - 24.4 Canals;
 - 24.5 Nearshore areas;
 - 24.6 Offshore areas; and,
 - 24.7 Oceans.
1. RESPONSE LEVEL 1 means the response level in which local immediately available resources are involved in the facilities for small spills, commonly caused during loading, offloading or storage for vessel consumption.
 2. RESPONSE LEVEL 2 means the response level in which local available resources and if necessary national resources are involved for moderate spills, commonly caused by a minor marine accident, a tanker operation or an oil pipeline accident.
 3. RESPONSE LEVEL 3 means the response level in which local, national and, if necessary, international available resources are involved, for huge spills from a source of generation of oil.
 4. ANIMAL FAT means a non-petroleum oil, lube oil or fat derived from animals and not specifically identified elsewhere herein.

5. SPILL MANAGEMENT TEAM means the personnel, identified in the organization staff structure identified in the response plan to manage the application of the referred plan.
6. NON-PERSISTENT OR GROUP 1 OIL means petroleum-based oil that, at the time of shipment, consists of hydrocarbon fractions:
 - 30.1 At least 50 % of which by volume, distill at a temperature of 340° C; and,
 - 30.2 At least 95 % of which by volume, distill at a temperature of 370° C.
7. PERSISTENT OIL means a petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. For the purposes hereof, persistent oils are further classified based on specific gravity as follows:
 - 31.1. Group II – specific gravity of less than 0.85.
 - 31.2. Group III – specific gravity equal to or greater than 0.85 or less than 0.95.
 - 31.3. Group IV – specific gravity equal to or greater than 0.95 and less or equal to 1.0.
 - 31.4. Group V – specific gravity greater than 1.0.
8. PETROLEUM OIL means petroleum in any form including crude oil, fuel oil, mineral oil, sludge, oil refuse (wastes) and refined products.
9. QUALIFIED INDIVIDUAL AND ALTERNATE QUALIFIED INDIVIDUAL means a representative of shore-based representative of a vessel owner or operator who meets the requirements set forth in Article 7 hereof.
10. LOCAL PNA ZONE means the areas in which *Prefectura Naval Argentina* (PNA) divides its jurisdiction into different operating Dependent Offices such as PNA Sub-units, PNA Units and PNA Districts.
11. LAKES means those navigable lakes where *Prefectura Naval Argentina* exercises its jurisdiction.
12. MAXIMUM EXTENT PRACTICABLE means the planned capability to respond to a worst case discharge in adverse weather, as contained in a response plan that meets the criteria of this annex, or in a specific plan approved by *Prefectura Naval Argentina*.
13. MAXIMUM MOST PROBABLE DISCHARGE means a discharge of:
 - 400 m³ of oil from a vessel with an oil cargo capacity equal to or greater than 4,000 m³; or

- 10% of the vessel's oil cargo capacity with a capacity of less than 4,000 m3.
38. OCEAN means the area measured from twenty four (24) nautical miles up to two hundred (200) nautical miles, from the base lines set forth in Section 1 of Act No. 23,968.
 1. OPERATING IN COMPLIANCE WITH THE PLAN means operating in compliance with the provisions of this Annex, including ensuring the availability of the response resources by contract or other approved means and conducting the necessary training and exercises.
 2. COMMERCIAL OPERATIONS means every and all activities carried out to obtain profits.
 3. RESPONSE ORGANIZATION means all response resources set forth by those responsible for pollution generation, by the agreements of cooperation entered into by them and those private ones that are in turn responsible for pollution generation, and/or by agreement between the former and spill removal organizations, all authorized by *Prefectura Naval Argentina*. Thereto, there shall not be other response organizations than those mentioned above.
 4. OTHER NON-PETROLEUM OIL means an oil of any kind that is not a petroleum oil, an animal fat, or a vegetable oil.
 5. WORST CASE DISCHARGE means a discharge in adverse weather conditions of a vessel's entire oil cargo.
 6. RESPONSE PLAN includes those plans specified in Section 807.0106. of the Maritime, River and Lake Navigation Regulations (REGINAVE), including those described in this annex.
 7. OWNER OR VESSEL OWNER means any person holding legal or equitable title to a vessel as owner or operator. In the case where a certificate of documentation has been issued, the owner or operator is the person or persons whose name or names appear on the vessel's certificate of documentation provided, however, that where a certificate of documentation has been issued in the name of a president or secretary of an incorporated company, such incorporated company is the owner. For the purposes hereof, the representative of the owner or operator, shall be that who evidences enough power to comply with the provisions of this annex.
 8. RESPONSE RESOURCES means the personnel, equipment, supplies and other capability necessary to perform the response activities identified in a response plan.
 9. OIL FIELD WASTE means non-pumpable drilling fluids with possible trace amounts of metal and oil.

10. RIVERS AND CANALS mean bodies of water confined within the inland area, including intracoastal waterways and other waterways artificially created for navigation.
11. ON-SCENE COORDINATOR means the Official pre-designated by *Prefectura Naval Argentina* to coordinate and verify operations at the scene of an oil or hazardous substance discharge as prescribed in the National Contingency Plan for every determined area.
12. EXCLUSIVE ECONOMIC ZONE means the zone contiguous to the territorial sea of the Republic of Argentina, extending to a distance of up 200 nautical miles from the baseline for which the breadth of the territorial sea is measured.

Article 4. Procedures to file the plan, approval, acceptance requirements or alternative criteria for planning.

1. The vessel owner or operator of an Argentine or foreign vessel to which this Annex is applied shall file in two copies a response plan in Spanish, with the Environment Protection Direction of *Prefectura Naval Argentina*. The plan shall be filed within a term not less than 30 days before the vessel enters waters of Argentine jurisdiction.
2. The Argentine or foreign owner or operator shall include in the presentation an affidavit setting forth that the plan of the filed vessel plan meets the requirements of this Annex, and that the vessel or vessels covered by the plan are vessels transporting oil, unmanned barges transporting oil, or vessels or barges transporting animal fat, vegetable oil or other non petroleum oils and/or noxious substances, etc.
3. If *Prefectura Naval Argentina* determines that the plan meets all the requirements of this Annex, it shall serve notice of such situation to the owner or operator, indicating that an inspection shall be requested within the dates set forth by this Authority, under warning of deeming same not presented and subject to the sanctions set forth by Section 807.9901 of REGINAVE. Once the plan is approved, it shall have a validity of 5 years from the date of approval, subject to the renewals set forth by this Authority, pursuant to Article 10 hereof.
4. If *Prefectura Naval Argentina* revises the plan and determines that same does not meet all the requirements, it shall serve notice to the owner or operator of the deficiencies thereof. The owner or operator shall consequently newly file the revised plan, or the parts corrected thereby, within the dates specified in the notice, under warning of deeming same not filed and subject to the sanctions set forth in Section 807.9901 of REGINAVE.
5. The filing of the plan shall be in a folder with removable pages to enable its amendment and update. The folder shall have numbered divisions to enable the quick location of the different sections and annexes. The pages shall be subsequently numbered in every page, and shall include the month and year of

filing (For example: Page No. /January, 2003). When a page is left blank, it shall also be numbered.

Article 5. Procedures to review the plan, new analysis and amendments.

1. The response plan shall be annually reviewed by the owner or operator.
 - 1.1. This review shall be carried out within a term not exceeding the anniversary date of the plan approval by *Prefectura Naval Argentina*.
 - 1.2. The owner or operator shall file any amendment with *Prefectura Naval Argentina* for information or approval purposes. The pages to be amended shall be filed together with the Amendment Form and the Approval Form of the plan or plans. Every time an amendment is made involving a page, the month and year in which this is made shall be added to the number. When the amendment also implies an addition of new pages for the purpose of not changing the numbers of all the subsequent pages, the new pages shall bear the same number as the one amended, adding the word “bis”, plus one number as from the second page added (If, for example, page No. 3 is modified and 3 more pages are included after, the numbers of these pages shall be: Page 3 bis/January, 2003; Page 3 bis 1/ January, 2003 and subsequently thereafter). Likewise, this new numbering shall be set forth in the General Table of Contents.
 - 1.3. Any amendment to the plan shall be included in the Form of Amendments. Then, the personnel having approved such amendments shall record the amendment approval in the Form of Approvals. The fulfillment of the annual revision by the owner or operator shall also be registered in the relevant record.
2. The owner or operator of a vessel covered by this Annex shall file again the complete plan with *Prefectura Naval Argentina* in the following circumstances:
 - 2.1. Three months before the end of the approval term of 5 years; and,
 - 2.2. Every time a change of vessel owner or operator takes place, having a new affidavit to be filed thereby or by the legal representative of the vessel owner or operator, pursuant to the provisions of Article 4.2.
3. The reviews and amendments of an approved response plan shall be filed for approval with the vessel owner or operator in the event of:
 - 3.1. A change in the vessel owner or operator or other member being part in the plan.
 - 3.2. A change in the vessel area of operations not covered by a previously approved plan. A vessel may operate in an area not covered in a plan previously approved under the written consent of *Prefectura Naval Argentina*, provided a new specific geographic appendix and the certification required by Section 6, 3) are filed for approval by the vessel owner or operator.

- 3.3. A significant change in the vessel structure affecting the information included in the response plan.
 - 3.4. A change in the type of oil transported aboard (group of oils affecting the required response resources).
 - 3.5. A change in the identification of the response organization.
 - 3.6. An important change in the vessel emergency response procedures.
 - 3.7. A change in the qualified individual or individuals.
 - 3.8. The incorporation of one or more vessels to its plan. This change shall include the vessel specific appendix required hereby and the owner or operator's affidavit required by Section 4 b); or,
 - 3.9. Any other significant change affecting the application of the plan. In case of doubt by the owner or operator, *Prefectura Naval Argentina* shall be consulted.
4. *Prefectura Naval Argentina* may require an owner or operator to review a response plan at any moment, if it is determined that the response plan does not meet the requirements of this Annex. *Prefectura Naval Argentina* shall serve written notice to the vessel owner or operator of any deficiency and operating restriction. The deficiencies or corrections shall be made within the specified term, otherwise, the plan shall be declared invalid and any oil storage, transfer, handling, transport or lightening in areas within the Argentine jurisdiction, shall be subject to the sanctions set forth in Section 807.9901 of REGINAVE.

Article 6: Operating restrictions and provisional operating authorizations.

1. Vessels subject to this Annex may not perform the following functions, unless operating in compliance with a plan approved under Article 4 thereof:
 - 1.1. Handling, storing or transporting oil, hazardous and noxious substances on the navigable waters, Contiguous Areas or Economic Exclusive Zone of the Republic of Argentina; or
 - 1.2. Transferring oil in any other port or place under the jurisdiction of the Republic of Argentina.
1. Notwithstanding the requirements of paragraph 1 above, a vessel may continue to handle, store, transport, transfer or lighter oil for a period of six months after the date of submission of a response plan pending approval, if the vessel owner or operator has received the written authorization of *Prefectura Naval Argentina* to continue operating.
2. To receive this authorization, the vessel owner or operator must certify in writing to *Prefectura Naval Argentina* the availability of response resources necessary to

respond to the maximum extent practicable to a worst case discharge, or substantial threat of a discharge from the vessel.

3. With respect to paragraph 2) hereof, a vessel may not continue to handle, store, transport, transfer or lighter oil, if:
 - 4.1. *Prefectura Naval Argentina* determines after the granting of the authorization that the response resources identified in the plan, or the response organizations identified in the vessel plan do not meet the requirements of this Annex.
 - 4.2. The contracts or other approved means filed have lost their validity or technical or operating aspects are not met.
 - 4.3. The vessel is not operating in compliance with the submitted plan; or,
 - 4.4. The term of its authorization expires.
1. An owner or operator of a vessel which does not navigate on a regular basis in one or more geographic specific areas not covered by the response plan, making an exceptional voyage may be authorized for such voyage. To be authorized, the vessel owner or operator shall obtain the written authorization of *Prefectura Naval Argentina* prior to the vessel's entry into Prefectura zone, that:
 - 5.1. A response plan meeting the requirements hereof (except for the applicable geographic specific appendixes), or a shipboard oil pollution emergency plan approved by the flag state that meets the requirements of Regulation 26 of Annex I to MARPOL 73/78 is available.
 - 5.2. The response plan is aboard the vessel.
 - 5.3. The vessel owner or operator has identified and informed the vessel master and the relevant PNA unit of the designated qualified individual prior to the vessel's entry, mentioned in Article 7 hereof; and,
 - 5.4. The vessel owner or operator has identified and ensured the availability, through contracts or other approved means, of the necessary response resources to respond to the maximum extent practicable to a worst case discharge or substantial threat of a discharge from the vessel.
2. If thereafter, the owner or operator decides to carry out navigation or operation on a regular basis in waters of Argentine jurisdiction, it shall adapt to the other guidelines of this Annex.

Article 7: Qualified individual and alternate qualified individual.

1. The response plan must identify a qualified individual and at least one alternate qualified individual who meet the requirements of this section. The qualified individual or alternate qualified individual must be available on a 24-hour basis.

2. The qualified individual and alternate must:
 - 2.1. Speak fluent Spanish and the working language of the vessel crew it is going to represent.
 - 2.2. Be located in the Republic of Argentina.
 - 2.3. Be familiar with the implementation of the vessel response plan; and,
 - 2.4. Be trained in the responsibilities of the qualified individual under the response plan.
 - 2.5. Be solely assigned in a specific geographic area where the vessel shall navigate. Without prejudice of the foregoing, where two or more different geographic areas are close, *Prefectura Naval Argentina*, after an evaluation, may authorize that only one qualified individual be assigned in such areas.
1. The owner or operator shall provide each qualified individual and alternate qualified individual identified in the plan with a document designating them as qualified individuals and specifying their full authority to:
 - 3.1. Activate and engage in contracting with oil spill removal organization(s) and other resources identified in the plan.
 - 3.2. Act as a liaison with the on-scene coordinator and supervisor.
 - 3.3. Obligate funds required to carry out response activities.
1. The owner or operator of a vessel may designate an oil spill removal organization to fulfill the role of the qualified individual and alternate qualified individual. The organization must then identify a qualified individual and at least one alternate qualified individual who meet the requirements of this Article. The vessel owner or operator is required to list in the response plan the response organization, the person identified as qualified individual, and the person or persons identified as alternate qualified individual(s).
2. The qualified individual is not responsible for:
 - 5.1. The adequacy of the response plan prepared by the owner or operator; or
 - 5.2. Contracting or obligating funds for response resources, beyond the full authority contained in their designation from the owner or operator of the vessel.

Article 8: General response plan requirements.

1. The plan must cover all geographic areas of the Republic of Argentina in which the vessel intends to handle, store, or transport oil, hazardous and noxious substances, including port areas and offshore traffic areas.
2. The plan must be written in Spanish and, if applicable, in a language that is understood by the crew members with responsibilities under the plan.
3. A vessel response plan must be divided into the following sections:

SECTION 1: INTRODUCTION AND GENERAL INFORMATION.

This section of the response plan must include the following information:

1. The vessel's name, country of registry, call sign, official number, and IMO international number, if applicable. If the plan covers multiple vessels, this information must be provided for each vessel.
2. In the case of barges covered by the plan, a list of the barges, with the same data as in paragraph 1.
3. The name, address, and procedures for contacting the vessel or barge owner or operator on a 24 –hour basis.
4. A list of PNA zones covered by the plan where the vessel or vessels or barges intend to handle, store or transport oil.
5. A table of content or index of sufficient detail to permit personnel with responsibilities under the response plan to locate the specific sections of the plan; and,
6. A record of change of pages to record information on the plan reviews, updates or revisions.
7. A page for approvals and a page for amendments.

SECTION 2: NOTIFICATION PROCEDURES.

This section of the response plan must include the following information:

1. A checklist with all notifications, including telephone or other contact numbers in order of priority to be made by shipboard or shore-based personnel and the information required for those notifications.
2. Identification of the person(s) to be notified of a discharge or substantial threat of a discharge of oil. If the notifications vary due to vessel location, the persons to be notified must also be identified in a geographic specific appendix. This section must separately identify:

- 2.1. The qualified individual(s) or organizations(s) to be notified by shipboard personnel.
 - 2.2. The qualified individuals or organizations to be notified by shore-based personnel.
1. The procedures for notifying the qualified individual(s) designated by the vessel's owner or operator.
 2. Description of the primary and, if available, secondary communications methods by which the notification will be made.
 3. The information that is to be provided in the initial and any follow-up notifications required in this section.
 4. The initial notification may be submitted in accordance with IMO Resolution A648 (16) "General Principles for Ship Reporting Systems and Ship Reporting Requirements". It must include at least the following information:
 - A) Vessel (or barge) name, country of registry, call sign, and IMO official number (if any).
 - B) Date and time of the incident.
 - C) Location of the incident.
 - D) Course, speed, and intended track of vessel (or barge towing vessel).
 - E) Radio frequencies maintained by vessel (or towing vessel).
 - F) Date and time of next report.
 - G) Type and quantity of oil on board.
 - H) Nature and detail of defects, deficiencies, and damage (e.g. collision, grounding, hold failure, etc.).
 - I) Details of pollution, including time of discharge or threat of a discharge.
 - J) Weather and sea conditions on scene.
 - K) Ship (or barge) size and type.
 - L) Actions taken or planned by persons on scene.
 - M) Current conditions of vessel (or barge), and
 - N) Number and details of crew.
1. After the transmission of the initial condition, as much as possible of the following information shall be reported:
 - A) Additional details on the type of cargo on board.
Additional details on the condition of the vessel (or barge) and ability to transfer cargo, ballast and fuel.
 - B) Additional details on the quantity, extent and movement of the pollution and whether the discharge is continuing.
 - C) Any changes in the on-scene weather conditions.
 - D) Actions being taken with regard to the discharge and the movement of the ship (or barge).

2. Identification of the person(s) to be notified of a vessel casualty potentially affecting the seaworthiness of a vessel, and the information to be provided by the vessel's crew to shore-based personnel to facilitate the assessment of damage, stability and stress.

SECTION 3: SHIPBOARD SPILL MITIGATION PROCEDURES.

This section of the response plan must include the following information:

1. Procedures for the crew to mitigate or prevent any discharge or substantial threat of a discharge of oil resulting from operational activities of the vessel (or barges), associated with internal or external cargo transfers. The responsibilities of vessel (or towing vessel) personnel should be identified by job title. These procedures must address personnel actions in the event of a:
 - A) Transfer system leak.
 - B) Tank overflow, or
 - C) Suspected cargo tank or hull leak.
2. Procedures for the crew to mitigate or prevent any discharge or substantial threat of a discharge in the event of the following casualties or emergencies:
 - A) Grounding or stranding.
 - B) Collision.
 - C) Explosion or fire, or both.
 - D) Hull failure.
 - E) Excessive list.
 - F) Equipment failure (e.g., main propulsion, steering gear, etc.) (for vessels only).
3. Procedures for the crew to deploy discharge contention equipment as required under Appendix A hereto.
4. The procedures for internal transfers of cargo in an emergency.
5. The procedures for ship-to-ship (or barge-to-barge) transfer of cargo in an emergency.
6. The form and content of the ship-to-ship transfer procedures must be consistent with the transfer guide, published by the Oil Companies International Marine Forum (OCIMF).
7. The procedures must identify the response resources necessary to carry out transfers, including:
 - A) Fendering equipment.
 - B) Connection equipment and transfer hoses.
 - C) Portable pumps and ancillary equipment.
 - D) Lightening and mooring masters.
 - E) Vessel and barge brokers.

1. Reference may be made to a separate oil transfer procedure and lightening plan carried out aboard the vessel (or barge), provided that the safety considerations are summarized in the response plan.
 2. The location of all relevant equipment must be identified, if not aboard the vessel.
 3. The procedures and arrangements for emergency towing, including the rigging and operation of any emergency towing equipment, as set forth in Appendix A to this Annex.
 4. The location, crew responsibilities and procedures for use of shipboard equipment which may be carried to prevent or mitigate an oil discharge.
 5. The crew responsibilities, for record keeping of the activities of oil discharge control operations.
 6. The crew's responsibilities to initiate a response and supervise shore-based response resources.
 7. Damage stability and hull stress considerations when performing shipboard mitigation measures. This section must identify and describe:
 - A) Activities in which the crew is trained and qualified to execute absent shore-based support and advice.
 - B) The information to be collected by the vessel's crew to facilitate shore-based assistance.
-
1. Location of vessel (or barge) plan necessary to perform salvage, stability and hull stress assessment. A copy of this plan must be maintained ashore by either the vessel owner or operator or the vessel's recognized classification society unless the vessel has prearranged for a shore-based damage stability and residual strength calculation program with the vessel's baselines strength and stability characteristics pre-entered. The response plan must indicate the shore location and 24-hour access procedures of the calculation program or the following plans:
 - A) General arrangement plan.
 - B) Midship section plan.
 - C) Lines plan or table of offsets.
 - D) Tank tables.
 - E) Load line assignment.
 - F) Light ship characteristics.
 2. The plan must identify the shore location and 24-hour access procedures for the computerized, shore based damage stability and residual structural strength calculation programs.

SECTION 4: SHORE-BASED RESPONSE ACTIVITIES.

This section of the response plan must include the following information:

1. The qualified individual's responsibilities and authorities, including immediate communication with *Prefectura Naval Argentina* and notification of the oil spill removal organization identified in the plan.
2. If applicable, procedures for transferring responsibility for direction response activities from vessel personnel to the shore-based spill management team.
3. The procedures for coordinating the actions of the vessel owner or operator or qualified individual with the pre-designated JECECODECON, responsible for overseeing or directing those actions.
4. The organizational structure that will be used to manage the response actions. This structure must include the following functional areas and must further include information for key components within each functional area:
 - A) Command and control.
 - B) Public information.
 - C) Safety.
 - D) Liaison with governmental agencies.
 - E) Spill response operations.
 - F) Planning.
 - G) Logistics support.
 - H) Finance.
1. The responsibilities of, duties of, and functional job descriptions for each oil spill management team position, within the organizational structure identified in paragraph 4. above.

SECTION 5: LIST OF CONTACTS.

This section of the response plan must include the following information:

1. The name, location and 24-hour contact information for the following key individuals and organizations must be included in this section of the response plan or, if more appropriate, in a geographic-specific appendix and referenced in this section of the response plan:
 - 1.1. Vessel (or barge) owner or operator.
 - 1.2. Qualified individual or alternate qualified individual for the vessel's area of operation.
 - 1.3. Applicable insurance representatives or supervisors for the vessel's (or barge) area of operation.

- 1.4. The vessel's (or barge's) local maritime agent(s) for that area of operations.
- 1.5. Personnel of the response organization to notify for activation of the response system for the three spill scenarios identified in section 9, paragraph 2.3, for the vessel's (or barge's) area of operations.
- 1.6. Persons within the identified response organization to notify for activating the organization to provide:
 - A) The required emergency lightening, applicable to the type of service of the vessel (or barge).
 - A) The required salvage and fire fighting, applicable to the type of service of the vessel (or barge).
1. Person to be notified, for activation of the spill management team for the spill response scenario identified in section 9, paragraph 2.3, for the vessel's (or barge's) area of operations.

SECTION 6: TRAINING PROCEDURES.

This section of the response plan must address the training procedures and programs of the vessel owner or operator to meet the requirements of Article 9.

SECTION 7: EXERCISE PROGRAMS.

This section of the response plan must address the exercise programs to be carried out by the vessel owner or operator to meet the requirements of Article 9.

SECTION 8: PLAN REVIEW AND UPDATE.

This section of the response plan must set forth update, review, amendment and modification procedures, including:

1. The procedures to be followed by the vessel owner or operator to meet the requirements of Article 5, and
2. The procedures to be followed for any post-discharge review of the plan to evaluate and validate its effectiveness.

SECTION 9: GEOGRAPHIC APPENDICES FOR EACH PNA ZONE IN WHICH A VESSEL OPERATES.

A geographic-specific appendix must be included for each PNA zone where the vessel operates. The geographic-specific appendix must include the area identified for each PNA identified zone. The appendix must include the following information or identify the location of such information within the plan:

1. A list of the geographic areas (port areas, rivers, lakes and canals, nearshore, offshore and open ocean areas) in which the vessel intends to handle, store, or transport oil within the applicable PNA zone.
2. The volume and group of oil on which the required level of response resources are calculated.
 - 2.1. Required PNA notifications applicable to the geographic areas in which a vessel operates.
 - 2.2. Identification of the qualified individuals.
 - 2.3. Oil spill removal organization identified and ensured available through contract or other approved means, and the spill management team to respond to the following spill scenarios.
 - A) Average most probable discharge.
 - B) Maximum most probable discharge.
 - C) Worst case discharge.
1. The organization(s) identified to meet the requirements of paragraph 5 hereof must be capable of providing the equipment and supplies necessary to meet the requirements of this annex, and sources of trained personnel to continue operation of the spill management team and staff in charge of operations, identified by the response organization(s) during the 7 days.
2. The appendix must list the response resources and related information.
3. The appendix must also separately list the companies identified to provide the salvage, vessel fire fighting, lightening, and if applicable, dispersant capabilities required herein.

SECTION 10: APPENDIX FOR VESSEL-SPECIFIC INFORMATION OF THE VESSEL(S) COVERED BY THE PLAN.

This section must include for each vessel covered by the plan the following information:

1. List of the vessel's characteristics:
 - 1.1. List of the vessel's principal characteristics.
 - 1.2. Capacities of all cargo, fuel, lube oil, ballast, and fresh water tanks.
 - 1.3. The total volume and cargo groups of oil cargo that would be involved in:
 - a) Maximum most probable discharge.
 - b) Worst case discharge.

- 1.1. Diagram showing location of all tanks.
 - 1.2. General arrangement plan (to be maintained separately aboard the vessel, providing the response plan identifies the location).
 - 1.3. Midship section plan (to be maintained separately aboard the vessel, providing the response plan identifies the location).
 - 1.4. Cargo and fuel piping diagrams and pumping plan (to be maintained separately aboard the vessel, providing the response plan identifies the location).
 - 1.5. Damage stability data (to be maintained separately aboard the vessel, providing the response plan identifies the location).
 - 1.6. Location of cargo and fuel stowage plan for vessel (normally maintained separately aboard the vessel providing the response plan identifies the location).
 - 1.7. Location of information on the name, physical and chemical characteristics, health and safety hazards, and spill and fire fighting procedures for the oil cargo aboard the vessel. This information shall be maintained separately, providing the response plan identifies the location.
1. Vessel owner or operator with multiple ships may file only one plan for every class of vessel (e.g. manned tank vessels, unmanned tank barges, or vessels or barges transporting animal fat, vegetable oil or other non-petroleum oil, noxious liquid substances, etc.), with a separate geographic-specific appendix for the vessel covered by the plan and a geographic-specific appendix for every specific geographic area in which the vessels shall operate.
 2. The information contained in the response plan shall be pursuant to:
 - 3.1. The area Local Contingency Plan in force with validity of 6 months prior to the date the response plan is filed; or
 - 3.2. The most recent PLANACON.
 1. Filed and approved copies of the response plan shall be available as set forth below:
 - 4.1. The owner or operator of all vessels, except for unmanned barges, shall ensure that a copy in Spanish and a copy in the crew working language and the approval by *Prefectura Naval Argentina* or an authenticated copy thereof, are maintained aboard the vessel. If applicable, additional copies of the required plan sections shall be in a language understood by the

crew members with responsibilities under the plan and maintained onboard the vessel.

- 4.2. The owner or operator of all unmanned tank barges shall ensure that a copy in Spanish and a copy in the crew working language and the approval by *Prefectura Naval Argentina* or an authenticated copy thereof, be maintained on board the barge or, otherwise in the towing vessel.
- 4.3. The vessel owner or operator shall maintain a copy of the complete plan and shall ensure that every person identified as a qualified individual and an alternate qualified individual have a copy of the same characteristics.

SECTION 11: ONBOARD NOTIFICATION CHECKLIST AND EMERGENCY PROCEDURES (FOR TANK BARGES ONLY).

This section of the plan shall set forth the responsibilities of the personnel in charge of the barge, or otherwise in the towing vessel. It shall also include:

1. Emergency telephone numbers of the PNA area where the barge operates.
2. Name and procedure to contact owner or operator.
3. Name and procedure to contact the qualified individual.
4. List of information to be supplied by personnel.
5. A list of the responsibilities and actions to be taken by the personnel, taking into account the procedures to moor or anchor the barge.
6. The information contained in Section 3.

Article 9. Training.

1. A response plan submitted to meet the requirements of Article 8 must identify the training to be provided to persons having responsibilities under the plan, including members of the vessel or barge and/or towing vessel crew, the qualified individual and the spill management team. The training program must differentiate between that training provided to vessel personnel and that training provided to shore-based personnel.
2. The vessel owner or operator shall ensure the maintenance of records sufficient to document this training and make them available for the inspections required by *Prefectura Naval Argentina*. Records must be maintained for 3 years following completion of training, identifying the location of training records, which must be:
 - 2.1. On board the vessel.
 - 2.2. With the qualified individual, or
 - 2.3. With the spill management team.

1. The vessel owner or operator may identify equivalent work experience which fulfills specific training requirements.
2. The vessel owner or operator shall ensure that any oil spill removal organization identified in a response plan to meet the requirements of this part maintains records sufficient to document training for the organization's personnel.
3. A training plan may be prepared in accordance with training elements for oil response to satisfy the requirements of this section.
4. The vessel owner or operator shall comply with the following training:
 - 6.1. Qualified individual notification exercises, which must be conducted every four months.
 - 6.2. Emergency procedures exercises, which must be conducted every four months.
 - 6.3. Shore-based spill management team tabletop exercises, which must be conducted annually.
 - 6.4. Oil spill removal organization equipment deployment exercises, which must be conducted annually.

Article 10. Inspections.

1. To verify the requirements of Articles 8 and 9, the owner or operator of a vessel shall comply with the inspections required thereto by *Prefectura Naval Argentina*. Such inspections may be announced or unannounced:
 - 1.1. Initial inspection.
 - 1.2. Annual renewal inspections.
 - 1.3. Extraordinary inspections, when deemed relevant by *Prefectura Naval Argentina*.
1. Such inspections shall consist in tabletop exercises simulating a real practice, in which all personnel with responsibilities under the plan shall be involved. The exercise of the spill response organization equipment deployment shall also be verified. The owners or operators who have ensured the response by contracts or other means approved by a spill removal organization approved and qualified by *Prefectura Naval Argentina* shall be exempted from such exercise.

Article 11. Additional response plan requirements.

This Article sets forth the spill response planning requirements for the owner or operator of the units specified in Article 2, operating in the special protection areas set forth by Ordinance No.12-98 (DPMA - BOOK 6) and all others to be created hereafter by *Prefectura Naval Argentina*.

1. The owner or operator of a vessel subject to this Article shall include the following requirements in the geographic-specific appendix required in this Annex.
1. The response plan must include the identification of a spill response organization that shall:
 - 2.1. Perform response activities.
 - 2.2. Provide oil spill removal and containment training, including training in the operation of prepositioned equipment, for personnel, including local residents that may be affected.
 - 2.3. Consist of sufficient number of trained personnel with the necessary technical skills to remove, to the maximum extent practicable, a worst case discharge or a discharge of 10,000 cubic meters of oil, whichever is greater.
2. The response plan must identify an inspection and a certification program for the prepositioned response equipment required in Article 12 that must provide for:
 - 3.1. Annual equipment inspection in accordance with the manufacturer's recommended procedures, to include:
 - 3.1.1. Start-up and running under load of all electrical motors, pumps, power packs, air compressors, internal combustion engines and oil recovery devices; and
 - 3.1.2. Removal of no less than one-third of required boom from storage annually, such that all boom will have been removed and examined within a period of three years;
 - 3.1.3. Records of equipment tests and inspection; and
 - 3.1.4. Certification that the equipment is on-site and in good operating condition and that required tests and inspections have been performed.
1. The response plan must identify and give the location of the prepositioned response equipment required in Article 12, including the make, model and effective daily recovery rate of each oil recovery resource.
2. All records required by this section must be available for inspection by *Prefectura Naval Argentina* and must be maintained for a period of at least 3 years.

Article 12. Requirements for prepositioned response equipment.

1. The owner or operator of a tanker subject to this Article shall provide the following prepositioned response equipment, located within Special Protection Areas set forth by Ordinance No.12/98 (DPMA BOOK 6) and any other that may hereafter be set forth by *Prefectura Naval Argentina*.
 - 1.1. On-water recovery equipment with a minimum effective daily recovery capacity of 10,000 cubic meters, capable of being on scene and operating within 10 hours of notification of discharge.
 - 1.2. Additional on-water recovery capacity of at least 10,000 cubic meters, capable of being on scene and operating within 10 hours of notification of discharge.
 - 1.3. On-water oil recovery devices and storage equipment located in communities and at strategic locations.
 - 1.4. Boom appropriate for the specific locations where the vessel operates.
 - 1.5. Sufficient boats to deploy boom and sorbents.
 - 1.6. Sorbents, including boom, sweeps, pads, blankets, drums and plastic buckets.
 - 1.7. Personnel protective clothing and equipment.
 - 1.8. Survival equipment.
 - 1.9. First aid supplies.
 - 1.10. Buckets, shovels, and various other tools.
 - 1.11. Decontamination equipment.
 - 1.12. Shoreline clean-up equipment.
 - 1.13. Mooring equipment.
 - 1.14. Anchorage buoys at appropriate locations to facilitate the positioning of defensive boom; and
 - 1.15. Other appropriate removal equipment.

1. A salvage company with appropriate experience and equipment capable of operating within 10 hours of notification of spill.

2. For tankers subject to this Article, the following response times must be used in determining the on-scene arrival, for the response resources set forth in items 1.5 through 1.15) hereof:

Tier 1	Tier 2	Tier 3
12 hours	24 hours	36 hours

Appendix A to Annex 18 of Ordinance No.8/98 (DPMA - BOOK 6). Determining and evaluating required response resources for vessel response plans.

1. Purpose.

1. The purpose of this appendix is to describe the procedures for identifying response resources to meet the requirements of Annex 18 of this Ordinance. These guidelines will be used by the vessel owner or operator in preparing the response plan and by *Prefectura Naval Argentina* to review the proper equipment.

2. Equipment Operability and Readiness.

1. All equipment identified in a response plan must be capable of operating in the conditions expected in the geographic area in which a vessel operates. These conditions vary widely based upon the location and season. Therefore, it is difficult to identify a single stockpile of response equipment that will function effectively in every geographic area.
2. Vessels storing, handling or transporting oil in more than one specific geographic area, as indicated in Table 1 must identify equipment capable of successfully functioning in each operating environment. For example, vessels moving from the ocean to a river port must identify appropriate equipment designed to meet the criteria for transiting oceans, inland waterways, rivers and canals. This equipment may be designed to operate in all of these specific geographic areas or, more likely, different equipment may be designed for use in each area.
3. Table 1 of this appendix lists the operating criteria for response resources. All equipment necessary to sustain or support a response operation in a geographic area must be designed to function in the same conditions. For example: boats which deploy or support skimmers or boom must be capable of being safely operated in the significant wave heights listed for the applicable operating area. *Prefectura Naval Argentina* may require documentation that the boom identified in a response plan meets the criteria of Table 1 of this appendix. In the event the documentation is lacking, *Prefectura Naval Argentina* may require that the boom be examined to demonstrate that it meets the aforementioned criteria. Testing must be in accordance with ASTM F 715 testing standard for barrier tension membrane materials or any other test approved by PNA.
4. A vessel owner or operator must refer to the applicable area plan to determine if ice, debris, weather-related visibility are significant in evaluating the operability of equipment. The emergency plan will also identify the average temperature ranges expected in a geographic area in which a vessel operates. All equipment identified in a response plan must be designed to operate within those conditions or ranges.
5. The requirements hereof establish the response resource mobilization and response times. The location that the vessel operates farthest from the storage location of the response resources must be used to determine whether the resources are capable of arriving on scene within the time required. A vessel owner or operator shall include the time for notification, mobilization and travel time

of resources identified to meet the average most probable discharge, maximum most probable discharge and the worst case discharge requirements in one tier.

6. The vessel owner or operator shall list the location, quantity and manufacturer's make and model, unless the oil spill removal organization providing the specific resources have been acknowledged by *Prefectura Naval Argentina*. This appendix determines the effective daily recovery capacity, which shall be included in the plan. The overall boom height (freeboard and draft) must be included. A vessel owner or operator is responsible for ensuring that identified boom has compatible connectors.
7. It shall be taken into account in all cases that oil storage capacity equals twice the recovery rate.

3. Determining Response Resources for the Average Most Probable Discharge.

1. A vessel owner or operator shall identify and ensure, by contract or other approved means, that sufficient response resources are available to respond to an average probable discharge of 10 cubic meters in the area of oil transfer involving a vessel that carries oil. The equipment must be designed to function in the operating environment in the area of oil transfer. These resources must include:
 - 1.1. Containment boom in a quantity equal to twice the length of the largest vessel involved in the transfer capable of being deployed within one hour of the detection of a spill at the site of oil transfer operations. If the transfer operation is more than 12 miles from shore, the containment boom must be deployed within one hour plus the travel time from the nearest shoreline at a speed of five knots.
 - 1.2. Oil recovery devices with an effective daily recovery capacity of 10 cubic meters available and adequately operating at the transfer site within two hours of the detection of an oil discharge. In the event the incident takes place more than 12 miles from shore, the recovery devices shall be available within 2 hours plus the travel time.
 - 1.3. The oil storage capacity equals twice the recovery rate.

1. Determining Response Resources Required for the Maximum Most Probable Discharge.

1. A vessel owner or operator shall identify and ensure by contract or other approved means, that sufficient response resources are available to respond to discharges up to the maximum most probable discharge volume for that vessel. The resources should be capable of containing and collecting 400m³ of oil from a vessel with a cargo capacity equal to or more than 4,000 m³, or 10% of the vessel cargo capacity with a capacity less than 4,000 m³. All equipment identified must be designed to operate in the applicable operating environment specified in Table 1 of this Appendix.

2. Oil recovery devices necessary, located within the specific times for the applicable level response, shall be included in the list in the following table.

Higher volume port areas, Nearshore areas, inland areas, Lakes	12 hours
Offshore areas	24 hours
Open ocean, plus travel time from shore	24 hours + travel time

1. Because rapid control, containment and removal of oil is critical to reduce spill impact, the effective daily recovery capacity for oil recovery equipment must equal 50% of the planning volume applicable for the vessel as determined in this Appendix. The effective daily recovery capacity for oil recovery equipment identified in the plan must be determined.
2. In addition to the oil recovery capacity, owner or operator must identify in the response plan and ensure through contracts or other approved means, the sufficient quantity of boom available to arrive within the required response times for oil containment and collection and for protection of shoreline areas. While the regulation does not set required quantities of boom for oil collection and containment, owner or operator must identify and ensure in the plan, through contract or other approved means, the availability of the boom identified in the plan for this purpose.
3. It shall be taken into account that oil storage capacity equals twice the recovery rate.
4. The following is an example of maximum most probable discharge volume planning calculation for equipment identification in a higher volume port area:
5. The vessel cargo capacity is 1,600 cubic meters. The planning volume is 10% or 160 cubic meters. The effective daily recovery capacity must be 50% of the planning volume, *i.e.* 80 cubic meters per day. The availability of oil recover equipment to meet this capacity will be calculated using the procedures in this appendix. Temporary storage capacity available on scene must equal twice the daily recovery rate. In this example, 160 daily cubic meters. This example constitutes the information vessel owner or operator will use to identify and ensure the availability, through contract or other approved means, of the required response resources. Owner or operator will also need to identify the amount of boom available for use.

5. Determining Required Response Resources for the Worst Case Discharge to the Maximum Extent Practicable.

1.Owner or operator shall identify and ensure, through contract or other approved means, that sufficient response resources are available to be used in response to the worst case discharge of oil to the maximum extent practicable. This appendix describes the method to determine the required response resources.

2.Oil spill recovery devices identified to meet the applicable worst case discharge planning must be located such that they can arrive to the scene of a discharge within the times specified for the applicable response tiers listed in the table below.

Higher volume port areas, Nearshore areas, inland areas, Lakes	60 hours
Offshore areas	72 hours
Open ocean, plus travel time from shore	72 hours + travel time

1. The effective daily recovery capacity for the recovery devices identified in a response plan must be determined using the criteria set forth in item 7) hereof. A vessel owner or operator shall identify the storage locations of all equipment used to fulfill the requirements.

2. When selecting response resources necessary to meet the Response Plan requirements, the owner or operator must ensure that a portion of those resources are capable of being used in shore protection activities in shallow water. The following percentages of the on-water response equipment identified for the applicable geographic area must be capable of operating in waters of 1.80 m or less depth:

- 4.1. Ocean – none.
- 4.2. Offshore areas – 10 %.
- 4.3. Port areas and higher volume areas, nearshore areas, inland areas, lakes – 20%.

2.1. In addition to temporary collection and storage equipment, the owner or operator must identify the Response Plan and ensure the availability, through contract or other approved means that sufficient quantities of boom arrive on scene within the response times for oil containment and collection. The specific quantity of boom required for collection and containment, will depend on the specific collection

equipment and strategies applied. Table 2 hereof lists the minimum amount of additional boom required that the owner or operator must identify in the Response Plan.

- 2.2. Owner or operator must also identify, through contract or other approved means, the availability of a response organization capable of responding to a shoreline clean-up operation involving the calculated volume of oil and emulsified oil that might impact the affected shoreline. The volume of oil that must be planned for is calculated through the application of factors contained in Tables 3 and 4 hereof. The volume calculated from these tables is intended to assist the owner or operator in selecting a response organization with sufficient resources. This planning volume is not used explicitly to determine a required amount of equipment and personnel.

6. It shall be taken into account in all cases that oil storage capacity equals twice the recovery rate.

6. Determining the Response Resources for Vessels Transporting Animal Fat, Vegetable or other Non-petroleum Oil.

1. A vessel owner or operator transporting animal fats and vegetable oil or other non petroleum oil, must provide information in the plan that identifies:

- 1.1. Procedures and strategies for responding to a worst case discharge of animal fat or vegetal oil to the maximum extent practicable; and
 1.2. Sources of equipment and supplies necessary to contain, recover and mitigate such a discharge.

2. A vessel owner or operator must ensure that any equipment identified in a response plan is capable of operating in the conditions expected in the geographic area in which the vessel operates using the criteria in Table 1 of Appendix A hereto. When evaluating the operability of equipment, owner or operator must consider limitations that are identified in the National Contingency Plan for PNA zones in which the vessel operates, including:

- 2.1. Ice conditions.
 2.2. Debris.
 2.3. Temperature ranges; and,
 2.4. Weather-related visibility.

- 1.A vessel owner or operator must identify and ensure that response resources are available through contract or other approved means and that the identified equipment include:

- 3.1. Containment boom, sorbent boom, or other methods for containing oil floating on the surface or to protect shorelines from impact.
 3.2. Oil recovery devices appropriate for the type of animal fat or vegetable oil transported; and

3.3. Other appropriate equipment necessary to respond to a discharge involving the type of animal fat or oil transported.

1. Response resources identified in a response plan under paragraph 3) hereof, must be capable of arriving on scene within the response times from the time a spill is discovered, as follows:

	Tier 1	Tier 2	Tier 3
Port areas and higher volume Port areas, Nearshore areas, Inland areas, Lakes	12 hours	36 hours	60 hours
Offshore areas	24 hours	48 hours	72 hours
Open ocean	24 hours + travel time	48 hours + travel time	72 Hours + travel time

1. The owner or operator must identify the following response resources in the response plan and must ensure their availability:

- 1.1. A salvage company with appropriate experience and equipment.
- 1.2. A company with vessels with fire-fighting capacity that shall respond to occurrences in the area in which the vessel is operating.

1. A vessel owner or operator must identify and ensure the following resources in the response plan:

- 6.1. Fendering equipment.
- 6.2. Transfer hoses and connection equipment; and,
- 6.3. Portable pumps and ancillary equipment necessary to the largest discharge cargo tanks of a vessel in 24 hours of continuous operation.

1. Response resources identified in paragraph 6), must be capable of reaching the location in which the vessel is and operating within the following times:

Higher volume port areas, nearshore areas, inland areas and lakes - 12 hours.

- 7.1. Offshore areas - 18 hours.
- 7.2. Oceans - 36 hours.

1. The owner or operator of a vessel operating in areas that meet the requirements for use of dispersants may request a credit for up to 25% of the recovery capacity of animal fat, vegetable oil or non-petroleum oil for the response tier for a worst case discharge. To receive this credit, the owner or operator must identify in the plan and ensure, through contract or other approved means, the

availability of dispersants and the necessary resources to apply such dispersants and to monitor their effectiveness. The extent of the credit for dispersants will be based on the volumes of dispersant available to sustain operations at the manufacturer's recommended dosage rates. Resources identified for plan credit should be capable of being on scene within 12 hours of a discovery of a discharge. Identification of these resources does not imply that dispersants shall be authorized for use. Such use shall also adjust to the provisions of Ordinance No.1/98. (DPMA Book 6) and the Contingency Plans of the relevant PNA zones.

7. Oil storage capacity equals twice the recovery rate.

7. Determining Effective Daily Recovery Capacity for Oil Recovery Equipment.

1. Oil recovery equipment identified by an owner or operator, must be identified by manufacturer, model, and effective daily recovery capacity. These rates must be used to meet the applicable planning criteria for the average most probable discharge, maximum most probable discharge and worst case discharge to the maximum extent practicable.
2. For the purposes of determining the effective daily recovery capacity of oil recovery equipment, the following method shall be applied. This method considers potential limitations due to available daylight, weather, sea state, and percentage of emulsified oil in the recovered material.

2.1. The following formula must be used to calculate the effective daily recovery capacity:

$$R = T \times DLH \times E$$

R: Equipment effective daily recovery capacity in m3.

T: Throughout rate in m3 per hour, informed by equipment manufacturer.

DLH: Amount of daylight hours. For the purposes of calculation 10 hours shall be considered.

E: Efficiency factor, 0.8 shall be considered.

- 2.1. For those devices in which the pump limits the throughout of liquid, this rate will be calculated using the pump capacity.
- 2.2. For belt or mop devices, the throughout rate will be calculated using the data provided by manufacturer as to the equipment nominal capacity of the identifying plate.
- 2.3. Owners or operators including oil recovery devices without data as to the manufacturer's throughout rate shall provide information to support an alternative method of calculation.

1. The determination of the effective daily recovery capacity shall be carried out by *Prefectura Naval Argentina*. Equipment manufacturer or oil spill removal

organizations may submit required information on behalf of multiple owners or operators.

8. Calculating Planning Volume.

1. Owner or operator shall plan a response for an oil worst case discharge. The planning for on-water recovery must take into account a loss of some oil to the environment due to evaporation, emulsification and potential for deposit of some oil in the shoreline.
2. The following procedures must be used to calculate the planning volume used by the owner or operator for determining required on water recovery capacity:
 - 2.1. The following must be determined: Total volume of oil carried; the appropriate group for the type of oil carried (persistent group II, III y IV) or non-persistent (group I) and the geographic area(s) in which the vessel operates. For vessels transporting different oil groups, each group shall be calculated separately. This information is to be used with Table 3 hereof to determine the percentages of the total volume to be used for removal capacity planning. This table divides the volume into three categories: oil lost to the environment, oil deposited on the shoreline and oil available for on-water recovery.
 - 2.2. The on-water oil recovery volume must be adjusted using the appropriate emulsification factor found on Table 4 hereof.
 - 2.3. The adjusted volume is multiplied by the on-water oil recovery resource mobilization factor found in Table 5 hereof from the appropriate operating area and response tier to determine the total recovery capacity in cubic meters per day.
 - 2.4. The resulting on-water recovery capacity, in cubic meters per day for each level must be used to identify response resources necessary to sustain operations in the applicable geographic area. The equipment must be able of sustaining operations for the time specified in Table 3 hereof. Owner or operator must identify and ensure the availability, through contract or other approved means of sufficient oil spill recovery equipment to provide the effective daily oil recovery capacity required. For vessels transporting oil from different groups, the effective daily recovery capacity shall be calculated for each group and shall be added before applying the coverage.
3. The following procedures must be used to calculate the planning volume for identifying the shoreline clean-up capacity:
 - 3.1 The following must be determined: Total volume of oil; the appropriate group for the type of oil (persistent group II, III y IV) or non-persistent (group I) and the geographic area(s) in which the vessel operates. For

vessels transporting different oil groups, each group shall be calculated separately. This information is to be used with Table 3 hereof to determine the percentages of the total volume to be used for shoreline clean-up resources planning.

3.2 The planning volume for shoreline clean-up must be adjusted using the same procedure as described herein.

3.3 The resulting volume will be used to identify a oil spill removal organization with the appropriate shoreline clean-up capacity.

1. The following is an example of the procedures described above:

A vessel with a 15,000 cubic meters capacity of oil, of 0.96 specific gravity, will move from a higher volume port area to another area. The vessel's route will be 70 miles from shore.

Cargo carried: 15,000 m³. Group IV oil, emulsification factor (from Table 4 hereof) = 1.4 Areas transited: inland, nearshore, offshore, open ocean.

Plan % on-water recovery (from Table 3 hereof)

Inland areas 50 %

Nearshore area 50 %

Offshore area 40 %

Open ocean 20 %

Plan % oil onshore recovery (from Table 3 hereof)

Inland areas 70 %

Nearshore area 70 %

Offshore area 30 %

Open ocean 30 %

General formula to determine planning volume:

(Planning volume) = (Capacity) x (% from Table 3 hereof) x (emulsification factor from Table 4 hereof)

Planning volume for on-water recovery:

Inland areas: 15,000 m³ x 0.5 x 1.4 =10,500 m³

Nearshore area: 15,000 x 0.5 x 1.4 =10,500 m³

Offshore area: 15,000 x 0.4 x 1.4 = 8,400 m³

Open ocean: 15,000 x 0.2 x 1.4 = 4,200 m³

Owner or operator must contract with a response resource capable of managing 10,500 m³ shoreline clean-up in those areas where the vessel comes closer than 50 miles to shore.

Determining required resources for on-water oil recovery for each level using mobilization factors: (on-water recovery requirements in cubic meters per day) = (on-water planning volume as calculated above) x (mobilization factor from Table 5 hereof).

	TIER 1	TIER 2	TIER 3
Inland/nearshore areas: 10,500 x	0.15	0.25	0.40
Offshore area: 8,400 x	0.10	0.165	0.21
Open ocean: 4,200 x	0.06	0.10	0.12
Equals (cubic meters per day) =			
Inland/nearshore areas	1,575 m ³	2,625 m ³	4,200 m ³
Offshore area	840 m ³	1,386 m ³	1,764 m ³
Open ocean	252 m ³	420 m ³	504 m ³

Since the requirements for Tier 1 for inland and nearshore areas exceed the caps, the vessel owner or operator would only need to contract for 1,500 cubic meters per day as set forth in Table 6. No additional equipment would be required for the resources required by Tier 3, since they do not reach the capacities determined for Tier 3.

10% of on-water recovery capability for offshore, and 20% of the capability for inland and nearshore areas for all levels, must be capable of operating in water with a depth of 1.80 meters or less.

The vessel owner or operator would also be required to comply with the quantity of boom identified in Table 2 hereof, for the areas in which the vessel operates.

9. Determining the Availability of Non-mechanical Response Methods.

1. The response plan for a vessel carrying persistent oil (Group II or III) as a primary cargo that operates in area meeting the requirements for dispersant use may access credit up to 25% of the recovery capacity in that area. To receive credit, owner or operator must identify the plan and ensure through contract or other approved means, the availability of dispersants and of the necessary resources to properly apply these agents and to monitor the effectiveness of such dispersants. The extent of the credit shall be based upon the volumes of dispersants available to maintain operations in the quantities recommended for manufacturers. For response plan credit, these resources must be capable of being on scene within 12 hours of the discovery of a discharge.

2. Identification of such resources does not imply that dispersants shall be authorized for use. Such use shall also be adjusted to the provisions of Ordinance No.1/98 (DPMA - Book 6) and the Contingency Plans of the relevant PNA zones.
3. To receive credit against any required on-water collection capacity, the response plan must identify the location of dispersant stockpiles, methods of transporting to a shoreside staging area and appropriate vessel or aircraft to apply the dispersant and monitor its effectiveness at the scene of discharge.
4. Dispersant application equipment identified in a response plan must be identified and located such that it may be mobilized to the contingency area to meet time requirements. Operations for dispersant application must be capable of being carried out in a term not exceeding 3 days.
 - 4.1. The following example sets forth that for a spill of 1,500 cubic meters, out of which 25% credit obtained is 375 cubic meters for Tier 1 would require the vessel owner or operator to demonstrate the ability to treat 375 cubic meters per day of oil at the dosage rate recommended for the dispersant to be used. Assuming a dosage rate of 10:1, the plan would need to show stockpiles and sources of 125 cubic meters of dispersant that would be available on scene at a rate of 12.5 cubic meters per day and the ability to apply this dispersant at the daily rate for 3 days in the area in which the vessel operates. Similar data would need to be provided for any additional credit against Tier 2 or 3 resources.
1. In addition to the equipment and supplies required, a vessel owner or operator shall identify the availability of a source of support to conduct the monitoring and post-use effectiveness evaluation required for every local and area contingency plan.

10. Additional Equipment Necessary to Sustain Response Operations.

1. A vessel owner or operator is responsible for ensuring that sufficient number of trained personnel, boats, aerial spotting aircraft, sorbent materials, boom anchoring materials, and other resources are available to sustain response operations to completion. All such equipment must be suitable for use with the primary equipment identified in the Response Plan. A vessel owner or operator is not required to list these resources in the Response Plan, but shall certify their availability.
2. A vessel owner or operator shall evaluate the availability of adequate temporary storage capacity to sustain the effective daily recovery capacities from equipment identified in the plan. Because of the inefficiencies of oil spill recovery devices, the response plan must identify daily storage capacity equivalent to twice the effective daily recovery capacity required on scene. This temporary storage capacity may be reduced if a vessel owner or operator can demonstrate that the efficiencies of the oil recovery devices, may decant water

or there is available alternative temporary storage in the area the vessel will operate.

3. The vessel owner or operator shall ensure that their plan includes the capability to arrange for final disposal of recovered oil.

Table 1. Response Resource Operating Criteria (oil recovery devices)		
Operating environment	Wave height (centimeters)	Sea State
Rivers and canals	31	1
Inland areas	90	2
Lakes	120	2-3
Offshore areas, nearshore open ocean	180	3-4

	Boom			
	Use			
Boom Property	Rivers And Canals	Inland Areas	Lakes	Offshore areas, Nearshore areas, Open Oceans
Sea state	1	2	2 - 3	3 - 4
Boom height	15 - 60 cm	60-100 cm	60 - 100 cm	60 - 100 cm
Reserve buoyancy To weight ratio	2:1	2:1	2:1	3:1 a 4:1
Total tensile strength, lbs.	4,500	15 – 20,000	15 – 20,000	+ 20,000
Skirt Fabric Tensile Strength, lbs.	200	300	300	500
Skirt Fabric Tear Strength, Lbs.	100	100	100	125

- 1- Oil recovery devices and boom must be at least capable of operating in wave heights exceeding the values listed in Table 1 for each operating environment.

2- Equipment identified as capable of operating in waters of 1.80 meters or less of depth are exempted from the wave height planning requirement.

Table 2. Shoreline protection requirements			
Location	Boom	Availability hours	
	Ensured by Contract (meters)	Higher volume Port areas	Other areas
	Persistent oil		
Ocean Offshore areas	4,500 m	24	48
Nearshore area / lakes	9,000 m	12	24
Rivers and canals	7,500 m	12	24
	Non-persistent oil		
Ocean Offshore areas Nearshore areas / Inland Areas / Lakes	3,000 m	12	24
Rivers and canals	4,500 m	12	24

Table 3. Removal resources planning Table						
Spill Location	Rivers and canals			Nearshore areas Inland areas / lakes		
Sustainability of on-water oil recovery	3 days			4 days		
Oil Group	% Natural Dissipation	% Recovered Floating oil	% Oil on shore	% Natural dissipation	% Recovered floating oil	% Oil on shore
I Non-Persistent Oil	80	10	10	80	20	10
II Light Crude	40	15	45	50	50	30
III Medium Crude and Fuels	20	15	65	30	50	50
IV Heavy Crudes And Fuels	5	20	75	10	50	70

Table 3. Removal resources planning Table (cont.)		
Spill Location	Offshore areas	Ocean

Sustainability Of on-water oil recovery	6 days			10 days		
	% Natural dissipation	% Recovered Floating oil	% Oil on shore	% Natural dissipation	% Recovered floating oil	% Oil on shore
I Non- Persistent Oil	95	/	/	100	/	/
II Light Crude	75	25	5	90	10	/
III Medium Crude and Fuels	60	40	20	75	20	/
IV Heavy Crudes And Fuels	50	40	30	50	20	/

Non-persistent oil Group I	1.0
Persistent oil Group II	1.8
Group III	2.0
Group IV	1.4

Area	Tier 1	Tier 2	Tier 3
Rivers and canals	0.30	0.40	0.60
Nearshore area / Inland areas/ Lakes	0.15	0.25	0.40
Offshore areas	0.10	0.165	0.21
Ocean	0.06	0.10	0.12

Note: These mobilization factors are for total resources mobilized, not incremental resources.

Area	Tier 1	Tier 2	Tier 3
All except Rivers, Canals and Lakes	1,600 m3 x day	3,500 m3 x day	7,000 m3 x day
Lakes	800 m3 x day	1,700 m3 x day	3,500 m3 x day
Rivers and Canals	300 m3 x day	500 m3 x day	1,000 m3 x day

