

# Operational and Regulatory Considerations for the Efficient Use of Dispersants to Combat Oil Spills

April 2025 Edition



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# **Executive Summary**

There is a lot of scientific and technical literature that supports the use of dispersants as one of several tools available to effectively combat offshore oil spills.

Many countries developed regulations and/or policies describing pre-approval/registration of dispersants, considerations for their use at the water surface and at the wellhead, as well as authorization processes for their application at the time of the spill.

Some countries have additional requirements or recommendations related to the storage of dispersants, environmental monitoring, or the assessment of potential impacts and benefits of dispersants use (e.g. through Net Environmental Benefit Analysis (NEBA) or Spill Impact Mitigation Analysis (SIMA)). This report highlights the importance of understanding country-specific regulations and policies, as well as good industry practices for the efficient preparedness and implementation of dispersants operations in any country, which would help to minimize the environmental and socio-economic impacts of a potential spill.

This report provides an overview of key regulatory requirements regarding the pre-approval and field authorization of dispersants in 19 North, South and Central American countries, as well as operational planning considerations and good international practices. It highlights opportunities for improvement in several aspects related to registration, pre-approval, availability of dispersants and application equipment, and the balance between the time necessary for field use authorization and the window of opportunity for an effective outcome of their use in case of an oil spill.

It is expected that this comparison allows users to find opportunities for improving regulatory and operational planning processes and encourage cooperation among Latin American and Caribbean countries. Since regulations change over time, readers should be aware that the data and benchmarking presented in this report describe the situation as of 22 April 2025 and may need to be updated with time.

Countries included in this edition are Argentina, Brazil, Canada, Colombia, Costa Rica, Chile, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama<sup>1</sup>, Peru, Suriname, Uruguay, USA.

NOTE: Arpel evaluation of the regulatory framework and operational aspects was based on the information received from the survey responses and the documents referenced in the Annex (Country Profiles). If the reader finds any inaccuracies in the information and/or its evaluation, please contact info@arpel.org.uy.

# **Glossary of Terms**

#### **Authorization**

Refers to the process by which a pre-approved/ registered dispersant can be used in the event of an actual spill

# **Capping equipment**

Equipment designed to close an uncontrolled subsea well

# **HNS**

Hazardous and Noxious Substances

### **Metocean conditions**

Combined effects of weather and ocean conditions in a specific area

# **NEBA**

Net Environmental Benefit Analysis

#### NOSCP

National Oil Spill Contingency Plan<sup>2</sup>

# OSRO

Oil Spill Response Organization

## Pre-approval/registration

Refers to the process by which the relevant government authority(ies) register the dispersant(s) as suitable for use in territorial waters

#### **SIMA**

Spill Impact Mitigation Assessment

#### **SMART**

Special Monitoring of Applied Response Technologies. A monitoring program designed by the US National Oceanic and Atmospheric Administration (NOAA) for insitu burning and dispersants

<sup>&</sup>lt;sup>2</sup> National oil spills contingency plans sometimes include hazardous and noxious substances. For ease of nomenclature, they are abbreviated as NOSCP, and—when appropriate—the scope of the plan is clarified by designating it by its official name.

# 1. Objectives

In 2007, Arpel developed the Guideline for the Use of Dispersants on Oil Spills (Arpel, 2007). The Guideline was designed to assist the decision makers -both responders and government agenciesby addressing key issues that would allow them to make informed decisions quickly using best available information. This document included a status summary of the regulatory/policy aspects in Latin America and the Caribbean related to the use of dispersants during oil spills. Over the last 18 years, this Arpel Guideline was utilized as a basis for the development or as a reference for the dispersants regulations/policies of several countries in the Region. Since then, much has been learned and changed regarding the regulatory, policy and operational aspects of dispersants use.

Following the release of *IMO Guidelines on the Use of Dispersants for Combating Oil Pollution at Sea* (IMO, 2024), the Arpel Emergency Response Planning Project Team initiated a project to collect the most recent information on the critical aspects of the regulations and operational considerations for the dispersants use in the Americas and Caribbean region.

This report analyzes and summarizes the policies and procedures associated with the pre-approval and authorization of the use of dispersants in case of an oil spill. It also highlights some operational aspects that should be considered in the planning phase of a successful dispersants program that may require special activities to avoid unnecessary delays during a response.

It is NOT the objective of this report to describe the scientific or technical aspects of the actual use (e.g. spraying, injecting) of dispersants in the field, since there is a wealth of knowledge and information already produced by reputable governmental and intergovernmental entities, universities and industry associations that are publicly available. *Ipieca (2024) and API (2024) websites* provide an updated compilation of dispersants information including scientific papers on the subject. The publications "The Use of Dispersants in Marine Oil Spill Response" and "Oil in the Sea IV. Inputs, Fates, and Effects" (National Academies, 2020 and 2022) offer additional in-depth information.

It is expected that this analysis would support the further development/updates of countries' effective regulations and policies on the approval and use of surface and subsea dispersants as options to combat oil spills and encourage implementation of good practices and transboundary collaboration.

# 2. Introduction

Globally, around 14.5 billion barrels of crude oil is transported by sea every year and 28 million barrels are produced daily from offshore fields.

Oil spills present a risk that has been managed for years by industry and governments alike. In addition to the prevention procedures and technologies, throughout the years they have -individually and cooperatively- devised toolkits for oil spills response. These toolkits include remote sensing, monitoring of natural attenuation, mechanical recovery, use of dispersants and biological agents, in-situ burning, shoreline cleanup, and wildlife response.

The most efficient use of dispersants in the case of an actual spill of crude oil or other hydrocarbons requires simultaneous evaluation of environmental, social, and economic considerations in the context of a legal framework within a limited time frame (window of opportunity) to make the decision and implement the technique. Since oil spill response is always a race against time, every effort should be made to expedite informed decision-making and enable the efficient use of response tools that would minimize environmental impacts and facilitate fastest ecosystem and economic recovery. A considerable number of topics needs to be considered and implemented during planning phase to ensure the successful outcome of response operations.

# 3.

# The Importance of the Different Regulatory Aspects

If national governmental authorities decide that dispersants can be an oil spill response option, then, a comprehensive -yet efficientset of procedures to approve and use them needs to be defined in the national oil spill contingency plan.

This chapter describes some of the critical aspects to be considered when developing sound regulations for the use of dispersants in an oil spill emergency.

# 3.1 National Oil Spill Contingency Plan (NOSCP)

Some countries have robust instructions in the NOSCP related to the dispersants' pre-approval and authorization. If the NOSCP doesn't specifically describe the dispersants use, the evaluation and eventual approval could be addressed under the advice of recognized international organizations typically called upon as observers or advisors during a spill, if they conclude that the use of dispersants is a suitable response option that can minimize the environmental

damage. These include IMO (www.imo.org), ITOPF (www. itopf.org), CEDRE (https://wwz.cedre.fr/), SINTEF (www. sintef.no) and OSRL (www.oilspillresponse.com), among others.

It is worth noting that several countries described in this study have experience with dispersants use in their offshore waters.

# 3.2 Decision Making Process

It's critical for the efficient dispersants evaluation and authorization process that agencies' roles and responsibilities are clear and that an efficient process for the decision-making is in place and is tested regularly.

For example, one agency may be responsible for the testing of dispersants to identify those that could be considered for the use in the country. A different agency or several agencies may oversee the situation at the time of a spill and authorize (or not) the use of these dispersants in the field. If the roles are not clear, too many agencies are involved in the approval process, or the format of their interactions is not efficient, the delays caused by the confusion and deliberations may delay the application of dispersants or even completely miss the opportunity to use them since oil on the water surface becomes less suitable for dispersion over time.

This may cause an avoidable environmental and socioeconomic impact and delay ecological and economic recovery. Since it is the governmental agencies' representatives who are responsible for making the decision to use dispersants, it is important that these individuals are identified, are aware of their responsibilities, are available 24/7 in case of emergency, and possess all the knowledge and information they need to make an informed decision without unnecessary delays.

Past experiences with dispersants use evaluation and authorization during real events as well as participation in emergency response exercises can support an efficient decision-making process.

# 3.3 Dispersants Testing for Registration and Pre-approval

Some countries outline test methodologies that are used to evaluate potential dispersants and select those with highest efficiency and lowest toxicity. Selected dispersants are then registered as pre-approved for use in a country. This registration of dispersants for pre-approval is a different process from the authorization of an actual use of these dispersants in the field and is typically handled by different governmental institutions.

Some countries have the necessary laboratory facilities and conduct these screening tests locally, while others rely on the tests and approvals from other countries. Some examples of laboratory tests widely accepted internationally can be found in:

#### • USA

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-J/part-300/subpart-J/section-300.915

#### • UK

https://www.gov.uk/guidance/get-an-oil-spill-treatment-product-approved

# • European Maritime Safety Agency

https://www.emsa.europa.eu/opr-documents/opr-manual-a-guidelines/item/719-manual-on-the-applicability-of-oil-spill-dispersants.html

It is important to remember that the efficiency and toxicity tests used for dispersants screening and registration are specifically designed for this purpose. The results of these tests cannot be directly extrapolated to field conditions. For example, efficiency tests are often conducted at low mixing energy to better differentiate between different dispersants. Their efficiency in the field could be much higher than the results of the laboratory tests.

It's important that countries consider testing and registering several types of dispersants that are available to the industry in large volumes globally. Some local dispersants are only available in small quantities and the manufacturing capacity necessary for an effective response may not be available. Industry has access to large volumes of several well-studied and effective dispersants with low toxicity and could make them available if a country allows their use. There is a finite volume of each dispersant in global stockpiles and manufacturing new dispersants at the time of a spill may present a challenge.

Therefore, if a country only approved one or two dispersant types, especially if these approvals expire frequently, it may limit the volumes of dispersants approved for response and in some cases result in insufficient response capacities. An insufficient response capability may in turn result in larger volumes of untreated spilled oil that may impact sensitive areas. This may be especially relevant for the scenarios involving loss of well control. Countries with these response scenarios need to evaluate the volumes of available pre-approved dispersants relative to the potential Worst Case Discharge volumes and consider the process for the expedited approvals/registrations and bringing into country additional types of dispersants to supplement existing capabilities if needed.





# 3.4 Expiration of Pre-approvals

Some countries don't have expiration time for their pre-approval and registration of dispersants. Once the dispersant is tested and registered it can be considered for use for as long as it doesn't change its chemical composition. Some other countries require re-application and re-registration of dispersants even if they have been tested before.

It is worth noting that manufacturers may not be interested in re-applying for dispersants certification in hundreds of different countries where their product could be used. It may be cost-prohibitive for them due to expenses associated with testing and registration as well as limited opportunity to sell additional dispersants once stockpiles are established. The removal of approved dispersants from the list may result in a reduced dispersants response capability in a country.

This, to some degree, could be mitigated by allowing entities other than manufacturers to submit applications for dispersant testing and re-approval (e.g. operators, oil spill response organizations, stockpile holders, or other legal entities).

Regulators could consider extending or removing the expiration dates from dispersants registrations (provided that the composition of the dispersant does not change), or allowing industry, response organizations or trade associations to apply for the product reapprovals in case manufacturers chose not to do so. Countries relying on approvals from other countries need to monitor their expiration dates to ensure that their region will not be left without access to dispersants.

# 3.5 Field Use Authorization

Dispersants use regulations typically describe the process to authorize where and when the pre-approved dispersant products may be used on oil spilled in national waters. Regulations typically identify the agency or agencies responsible for the authorization of the use of dispersants in the field and describe the decision-making process to ensure that dispersants use will be able to mitigate negative impacts of a spill. The documents often describe whether this process covers surface application of dispersants, injection subsea at a wellhead, or both. The process can cover multiple considerations and conditions (operational, environmental, logistics, etc.) that should be factored into decision-making.

"As dispersants are most effective on "fresh oil", it is of the utmost importance that the decision to use dispersants be taken quickly and efficiently. The speed of that process will depend on the level of preparedness measures put in place and on decision-making criteria developed in advance" (IMO, 2024). Therefore, it is in the best interest of governments and operators to have clear policies and procedures of preapproval and authorization to use dispersants in case of an oil spill.

To expedite the decision-making at the time of the spill some countries have preemptively identified areas where dispersants can or cannot be used. Having predesignated areas where dispersant approval, concurrence or consultation is not needed will expedite the use of dispersants in case this is a desirable response option. Information about the special geographic areas, sensitive habitats restrictions, as well as salinity, depth, and other limitations that may prevent the use of dispersants will support and expedite the decision-making process.

These questions can be addressed at a country-level though mapping of these designated zones. For example, there are pre-authorized zones for surface application of dispersants in most coastal states in the US. The zones and scenarios for pre-authorized dispersants use could also be addressed specifically for a location or an operator. For example, a contingency plan for an offshore exploration or production location could describe specific response scenarios for which dispersants could be used. Regulators could evaluate these scenarios in advance of a spill and give their authorization during contingency planning phase to make sure there are no unnecessary delays during the response.

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There are also different formats of decision trees, allowing regulators to evaluate the most important characteristics of the spill scenario and determine whether dispersants would be a suitable response technique. Several decision trees examples can be found at Ipieca (2024), IMO (2024) and the information described in the Annex with country profiles. It is not the intention of this report to

recommend any specific format. Governmental authorities responsible for developing and adjusting the national policy for the use of dispersants can use these examples and adapt it to conform to their national circumstances.





4.

# Benchmarking Critical Aspects of Dispersants Regulations

This chapter evaluates critical aspects of dispersants regulations or policies and provides a basis for users to understand the opportunities to improve their efficiency as well as the procedures for dispersants' preapproval and authorization in each country.

Table 1 describes with colors the subjective overall evaluation of the regulations or policies related to dispersants pre-approval and field use authorization.

# Table 1. Overall evaluation criteria of regulations

Green cells represent a pragmatic/efficient approach to pre-approval and/or field authorization of dispersants. Procedures and responsibilities are well defined and the time frames for making decisions are reasonable.

Yellow cells indicate that there are opportunities for improving the regulatory policies and processes or to support the decision-making within the window of opportunity, the information may be missing or requires clarification.

Orange cells indicate a potential risk to the effective implementation of the existing regulations or the application of dispersants in an actual spill for the specific aspect considered.

For this study, fourteen critical aspects were identified for the development of regulations for dispersants' preapproval/registration and field use authorization. Table 2 explains the color assignment for the specific critical regulatory aspects evaluated<sup>3</sup>.

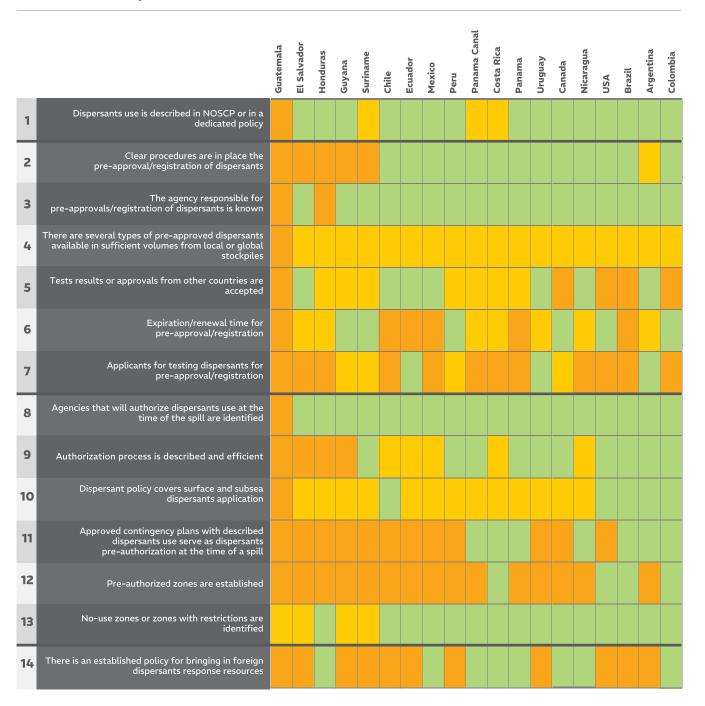
Table 2. Explanation of the evaluation made for specific critical aspects of the regulations

	CRITICAL REGULATORY OR POLICY ASPECTS	COLOR CODES			
1	Dispersants use is described in NOSCP or in a dedicated policy	YES	To a certain degree	NO	
2	Clear procedures are in place the pre- approval/registration of dispersants	YES		NO	
3	The agency responsible for pre- approvals/registration of dispersants is known	YES	To a certain degree	NO	
4	There are several types of pre-approved dispersants available in sufficient volumes from local or global stockpiles	YES	Limited	NO	
5	Tests results or approvals from other countries are accepted	YES	Not clear	NO	
6	Expiration/renewal time for pre-approval/registration	N/A, none stated, don't expire once listed	Medium duration	Manufacturer only	
7	Applicants for testing dispersants for pre- approval/registration	Operator, suppliers or anyine	Not clear	Short duration (e.g., every one or two years)	
8	Agencies that will authorize dispersants use at the time of the spill are identified	YES		No, or not clear	
9	Authorization process is described and efficient	YES	Not clear or potentially inefficient	NO	
10	Dispersant policy covers surface and subsea dispersants application	Both	Only surface	No policy	
11	Approved contingency plans with described dispersants use serve as dispersants pre-authorization at the time of a spill	YES		No, or not indicated	
12	Pre-authorized zones are established	YES		No, or not indicated	
13	No-use zones or zones with restrictions are identified	YES	No (or in the process)		
14	There is an established policy for bringing in foreign dispersants response resources	YES	Not specific	NO	

<sup>&</sup>lt;sup>3</sup> Some aspects may only have two colors

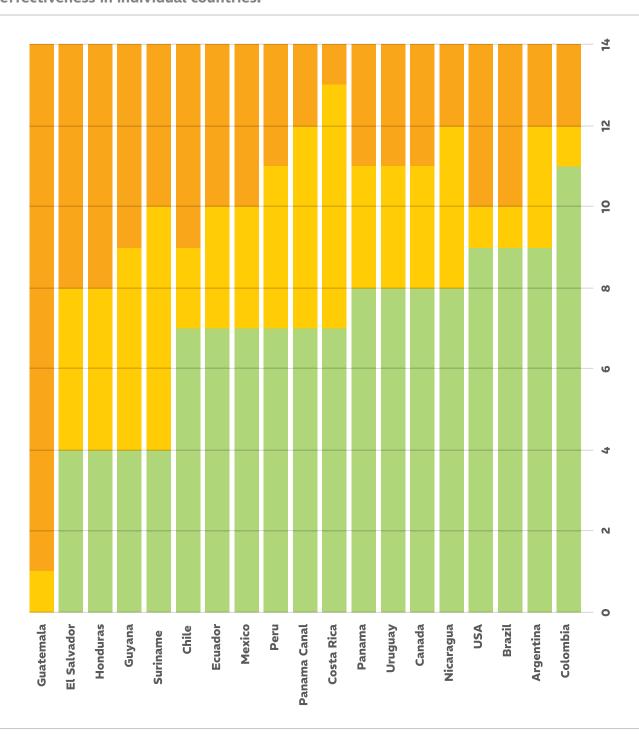
**Table 3** represents a benchmarking of critical aspects of the regulations/ policies of the countries evaluated during the project. The colors correspond to those indicated in Table 2; i.e., green representing effective policies and procedures while yellow and orange represent opportunities for improvement.

Table 3. Comparison of the effectiveness of critical aspects of dispersants regulations in western hemisphere countries



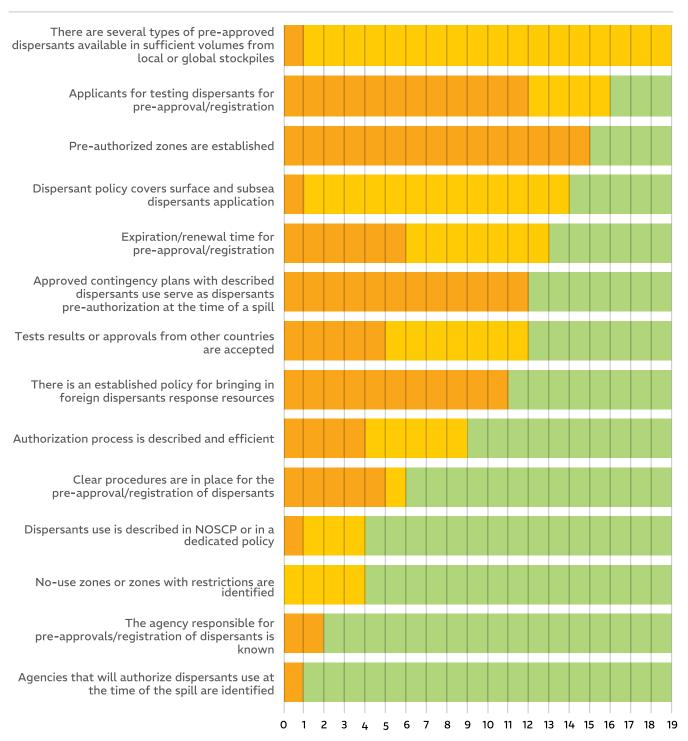
**Figure 1** graphically describes the magnitude of the overall opportunities for improving the regulatory effectiveness of each of the different countries in these 14 critical aspects. The more criteria in yellow and orange, the more opportunities each country has for improvement.

Figure 1. An overall summary of the opportunities for improving regulatory effectiveness in individual countries.



**Figure 2**, in turn, seeks to prioritize the critical aspects that the countries in this study could consider in order to achieve greater regulatory effectiveness. The more yellow or orange a critical aspect is, the higher the priority (at the regional level) for addressing improvements in policies, regulations, or procedures.

Figure 2. Regional priorities for critical aspects of dispersants decision-making



Since this is a regional evaluation, **Table 3 and Figure 2 -in particular- are** an important contribution to guiding discussion and cooperation among the countries evaluated in this Report.

# 5.

# Operational Considerations

While the technical/tactical details of the dispersants operations in the field are outside of scope for this report, there are several important operational considerations that should be evaluated during the planning phase, along with regulatory requirements, to avoid unnecessary delays during a response. Several key considerations requiring special planning activities are summarized here.

# 5.1 Net Environmental Benefit Analysis (NEBA) and Spill Impact Mitigation Assessment (SIMA)

Every spill response effort aims to minimize environmental and socio-economic impacts and facilitate faster recovery. In many cases the selection of the best response techniques is obvious and can be done based on best professional judgement, existing plans, and regulations. Sometimes it can be supported by an informal or expedited assessment.

Some response scenarios may not be covered by the existing pre-authorizations, approved contingency plans, or decisions trees. Some of the more complex scenarios may need a more detailed and formal evaluation of potential benefits and impacts of available spill response techniques to ensure that selected response options would offer maximum environmental protection. Through decades of experience, several methods including Net Environmental Benefit Analysis (NEBA) and Spill Impact Mitigation Assessment (SIMA) were developed and implemented around the world. They involve a structured analysis of a spill scenario, as well as location-specific ecological, cultural, and socio-economic resources, combined with positives and drawbacks of the available response methods.

These processes aim at engaging all relevant stakeholders and developing a consensus on the preferred response strategies. NEBA and SIMA are techniques that require effort, experts with different expertise, and time to build a consensus and to deliver comprehensive analysis. If a potential spill scenario is complex enough to require a formal assessment process, it is best when they are conducted at the 'time of peace'. In case of a spill, the scenarios previously developed can be revisited and compared with the actual conditions to make a scientifically and risk based (and swifter) decision, thus granting the opportunity to use selected response techniques within the limited window of opportunity.

As a reference for the reader, a series of workshops for the Net Environmental Benefit Analysis (NEBA) has been conducted in multiple coastal states in the US during planning process and served as a basis for establishing pre-authorized dispersants zones offshore. This effort reduced the need to repeat this complex analysis at the time of a spill. The scientific information has been collected by NOAA's Office of Response and Restoration (NOAA, 2021).

# 5.2 Dispersants Use Monitoring

Some countries have additional authorization requirements or recommendations related to the monitoring of the dispersants use in the field. These procedures can cover monitoring of the dispersants application efficiency and/or monitoring of the potential environmental impacts. Many monitoring guides point out that oil spill response, protection of human health, and reduction of environmental impacts are the most

important objectives, and that monitoring operations should not delay response activities. Multiple examples of monitoring guides are available for both surface and subsea applications and can be found in API (2024), Ipieca (2024) and NOAA et al (2006). Planning activities should include the development of monitoring and sampling plans to meet local requirements.

# 5.3 Resources Availability for Dispersants' Use

It is important to know the locations of available dispersant application equipment and volumes of available dispersants stockpiles, their ownership, and the access process to expedite the delivery of these resources to the spill site in the shortest time. Some countries maintain local dispersants application resources, while others rely on those available elsewhere. In the latter case, a policy or procedures expediting customs and immigration clearances for the entrance of human and equipment resources would be critical for the efficient spill response.





# 5.4 Dispersants Storage

Most of the dispersants stockpiled by industry are stable and have long shelf life. They can be stored in a variety of conditions without losing their efficiency. Industry uses Ipieca Guide (2017) for dispersants storage and logistics. Some countries provide additional guidance on the preferred storage conditions and periodic testing of the dispersant stockpiles to ensure that they maintain their response efficiency.

# 5.5 Summary of the Status of Operational Considerations in some Western Hemisphere Countries

Table 4 below provides a succinct summary of some Operational Considerations in the countries evaluated in this stage of the Arpel study, as described in subchapters 5.1, 5.2, 5.3 and 5.4.

Further details about each country can be found in the Country Profiles in the Annex.

Table 4. Some key considerations impacting operational effectiveness during an oil spill response using dispersants

	Are there in-country stockpiles?	Are stockpile details (volumes, ownership) available?	Are there specific dispersants' storage requirements?	Is dispersants' application equipment available in-country?	Is NEBA/SIMA required for dispersants' field use authorization?	Are there specific field monitoring requirements?
Argentina	YES	NO	YES	YES	NO	NO
Brazil	YES	NO	NO	YES	*1	YES
Canada	YES	NO	YES	YES	YES	YES
Colombia	NO	NO	NO	NO	YES	YES
Costa Rica	YES	NO	NO	?	NO	NO
Chile	YES	YES	YES	YES	NO	NO
Ecuador	YES	NO	NO	?	NO	NO
El Salvador	NO	NO	NO	SI	?	NO
Guatemala	N/A	N/A	N/A	N/A	N/A	N/A
Guyana	YES	YES	YES	YES	YES	YES
Honduras	NO	NO	NO	NO	YES	NO
Mexico	NO	NO	NO	YES	YES	NO
Nicaragua	YES	NO	NO	?	NO	NO
Panama	YES	YES	NO	NO	YES	NO
Panama Canal	YES	YES	NO	YES	?	NO
Peru	YES	NO	NO	?	NO	NO
Suriname	NO	NO	NO	NO	YES	NO
Uruguay	YES	NO	NO	YES	NO	YES
USA	YES	YES	YES	YES	*2	YES

<sup>\*1</sup> Not explicitly stated \*2 Depends on the area and the type of application

# 6.

# **Conclusions**

Emergency response planning is a complex process involving multiple stakeholder groups and regulatory frameworks. Delivering an efficient response requires collaboration between the various stakeholders and considerable advance planning. To minimize the environmental and socioeconomic impacts in the event of an oil spill at sea, it is important that governments -in case they decide to consider the use of dispersants in their portfolio of response options- develop regulations and procedures for the efficient dispersants use assessment and decision-making. It's also important for Operators to have all the required tools and plans in place to implement an efficient response.

This report provides some insights into the current situation, good practices and opportunities for improvement for dispersants policies, regulations and procedures in Western Hemisphere countries. It also highlights key aspects that Operators could consider addressing in their emergency response planning process.

It may be useful for countries to conduct a more detailed evaluation with key stakeholders and specialized international organizations to discuss and implement specific improvement opportunities that would allow more response decision-making. Continuous education and outreach on these topics as well as participation in joint exercises will allow responsible individuals to maintain their expertise and ensure knowledge transfer within relevant organizations.

Arpel, in fulfillment of its Mission of working through cooperation among its members and collaboration with its main stakeholders, will support these initiatives.

# **References:**

- 1. API (2024). Response Library. [from the Homepage of API]. [online]. 20 April 2025. Available from: https://www.oilspillprevention.org/oil-spill-research-and-development-cente#sort=%40ftitle3892%20ascending&f:Category=[Dispersants] [Accessed 20 April 2025]
- **2.** Arpel (2007). *Guideline for the Use of Dispersants on Oil Spills.* [online]. Available from: https://www.arpel.org/en/publications/f-cor-1608-guideline-use-dispersants-oil-spills [Accessed 20 April 2025]
- 3. IMO (2024). Guidelines on the Use of Dispersants for Combating Oil Pollution at Sea. International Maritime Organization. Available from: https://www.cdn.imo.org/localresources/en/OurWork/Environment/Documents/OPRC%20 &%20HNS/IMO%20Dispersants%20Guidelines%202024\_Final.pdf [Accessed 20 April 2025].
- 4. Ipieca (2024). *Dispersants*. [from the Homepage of Ipieca]. [online]. 20 April 2025. Available from: https://www.ipieca.org/work/marine-spill-preparedness-and-response/dispersants [Accessed 20 April 2025]
- 5. Ipieca (2017). *Dispersant storage, maintenance, transport and testing.* [online]. Available from: https://www.ipieca.org/resources/dispersant-storage-maintenance-transport-and-testing [Accessed 20 April 2025].
- 6. ITOPF (2024). *Countries, Territories & Regions*. [from the Homepage of ITOPF]. [online]. 22 April 2025. Available from: https://www.itopf.org/knowledge-resources/countries-territories-regions/ [Accessed 17 September 2024]
- 7. National Academies (2020). "The Use of Dispersants in Marine Oil Spill Response" [online] Available from: https://nap.nationalacademies.org/catalog/25161/the-use-of-dispersants-in-marine-oil-spill-response [Accessed 20 April 2025]
- **8.** National Academies (2022). "Oil in the Sea IV Inputs, Fates, and Effects" [online] Available from: https://nap. nationalacademies.org/catalog/26410/oil-in-the-sea-iv-inputs-fates-and-effects [Accessed 20 April 2025]
- 9. NOAA, U.S. Coast Guard, U.S. Environmental Protection Agency, Centers for Disease Control and Prevention, Minerals Management Service (2006). *Special Monitoring of Applied Response Technologies*. [online]. U.S. National Oceanic and Atmospheric Administration. Office of Response and Restoration. Available from: https://response.restoration.noaa.gov/sites/default/files/SMART\_protocol.pdf [Accessed 20 April 2025]
- 10. NOAA (2021). U.S. National Oceanic and Atmospheric Administration. Office of Response and Restoration. *Ecological Risk Assessment (ERA) Workshops.* [online] Available from: https://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/resources/ecological-risk-assessment-era-workshops.html [Accessed 20 April 2025]
- 11. RAC/REMPEITC-Caribe (2012). *Plan OPRC del Caribe*. [online]. Available from: https://new.racrempeitc.org/wp-content/uploads/2022/04/Caribbean-Island-OPRC-Plan-2012ESP.pdf
- 12. RAC/REMPEITC-Caribe (2015). Plan Regional de Preparación, Respuesta y Cooperación contra Derrames de Hidrocarburos y Sustancias Nocivas y Potencialmente Peligrosas para América Central. [online]. Available from: https://new.racrempeitc.org/wp-content/uploads/2022/06/PRCCA-Final-2015.pdf [Accessed 17 September 2024]

# **ANNEX:**

# Regulations, Policies and Operational Considerations for the Use of Dispersants COUNTRY PROFILES

This chapter provides a succinct summary of the regulations, policies and procedures related to dispersants registration for pre-approval and field use authorization, as well as updated information about the resources availability for the countries evaluated in this study.

The information used in these "Country Profiles" stems from the responses of a survey of operators conducted by Arpel in 2024. Additional information was obtained from:

- ITOPF Country Profiles (ITOPF, 2024)
- Caribbean OPRC Plan (RAC/REMPEITC-Caribe, 2012)
- Plan regional de preparación, respuesta y cooperación contra derrames de hidrocarburos y sustancias nocivas y potencialmente peligrosas para América Central (RAC/REMPEITC-Caribe, 2015)

All Internet hyperlinks of this section have been checked and are valid as of 22 April 2025.



The Ordinance 8/98 provides for the approval by the *Prefectura Naval Argentina* of the PLANACON (NOSCP), the National System for Preparedness and Response to Oil and HNS Pollution (https://www.ecofield.net/Legales/Navegacion/pna/TOMO6/6-1998-8.pdf) and Ordinance No. 1/98 DPMA-Volume 6 establishes the "Rules for the Authorization of use of Chemical Products Used to Combat Oil Pollution" (https://www.ecofield.net/Legales/PNA/Ord1-98\_DPMA.htm).

# **PREAPPROVAL**

The Prefectura Naval Argentina is the governmental authority responsible for the approval. The companies with authorized dispersants are listed by the *Prefectura Naval Argentina* in https://www.argentina.gob.ar/prefecturanaval/proteccion-ambiental/dispersantes-autorizados. Corexit EC9500A, Corexit EC9527A and Dasic Slickgone LTE are pre-approved. Any operator can apply for testing dispersants for pre-approval/licensing, and the certificate is valid for 8 years (with a validation inspection every 2 years).

Several tests are required for preapproval, and their details can be found in Ordinance No. 1/98 DPMA-Volume 6. Specific oil types and species are required to be tested.

The regulation does not accept tests results or licenses from other countries. INDUSER (https://induser.com. ar/) is the national lab officially allowed in Argentina to perform dispersants' testing.



# FIELD USE AUTHORIZATION

Argentina has real-life experience in authorizing the use dispersants during spills. The list of pre-approved dispersants does not imply that these dispersants are authorized for field use. Such use must also comply with the provisions of Ordinance No. 1/98 (DPMA - Volume 6) and the Contingency Plans of the applicable prefectural jurisdictions.

The use of dispersants is prohibited in Special Protection Zones (ZPE) along the coast, in marine waters less than 10m deep and in fresh water, and in semi-enclosed areas. Permission from the *Prefectura Naval Argentina* must -always- first be obtained for their use.

Authorization does not depend on outcomes of NEBA/SIMA or other type of ecological/safety risk assessment and the *Prefectura Naval Argentina* is the institution in charge of carrying out the operational and environmental monitoring of the dispersants use.

The decision tree to allow for the use of pre-approved dispersants is not clearly defined in the PLANACON.

Operators with an approved individual contingency plan that includes the use of dispersants (described in the plan) are allowed to use them under the scenarios described in the contingency plan.

## **RESOURCES AVAILABILITY**

A response service provider of Argentina has dispersants stockpiles, but the details (e.g., volumes) are not available.

The *Prefectura Naval Argentina* operates coastguard vessels as well as fixed wing aircrafts and helicopters based strategically and equipped with dispersant spraying devices. Operators do not have dispersants spraying capabilities although there is a private contractor with bases strategically positioned along the Atlantic coast to provide rapid mobilization.

There is no specific policy for bringing in dispersants response resources (equipment and personnel) from other countries. For this, the regular customs and immigration procedures are applicable.





Decree No. 10,950/2022 provides for the National Contingency Plan for Oil Pollution Incidents in Waters under National Jurisdiction (https://www.planalto.gov.br/ccivil\_03/\_ato2019-2022/2022/decreto/d10950.htm#:~:text=DECRETO%20N%C2%BA%2010.950%2C%20DE%2027,em%20%C3%81guas%20 sob%20Jurisdi%C3%A7%C3%A3o%20Nacional) and Resolution No. 472/2015, provides for the use of chemical dispersants in oil pollution incidents at sea in Brazil (https://conama.mma.gov.br/?option=com\_sisconama&task=arquivo.download&id=692)

# **PREAPPROVAL**

IBAMA (Brazilian Environment and Natural and Renewable Resources Institute) is the governmental authority responsible for the approval of their use. Corexit EC9500A, Finasol OSR 52 and Accell Clean DWD are pre-approved. Only the manufacturers can apply for testing dispersants for pre-approval/licensing, and it is worth noting that expiration/renewal time for pre-approval/listing is every two years.

Several tests are required and their details can be found in Normative Instruction 01/2000 (https://www.gov.br/ibama/pt-br/assuntos/quimicos-e-biologicos/dispersantes-quimicos/arquivos/Instrucao\_Normativa\_1\_de\_14\_de\_julho\_de\_2000\_Dispersantes.pdf) and 07/2001 (https://www.ibama.gov.br/component/legislacao/?view=legislacao&legislacao=106276). Specific oil types and species are required to be tested.

The time for re-approval is, on average, two years. However, there is not a legally established minimum timeframe.

The regulation does not indicate if tests results or licenses from other countries are accepted.



#### FIELD USE AUTHORIZATION

Brazil has real-life experience in authorizing the use dispersants during spills. The authorization of the use of dispersants is not required in pre-authorized areas; however, it is required, including NEBA/SIMA type of a document, for the use in "restricted areas". Currently, the polluter is responsible for developing this analysis with possible participation of non-governmental participation in the future. The regulation describes the red zones where dispersants cannot be used and the conditions under which their use is prohibited. It also designates green zones (i.e., predesignated areas where dispersant approval, concurrence or consultation is not needed): offshore waters deeper than 20m and distant more than 2000km from sensitive areas and shoreline.

Resolution 472/2015 includes the decision tree for approval and describes the conditions under which dispersants are to be used if this is the preferred response option. The policy on the use of dispersants covers surface or subsea dispersants application; in pre-authorized areas, and if use criteria are met, the use of dispersants only requires communication to IBAMA. Other situations demand explicit authorization by IBAMA.

In case dispersants are utilized, there are several environmental monitoring requirements for surface and subsea use, which can be found in Normative Instruction 26/2018 (https://www.ibama.gov.br/component/legislacao/?view=legislacao&legislacao=138329). The polluter is responsible for planning and execution of all steps of environmental monitoring, under IBAMA surveillance.

Operators with an approved individual contingency plan that includes the use of dispersants (described in the plan) are pre-authorized to use them at the time of a spill. There are specific field monitoring requirements.

# **RESOURCES AVAILABILITY**

Brazil has dispersants stockpiles, but the details (volumes, ownership) are not available.

Offshore O&G producers are required to keep oil spill response vessels close to platforms and FPSO<sup>5</sup> units. Most of them have application arms onboard. There is no aircraft with application capability in-country.

OSRL has a capping equipment in its base Angra dos Reis, close to Rio de Janeiro for its use by its members in Brazil and elsewhere in the world. It includes Capping Stack Systems and two Subsea Incident Response Toolkits for debris clearance, blow out preventer intervention and the subsea application of dispersant at a wellhead.

In Brazil, there are several OSRO's (e.g., OceanPact, etc.) that work under contract with several industry players and can complement individual companies' equipment.

There isn't an established/specific policy for bringing in foreign dispersants response resources. However, the NOSCP indicates that Federal Agencies can be activated to facilitate this entry.



<sup>&</sup>lt;sup>5</sup> FPSO: Floating, Production, Storage and Offloading



The Marine Spills Contingency Plan – National Chapter (https://www.ccg-gcc.gc.ca/publications/environmental-environmentale/marine-pollution-deversements-en-mer/docs/MSCP2018-eng.pdf) developed by the Canadian Coast Guard (CCG), does not mention the use of dispersants. However, in accordance with Canada's Marine Oil Spill Preparedness and Response Regime, the polluter is expected to respond to incidents while the CCG will work with the polluter and other partners and stakeholders in a Unified Command setting in the capacity of Incident Commander for the federal government or in Single Command for other, specific types of incidents. The CCG may also provide assistance to other federal, provincial, territorial or local agencies.

However, policies/guidelines related to preapproval and authorization of dispersants in Canada were developed and enacted in 2016 by the Ministry of Environment. They are described in the Canada Gazette Regulations Establishing a List of Spill-treating Agents (Canada Oil and Gas Operations Act) – (https://canadagazette.gc.ca/rp-pr/p2/2016/2016-06-15/html/sor-dors108-eng.html. This way, the government provides the legislative and regulatory structure for the regime and oversees industry's preparedness and response activities.

#### **PREAPPROVAL**

The only dispersant pre-approved, as described in the Canada Gazette, is Corexit 9500. Several tests are required with specific species and their details can be found in this document. Dispersants approval or test results from other countries are not accepted.

The document has no clear requirements for re-approval.



#### FIELD USE AUTHORIZATION

The process to authorize field use of dispersants is outlined in the oil spill response plans of the various offshore operators. These plans are reviewed and approved by the respective offshore board. However, the approval of a contingency plan does not constitute an approval to use dispersants under scenarios described in it.

For offshore oil exploration/production spills, the governmental organizations responsible for the authorization are: Canada Energy Regulator (https://www.cer-rec.gc.ca/en/), Canada-Newfoundland Labrador Offshore Petroleum Board (C-NLOPB) and Canada-Nova Scotia Offshore Petroleum Board (C-NSOPB).

In response to a spill, the relevant Board's Chief Conservation Officer determines if the use of dispersants is likely to achieve a net environmental benefit in the circumstances of the spill and approves its use.

Only surface application of dispersants is allowed. Green zones (predesignated areas where dispersant approval, concurrence or consultation is not needed) have not been designated.

The requirements for the operational and environmental monitoring of the dispersants' use are outlined in the Oil Spill Response Plan for each of the offshore installations. Monitoring would be conducted by the polluter as well as government agencies (Environment and Climate Change Canada and Fisheries and Oceans Canada).

There are specific wildlife response requirements for dispersants use. Seabird and Marine Mammal surveys would be expected. Standard protocols have been established by the relevant government agencies (Environment and Climate Change Canada, Canadian Wildlife Service, and Fisheries and Oceans Canada).

# **RESOURCES AVAILABILITY**

Canada has dispersants stockpiles, but the details (volumes, ownership) are not available.

Dispersants stockpiles owners are required to follow regulations for storage conditions, expiration dates or holding time and periodic testing. They must revalidate product integrity or performance at the time of use.

At the time of writing this report, in Canada there are approximately twelve vessel-mounted spray systems available.

The key government agency for authorizing entry of foreign equipment, products, and personnel for dispersant application is the Canada Border Services Agency. Customs clearance for oil spill response equipment would generally be expedited. The Responsible Party (polluter) would need to provide the necessary support documentation for the entry of personnel.





Protocol 1 (Offshore) of Colombia's National Contingency Plan for Losses of Containment of Hydrocarbons and Other Hazardous Substances – NOSCP (https://portal.gestiondelriesgo.gov.co/Documents/PNC/PNC-frente-a-perdidas-de-contencion-de-hidrocarburos-y-otras-sustancias-peligrosas-2021.pdf) was adopted in 2021.

The Institutional Arrangement for the Use of Dispersants in Coastal and Oceanic Waters Located in the Colombian Maritime Space (can be downloaded from https://repositorio.gestiondelriesgo.gov.co:8443/handle/20.500.11762/41219), was developed by the Ministry of Environment and Sustainable Development (MADS) and the National Disaster Risk Management System, and later approved and validated by National Committee for Disaster Management (CNMD) and the Technical Advisory Commission of the National Contingency Plan (CTAPNC), in December/2024.

# **PREAPPROVAL**

MADS is responsible for the pre-approval/registration of dispersants that can be utilized in Colombian waters. Finasol OSR52 is the only dispersant included in the pre-approved list.

Ecotoxicity, effectiveness and biochemical tests are required for pre-approval. Although tests with specific hydrocarbons are not required, they must be carried out with native species of the Colombian Caribbean. The National University, the Institute for Marine and Coastal Research and the Jorge Tadeo Lozano University are national labs able to perform dispersants testing identified in the NOSCP.

The Interinstitutional Arrangement does not establish a periodicity for dispersants' reapproval in Colombia.

The request for pre-approval of new dispersants may come from the operating companies. However, only the National Committee for Disaster Management, led by the UNGRD (National Unit for Disaster Risk Management), in which the other authorities participate, makes the decisions.



#### **FIELD USE AUTHORIZATION**

The authorization process covers both the application of dispersants on surface and through subsea injection.

In order to corroborate its use in the local ecosystems (where it would be used) and with the oil on which the dispersal will be carried out, the responsible party is required to perform verification tests of the characteristics considered in the Australian National Plan Dispersant Effectiveness Field Test Kit (Nat-DET) rapid field test.

The Technical Advisory Committee for the National Contingency Plan for Losses of Containment of Hydrocarbons and Other Hazardous Substances (CTAPNC) is part of the Working Group on Advanced Response Techniques (MTTAR), which is responsible for issuing a favorable or unfavorable ruling on a request for dispersant use. It is comprised of DIMAR (General Maritime Directorate), ANLA (National Environmental Licensing Agency), UNGRD, and MADS. DIMAR seems to have the final decision, based on the advice of the other institutions of the CTAPNC.

The Interinstitutional Arrangement does not have a decision-making tree in Colombia, as each operator is responsible for proposing it on a case-by-case basis during the Environmental Licensing process, including a chapter with NEBA of different scenarios. However, the approval of a contingency plan constitutes an approval to use dispersants under scenarios described in it.

Recently, MADS, DIMAR, and INVEMAR (Marine and Coastal Research Institute) have developed sensitivity maps for the establishment of special areas in Colombia's coastal marine territory (Caribbean Region), which will be published around May 2025. In anticipation of this publication, the Interinstitutional Agreement already includes green, yellow, and red zones. These maps will allow understanding, from a geographic viewpoint, the action strategies in case of emergencies.

#### **RESOURCES AVAILABILITY**

There are in country dispersants stockpiles available, but the inventory listing is not publicly available.

According to the NOSCP, in the event it is required the use of out of country dispersants that have not been tested for in country approval requirements, a high-level committee (Level 3 - National) will be established in which the main authorities with influence in offshore participate to make decisions in less than 24 hours. This committee is convened and operates from the Crisis Room of the National Disaster Risk Management Unit - UNGRD - where all institutions are coordinated.

Oil and gas companies will always be responsible for emergency management. In Colombia there is no stock of specialized application equipment; however, all companies have insurance with international organizations such as OSRL for the import of equipment in less than 24 hours for emergency response, including vessels, airplanes, helicopters, Capping Stacks, ROVs and dispersants mainly all from the Gulf of Mexico and Fort Lauderdale (FL, USA).

The procedures for authorizing the entry of foreign equipment, products, and personnel for dispersant application are managed through permits and authorizations with the Ministry of Foreign Affairs and Customs. Although there is no specific policy for this, there is nothing preventing it, and environmental licenses have approved this process for the entry of foreign resources without problems.





The NOSCP of Costa Rica http://www.pgrweb.go.cr/scij/Busqueda/Normativa/Normas/nrm\_texto\_completo.as px?param1=NRTC&nValor1=1&nValor2=86292&nValor3=111871&strTipM=TC was issued in December/2017. The criteria for the use of chemical dispersants are regulated by the provisions of Appendix P.

There are no specific regulations to use dispersants developed by governmental institutions; instead, there is a policy.

# **PREAPPROVAL**

It is emphasized that only licensed and approved dispersants are permitted. As of 2010, only the dispersants listed in Appendix P have been approved. Approved Dispersants include COREXIT EC 9500A and COREXIT EC 9527A.

The agencies responsible for approval are the Ministry of Environment and Energy (MINAE) and the Ministry of Health (MINSA) and are established in the official document DPAH-4986-05-UTE-282-05, dated August 24, 2005, from the Directorate of Human Environment Protection of the Ministry of Health.

The timelines for re-approval of dispersants are not indicated.

There are national labs able to perform dispersants testing identified in the NOSCP. The National Environmental Technical Secretariat (SETENA) is the body that regulates laboratories, and its Resolution No. 118-2007 regulates standardized tests and methods required for the approval of dispersants

Only manufacturers can apply to add a new product to the approved list.



# FIELD USE AUTHORIZATION

The habitats in which dispersants cannot be applied, as well as those in which it is recommended to apply them are described in a generic manner. The Directorate of Human Environment Protection of the Ministry of Health is the national entity responsible for approving the use of dispersants in maritime waters in Costa Rica.

The metocean conditions under which dispersants use is restricted are not described, only the type of habitats and environmental sensitivities.

The Human Environment Protection Directorate of the Ministry of Health is the national entity responsible for approving the use of dispersants in maritime waters in Costa Rica in accordance with the General Health Law, unless there were special considerations for cancellation at the time of the spill.

Field use authorization does not depend on the outcomes of NEBA, SIMA or a similar type of ecological/safety risk assessment.

To speed up the authorization process, the approval of a contingency plan constitutes an approval to use dispersants under scenarios described in the contingency plan.

SETENA is the organization responsible for carrying out the operational and environmental monitoring of the dispersants' use.

Only surface dispersant application is allowed.

#### **RESOURCES AVAILABILITY**

If the dispersant is not previously approved by the Ministry of Environment and Energy and the Ministry of Health, it cannot be sold and even less applied. This creates challenges for bringing dispersants from abroad if the existing national resources are depleted during an incident where dispersants are to be used.

The procedures for authorizing the entry of foreign equipment, products, and personnel for dispersant application are described in Appendix V of the NOSCP.





The National Contingency Plan to Combat Oil Water Pollution of Chile (https://eaa.mma.gob.cl/wp-content/uploads/2012/05/Plan\_Nacional\_2006\_Contaminacion\_Hidrocarburos.pdf) approved on June/2006 by the Directorate General of Maritime Territory and Merchant Marine (DIRECTEMAR) is complemented by a Quick Consultation Manual of Chile's National Response Plan for Oil Spills or Other Harmful Substances in the Aquatic Environment (https://www.directemar.cl/directemar/site/docs/20170216/20170216105546/manual\_plan\_nacional\_v\_02\_w.pdf) published in September/2020.

The provisions of the Maritime Authority for the application of dispersants are published in Circular A 53/001 (DGTM and MM. ORD. No. 12,600/184/VRS., dated March 9, 2007) (https://www.directemar.cl/directemar/site/docs/20170328/20170328100718/a53\_001.pdf).

## **PREAPPROVAL**

DIRECTEMAR is the governmental authority responsible for the approval of dispersants and updates the list periodically (https://www.directemar.cl/directemar/intereses-maritimos/medio-ambiente-acuatico/archivos-destacados-medio-ambiente-acuatico/productos-dispersantes-y-absorbentes-autorizados).

SPILL DISPERSANT  $N^{\circ}$  010- 2000 has been pre-approved in April/2023 and OSE II H was pre-approved in April/2024. Only two suppliers have applied for pre-approval/licensing of their products. The validity of this pre-approval is three years.

The Directorate of Maritime Interests and Aquatic Environment (DIRINMAR) is responsible for pre-approval of dispersants to be used in pollution control, provided they comply with the protocol for the graphic determination of the average lethal toxicity of chemical dispersants to combat oil spills. DIRINMAR requests that users and naval departments that possess dispersants carry out tests at least once a year, to verify the dispersion properties, expiration date and storage of the stored product(s).



As indicated in Circular A 53/001, any individual or organization interested in applying for a new dispersant must have a resolution from the DIRECTEMAR approving said product, for which a sample of the dispersant product will be sent with its technical specifications in order to subject it to toxicity tests according to the Protocol for the Graphic Determination of the Median Lethal Toxicity of Chemical Dispersants to Combat Oil Spills, proposed by the IX Session of IMO/MEPC (Doc. MEPC IX/Inf.2). The tests must be developed by a private or academic center that has the capacity and recognition by the Maritime Authority to carry out this type of test.

The regulation does not indicate if tests results or licenses from other countries are accepted.

# **FIELD USE AUTHORIZATION**

Following the provisions for the application of dispersants (Circular A 53/001), it is the local Maritime Authority, the organization that can grant the approval of the use of pre-approved dispersants in the case of an oil spill. The Port Captain is the person responsible for the spill and the individual who must make the request to use dispersants locally.

The authorization to use dispersants in an oil spill details those metocean conditions and areas with specific environmental sensitivities for use/no-use.

The regulation does not explicitly quote SIMA/NEBA to decide on the authorization of the use of dispersants, but it demands that the solution should be the one that "best preserves the resources considered most valuable and important".

#### **RESOURCES AVAILABILITY**

On January/2015, DIRECTEMAR established Circular #A-53/003 (https://www.directemar.cl/directemar/site/docs/20220601/20220601135525/d\_30\_a53\_003.pdf) describing the procedure for the preparation and presentation of Contingency Plans for response to water contamination by oil or other harmful substances -including minimum response material- and guidelines for companies dedicated to the tasks of containment, recovery, cleaning and final disposal of recovered waste.

Annex B of this Circular describes the minimum equipment to deal with oil spills including dispersant application system for different types of oil, operations and industrial facilities.

The Directorate of Maritime Interests and Aquatic Environment (DIRINMAR) is responsible for preparing and maintaining a registry by jurisdiction of all users who possess dispersants and in which the name of the product, stored quantity, manufacturer/distributor, date of acquisition, duration or expiration date of the product and storage method, as appropriate. The Harbor Masters carry out inspections in which the type of dispersant is verified, recording the place and form of storage of the product.



Resolution No. MTOP-SPTM-2015-0148-R issued the national contingency plan to address oil pollution and/or its derivatives in the maritime, coastal, river and island areas – NOSCP (https://www.obraspublicas.gob. ec/wp-content/uploads/downloads/2018/02/LOTAIP\_1\_MTOP-SPTM-2015-0148-R-PLAN\_NACIONAL\_DE\_CONTINGENCIA\_HIDROCARBUROS.pdf).

The NOSCP does not establish policies or guidelines to use dispersants. However, it does describe the equipment and materials that the superintendencies of oil terminals must have for the control of oil spills in the maritime areas of SUINBA, SUINLI, SUINSA and the Monteverde maritime terminal, as well as offshore platforms and port authorities, including chemical dispersants and equipment for their dispersion.

## **PREAPPROVAL**

The requirements for obtaining authorization for use of dispersants for the control of oil spills from the Undersecretary of Ports and Maritime and River Transport are described in https://www.obraspublicas.gob.ec/wp-content/uploads/downloads/2013/10/25-10-2013\_SPTMF\_REQUISITOS-PARA-USO-DE-DISPERSANTES.pdf. The issuance of the "Dispersant Use Certificate" has a duration of one year.

Any organization or company may apply to obtain the approval. It must present a bioassay or toxicity analysis of the product to be used as a dispersant, issued by the Natural Resources Research Institute, the Faculty of Natural Sciences, the University of Guayaquil, a qualified or accredited laboratory, or by a duly recognized and updated International Organization with the respective consular certification.



# FIELD USE AUTHORIZATION

According to the NOSCP, the use of dispersants during a spill is authorized by the Superintendencies of EP-Petroecuador (the state-owned company).

Only surface dispersants are authorized for use. There are unofficial recommendations restricting the use of dispersants in depths <20 m and in conservation areas.

The use of dispersants on spills greater than 100 barrels requires prior permission from the Directorate General of Merchant Marine and Ports (DIGMER). For spills of less than 100 barrels, dispersants may be used with later notification to DIGMER.

# **RESOURCES AVAILABILITY**

There are dispersants stockpiles as described in Annex D of the NOSCP: "Equipment and materials that the superintendencies of the terminals must have". However, the actual inventory is not publicly available.

There is no information available on application equipment available in the country. Those responsible for its implementation are the port superintendencies or port authorities.

The dispersants' approval or test results from other countries are accepted. This means that dispersants brought from abroad (complying with the pre-approval proviso mentioned above) can be considered for use in case of a spill. However, specific procedures for authorizing the entry of foreign equipment, products, and personnel for dispersant application are contemplated in the contingency plan of each port or maritime terminal.





The NOSCP of El Salvador was issued in April/2008. The NOSCP considers the use of dispersants in the oil spill response portfolio.

The Environmental Law and its General Regulations of the Environmental Law provide for the registration of dispersants, in terms of hazardous substances, residues and waste, according to Art. 76 of the same Law (https://www.transparencia.gob.sv/institutions/marn/documents/277004/download).

# **PREAPPROVAL**

The Ministry of Environment and Natural Resources (MARN) is in charge of pre-approval. However, there is no list of pre-approved dispersants and procedures for pre-approval of dispersants are not stated in the NOSCP or other governmental regulations.

According to Article 76 of the Special Regulations on Hazardous Substances, Waste and Scraps, dispersants used to combat oil spills must be biodegradable and duly registered with MARN, providing the following information:

- Generic and commercial name.
- Chemical composition.
- Dose and application.
- · Toxicology, and
- Immediate effects on ecosystems

Only suppliers, representatives or manufacturers of dispersants can apply to add a new product to the list.



If the opportunity to use dispersants is proposed, it requires pre-approval by the Ministry of Environment and Natural Resources MARN.

The metocean conditions under which dispersants use is restricted and/or allowed are not described; neither are the type of habitats and environmental sensitivities.

Field use authorization is believed to depend on the outcomes of NEBA, but details can't be found in the NOSCP.

Only surface dispersant application is allowed.

#### **RESOURCES AVAILABILITY**

The NOSCP refers to the existence of a dispersants pump and a couple of barrels of dispersants in the Terminal of Acajutla. However, the date of the NSOCP is 2008 so this information is not accurate. At present there is no information about the existence of material or equipment to apply dispersants.

Dispersants approval or test results from other countries accepted and if dispersant is previously approved by MARN the use of out-of-country dispersants that have not been tested for in-country approval requirements should be possible in case national resources are depleted during an incident where dispersants are to be used.

However, there aren't any procedures for authorizing the entry of foreign equipment, products, and personnel for dispersant application.





The National Oil Spill Response Plan of Guatemala was issued in December/2014.

The use of dispersants is not permitted in the State of Guatemala. The Ministry of Environment and Natural Resources is currently preparing a legal instrument to regulate their use.



The Guyana National Oil Spill Contingency plan (https://petroleum.gov.gy/documents/guyana-national-oil-spill-contingency-plan-august-2020) includes the use of dispersants as part of the response portfolio options. This plan is presently under review.

The approach to dispersants' use in Guyana follows that of the Caribbean Island OPRC 2012 Plan (https://new.racrempeitc.org/caribbean-oprc-plan/). "It is the policy of the Island States and Territories that when combating spilled oil within its territorial seas, the On Scene Commander as authorized by the Lead Agency, may use dispersants without prior notifications to other Island States and Territories ..." (under certain parameters). However, this regional plan establishes that "The Lead Agency will notify potentially affected downstream Island States and/or Territories whenever dispersant use is intended to be conducted beyond its territorial seas".

#### **PREAPPROVAL**

approval. Corexit EC9500A and Corexit EC9527A are the only dispersants pre-approved. These and other dispersants' registration remain valid if the manufacturer goes out of business.

There is no established protocol to add a new product to the approved list. At present, the EPA is the national entity that determines whether a new product is added to the pre-approved list.



Using dispersants during a real spill requires conducting a NEBA or a SIMA, in accordance with international petroleum industry standards. It is not clear what the standards are. The EPA is responsible for approving the analyses which are conducted by an independent entity.

Subsea injection and surface dispersants applications are authorized.

#### **RESOURCES AVAILABILITY**

Guyana has privately owned dispersants stockpiles, but the details (e.g., volumes, ownership) are not available. The inventory of the current stockpile is shared with the regulatory agencies.

In 2025, OSRL stationed at the Guyana Shore Base Inc a new capping stack. The system includes a lightweight Capping Stack, Subsea Dispersant kit, and Heavy-Duty Shears for debris removal.

An application must be made to the EPA for the use of dispersants brought from abroad and not included in the national pre-approved list. The application must be accompanied by the relevant supporting documentation, including but not limited to the NEBA and SIMA findings. There are no specific procedures considered in the Guyana NOSCP for bringing in dispersants response resources (equipment and personnel) from other countries.





The NOSCP of Honduras (https://marinamercante.gob.hn/wp-content/uploads/2023/01/PM.D.25. PNCH.2023(Rev.5).pdf) was issued in January/2023. The criteria for the approval and use of chemical dispersants are regulated by the provisions of section 3.6 and Appendix P.

There are no specific regulations to use dispersants developed by governmental institutions; instead there is a policy included in the NOSCP.

#### **PREAPPROVAL**

An indicative and non-exhaustive list of chemicals used as dispersants on a regional and global scale is described in the NOSCP and includes Corexit 9500, Dasic slickgone NS, Dasic slickgone EW, Dasic slickgone LTSW, Finasol OSR 51, OSR 52, OSD/LT, Gamlem, Radiagreen OSD and Superdispersant 25.

The policy highlights that their inclusion in the NOSCP does not in any way determine the authorization of their use in national waters. Furthermore, the NOSCP does not explicitly indicate that these dispersants are pre-approved in Honduras.

Only manufacturers and suppliers (and their representatives) can apply to add a new product to the list.



The evaluation process regarding the suitability of applying dispersants on an oil slick in a given situation is the responsibility of the Secretariat of Natural Resources and Environment (SERNA), the Directorate General of the Merchant Marine (DGMM) and the Secretariat of Health (SESAL). It should be noted that the final decision, if no agreement is reached between the three aforementioned institutions, will be the responsibility of the Secretariat of Natural Resources and Environment (SERNA), in its capacity as national environmental authority.

The habitats in which dispersants cannot be applied, as well as those in which it is recommended to apply them are described in a generic manner.

The metocean conditions under which dispersants use is restricted/allowed are described as well as the type of habitats and environmental sensitivities and types of oil.

Before considering the application of dispersants in areas close to maritime borders where ocean dynamics can transfer the effects of both the spill and the introduction of chemicals into the water to the jurisdictional waters of another country(ies), the NOSCP considers that formal communication must be established through the Secretariat of Foreign Affairs and International Cooperation (SRECI) to the potentially affected countries.

Field use authorization depends on the outcomes of NEBA, which is developed and approved by SERNA, DGMM and SESAL.

Only surface dispersant application is allowed.

## **RESOURCES AVAILABILITY**

There are no local resources available, neither dispersants stockpiles nor application equipment.

If the dispersant is not previously approved by the Secretariat of Natural Resources and Environment (SERNA), it cannot be sold and even less applied. This creates some issues to bring dispersants from abroad if the existing national resources are depleted during an incident where dispersants are to be used.

The procedures for authorizing the entry of foreign equipment, products, and personnel for dispersant application are described in Appendices V (Cross-Border Movements of Equipment and Personnel) and W (Financial Procedures for the Movement of Personnel and Equipment) of the NOSCP.

If, following an assessment of the spill by Honduras, it is determined that international assistance and specialized personnel trained to provide technical assistance and operate pollution control equipment are required, Honduras will request, through notification, neighboring States to provide such assistance.





On December 28, 2023, the third update of the National Contingency Plan for Spills of Oil and Hazardous and Noxious Substances in Mexican Marine Zones (NOSCP) was published (https://digaohm.semar.gob.mx/PROMAM/anexos/Plan\_Nacional\_de\_Contingencia.pdf).

Section 411 of the NOSCP establishes that the use of chemical dispersants as an alternative response technique for the control of oil spills and the Energy and Environmental Safety Agency (ASEA) developed the guidelines to use them (https://www.gob.mx/cms/uploads/attachment/file/919809/Directrices\_de\_dispersantes\_VF\_UNR.pdf).

#### **PREAPPROVAL**

Pre-approved dispersants are set out in the ASEA Guidelines, which reference the list of products published by the US EPA (https://www.epa.gov/emergency-response/alphabetical-list-ncp-product-schedule-products-available-use-during-oil-spill). The timeline for re-approval of dispersants is described in the same EPA list.



ASEA is the governmental authority responsible for the approval of their use during a spill. There are no green zones designated (i.e., previously designated areas where approval, compliance or consultation is not required for the use of dispersants).

According to ASEA guidelines, dispersants' selection and use must be approved by the Technical Council of the National Contingency Plan, the Regional Coordination Committee or the Local Coordination Committee, with advice from its respective Technical Advisory Committee, and will be based on international best practices, technical knowledge and the specific circumstances of the spill, considering the regulations issued for this purpose by the environmental authorities and the results of NEBA.

The metocean conditions that must coexist for the application of chemical dispersants in the Mexican Maritime Zone are described in the ASEA Guidelines. There are no specific field monitoring requirements.

Operators with an approved individual contingency plan that includes the use of dispersants (described in the plan) are not pre-authorized to use them at the time of a spill.

#### **RESOURCES AVAILABILITY**

There are no dispersants stockpiles in Mexico. The Mexican Navy works in cooperation with Pemex (the National Oil Company) and has access to dispersant spray vessels in each of the Naval Zones on the Pacific and Caribbean coasts. There are no private contractors.

In the case of Pemex, there are two PSV "OILREC" vessels<sup>6</sup>, as well as four Dispersing Boats, with the appropriate equipment for their application if required. Likewise, there are specialized personnel in Spill Control located in the following Pemex facilities: Spill Control Center Ciudad del Carmen, Spill Control Center Dos Bocas and International Spill Center in Tampico Madero.

There are two types of procedures for bringing in foreign dispersants' response resources, one is indicated by the MEXUS plan "Cooperation Agreement between the United Mexican States and the United States of America on the Pollution of the Marine Environment by Spills of Hydrocarbons and other Harmful Substances" (https://www.dof.gob.mx/nota\_detalle.php?codigo=4648400&fecha=18/05/1981#gsc.tab=0) and the other is established in section 307 ("Supporting organizations and companies") of the NOSCP of Mexico.

 $^{\rm 6}$  PSV (Platform Supply Vessel) OILREC (Oil Recovery)





The NOSCP of Nicaragua was issued in February/2018. The criteria for the use of chemical dispersants are regulated by the provisions of Annex VII.6.

There are no specific regulations to use dispersants developed by governmental institutions; instead there is a policy.

## **PREAPPROVAL**

Approved Dispersants include COREXIT EC 9500A and COREXIT EC 9527A.

The Ministry of Environment and Natural Resources (MARENA) provides for the registration of dispersants, in terms of hazardous substances, residues and waste, according to Ministerial Resolution DISUP No. 02.02.2012.

Suppliers, representatives or manufacturers of dispersants are the only ones that can apply to add a new product and must submit to the competent authority, MARENA, a request for approval of use of each type of dispersant indicating Manufacturer, Country of origin, Brand and Identification No. and Tests at origin of toxicity, biodegradability and efficacy. This means that tests results or licenses from other countries are accepted.

Once approved, the competent authority will include it in a list of approved dispersants and the supplier, representative or manufacturer will present recommendations for its effective use and applicability.

The timelines for re-approval of dispersants are not indicated.



Companies that store and handle hydrocarbons are required to request pre-approval from MARENA for the use of hydrocarbon dispersants at sea, and approval must also be requested in the event of a spill.

With prior authorization from MARENA, the Operations Coordinator may authorize the application of approved dispersants only.

The metocean conditions under which dispersants use is restricted/allowed are described in a generic manner as well as the type of habitats and environmental sensitivities.

Field use authorization does not depend on the outcomes of NEBA, SIMA or a similar type of ecological/safety risk assessment.

To speed up the authorization process, the approval of a contingency plan constitutes an approval to use dispersants under scenarios described in the contingency plan.

Only surface dispersant application is allowed.

#### **RESOURCES AVAILABILITY**

There are in-country dispersants stockpiles available but the inventory listing their ownership, volumes, location and products is not publicly available.

The local equipment available includes fumigation backpacks and trained personnel (first responders) with IMO 4.02 model course.

If the dispersant is not previously approved by MARENA, it cannot be applied. This would create some issues to bring dispersants from abroad if the existing national resources are depleted during an incident where dispersants are to be used. However, since tests results or licenses from other countries are accepted, this may be solved in a timely manner.

The procedures for authorizing the entry of foreign equipment, products, and personnel for dispersant application are described in ANNEX VII.7.



The National Oil Spill Contingency Plan (NOSCP) of Panama, enacted by the Panama Maritime Authority (AMP) does not apply to waters under the exclusive administration of the Panama Canal Authority (ACP). For this reason, this chapter addresses the key issues related to dispersants regulations in Panama and those substantial differences between the provisions of the NOSCP and those applicable to the Panama Canal.

## **NOSCP/REGULATIONS**

## **NOSCP** (excluding Panama Canal)

On 2023, the Panama Maritime Authority (AMP) approved the NOSCP (http://gacetaoficial.gob.pa/pdfTemp/29918\_A/101490.pdf). However, this NOSCP does not apply to waters under the exclusive administration of the Panama Canal Authority (ACP). Appendix P of the NOSCP addresses the conditions of approval and use of dispersants in Panamanian waters.

### Panama Canal

Under the ACP Contingency Plan – Agreement No. 10/1999 "Regulations for Attention to Emergency Situations" (https://pancanal.com/wp-content/uploads/2021/12/acuerdo10.pdf), various emergency planning, preparation and response activities are developed, and projects are executed to increase the ACP's capacity to manage incidents. In this plan, the ACP acts as the sole organization in charge of removing oil spills in Canal Waters and includes mechanical removal strategies and other response alternatives.

To this end, Agreement No. 65/2003 (https://pancanal.com/wp-content/uploads/2020/02/acuerdo-65.pdf) requires vessels that will pass through the canal to have a copy of the Panama Canal Shipboard Oil Pollution Emergency Plan (PCSOPEP). PCSOPEP contemplates preparation with mechanical removal strategies and other response alternatives. They are also required to have other spill prevention/management plans that follow international MARPOL standards.



#### **PREAPPROVAL**

### **NOSCP** (excluding Panama Canal)

The list of pre-approved dispersants by the AMP in 2023-2024 is described in https://www.amp.gob.pa/wp-content/uploads/2024/04/productos-aprobados-2023-2024-1.pdf and include: Boat Boy Oil Spill Dispersant, SeaKlean-ISS, Crystal Simple Green Industrial Cleaner & Degreaser, Simple Green and Industrial Cleaner & Degreaser.

With the results of the Biodegradability Analysis studies of the Technological University of Panama (UTP), the Department of Pollution Prevention and Control (PCC) of the General Directorate of Ports and Auxiliary Maritime Industries of the AMP issues the Product Approval Certification and the conditions of use.

The Department of Prevention and Control of Port Pollution is responsible for carrying out tests at least once a year, to verify the dispersion, expiration and storage properties of the stored product(s).

#### Panama Canal

The Panama Canal Authority (ACP) has enacted the 2610EAC113 Environmental standard for the use of chemical dispersants in oil spills (https://pancanal.com/wp-content/uploads/2022/03/EAC-113-uso-de-dispersantes-quimicos.pdf) that establishes that -at the time of purchase- dispersants must be listed on the U.S.A. National Contingency Plan Product Schedule, Subpart J.

Beginning in the tenth year of dispersant manufacture and each year thereafter, an effectiveness test will be performed to determine if replacement is required.

#### **FIELD USE AUTHORIZATION**

#### **NOSCP** (excluding Panama Canal)

Appendix P of the NOSCP enacted by the AMP establishes the conditions of use of dispersants (environmental sensitivity, metocean conditions, etc.), which are established at the time of the pre-approval of dispersants.

Dispersants may be used on some coasts during clean-up operations, subject to prior authorization from the AMP and the Ministry of the Environment. However, when there is a high level of contamination, it will be essential and a priority to collect the bulk of the trapped oil, using techniques appropriate to the situation.

#### **Panama Canal**

The 2610EAC113 standard dictates the general guidelines for the use of chemical dispersants as an alternative response to oil spills and is applicable to all persons who plan or execute response strategies and tactics for oil spills in Panama Canal Waters, particularly the Spill Prevention and Control Section of the Emergency Protection and Response Division and those who are part of the Incident Command System when a spill occurs.

In the Panama Canal Waters, chemical dispersants may only be applied by the ACP, or by other organizations that have express authorization and are under the supervision of the ACP.

#### **RESOURCES AVAILABILITY**

## **NOSCP** (excluding Panama Canal)

Appendix K of the NOSCP describes the oil spill response equipment available in Panama (public and private), but there is no dispersant application equipment in the list. Appendix L of the NOSCP describes external sources of possible support (including OSRO's), although it is not indicated if the government has an agreement in place with them to use their services.

Appendix V of the NOSCP ("Transboundary Movements of Equipment and Personnel and Their Financing") describes the process to access international support during a response.

#### Panama Canal

The 2610EAC113 Standard of the ACP establishes that the ACP shall have a reserve of 20,000 liters (approximately 5,500 gallons) of dispersants, distributed equally between the Atlantic and Pacific sectors. It also stipulates that the ACP will maintain at least one dispersant application team with work boats on each side of the Canal. Dispersants' storage conditions are to consider expeditious logistics that allow transisthmic mobilization.

Beginning in the tenth year of dispersant manufacture and in each successive year, an effectiveness test will be performed to determine if replacement is required.

The ACP must have products from at least two different manufacturers in its reserve of dispersants. In the event of increased dispersant needs, the ACP may activate its international agreements or response affiliations to obtain even greater quantities of dispersant.





The "National Contingency Plan for the Prevention, Control and Combating Spills of Hydrocarbons and Other Harmful Substances in the Aquatic Environment of Peru" - NOSCP (https://cdn.www.gob.pe/uploads/document/file/5832913/5173697-pnc-junio-2023r.pdf?v=1707402820) was approved in February/2024.

The regulations that enable the use of dispersants are described in R.D. No. 757-2004/DCG. (https://faolex.fao.org/docs/pdf/per119985.pdf) issued by the General Directorate of Captaincy and Coast Guard (DICAPI) in August/2005.

#### **PREAPPROVAL**

LDM-EC Ecological Petroleum Dispersant is the only product preapproved by the Environment Directorate of DICAPI. Manufacturers or operators can apply for preapproval of new dispersants.

The resolution R.D. No. 757-2004/DCG establishes -in its Annex- the tests to be performed for preapproval. The labs that are allowed to develop these tests are regulated by the National Institute for the Defense of Competition and the Protection of Intellectual Property (INDECOPI). The resolution indicates the validity of this approval is for three (3) years.



According to Article 271.4 of Supreme Decree D.S. No 001-2024-DE (https://cdn.www.gob.pe/uploads/document/file/5765586/5122001-2-ds-001-2024-de-parte-2.pdf?v=1706299263) the authorization of the use of preapproved dispersants during a spill must count with the approval of the Port Captaincy of the jurisdiction.

According to the NOSCP, authorization to apply dispersants will be requested from the Technical Advisory Committee (CAT), depending on the level of activation of the event.

The CAT is chaired by the Director of DICAPI and made up of a representative with the capacity to make decisions as an expert, designated by several public and private entities (see section "Órgano Asesor" of the NOSCP).

Authorization does not depend on the outcomes of NEBA/SIMA or a similar type of ecological/safety risk assessment.

Both surface application of dispersants and subsea dispersant injection seem to be authorized.

Operational monitoring is carried out by DICAPI while environmental monitoring is carried out by the company that authorizes its application.

## **RESOURCES AVAILABILITY**

There are in-country dispersants stockpiles available, but the information is not publicly available.





The latest version of the National Oil Spill Contingency Plan (NOSCP) was issued in 2016. The guidance regarding the use of dispersants in the EEZ of Suriname is based in Chapter 10 of the Caribbean Island OPRC Plan (https://new.racrempeitc.org/caribbean-oprc-plan/) and the 1995 Edition of IMO/UNEP Guidelines on Oil Spill Dispersant Application including Environmental Considerations (https://doi.org/10.62454/EA575E).

Starting late 2023, a new version of the NOSCP is being developed which is known to have better guidance on dispersants approval and use authorization but is not available to the public at large yet<sup>7</sup>.

#### **PREAPPROVAL**

Suriname does not have real-life experience in approving the use dispersants during spills. According to the NOSCP, NIMOS (National Institute for Environment and Development) is the governmental authority responsible for pre-approving the list of dispersants. However, there is no list available of dispersants approved for use in Surinamese waters.



<sup>&</sup>lt;sup>7</sup> The information of Suriname in this section and in Tables 3 and 4 and in Figure 1 refers to the 2016 edition of the NOSCP

The Operator (or Responsible Party) needs to fill in a Dispersants Use Request Form (described in the NOSCP) requesting permission from NIMOS to use dispersants. NIMOS is the governmental authority responsible for the approval of their use during a spill. The organization carrying out the dispersant operations needs to involve NCCR (National Coordinator Center for Disaster Relief) to notify potentially affected downstream, Island States and/or Territories whenever dispersants use is intended to be used beyond the territorial use (this procedure follows OPRC Plan guidelines).

NIMOS applies NEBA to evaluate the use of dispersants (or other response alternatives) and discusses this with other governmental authorities: NCCR, MAS (Maritime Authority Suriname), LBB (National Forest Management Service), the Fisheries Department and the District Administrator of Paramaribo North, prior to making a decision.

The decision tree to decide on the use of surface and subsea dispersants is described in the NOSCP.

The criteria to be followed for the application of chemical dispersants in the Suriname Maritime Zone are described in the NOSCP.

According to OPRC Plan, during a dispersant operation the On Scene Commander should determine the effectiveness of the dispersant application by on-scene observation and/or by scientific monitoring.

#### **RESOURCES AVAILABILITY**

In Suriname there are no dispersants stockpiles or equipment to apply them. However, Staatsolie and other offshore operators are members of OSRL, and it would be expected that some resources could be obtained through these means. The details on how to have access to external resources are not described in the NOSCP.





As of December/2024, Uruguay has a National Contingency Plan, prepared by the General Command of the Navy – *Prefectura Nacional Naval* but it is not accessible online.

However, Resolution No. 133/2024 of the *Prefectura Nacional Naval* stipulates the communication and action procedures of ANCAP (the state-owned company) within the framework of the use of chemical dispersants at sea. ANCAP is the only company authorized to use dispersants.

#### **PREAPPROVAL**

Dispersants pre-approved by the Prefectura Nacional Naval are Dasic Slickgone NS and Superdispersant 25 only for their use in the petroleum buoy operating in the East Terminal in the Department of Maldonado. As of April 15, 2024, this permit is valid for a period of 3 (three) years.

Since both dispersants are listed as approved by the Marine Management Organization in the UK (https://www.gov.uk/government/publications/approved-oil-spill-treatment-products/approved-oil-spill-treatment-products) and by CEDRE in France (https://wwz.cedre.fr/en/Resources/Fact-files/Spill-response-products/Dispersants) the Prefectura Nacional Naval validates the relevant tests of these two organizations for approval.

ANCAP, OSROs and offshore E&P operating companies can apply to add a new product to the approved list.



In 1997, during the San Jorge spill, Uruguay had real-life experience in authorizing the use of dispersants.

Uruguay follows the Protocol for Dispersant Application of the Regional Autonomous Corporation of the Cardique Dike Canal, Colombia.

#### **RESOURCES AVAILABILITY**

ANCAP has dispersants stockpiles in Uruguay. Dasic Slickgone NS in the La Teja Refinery and Superdispersant 25 in the East Terminal in the Department of Maldonado.

The National Navy has aerial applicators with helicopters, the OSROs have boats and ANCAP has tugs with "Spray arms".

In 2015, the *Prefectura Nacional Naval* issued the Maritime Resolution #158 (https://www.armada.mil.uy/ ContenidosPDFs/Prena/Dirme/disposiciones\_maritimas/dismar\_158.pdf) with the regulations for the licensing and registration of companies providing services for the prevention and control of oil and HNS spills which establishes the requirements for OSROs equipment, materials and resources. The resolution differentiates the levels of the OSROs (A, B or C) according to the amount and type of equipment, including dispersants stockpile and application equipment.





The US National Oil and Hazardous Substances Pollution Contingency Plan (NOSCP) was last amended on 13 December 2024 (https://www.ecfr.gov/current/title-40/chapter-I/subchapter-J/part-300) and establishes the use of dispersants as an alternative response technique for the control of oil spills. It provides for national procedures for the use of dispersants and other chemicals in removals under the Clean Water Act and response actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

Policies and guidelines regarding pre-approval and use authorization have been developed by the US Environmental Protection Agency – EPA in the National Contingency Plan Subpart J (https://www.epa.gov/emergency-response/national-contingency-plan-subpart-j).

#### **PREAPPROVAL**

Under new regulations of Subpart J of the NCP, only Ecosafe OSD (Dasic), Finasol and Accel Clean DWD 2.0 have been listed by U.S. EPA are under further consideration. Details on these products is found in the NCP product schedule (https://www.epa.gov/emergency-response/ncp-product-schedule-products-available-use-oil-spills).

The dispersants conditionally listed through 12/12/2025 are described in the US EPA National Contingency Plan Product Schedule including the dates listed, relisted, removed and updated (https://www.epa.gov/system/files/documents/2024-11/ps\_nov24\_508partial.pdf). A listing can also be found in https://www.epa.gov/emergency-response/alphabetical-list-ncp-product-schedule-products-available-use-during-oil-spill.



This listing does not mean that the US EPA approves, recommends, licenses, or certifies their use on an oil discharge. This listing only means that data have been submitted to the US EPA as required by Subpart J of the NCP.

The agency responsible for pre-approval of dispersants is the U.S. EPA. The tests related to effectiveness and toxicity are outlined in Subpart J: 40 CFR 300.900-300.970. The final rule associated with Subpart J was published in 2023. Generally, dispersant approval or test results from other countries are not accepted for approval by U.S. EPA.

#### FIELD USE AUTHORIZATION

USA has real-life experience in authorizing the use of dispersants during spills, the most notorious case being the Deepwater Horizon Incident in 2010. Both surface dispersant application and sub-sea dispersant injection are covered by the authorization process. Authorization does not depend on the outcomes of a NEBA and/or SIMA. However, authorization requires analysis of ecological benefits and tradeoffs.

Only a Federal On-Scene Coordinator (FOSC) may authorize use of this product in accordance with Subpart J of the NCP in response to an oil discharge, with the concurrence of the EPA Regional Response Team (RRT) representative and, as appropriate, the concurrence of the RRT representatives from the state(s) with jurisdiction over the waters and adjoining shorelines threatened by the release or discharge, and in consultation with the Department of Commerce and Department of the Interior natural resource trustees.

Per RRT guidance, green zones for use of dispersant have been designated in which dispersant operations have general pre-authorization for use. Green zones comprise waters that meet all of the following conditions: a) not classified within a "Yellow" or "Red" zone; b) at least three miles seaward of any shoreline; and 3) at least 10 meters in depth. Dispersants can be used for surface application in daylight hours only, and SMART protocols are required (https://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/resources/smart. html). By comparison, subsea dispersant injection, can be conducted 24 hours a day. Additional information on monitoring requirements for the prolonged surface application and subsea application can be found in https://nrt.org/sites/2/files/NRT\_Atypical\_Dispersant\_Guidance\_Final\_5-30-2013.pdf.

#### **RESOURCES AVAILABILITY**

There are dispersants stockpiles in the USA. Equipment for both aerial application and sub-sea dispersant injection is available in-country from various OSROs. Information can be found through the websites of e.g., MWCC (https://marinewellcontainment.com/resources-capabilities/), MSRC (https://www.msrc.org/equipment-capabilities), CGA (https://cleangulfassoc.com/equipment/) and HWCG (https://www.hwcg.org/organization).

Recent U.S. EPA has provided guidance for the storage and requalification testing of dispersant to ensure its effectiveness.

To authorize the use of out of country dispersants that have not been tested for in country approval requirements, users will have to follow the U.S. EPA procedures described in Appendix C to Part 300 of Subpart J of the NCP (https://www.ecfr.gov/current/title-40/chapter-l/subchapter-J/part-300). Procedures for authorizing the entry of foreign equipment, products, and personnel for dispersant application follow the normal customs and importation restrictions. However, the Jones Act (that requires that vessels transporting cargo from one U.S. point to another U.S. point be U.S.-built and owned/crewed by U.S. citizens) applies to foreign flagged vessels. Further, any foreign stocks of dispersant would need to be properly listed and approved by U.S. EPA and stored according to the Subpart J of the NCP.



# Operational and Regulatory Considerations for the Efficient Use of Dispersants to Combat Oil Spills

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ARPEL is a non-profit association gathering oil, gas and renewable energy sector companies and institutions in Latin America and the Caribbean. Founded in 1965 as a vehicle of cooperation and reciprocal assistance among sector companies, its main purpose is to actively contribute to industry integration and competitive growth, and to sustainable energy development in the region.

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