

# **National Guidelines on the Use of Chemical Dispersants : Thailand**

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**Ministry of Natural Resources and Environment**



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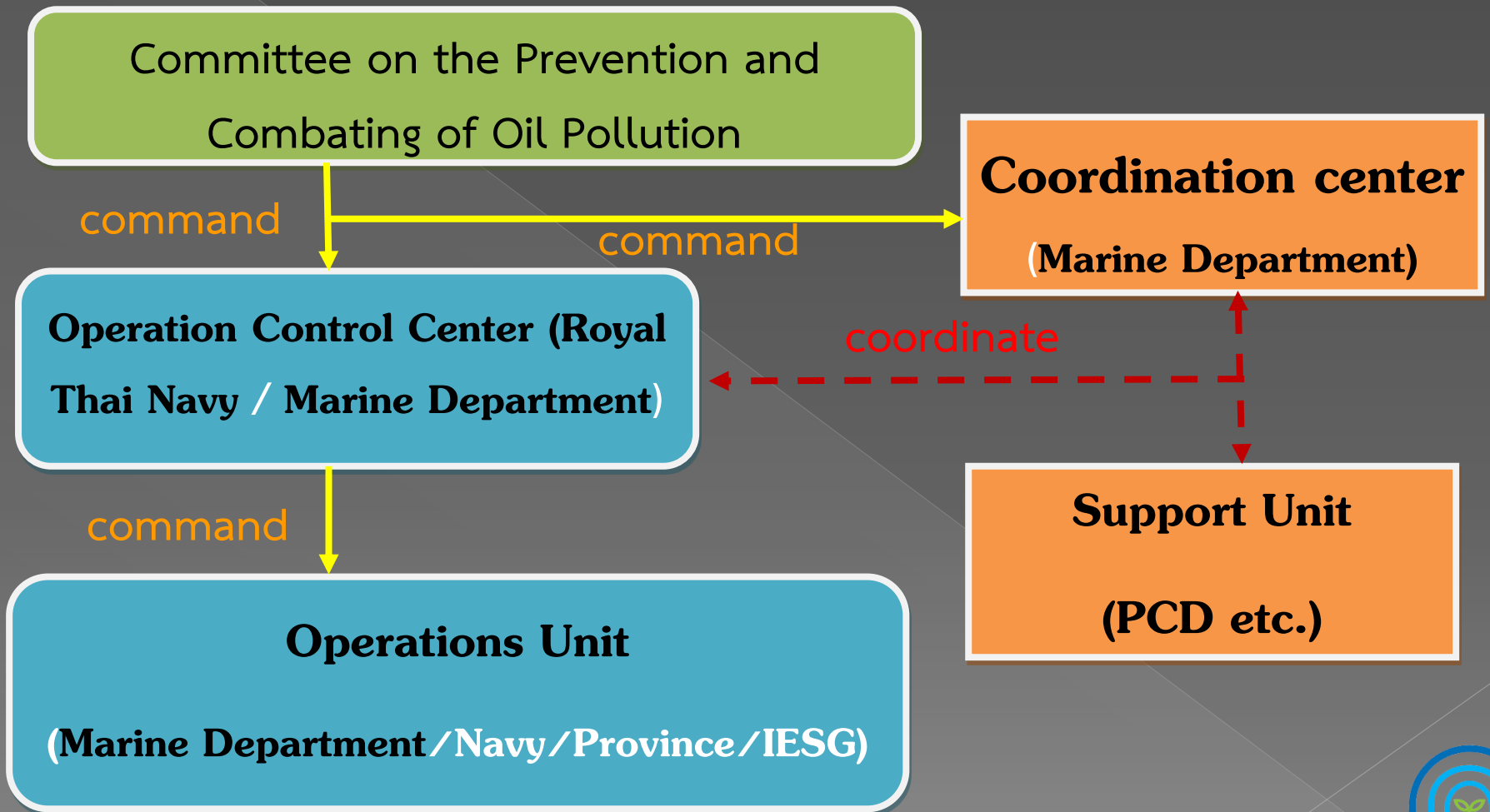
# Scope of talk

## ● Pollution Control Department's Role

## ● Guidelines for the use of dispersants in Thailand

- > Zonation
- > Approved list of dispersants
- > Permission

# National Oil Spill Response Organization

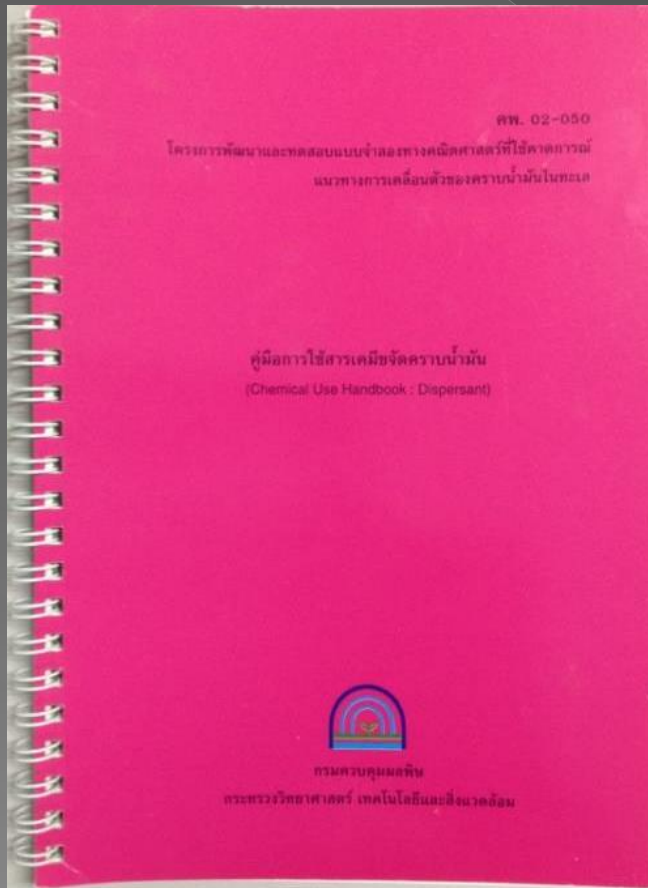


# Pollution Control Department's Role

- provide information on oil slick movement
- provide information on coastal and marine resources affected by oil spill
- develop the environmental restoration plan
- provide information in support of legal action against a polluter
- supervise and regulate the use of chemical dispersant

# National Oil Spill Response Plan

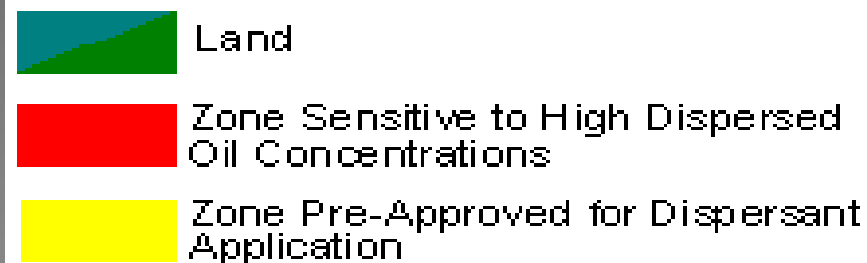
The guideline for the use of dispersant in Thailand



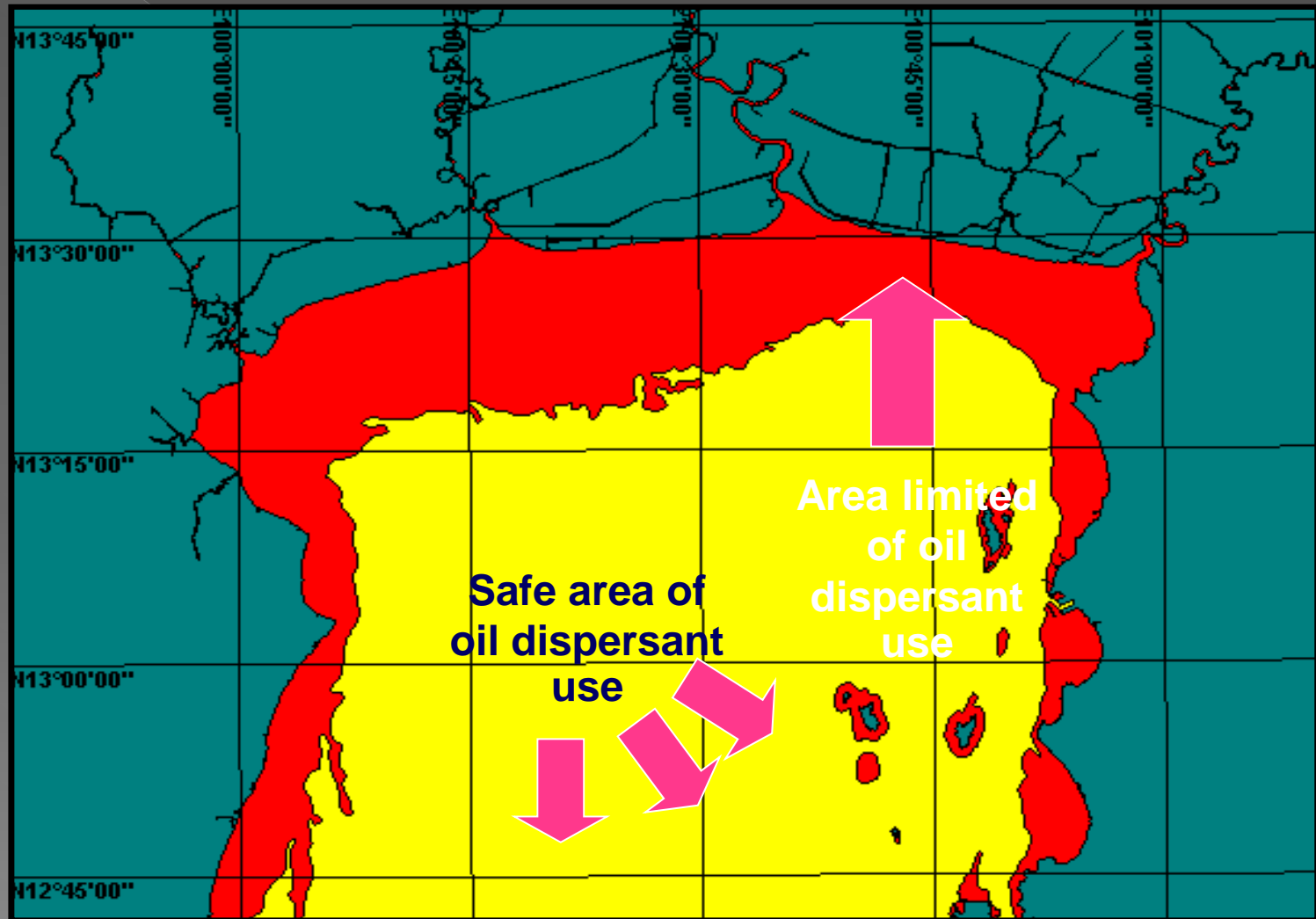
## Chemical Use Handbook : Dispersant

- Zone which are pre-approved for dispersant.
- Zone sensitive to a high concentration of dispersed oil.
- List of approved dispersants

## Dispersant Use Zonation in Thailand



# Dispersant Use Zonation in Thailand





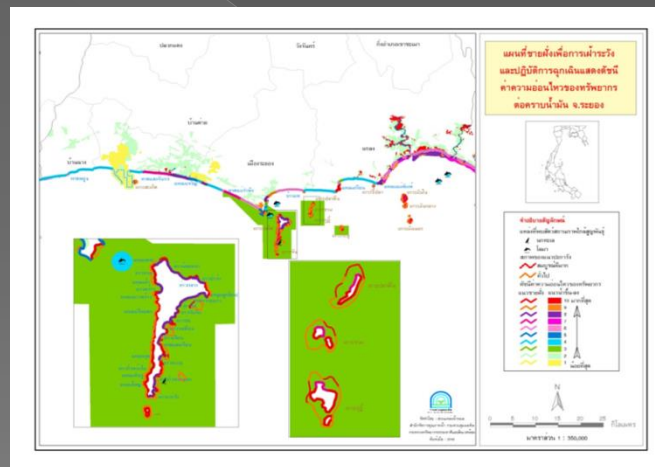
# The use of oil dispersant.

## The areas to use the dispersant in Thailand

- ❖ **Zone pre-approved for dispersant application.** : This category is for the resources which are not sensitive to high oil spread and a depth of over 10 meters, which helps to dilute quickly.
- ❖ **Zone sensitive to high dispersed oil concentrations.** : This category is for the areas has a depth less than 10 meters and the resources that are sensitive to dispersed oil. The area is recommended to use oil dispersant when using the net benefit to the environment.

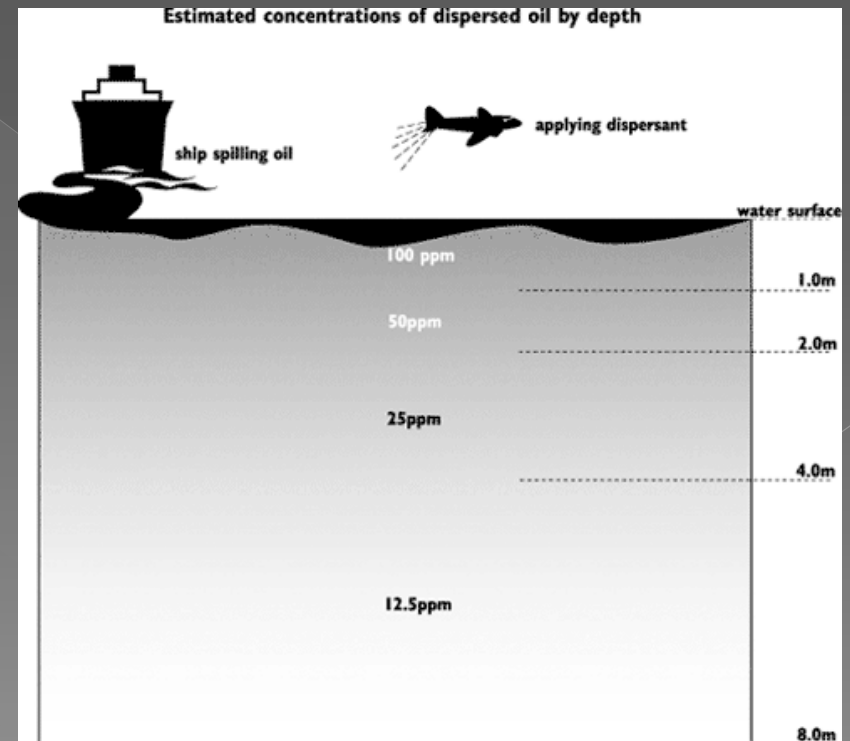


# Environmental sensitive areas



# Environmental sensitive areas

- The Aquaculture
- Shallow reef
- Nursery larvae of aquatic animals
- Mangrove / Beach Lane
- Estuary



# List of dispersants approved for use in Thailand

## Reference Agencies

- Thai Industrial Standards Institute (TISI), Thailand
- Marine Management Organization (MMO), UK
- U.S. Environment Protection Agency (U.S. EPA), USA
- Australian Maritime Safety Authority (AMSA), Australia

### Appendix C

#### List of Approved Dispersants for Using in Thailand

No.	Product Name	Approved Use <sup>1</sup>	Expiry	Registered/ Revised	Approval Organization
1	Accell Clean® DWD	*		18 Jul 2011	U.S. EPA.
2	Agma DR 379	S B RS	20 Jun 2021		MMO
3	BIODISPERS (FROMERLY PETROBIODISPERS)	*		28 Jun 2002	U.S. EPA.
4	Caflon OSD	S B RS	20 Dec 2018		MMO
5	CHEMAX 307 oil spill dispersant	*	-	-	TISI
6	COREXIT® EC9500A	S	12 Dec 2018	13 Apr 1994/ 18 Dec 1995	MMO U.S. EPA.
7	COREXIT® EC9500B	*		1 Aug 2013	U.S. EPA.
8	COREXIT EC9527A (Formerly Corexit 9527)	*		10 Mar 1978/ 18 Dec 1995	U.S. EPA.
9	DASIC SLICKGONE NS/ Slickgone NS	S B RS	20 Feb 2019		AMSA / MMO
10	DASIC SLICKGONE EW/ Slickgone EW	S B RS	25 Apr 2018		AMSA / MMO
11	DISPERSIT SPC 1000TM	*		22 Apr 1999	U.S. EPA.
12	FFT-Solution®	*		1 Nov 2011	U.S. EPA.
13	Finasol OSR 51	S B RS	27 Jun 2017		AMSA MMO
14	Finasol OSR 52	S B RS	18 Mar 2020	30 Jan 2003	MMO U.S. EPA.
15	JD-109	*		20 Sep 2000	U.S. EPA.
16	JD-2000™	*		6 Aug 2001	U.S. EPA.
17	MARE CLEAN 200	*		23 Feb 1988/ 26 Jan 1996	U.S. EPA
18	MARINE D-BLUE CLEAN™	*		23 Apr 2012	U.S. EPA
19	NEOS AB3000	*		22 Apr 1985/ 26 Jan 1996	U.S. EPA.
20	NOKOMIS 3-AA	*		31 Jul 2008	U.S. EPA
21	NOKOMIS 3-F4	*		4 Mar 2002	U.S. EPA.
22	OSD/LT Oil Spill Dispersant	S B RS	20 Jun 2021		MMO
23	OSR 4000	S B RS	7 Aug 2018		MMO

No.	Product Name	Approved Use <sup>1</sup>	Expiry	Registered/ Revised	Approval Organization
24	Radiagreen OSD	S	19 Feb 2020		MMO
25	SAF-RON GOLD (a/k/a SF-GOLD DISPERSANT)	*		3 Jan 2005	U.S. EPA.
26	SEA BRAT #4	*		26 Nov 2002	U.S. EPA.
27	SEACARE ECOSPERSE	S B RS	20 Mar 2017		MMO
28	SEACARE ECOSPERSE 52 (see FINASOL OSR 52)	S B RS	25 Apr 2018	30 Jan 2003	MMO U.S.EPA
29	Seacare Ecosperse LT23	S B RS	28 Oct 2018		MMO
30	SEACARE E.P.A. (see Dispersit SPC 1000™)	*		22 Apr 1999	U.S. EPA.
31	Seacare OSD	S B RS	10 May 2018		MMO
32	Seacare OSD2	S B RS	28 Oct 2018		MMO
33	SF-GOLD DISPERSANT (see SAF-RON GOLD)	*		3 Jan 2005	U.S.EPA
34	Super-dispersant 25	S B RS	17 Mar 2020		MMO
35	SUPERSPERSE™ WAO2500	*		23 Mar 2011	U.S.EPA
36	ZI-400	*		16 Jun 2005	U.S.EPA
37	ZI – 400 OIL SPILL DISPERSANT (see ZI-400)	*		16 Jun 2005	U.S.EPA

Information update as of 5 September 2015

Remark: <sup>1</sup> Allow to be used in the following areas

S = Sea                      B = Beach  
RS = Rocky shore        \* = not specified



# The use of oil dispersant

## Principles and facts of use of oil dispersant.

- Oil removal other method is not effective or not projected. Or when it is beneficial to the environment as a whole, without impacting resources and aquatic ecosystems.
- Chemicals used should be in the list of dispersant that allowed to use in Thailand, which according to the terms and/or permission from government agencies involved.



# Limitations of Dispersants

1. Shallow Water	not commonly used in shallow water (lower 10 meter)
2. Fresh Water	not commonly used in freshwater (not effective in fresh water)
3. Sea State	wave energy and wind speed
4. Oil properties	Effectiveness will decrease as oil viscosities increase
5. Pour point	Pour point 10 – 15 <sup>0</sup> C below sea temperature will be difficult to disperse chemically



## **Conditions that need permission prior to dispersant usage**

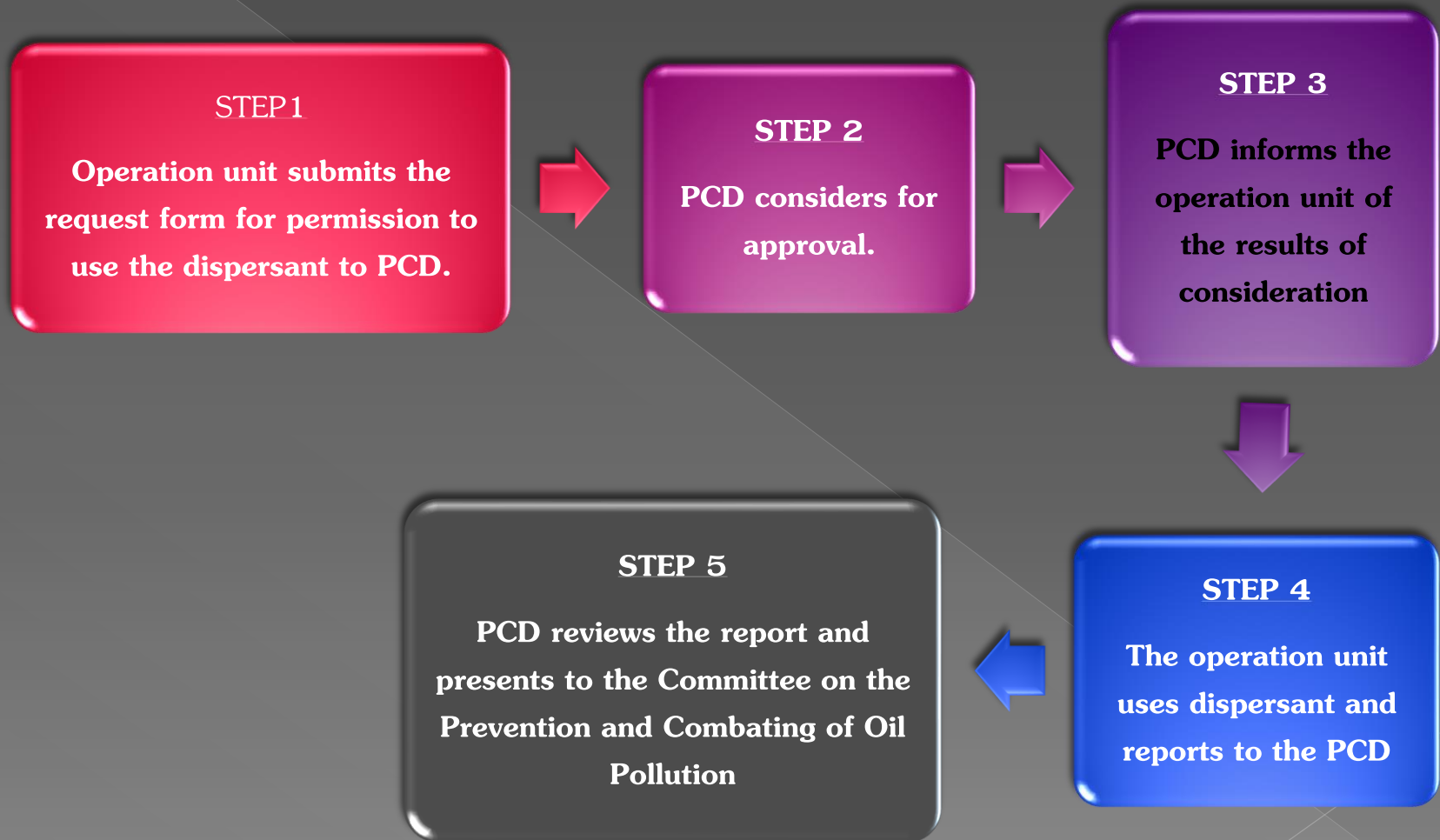
- The sea depth does not exceed 10 m.**
- Areas where natural resources are susceptible to oil pollution.**
- Freshwater and brackish water.**

# National Oil Spill Response Plan

Before using the dispersants in the zones that sensitive to high concentration of dispersed oil, the users need permission from PCD.

The use of dispersants will be approved by the Director General of PCD.

# Dispersant Use Flowchart in Thailand



# Request Form

กพ. 01

## Request Form

Date.....

Dear **Director General of PCD**

Agency Name.....  
Type of Dispersant.....  
Spill case .....  
Spill location .....  
Latitude/Longitude.....  
Spill Date.....Time.....  
Type of oil .....Volume .....liters  
Spill duration..... days. Location to use dispersant.....  
Volume .....liters. Method .....

Sign .....  
(.....)

Position.....

Contact address of the applicant.....  
Telephone .....FAX.....  
Mobile .....E-mail.....



กรมควบคุมมลพิษ  
POLLUTION CONTROL DEPARTMENT

# Permission document

## Permission Document

Date .....

PCD determined as follows:

☐ Not grant permission to use dispersant .....  
Because.....

☐ grant permission to use dispersant .....  
Volume.....liters. In area.....

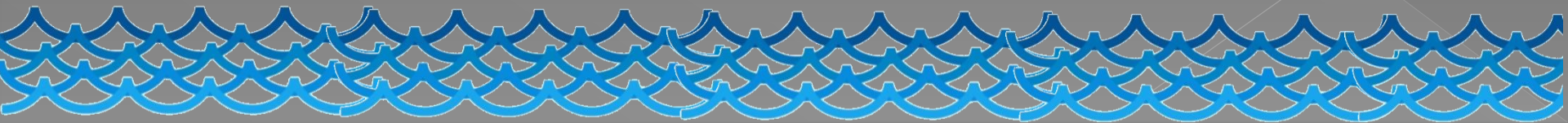
This permission is granted for oil spill response in this case only, and the results of the dispersant application must be reported to PCD after the completion of the operation.

(Sign).....

The Director General of PCD



กรมควบคุมมลพิษ  
POLLUTION CONTROL DEPARTMENT



**Way forward.....**



