



## DRAFT OF CIRCULAR

PROCESS OF USING DISPERSANTS IN OIL SPILL RESPONSE AT SEA IN VIETNAM





#### **CONTENT OF CIRCULAR**

- I. General provisions
- II. Regulation on managing and granting permits of dispersant use
- III. Process of using dispersants in oil spill response at sea in Vietnam
- IV. Organization of implementation





#### I. General provisions

- **1. Scope of regulation This Circular provides for:**
- Managing and granting permits of dispersant use
- Dispersant use in oil spill response at sea in Vietnam
- 2. Subjects of application

This Circular shall apply to Vietnamese organizations and individuals and to foreign organizations and individuals who have activities involved in dispersant use on Vietnam sea.





#### II. Regulation on managing and granting permits of dispersant use

#### 1. Principles of managing and granting permits of dispersant use

- Dispersants must be granted permits before using at the sea in Vietnam;
- The Ministry of Natural Resources and Environment shall issue regulations to detail the process of assessing application documents for permission for the use of dispersants;

#### 2. Process of granting permits for new type of dispersants

- In case of international cooperation in responding to oil spill incident by dispersants and the dispersants are outside the list approved by the Ministry of Natural Resources and Environment, the related nations must sign an agreement which provides for the List of used dispersants.





#### III. Process of using dispersants in oil spill response at sea

## 1. Providing for deciding on the use of dispersants upon the occurrence of oil spill incident at sea of Vietnam

General provision:

Deciding on the use of dispersants when an oil spill occurs shall comply with the following regulations:

- + The use of dispersants is considered together with other methods of response as soon as the oil spill incident occurs;
- + Do not use dispersants in the areas such as densely populated areas , points of drinking water and water to produce; tourist sites; areas with ecosystems; aquaculture areas and areas of over average sensitivity;
- + Do not use coastal waters with a depth of <20m; less than 2km from shore and in bays or lagoons with low water exchange



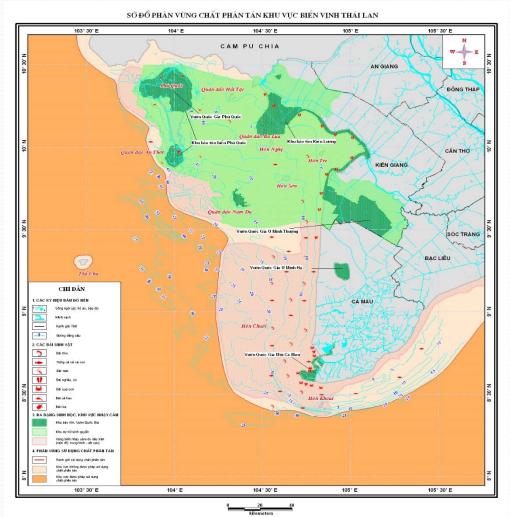


#### **Regulation for spilled oil**

- Do not use dispersants when most of spilled oil is weathered or dispersed naturally;
- Do not use dispersants when types of spilled oil are gasoline, diesel, kerosene or other oils that can disappear by evaporation or natural dispersion;
- The use of dispersant should only be applied when the spilled oil has viscosity <5000cSt;
- Viscosity of spilled oil > 10,000 cSt: the use of dispersant is not effective;
- Dispersant should be used within 24 hours of oil spill to marine environment;
- Use zoning map of using dispersant: It provides for areas that are allowed and not allowed to use dispersant.







Zones for dispersant application (Gulf of Thailand)





#### Analyze environmental benefits before making a final decision

- Environmental benefit analysis is a decision-making tool to assist in the selection of oil spill response to reduce the negative impact on the overall environment.
- An environmental benefit analysis can not be conducted after the occurrence of oil spill incident because data compilation and assessment require long periods of time. Therefore, an environmental benefit analysis should be conducted in the planning of oil spill incident response





#### Set up guidelines for the preparation of dispersant use

After dispersant is decided on using to treat oil spills, the preparation for the use of dispersant includes:

- Prepare the type of dispersant used for the oil spill incident response: dispersant name, amount of dispersant required, dispersant suppliers, means of transport;
- Preparation of equipment for dispersant spraying: aircraft, ships, spraying equipment, etc.;
- Prepare human resources and labor protection equipment during dispersant spraying;
- Prepare supplementary dispersant storage when large amounts of dispersant are needed, which are not met by the local authorities





#### Determine the thickness and the amount of oil spill

To determine the thickness and the amount of oil spill based on the color of the oil spill and divided into five main oil codes, each oil code has the thickness and the amount of oil spill are specified in the table below:

Code	Description-Appearance	Layer Thickness Int <i>er</i> val (µm)	Litres per Km²
1	Sheen (silvery/grey)	0,04 to 0,3	40 to 300
2	Rainbow	0,3 to 0,5	300 to 5000
3	Metallic	0,5 to 50	5000 to 50000
4	Discontinuous true colour	50 to 200	50000 to 200000
5	Continuous true colour	> 200	> 200000





#### 2. Spraying oil spill dispersants

Dispersants can be sprayed from any 'platform' - surface vessel or aircraft

- Depending on the location and size of the oil spill incident, weather conditions, hydrographical conditions and local rescue equipment, field commander will decide on dispersant spraying methods;
- General guideline on the dosage of dispersant used, spraying methods is presented in Appendix 1. The field commander may use other methods to achieve the highest efficiency.





#### 3. Safety in dispersant use

- Organizations and individuals using dispersant must provide fully labor protection equipment for persons directly working with dispersant, including protective clothing, goggles, gloves and masks and other tools in accordance with the manufacturer's regulations;
- If dispersant is in contact with skin or eyes, wash immediately with clean water.
- After using, labor protection equipment must be re-washed before reuse.





#### 4. Monitoring the effectiveness of the use of dispersant

- Monitoring of the effectiveness of the use of dispersant during oil processing should be monitored and updated continuously through satellite images, surveillance ships or surveillance aircraft.
- If dispersant is used effectively (when the oil is dispersed more than 50% of the oil spill), continue spraying to treat the remaining oil or if using dispersant is ineffective, stop dispersant spraying and use other methods to treat oil spills to bring about higher efficiency.





#### 5. Environmental impact assessment after using dispersant

After using dispersant for oil spill treatment, an environmental impact assessment of the use of dispersant should be made, including:

- Samples of water, organism samples and sediment samples in those areas and adjacent areas. Samples must be collected and preserved in accordance with current regulations;
- Analyze these samples in a laboratory to measure dispersion and dispersed oil concentrations in samples as the basis for environmental impact assessment after dispersant use;
- The results of the analysis are compared with the permitted limits on the concentration of toxic substances contained in the samples according to the current standards and regulations.





#### 6. Report on the results of using dispersants

After using dispersant, the agency or organization dealing with the oil spill incident shall have to report to the Ministry of Natural Resources and Environment on the results of the use of dispersant. The report includes:

- Location, time, process and scale of oil spill incident;
- Meteorological and hydrographical conditions in the area where the oil spill incident occurs;
- Name of agency or organization using dispersant;
- The name of the dispersant used and its basic characteristics, the decision approving the use of the dispersant;
- Spraying method, dosage, starting and ending time, evaluation of treatment results;
- The status of the environment and its consequences on the environment after using dispersant;
- Conclusions and recommendations.





#### IV. Organization of implementation

- The Ministry of Natural Resources and Environment shall be responsible for promulgating a Circular on Process of using dispersants in oil spill response at Vietnam sea
- Vietnam Administration of Seas and Islands shall be responsible for instructing, controlling, monitoring the implementation of this Circular

# THANK YOU FOR YOUR ATTENTION