

Japan's Initiatives in Prevention and Clean-up Spilt Oil/HNS in Light of the OPRC  
Convention

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**Slide 1:**

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**Slide3:**

The Japan Coast Guard (JCG) endeavors to grasp the occurrence of marine pollution through surveys and controls based on surveillance by patrol vessels and aircraft and calls to the emergency phone number (118), as well as through survey vessels.

The number of marine pollution cases that the JCG confirmed in 2014 was 380. The number has generally hovered at 300 to 500 level over the past decade.

The number of confirmed marine pollution cases by type, oil pollution tops the list, accounting for more than half of all cases.

For preparedness and response to marine oil pollution, the OPRC Convention stipulates that each country' response setup should be strengthened and an international cooperation setup also should be.

**Slide 4:**

I would like to explain the outline of the OPRC Convention according to the flow diagram in the slide.

As you are aware, the OPRC Convention is an international treaty aimed at developing an international cooperation system to respond to large-scale oil spill incidents.

In the event of an oil spill incident, the ship master or other responsible persons must report to the coastal countries pursuant to Article 4 of the Convention. The coastal countries that receive the report shall inform all countries that will be affected by the pollution incident, in accordance with Article 5. Furthermore, the parties to the

Convention must provide information of the pollution incident to the IMO. If a country wishes to request the assistance of other countries, it may request assistance from other parties to the Convention in accordance with Article 7. The parties that received the request can provide assistance such as dispatching equipment and experts to the extent possible.

Pursuant to Article 6, the parties to the OPRC Convention must establish a national system to respond promptly and effectively to oil pollution incidents. To be specific, this shall mean designating authorities and counterparts, formulating national contingency plans, reserving equipment and training.

On the other hand, the OPRC Convention also stipulates that parties to the Convention should endeavor to conclude bilateral or multilateral agreements in responding to pollution incidents.

Thus, in this presentation I would like to explain the outline of Japan's National Contingency Plan and about NOWPAP, which is a regional agreement that Japan is a party to, as well as about the National Strike Team, which was established after the OPRC Convention came into effect.

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**Slide 6:**

In Japan, the following plans for the preparation of a system and equipment to combat oil spill incidents have been formulated from their respective perspectives and are harmonized with each other: the Basic Plan for Disaster Prevention, the Operational Plan for Disaster Prevention, the Local Plan for Disaster Prevention, based on the Disaster Countermeasures Basic Act; the Plan for the Cleaning of Spilled Oil based on the Law Relating to the Prevention of Marine Pollution and Maritime Disaster; the Plan for Disaster Prevention for Petroleum Industrial Complexes based on the Law on the Prevention of Disaster in Petroleum Industrial Complexes and Other Petroleum Facilities; and the Basic Environment Plan based on the Basic Environment Law.

The National Contingency Plan (National Contingency Plan for Oil Pollution Preparedness and Response) based on the OPRC Convention summarizes these existing plans into one plan.

**Slide 7:**

I would like to introduce the history of the formulation of the NCP.

The OPRC Convention was adopted by IMO in 1990.

Since Article 6 of the OPRC Convention prescribes that a national contingency plan should be established, Japan formulated its National Contingency Plan in order to ratify the OPRC Convention, and the Plan was approved at a Cabinet meeting in December 1995.

Followed by the Nakhodka incident in 1997, the NCP was amended to clarify an immediate response system, cooperation and role sharing in the event of an oil pollution incident.

About 10 years later, the NCP was amended to expand the target range of substances to “oil, noxious liquid substances, hazardous substances, and other substances,” in preparation for the effectuation of the OPRC-HNS Protocol. This is the current version of the NCP.

**Slide 8:**

The contents of the NCP can be divided broadly into “preparedness” for incidents and “response” after the occurrence of incidents.

With regard to “preparedness,” the NCP includes matters such as a comprehensive collection of information continual, a response system such as keeping patrol vessels and aircraft available for 24 hours, the establishment of a communication system, the preparation of necessary equipment at relevant organizations, training with the relevant organizations, and cooperation with neighboring countries.

With regard to “response,” the NCP comprehensively stipulates specific step-by-step measures that should be implemented by the national government agencies and local governments from the occurrence of a pollution incident to observation after the incident.

**Slide 9:**

I would now like to explain the measures on “response” based on the Law Relating to the Prevention of Marine Pollution and Maritime Disaster in a flowchart.

In the event of an oil spill incident, the obligation to report and take emergency cleaning measures is primarily borne by the party that caused the incident.

The party that caused the incident must respond the spilled oil by themselves as well as by entering into a clean-up agreement with private organizations that carry out oil clean-up (such as the Maritime Disaster Prevention Center).

On the other hand, the JCG, upon receiving a report, can order the party with response obligation to carry out cleaning measures if the party is deemed not to have taken such

measures.

In addition, if there is need to take emergency response measures, the JCG can implement such measures or instruct a designated maritime disaster prevention organization to do so. Furthermore, the JCG requests cleaning to relevant government agencies and restricts navigation in the sea area of the site as necessary.

The law also requires to take into consideration the rescue of wildlife, implementation of fishing ground conservation measures, measures for preventing dangers, and health care and safety of responders.

Relevant government agencies are also required to take prompt and adequate responses in publicizing the incident.

Observation after the incident and other matters shall also be made as necessary.

#### **Slide10:**

In Japan, response systems including the establishment of meetings and countermeasure headquarters in the event of an oil spill incident are stipulated as shown in the slide in proportion with the scale of the incident and the degree of damage and social impact.

The system starts with a “meeting among national government agencies,” aimed at confirming, sharing and coordinating primary information on the damage by the incident. As the scale of the incident grows, the system develops to the establishment of a “Precautionary HQ,” the assembling of an “Emergency Response Team,” and finally to the establishment of a “Disaster Countermeasures HQ” under the Ministry of Land, Infrastructure, Transport and Tourism, headed by the Minister if it is deemed that large-scale damage has occurred.

#### **Slide11:**

I would like to introduce examples of past responses in line with the flow of the NCP.

In July 1997, there was an incident called the Diamond Grace accident.

The Diamond Grace was a crude oil tanker of Panamanian registry with a tonnage of 147,012 tons and loaded with 250,000 tons of crude oil, en route from the UAE to the Keihin Kawasaki Sea Berth in Tokyo Bay.

Around 10:05 a.m. of July 2, the tanker struck a sand bank southwest of the Nakanose route of Tokyo Bay after passing the Uruga Channel. This holed the hull of the ship on the starboard side, causing approximately 1,550 kiloliters of the cargo oil to spill.

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After the occurrence of the accident, the government responded by summoning a meeting among national government agencies and establishing a Precautionary HQ headed by the Commandant of JCG, in line with the flow of the NCP.

Due to the scale of the incident, the Precautionary HQ as set forth in the NCP was later re-organized as the Disaster Countermeasures HQ based on the Disaster Countermeasures Basic Act, in order for the government to take national comprehensive response measures. The cleaning activities were carried out by the JCG, Maritime Self Defense Forces, the Port and Harbor Authority of the Ministry of Transport (at the time), the Maritime Disaster Prevention Center, etc.

The photos on the right show the response operations on the sea and land.

As a result of response activities, the dense portion of the drifting oil was mostly recovered by July 4, and there was no longer notable drifting oil in Tokyo Bay after the morning of July 6. The Disaster Countermeasures HQ was closed on July 11.

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The UNEP action plan started in 1974 as a regional approach to manage marine and coastal resources and control marine pollution.

The action plan is currently formulated in 14 sea areas, with more than 140 coastal states and regions participating.

In the event of a large-scale oil spill incident, the impact may not be limited to one country but may spread over several countries. In order to minimize the damage, it is necessary for countries to cooperate with each other in responding to such an incident.

For this reason, Japan endeavors to establish a system for relevant countries to cooperate in responding to incidents by participating in the Northwest Pacific Action Plan (NOWPAP), which aims to preserve the marine environment in the Sea of Japan and the Yellow Sea and is promoted with the neighboring countries of South Korea, China and Russia.

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In September 1994, Japan, China, South Korea and Russia held an inter-governmental meeting and agreed to make efforts in NOWPAP, one of the action plans promoted by

the UN Environmental Program.

An area sea action plan is a regional approach that aims to manage marine pollution of a closed water area.

NOWPAP aims to preserve the marine environment of the Sea of Japan and the Yellow Sea, and carries out activities such as establishing a database on the marine environment, monitoring pollution, and performing emergency response to marine pollution through its four regional activity centers.

Emergency response to marine pollution by oil or HNS is carried out by MERRAC, the secretariat of which is established at the Marine and Ocean Engineering Research Institute of the Korea institute of Ocean Science & Technology in Daejeon, South Korea. MERRAC carries out the following two major activities in on response:

- 1) Formulating and managing contingency plans and related manuals and guidelines for large-scale oil/HNS spills in the NOWPAP region; and
- 2) Implementing training aimed at strengthening cooperation and improving response capabilities in an emergency.

**Slide 16:**

With regard to the contingency plan, which is one of NOWPAP's initiatives, the member countries of NOWPAP can request paid-for support from other member countries for oil spill incidents of the Tier 3 level, which is a level that exceeds the response capacity of one country. The contingency plan stipulates procedures for member countries to offer assistance to the extent possible in their own oil pollution response system.

The formulation of this plan started at MERRAC in 1997. The plan was approved and began operation in 2004.

Subsequently, the scope of application was expanded in 2006 to prepare for cases of oil spill events from the oil production area in the northeast part of Sakhalin.

After the OPRC-HNS Protocol came into effect in 2007, NOWPAP also considered including HNS in its target substances, and added HNS in 2008.

MERRAC continues to manage NOWPAP's contingency plan while making minor amendments.

**Slide 17:**

Outline of the incident

On December 7, 2007, HEBEI SPIRIT (146,000 tons), a tanker of Hong Kong registry

that was in harbor, and a crane salvage barge that was being towed by a tug boat collided off the coast of South Korea's Taean peninsula, causing approximately 12,547 kl of crude oil of the 302,641 kl of total crude oil cargo to spill.

Although the South Korean government issued a "declaration of a national disaster crisis" and employed all of the country's disaster prevention organizations to the oil spill incident, the damage was serious and prompted the government to request NOWPAP to implement the NOWPAP contingency plan as well as request our government's emergency aid.

Based on this request, we decided to send 10 tons of oil absorbents and the Japan Disaster Relief Team without compensation, in order to assist in oil responding activities in the damage-stricken area. It was also decided that three JCG staff (of which two were NST members) and one staff of the Maritime Disaster Prevention Center would participate for nine days.

Subsequently, due to the activities of the Japan Disaster Relief Team, the South Korean government and many volunteers, the majority of the oil pollution in the coastal region was removed in about a month from the accident, and the NOWPAP contingency plan was called off on January 14 of the following year.

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The second major initiative is implementing joint training aimed at strengthening cooperation and improving response capabilities in an emergency.

Since pollution of the marine environment by oil or HNS not only affects Japan but also surrounding coastal countries, it is important to make responses in cooperation with other countries.

Therefore, we have been co-hosting joint response training every two years to strengthen cooperation with the relevant countries and improving response capabilities. In October 2014, the 5th Japan Russia joint response training was carried out in Vladivostok, Russia under the NOWPAP framework. JCG sent a delegate as well as patrol vessels and helicopters, and made efforts not only in improving response capabilities but also in strengthening coordination and cooperation with relevant organizations.

Since international cooperation on response at NOWPAP is based on compliance with the laws and regulations of the country that requested assistance, such training will clarify the kind of procedures that will become necessary for moving ships and equipment across borders, as well as enable the responsible staff of the relevant organizations that respond the oil spill to get acquainted with each other and offer them

opportunities to exchange and share information.

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**Slide 20:**

A National Strike Team (NST) is a really professional team for responding oil and HNS pollution, and maritime fires.

I would like to explain the history of the NST.

The NST was established in 1995, followed by the ratification of the OPRC Convention in the same year, with eight members in two teams, under the Disaster Prevention Office, Search and Rescue Division of the 3rd Regional HQ, aiming to strengthen the maritime disaster prevention capability both for domestic and international cooperation.

Subsequently, following large-scale oil spill incidents such as heavy oil spill incident of Russian tanker Nakhodka on the Sea of Japan and crude oil spill incident of the Diamond Grace in Tokyo Bay in 1997, one team (4 members) was added in 1998 and the Yokohama NST Station was newly created as an office of the 3rd Regional HQ.

Furthermore, one team (4 members) was added in 2007 followed by the ratification of the OPRC-HNS Protocol to constitute the current 4-team, 16-member system in order to strengthen the capability so as to be able to respond to HNS in addition to oil pollutions. The NST commemorated its 20 year anniversary in 2015.

**Slide 21:**

Let me explain the organization of the NST.

The Yokohama NST Station, which belongs to the 3rd Regional HQ, is the sole organization within the JCG in the country.

The station is headed by the Chief, the station consists of a Deputy Chief, who is in charge of clerical work, and Administration coordinator, and NSTs that consist of four teams.

A team consists of four persons; a captain, a vice-captain and two members, totaling a small number of 16 persons. Members are selected from Coast Guard officers all over the country that excel in knowledge, experience and skill such as expert divers, those in the rescue and disaster prevention divisions on land as well as persons experienced in fire-barge operation. Activities of NST are available for 24 hours, 365 days a year.

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The major activities of NST are:

1. To be dispatched by the request from the site, where major oil spill from vessels and marine facilities, spill of hazardous materials, maritime fires, and take proper measures.
2. Minimizing marine disasters make effort of response and coordination for parties related incidents within and out of JCG including party caused incident.
3. Using professional skill and equipment, respond against incidents like HNS spills.

**Slide 23:**

This trend diagram shows the number of dispatches since the establishment of the NST. Although the number varies from year to year, the average is around 17 per year, or 1 to 2 a month. (The average number of days dispatched for each case in the past five years: 3.46 days)

As you can see, the percentage of spilled oil response cases is the highest.

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I would now like to explain about international cooperation.

All members of the NST are registered as member of Japan Disaster Relief (JDR) Teams.

JDR teams are dispatched when the Ministry of Foreign Affairs deems it appropriate upon being requested by the government of the disaster-stricken country.

NST has been dispatched four times in the past as JDR: once to Singapore, once to South Korea and twice to the Philippines.

The dispatch to South Korea in 2007 was for the oil spill incident of the HEIBEI SPIRIT, which I explained in the previous slide.

The latest dispatch was in 2013 when a huge typhoon hit the east coast of Philippines and destroyed a barge with a power generating facility and approximately 850 kl of heavy oil flowed out from her fuel tank.

Two NST members were sent to the site by request of the government of the Philippines, and provided technical support on oil spill response towards to the Philippines Coast Guard.

**Slide 25:**

I will touch upon other activity of NST on cooperation. In JAN 2013, two members of NST were sent to Sri Lanka for technical assistance to the Sri Lanka Coast Guard. This four weeks service was initiated by the request of Sri Lanka Government through JAICA who executes Japan's ODA activity unifiedly.

During their stay in the site, they did technical training including lectures on OSR.

This year, January 2016, JCG HQ staff and NST member has been there for one month technical assistance.

**Slide 26:**

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