

Newsletter from NOWPAP MERRAC

Northwest Pacific Action Plan
Marine Environmental Emergency Preparedness and Response
Regional Activity Centre

No. 6
February 2011

Greetings from the Director of MERRAC



On behalf of the MERRAC, I am very pleased to inform you of 2010 MERRAC activities through the 6th MERRAC newsletter.

As all of you know, the largest spill incident in history, the *BP's Deepwater Horizon oil spill*, has occurred in Gulf of Mexico, USA, April 2010. It is anticipated to have severe impacts on the marine environment, spilling huge

amount of oil into the sea. Also, in July 2010, *crude oil pipeline explosion incident* has recently occurred in Dalian, People's Republic of China. Such as the latest incidents, if oil or Hazardous & Noxious Substances (HNS) spills from off/onshore oil handling and storage facilities, unlike ship incident, it is most likely to cause tremendous spills, and to be very serious impacts on marine environment.

Recognizing the potential risk of spill incidents from the facilities as well as ship in the Northwest Pacific region, MERRAC, together with regional countries, has tried to increase the level of preparedness and response to major spill accident. Especially, last year, we had organized the Forum on Sakhalin Projects (Wakkanai, Japan, September 2010), back to back with the 3rd NOWPAP DELTA (Joint Oil Spill Exercise). As you know, the Sakhalin area is one of potential hotspots where particular concerns about potential ship collision including incidents resulting from the facilities have been raised due to the oil and LNG exploration projects. Taking into account this circumstance, the Sakhalin area had included into geographical scope for the NOWPAP Regional Oil and HNS Spill Contingency Plan (RCP). The Forum and the practical Joint Oil Spill Exercise had successfully carried out, with the leading role of Japan and Russia, and the participation of other NOWPAP countries and private sectors in relation to the Sakhaline

Projects. I am sure that this kind of exercise could contribute to reminding the importance of preparedness and response to marine pollution incidents, and to enhance prevention system and abilities to respond to future incidents in this region.

MERRAC will continuously enhance the oil spill exercises, including NOWPAP DELTA, BRAVO, and Table-Top exercise, and continue to further response capability for marine conservation against oil spill incidents. In particular, the 15th NOWPAP Intergovernmental Meeting held in Moscow, Russian Federation, in November 2010, has emphasized the importance of organization of these exercises on regular basis in this region.

In increasing the level of preparedness and response to oil spill in the region, the participation of relevant private sectors is important, as well as co-operation among the government agencies of NOWPAP members. In this regard, MERRAC is currently making a preparation to launch the IMO Global Initiative (GI) Programme in the NOWPAP region for improving the effective response in close co-operation between government and industries. Through these activities, MERRAC will do continuous efforts for efficient implementation of the NOWPAP Regional Oil and HNS Spill Contingency Plan.

Finally, experiencing the latest marine pollution incidents, I realized how important the international cooperation is, and that the regional cooperation activities are more essential for marine pollution preparedness and response to spill incidents which exceed response capability of each state. Taking this opportunity, I would like to express my sincere gratitude to all NOWPAP member states, NOWPAP RCU and IMO for many constructive support and contributions to MERRAC activities, and to ask you for continuous co-operation on MERRAC activities. Thank you very much.

Seong-gil Kang
Director of MERRAC

▼ Hebei spirit oil spill, Republic of Korea, 2007



Photo: YONHAP/REUTERS

▼ Dalian pipeline explosion incident, China, 2010

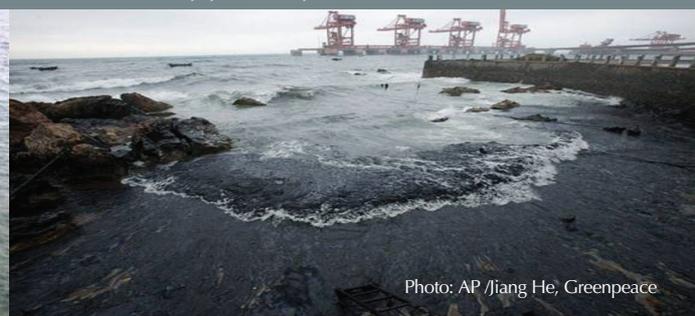


Photo: AP /Jiang He, Greenpeace

13th NOWPAP MERRAC Focal Points Meeting and 5th Competent National Authorities Meeting



According to the decision of the 12th NOWPAP MERRAC Focal Points Meeting (FPM) and 4th Competent National Authorities (CNA) Meeting, MERRAC organized the 13th MERRAC FPM and 5th CNA Meeting at MERRAC, 8-11 June 2010, with technical support of NOWPAP Regional Coordinating Unit (RCU) and International Maritime Organization (IMO). The participants from NOWPAP member states, NOWPAP RCU, IMO, Regional Activity Centres (RACs), and Oil Spill Response attended the meeting.

At the 13th MERRAC FPM, it was reviewed the major MERRAC activities carried out during the intersessional period, and discussed MERRAC future plans.

As the Routine Tasks, the meeting agreed to continuously share the relevant information on lists of Focal Points, oil spill response equipment and institution, national

performance standard and/or regulation on the application of non-mechanical methods, and lists of oil and HNS spill incidents.

Regarding the MERRAC Specific Projects, the meeting agreed to terminate the Projects on HNS Training Manual and Regional report on HNS preparedness and response. Also, the meeting agreed to carry out the new MERRAC Specific Projects on Legislations and Practice on Marine Pollution Damage Civil Liability and Compensation, Application of HNS Training Manual to Actual Training Courses, Environmental Issues related to Oil Spill Incidents in the NOWPAP region, Development of Practical Assistance Procedure and System, and possible future strategies and/or actions with a view that GI programme may launch in the NOWPAP region.

For the revision and/or amendment of NOWPAP Regional Oil and HNS Spill Contingency Plan (RCP), the meeting agreed to update the ANNEX 3 of RCP to newly revised National Contingency Plans of Japan and Korea. In order to facilitate the implementation of the NOWPAP RCP, the meeting also agreed to organize the Forum on Sakhalin Projects back to back with the 3rd NOWPAP DELTA, at Hokkaido, Japan, on 5th September 2010.

Based upon the agreement of the 13th MERRAC FPM, the 14th MERRAC FPM in conjunction with the 6th CNA Meeting will be organized at MERRAC in June, 2011.

▼ Representatives of NOWPAP member states, IMO and others



▼ 13th NOWPAP MERRAC FPM & 5th CNA Meeting, at MERRAC

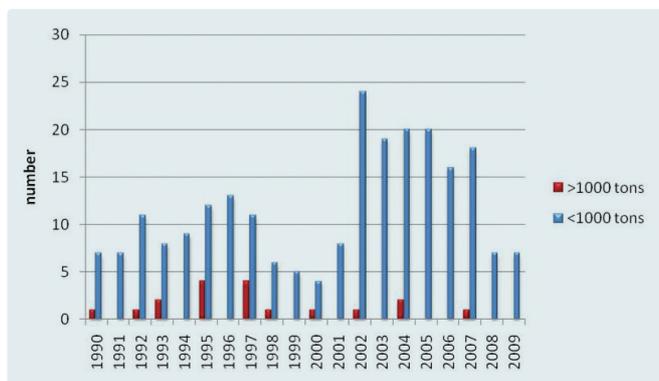


Oil and HNS Spill Statistics in the region from 1990 to 2009

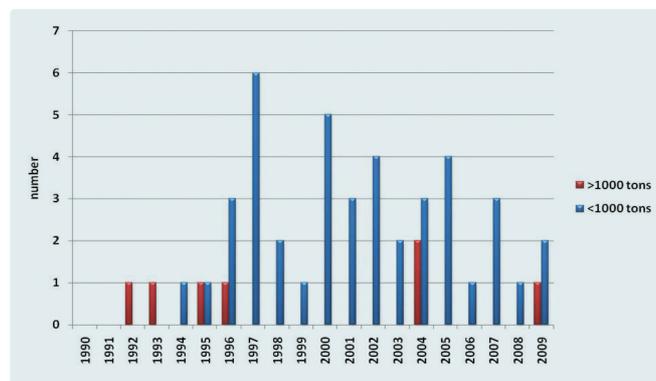
1. Number of oil and HNS spills, 1990-2009

MERRAC has annually updated information on oil and HNS spill incidents over 10 tons, including the additional information on the location, the quantities of oil spilled, and its fates and effects. As illustrated in figures below, 250 oil and 49 HNS spill incidents occurred in the NOWPAP

region from 1990 to 2009. In the year of 2009, total 7 oil and 3 HNS spill incidents occurred as well. Most of oil and HNS spill incidents have been recorded by small spills less than 1,000 tons.



▲ Oil spills (number)



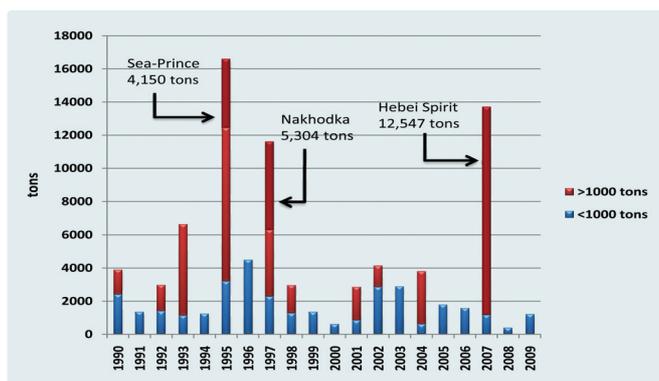
▲ HNS spills (number)

(Note: In case of the unknown amount of oil and HNS spilled, these are randomly included into the category of < 1000 tons)

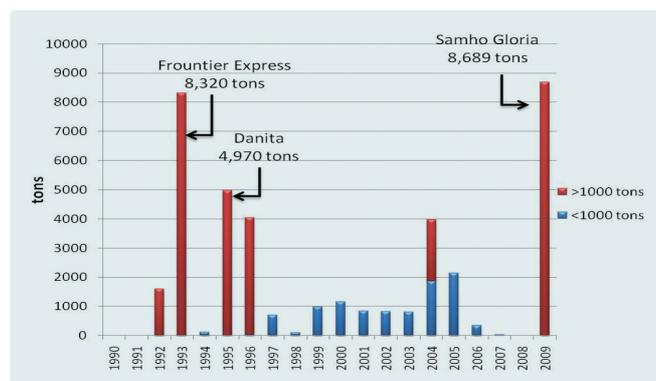
2. Quantities of oil and HNS spills, 1990-2009

The overall tendency in terms of the quantities was that oil and HNS spills larger than 1,000 tons hardly happen, while

a few major spills have recorded most of total amount of oil and HNS spills.



▲ Oil spills (tons)



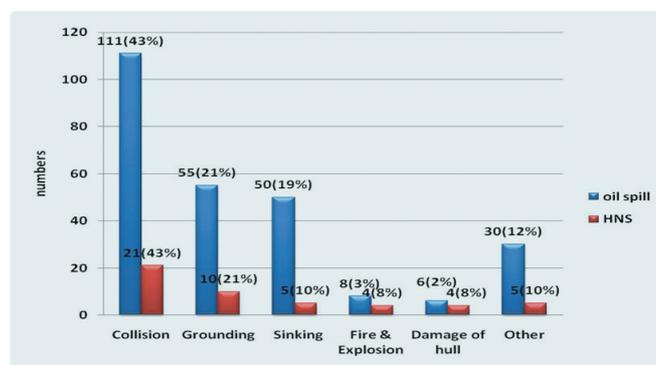
▲ HNS spills (tons)

(Note: In case of the unknown amount of oil and HNS spilled, these are not included into the total tons)

3. Cause of oil and HNS spills, 1990-2009

Based upon the information submitted by the NOWPAP member states, it has been found that collision (43%) represented the highest percentage of oil and HNS spill causes, followed by grounding and sinking over the last two decades.

The list and relevant information of oil and HNS spill incidents are available on MERRAC website (<http://merrac.nowpap.org>)



▲ Cause of spill



▲ Gas Detection PM84 "Shirakami"



▲ Oil Recovery Tag Boat "Hikari"

The 3rd NOWPAP DELTA-Joint Oil Spill Exercise

The 3rd NOWPAP DELTA-Joint Oil Spill Exercise was conducted in Wakkanai Port, Hokkaido, Japan, on 4th September 2010, back-to-back with the Forum on Sakhalin Projects, in order to increase the level of preparedness of the NOWPAP member states to jointly respond to major marine pollution incidents, within the framework of NOWPAP Regional Oil and HNS Spill Contingency Plan.

This practical exercise mobilized real response equipment was jointly organized by Japan and Russia, and co-organized by Hokkaido Government, City of Wakkanai and NOWPAP MERRAC. It is expected to contribute to enhancing the capabilities of oil spill response for the Sakhalin Projects-related parties including national governments and private sectors, and to ensure the safety and security of the public, as increased the potential risk of collision incidents of oil and LNG tankers and raised

particular concerns of people living near the coastal areas in this region.

The governments of Japan and Russia mobilized 9 ships, 2 helicopters, radar, mobile video transmission devices and communication equipment, under the scenario where Japan Coast Guard (JCG) aircraft on patrol finds tremendous amount of drifting oil in the offshore of the City of Wakkanai, and then joint response activities including gas detection, evacuation guidance, spraying oil dispersant and oil recovery were carried out and one of the crew members in a fishing boat was rescued.

Over 200 participants from Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Maritime Disaster Prevention Center (MDPC), Petroleum Association of Japan (PAJ) and Wakkanai Fisheries Cooperative Association (WFCA) as well as international observers from NOWPAP Regional

Organization of the Forum on Sakhalin Projects



▲ Forum on Sakhalin Projects

On 5 September 2010, the Forum on Sakhalin Projects in the format of 2010 MERRAC Expert Meeting was held in Wakkanai, Japan in conjunction with the 3rd NOWPAP DELTA-Joint Oil Spill Exercise.

Participants from NOWPAP member states, MERRAC, NOWPAP RCU, local oil industry and oil spill response company attended the Forum, which was composed of keynote lectures, a panel discussion, and presentations by the related international and domestic parties and academic experts. Director of MERRAC, Dr. Seong-Gil Kang, made a presentation on Marine Pollution Prevention Measures under the Northwest Pacific



▲ Aerial Dispersant Spray System

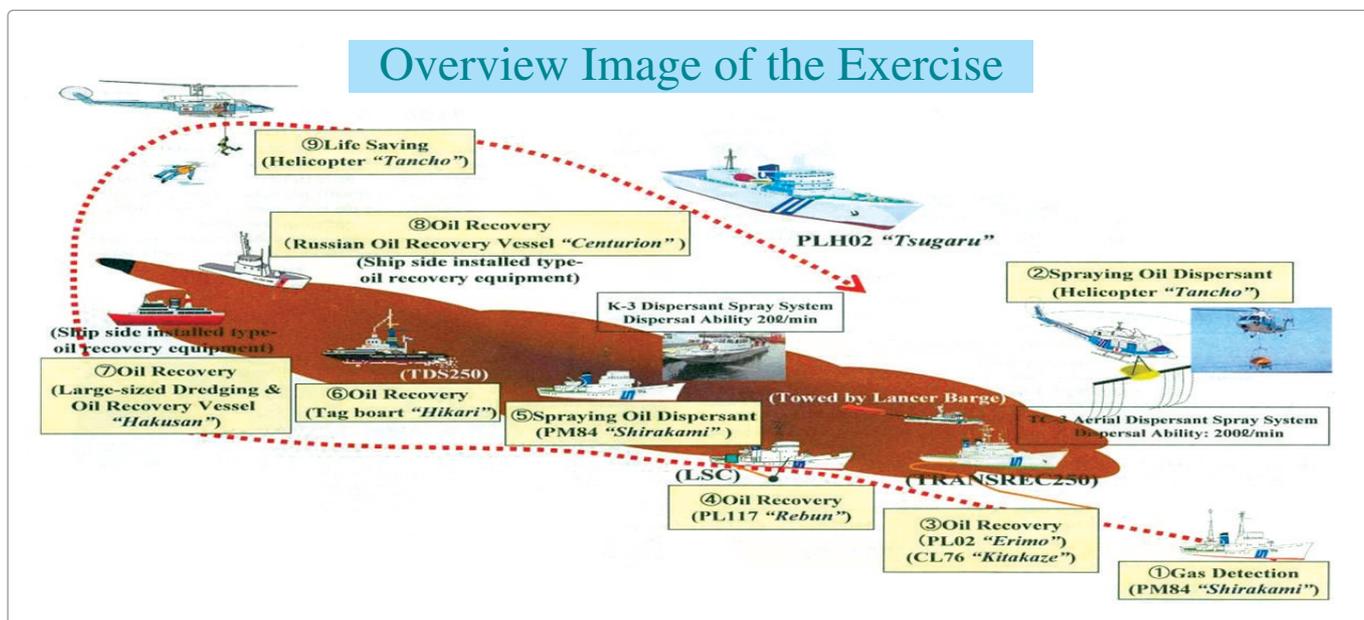


▲ Russian Oil Recovery Vessel "Centurion"

Coordinating Unit (RCU) and other NOWPAP member countries (China MSA, Korea Coast Guard) took part in the real exercise.

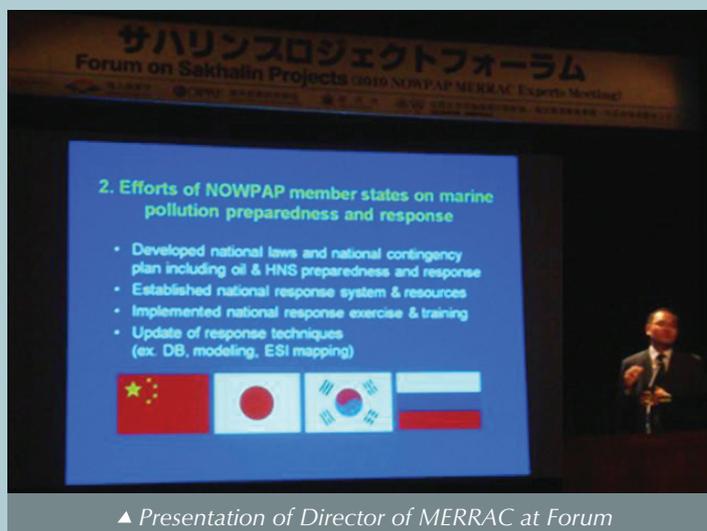
NOWPAP DELTA-Joint Oil Spill Exercise has been

organized biennially since 2006. The 1st and 2nd NOWPAP DELTA Exercises were held in Sakhalin and Qingdao in 2006 and 2008, respectively. The next 4th NOWPAP DELTA will be expected to organize in Korea, 2012.



Action Plan.

Through the Forum, the participants had opportunities to promote better understanding of the general public about the Sakhalin Projects and related issues on marine pollution, to ensure the safety and security, to remind the related parties in Japan and Russia of the importance of preparedness and response to marine pollution incidents in the Sea of Okhotsk, and to share a view to enhance the prevention systems and abilities to respond to future incidents.



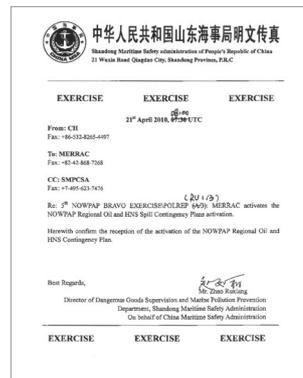
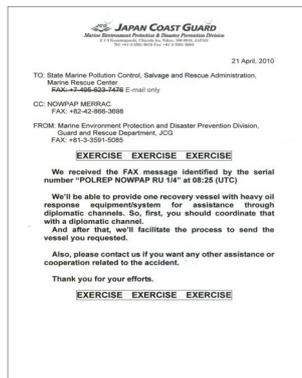
▲ Presentation of Director of MERRAC at Forum

NOWPAP BRAVO-Alarm Exercise

In order to test the procedures and communication for reporting, requesting and providing assistance in case of large-scale oil and HNS spills, the 4th and 5th NOWPAP BRAVO- Alarm Exercises were successfully conducted by China and Russia, respectively.

On 15 December 2009, the 4th NOWPAP BRAVO was conducted by China, using lists of competent national

authorities/national operational points and communication plan in line with Annex 1 and Annex 2 of NOWPAP Regional Oil and HNS Spill Contingency Plan. Through the NOWPAP BRAVO exercise, NOWPAP member states have tested the revised POLREP adopted by 12th MERRAC FPM and the communication system between member states.



▲ 5th NOWPAP BRAVO Exercise, conducted using the NOWPAP POLREPs (Pollution Reports)

The 5th NOWPAP BRAVO was conducted by Russia, on 21 April 2010, using fax and e-mail to confirm whether communication system functions normally when large-scale oil spills and other maritime accidents occur, and to improve the implementation of NOWPAP Regional Oil and HNS Spill Contingency Plan through further cooperation with NOWPAP member states.

The results of two NOWPAP BRAVO exercises were reported to 13th MERRAC FPM and 5th CNA Meeting, where it was agreed to organize NOWPAP BRAVO continuously twice a year. Japan and Korea were invited to lead NOWPAP BRAVO exercises during the inter-sessional period after the 13th MERRAC FPM.

NOWPAP Table-top Exercise

At the 5th CNA Meeting, held back-to-back with the 13th MERRAC FPM (8-11, June 2010), it was discussed the table-top exercise, and it was recalled the roles and actions of leading and assisting countries in accordance with the general procedure of NOWPAP Regional Oil and HNS Spill Contingency Plan. At the meeting, NOWPAP member states identified the necessity to share further information on custom and immigration procedures, and on pre-arrangement procedures in NOWPAP member states.

According to the decision of the 13th MERRAC FPM, MERRAC will develop the checklist for self-assessment and distribute it to the NOWPAP member states. MERRAC will organize the table-top exercise at the next CNA Meeting to build regional capacity and improve practical implementation on NOWPAP Regional Oil and HNS Spill Contingency Plan.

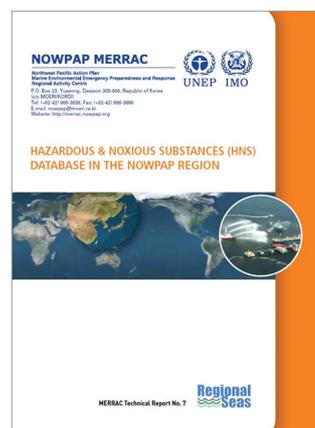
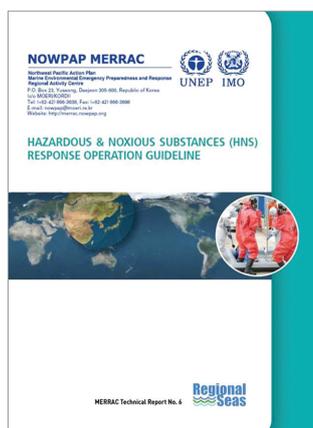
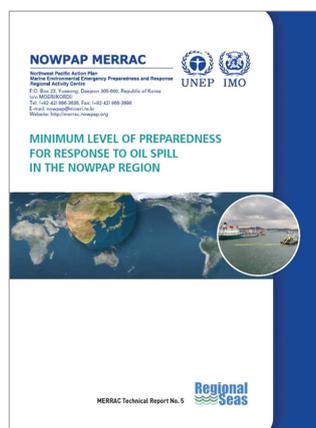
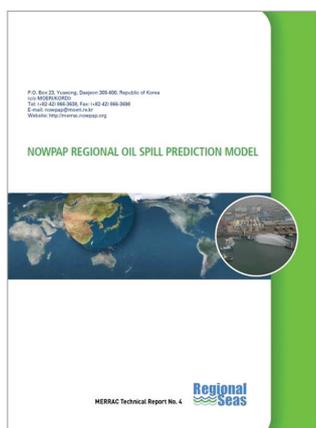


Implementation of MERRAC Specific Projects

In order to facilitate designated mandates of MERRAC, several specific projects have been organized and maintained as so called as MERRAC Specific Projects. Through MERRAC Specific Projects, experts and institutions of the NOWPAP member states provided technical advice on technical issues relevant to marine pollution preparedness and response. MERRAC has implemented the following Specific Projects:

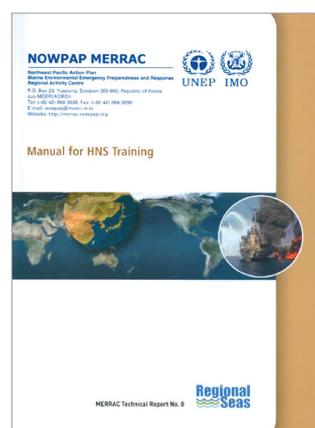
- Minimum Level of Preparedness (led by China and Russia);
- HNS Response Operation Guidelines (led by China and Russia);
- HNS Database (led by Korea);
- HNS Training Manual (led by Japan);
- Regional Report on HNS Preparedness and Response (led by MERRAC Secretariat)

MERRAC organized the Expert Groups with recommendation from each MERRAC Focal Point of member states to carry out MERRAC Specific Projects efficiently. Each Expert Group was composed of experts from all the member states, who have profound professionalism in their respective fields. According to the decision of the 12th MERRAC FPM to terminate the MERRAC Specific Projects on Minimum Level of Preparedness, HNS Response Operation Guidelines and HNS database, MERRAC published the reports as MERRAC Technical Reports. Especially, based upon the results of the project on HNS database, MERRAC has established HNS database system on MERRAC website (<http://merrac.nowpap.org/>) with the relevant links to other regions or countries.



Regarding the HNS Training Manual, MERRAC submitted the document to the 10th IMO OPRC-HNS TG meeting (London, March 2010) with assistance of Japanese Delegation. In line with the agreement of the 13th MERRAC FPM, MERRAC has published the Manual for HNS Training as a MERRAC Technical Report in a hard copy, and it will be uploaded in the “Platforms for information sharing and management of OPRC/HNS-related guidance” hosted by REMPEC.

Regional report on HNS preparedness and response will be published in PDF version as a MERRAC Technical report after review by member states as well.

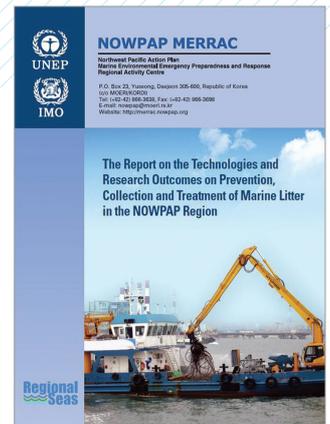
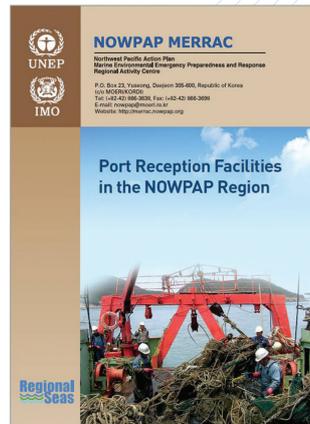


Regional Action Plan on Marine Litter (RAP MALI) implementation

In response to growing concerns related to the marine litter, NOWPAP activities have been initiated since November 2005. The first phase, called Marine Litter Activities (MALITA), was completed by the end of 2007. The overall objective of the MALITA project was to develop NOWPAP Regional Action Plan on Marine Litter (RAP MALI) in order to promote the environmental protection and sustainable development of the NOWPAP region. The second phase of NOWPAP marine litter activities is the implementation of NOWPAP RAP MALI which started in March 2008.

In accordance with the agreement of the 12th MERRAC FPM, MERRAC developed and published the two reports in PDF version as follows: 1) For the development of the Report on technologies and research outcomes on prevention, collection and treatment of marine litter, MERRAC completed the Memorandum of Understanding (MoU) between experts and institutions/organizations of the experts. The Expert Group submitted a draft report to MERRAC according to the MoU. MERRAC finalized the Report after circulation to NOWPAP member states, NOWPAP RCU and RACs. 2) For the assessment of port reception facilities, MERRAC collected the relevant information from member states and developed the report based on the information of port reception facility in member states, in accordance with the format of IMO Global Integrated Shipping Information System (GISIS, <http://gis.imo.org/Public/>). China and Russia have provided information of their port reception facilities for garbage to IMO GISIS.

These two reports are downloadable on MERRAC website (<http://merrac.nowpap.org/>)



At the 13th MERRAC FPM, it was agreed to develop a case study report on negative impacts of marine litter, and MERRAC will collect many cases of negative impacts on marine litter occurred in the NOWPAP member states in order to understand how harmful marine litter is and how it affects to the marine environment in the NOWPAP region by establishing Expert Group consisting of experts nominated by MERRAC Focal Points and/or Marine Litter Focal Points during the intersessional period after the 13th MERRAC FPM. Also, it was agreed to develop public awareness materials such as pamphlet or brochure, which explains negative impacts of marine litter in the NOWPAP region. MERRAC will also update an assessment report on port reception facilities by using the information from the IMO GISIS website, if necessary.



15th NOWPAP Intergovernmental Meeting in Moscow



The 15th NOWPAP Intergovernmental Meeting (IGM) was held in Moscow, Russia, on 16-18 November 2010 with participation of representatives of all NOWPAP member states, NOWPAP RCU and Regional Activity Centres (RACs), and other PICES and IOC WESTPAC.

The Director of MERRAC, Dr. Seong-gil Kang presented the report on the activities of MERRAC during the period of 2009-2010, including the results of the 13th MERRAC FPM and the 3rd NOWPAP DELTA-Joint Oil Spill Exercise/Forum on Sakhalin projects, and the budget and work plans for 2010/2011 biennium revised by the 13th MERRAC FPM. Also, the meeting approved the MERRAC reports for 2009-2010. Upon the request of member states, it is recommended that the oil spill exercises of MERRAC will be enhanced, taking into account importance of preparedness and response to oil pollution incidents in the NOWPAP region.

According to the decision of the 14th NOWPAP IGM, the

meeting has discussed the NOWPAP medium term strategy 2012-2017 and decided to further develop and submit it to the next IGM in close consultation with RACs during the intersessional period after the 15th NOWPAP IGM, along with NOWPAP work plan and budget for 2012-2013.

As the increase of NOWPAP Trust Fund failed to agree among member states, the meeting encouraged member states to make their utmost efforts to increase their annual contributions, and agreed that the Korea Government will prepare a draft paper on possible measures addressing future financial situation of NOWPAP until the end of this year for possible feedback from member states till March 2011, and agreed to further discuss this issue at the next Intergovernmental Meeting. The next 16th NOWPAP IGM will take place in China in 2011.

You can find out more information on NOWPAP RCU website (<http://www.nowpap.org>)

▼ 15th NOWPAP Intergovernmental Meeting, 2010



▼ Report of Director of MERRAC at IGM



MERRAC Workplan for 2011/12 biennium

| Date | Activities |
|--------------------|--|
| 24 Feb. 2011 | 6 th NOWPAP BRAVO exercise (led by Japan) |
| Apr - May. 2011 | 7 th NOWPAP BRAVO exercise (led by Korea) |
| 7-10 Jun. 2011 | 14 th MERRAC Focal Points Meeting and 6 th Competent National Authorities Meeting |
| | Intersessional work |
| 2012 | NOWPAP BRAVO exercises (led by China and Russia) |
| May - Jun. 2012 | 15 th MERRAC Focal Points Meeting and 7 th Competent National Authorities Meeting |
| Jan 2011- Dec 2012 | Implementation of specific projects - Quantitative minimum level of preparedness (June 2011) - Legislations and practice on marine pollution damage civil liability and compensation (June 2012) - Application of HNS training manual to actual training courses (June 2012) - Environmental issues related to oil spill incidents in the NOWPAP region (June 2012) - Review of the assistance procedure and system under the RCP (June 2012) - GI Programme and other specific projects on Oil and HNS issues (2010-2011) |
| Jan 2011- Dec 2012 | MERRAC activities on RAP MALI |
| 2012 (tentative) | NOWPAP DELTA-Joint Oil Spill Response Exercise |
| 2012 (tentative) | NOWPAP Expert Meeting |

MERRAC Focal Points

MERRAC warmly welcomes new MERRAC Focal Point of Russia, Mr. Evgeny BARYSHEV and also express our sincere thanks to his predecessor, Mr. Andrey V. KHAUSTOV for his invaluable support and many contributions to MERRAC activities. The updated list of the MERRAC Focal Points is as follows:

| People's Republic of China | Japan | Republic of Korea | Russian Federation |
|---|---|--|--|
| Mr. Hailiang E | Mr. Toshinobu KAWAMURA | Mr. Sang Woon KIM | Mr. Evgeny BARYSHEV |
| Director Department of Ship Safety and Pollution Prevention, China Maritime Safety Administration People's Republic of China | Director Marine Environment Protection & Disaster Prevention Division, Guard and Rescue Department, Japan Coast Guard Japan | Director Division of Marine Pollution Response Planning Korea Coast Guard Republic of Korea | Director State Marine Pollution Control, Salvage & Rescue Administration (SMPCSA) Russian Federation |

Visit MERRAC Website

MERRAC website has continuously updated (<http://merrac.nowpap.org/>). Database was established regarding the information system on the oil spill response equipment and experts, and oil and HNS spill incidents. Through the MERRAC website, information sharing as well as public awareness was facilitated.



UNEP



IMO

MERRAC Newsletter

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Where MERRAC works

The Centre was established in 2000 within Maritime & Ocean Engineering Research Institute (MOERI) / Korea Ocean Research and Development Institute (KORDI) in Daejeon, Republic of Korea.

