

**NATIONAL TRAINING COURSE ON ACCIDENTAL MARINE POLLUTION  
PREPAREDNESS AND RESPONSE FOR SUPERVISORS  
AND/OR ON SCENE COMMANDERS (OIL AND CHEMICAL SPILLS)**

**Casablanca, Morocco: 7 - 10 January 2001**

**REPORT**

**INTRODUCTION**

A national training course on preparedness and response to accidental marine pollution for Supervisors On Scene Commanders, covering both oil and chemical spills, was held in Casablanca, Morocco, between 7 – 10 January 2001. The training course was organised by Peter Hayward Associates under the supervision of REMPEC and in co-operation with the Département de l'Environnement, Morocco. Technical Co-operation Division (TCD) of the International Maritime Organization (IMO) provided financial support for the training course.

The national training course was based on the IMO OPRC Level 2 model training course but with the addition of a full day's session on the response to chemical spills. It was aimed at administrators and managers within the Moroccan administration who would be likely to act as On Scene Commanders or Supervisors in the event of marine oil or chemical spills, or experts within the administration who could be called upon to offer specialist advice or expertise. Trainees were nominated by the Département de l'Environnement from national organisations and the ports sector, all of which have responsibilities for preparedness and response under the Moroccan national contingency plan.

The duration of the training course was planned to last 5 days. However, upon arrival in Casablanca it was learned that the final day was in fact a national holiday. The Course Director and REMPEC therefore decided to re-schedule the programme to cover all the content of the course within 4 days by working longer hours, thus allowing the trainees the benefit of their national holiday.

The national training course was organized by REMPEC in accordance with the Project PR 272, financed by the Technical Co-operation Division of IMO, with a view to increasing the level of preparedness for dealing with accidental marine pollution in Arab/Mediterranean States. REMPEC was designated as implementing agency for this Project. Furthermore, it was in conformity with the work plan of REMPEC activities for the 2000-2001 period, as approved by the Eleventh Ordinary Meeting of the Contracting Parties to the Barcelona Convention, held in Malta, 27-30 October 1999.

**ORGANIZATION OF THE TRAINING COURSE**

The Environment Department, as the competent Moroccan national authority, was responsible for the selection and invitation of participants. The Moroccan administration's responsibilities also included making the necessary arrangements for the smooth running of the training course, including *inter alia* the provision of a conference room and the necessary audio-visual equipment. The arrangements were efficiently executed by Mr Mohamed Dahhou, the officer responsible for the national contingency plan within the Département de l'Environnement.

The training course was held in the Centre d' Entraînement Naval de la Marine Royale, Casablanca. This is the training centre of the Moroccan navy, and a well-equipped conference room was provided for the training course. Lunches for all participants were graciously provided by the Naval Officers' Club.

REMPEC acted as the official point of contact with the national authorities and liaised with them on the dates and venue of the training course and the identification of the appropriate participants. REMPEC also participated in the preparation of the training course programme and provided two lecturers.

Peter Hayward, Senior Partner of Peter Hayward Associates, acted as Course Director and was in charge of the overall organisation of the training course including:

- Preparing the training course programme, in close co-operation with and subject to the final approval of REMPEC.
- Identifying suitable trainers and, after approval by REMPEC, hiring and instructing external trainers.
- Arranging the travel and accommodation costs of external (ie non-REMPEC) trainers.
- Liaison with the Moroccan national authorities.
- Arranging for simultaneous interpretation into French at the training course and making the sub-contracts with the interpreters.
- The provision of course manuals for each of the trainees.

The costs of preparing the written materials, the interpretation services, as well as the fees, travel costs and DSA of the non-REMPEC lecturers, were borne by the Technical Co-operation Division of IMO and effected through the contract between REMPEC and Peter Hayward Associates. All costs related to this contract were made available by TCD under Project PR 272, budget code TC03RAB/98/208.

The training course was conducted in both French and English with simultaneous translation being provided from English into French where necessary.

A total of twenty-nine (29) participants attended the national training course. Organisations which sent representatives included the Marine Royale, the Gendarmerie Royale, the Office for the Exploitation of Ports (ODEP) and the Environment Department. Unfortunately there were no representatives from the Department of Civil Protection. The list of participants is given in **Annex 1**.

### **PROCEEDINGS OF THE TRAINING COURSE**

The objective of the training course was to instruct those who may become actively involved in the response to marine pollution incidents in Morocco in the practical elements of contingency planning and response techniques. The training course also covered important related topics, such as dealing with the media, liability and compensation, record keeping and reporting requirements, and international co-operation. The first day of the course was devoted exclusively to matters related to chemical spills. The overall objective of the course was to provide the participants with the knowledge and information required to prepare for and respond effectively to accidental marine pollution incidents in Morocco, whether from spills of oil or chemicals.

In order to achieve these objectives, Peter Hayward Associates prepared a training course programme which included 24 lectures, all of which were illustrated by various visual aids (videos, overheads, PowerPoint presentations). Practical elements in the course included three short exercises on chemicals and a half-day table-top exercise dealing with an imaginary oil spill scenario. A copy of the training course programme as prepared is reproduced in **Annex 2** (English) and as actually executed (in 4 days) in **Annex 3** (French).

The lectures were given by a team of five lecturers (listed in **Annex 4**). The training course manuals contained copies of all the overheads and PowerPoint slides used in the lecturers' presentations, at least three-quarters of the written material being in French. In addition, REMPEC and the lecturers provided French versions of various technical manuals and publications for participants. A list of the published documents distributed to the participants is at **Annex 5**.

The final day of the training course included a session on the national system for oil spill response in Morocco, made by **Captain Mohamed TAOUDI** of the Marine Royale.

**Mr Mohamed DAHOU**, representing the Département de l'Environnement, and **Capitaine de Vaisseau Driss CHAKKOUCH**, Commandant of the Centre d'Entraînement Naval, closed the training course at 18.00 h on 10 January, assisted by **Mr Darko DOMOVIC** (REMPEC) and **Mr Peter HAYWARD** (Course Director). Captain Chakkouch presented participants with numbered Certificates of Attendance which had been prepared by REMPEC (certificate numbers awarded to the participants are included in Annex 1).

## **CONCLUSIONS**

The training course was aimed at officials in the Moroccan public administration and managers in the ports and petroleum sector who could be expected to play an important role in preparing for or responding to marine pollution events in the country as On Scene Commanders or team leaders/supervisors. To a large extent the participants were of the managerial level expected, although it would have been helpful to have had some representatives from the petroleum sector and the presence of officials from the Directorate of Civil Protection.

Despite this, the participants who did attend at the invitation of the Environment Department were clearly appropriate. This is confirmed by the fact that the course evaluation questionnaire showed that 55% of the trainees considered that the information they had learned on the course would help them "very much" in their present job; 45% considered that the knowledge gained would be of some help in their present work; no participants were of the opinion that the training course was of not much relevance to their present work.

There was a high degree of active participation manifested, in particular, by the level of questions and interaction between lecturers and trainees, and by the active involvement in the exercises. The Course Director had prepared a course evaluation questionnaire, the conclusions of which are summarised in **Annex 6**. Of particular relevance is the conclusion that 70% of the trainees expressed themselves to be "very satisfied" with the overall results of the training course; the remaining 30% confirmed their overall "satisfaction" with the course. Furthermore, 95% of the trainees claimed to have learned "very much" new material during the training course.

## ANNEX 1

### LIST OF PARTICIPANTS

<u>Certificate No.</u>	<u>Name of the participant</u>	<u>Organisation</u>
1909	Colonel El Mokhtar BERNICHI	Gendarmerie Royale
1910	Cdt. Akka AHABBAR	Gendarmerie Royale
1911	C <sup>ne</sup> Hassan CHRICHI	Gendarmerie Royale
1912	C <sup>ne</sup> Rachid ABRIDI	Gendarmerie Royale
1913	Lt. Khalid OUAHBI	Gendarmerie Royale
1914	Lt. Redouane LAHBOUB	Gendarmerie Royale
1915	Lt. Ilyas DERDABI	Gendarmerie Royale
1916	Mr. Mohamed KOUHKOUH	ODEP
1917	Mr. Abdellah HADRAMI	ODEP
1918	Mr. Rachid EL LAIA	ODEP
1919	Mr. Ahmed DARIF	ODEP
1920	Mr. Bouchaïb AKKAL	ODEP
1921	C.F. Mohamed TAOUDI	Marine Royale
1922	C.F. Abdellatif RHANEMI	Marine Royale
1923	C.C. Abdeslem ASSIF	Marine Royale
1924	L.V. M'hamed HAJOUJ	Marine Royale
1925	C.C. Ahmed RIAD	Marine Royale
1926	C.C. Noureddine EL HADFI	Marine Royale
1927	C.C. Ahmida BENMASSOUD	Marine Royale
1928	L.V. Redouane DARGHAM	Marine Royale
1929	L.V. Abdelkebir BENRAMADAN	Marine Royale
1930	L.V. Mohammed CHAOUNI	Marine Royale
1931	L.V. Mohamed LAAOUINA	Marine Royale
1932	E.V., Abdelhamid ABBASSI	Marine Royale
1933	E.V., Redouane BELAHCEN	Marine Royale
1934	C.C. Mohammed EN-NABTY	Marine Royale
1935	C.V. Salah ELKHATTABI	Marine Royale
1936	Mr. Mohamed BOUGMA	Département de l' Environnement
1937	Mr. Hafid EL OUALJA	Département de l' Environnement

## ANNEX 2

### NATIONAL TRAINING COURSE ON ACCIDENTAL MARINE POLLUTION PREPAREDNESS AND RESPONSE FOR SUPERVISORS AND ON SCENE COMMANDERS (OIL AND CHEMICAL SPILLS)

Casablanca, Morocco: 7 - 11 January 2001

#### PROGRAMME (as prepared)

<u>Day 1</u>	<u>Sunday 7 January</u>	
08.30 - 09.00	Registration	
09.00 - 09.15	Opening Ceremony: Introduction to the training course	
09.15 - 09.45	Video: "Introduction to chemicals and their transport"	
09.45 - 10.10	<b>Assessing chemical hazards</b>	Stefan Micallef
10.10 - 10.30	<i>Coffee break</i>	
10.30 - 11.00	Paper exercise 1	
11.00 - 11.45	<b>Classifying chemicals</b>	Stefan Micallef
11.45 - 12.30	Paper exercise 2	
12.30 - 14.00	<i>Lunch</i>	
14.00 - 14.45	<b>Ecotoxicology and assessing impact of chemicals on the environment</b>	Stefan Micallef
14.45 - 15.30	Paper exercise 3	
15.30 - 16.15	<b>Safety at a spill site</b>	Stefan Micallef
16.15 - 16.30	Video: "Response options for chemical spills"	
<u>Day 2</u>	<u>Monday, 8 January</u>	
09.00 - 09.45	<b>Origins/sources of marine pollution</b>	Darko Domovic
09.45 - 10.15	<b>Types and properties of oils</b>	Darko Domovic
10.15 - 10.35	Video: "The Oil Spill"	
10.35 - 11.00	<i>Coffee break</i>	
11.00 - 11.45	<b>Fate and behaviour of oil. Impact of oil</b>	Thierry Jacques
11.45 - 12.30	<b>Introduction to accidental oil pollution</b>	Darko Domovic

Day 2

Monday, 8 January (cont.)

12.30 - 14.00

*Lunch*

14.00 - 14.45

**Contingency planning**

Peter Hayward

14.45 - 15.30

**Oil spill response strategies**

Thierry Jacques

15.30 - 16.15

**Sensitivity mapping for oil spill response**

Peter Hayward

Day 3

Tuesday, 9 January

09.00 - 09.45

**Containment of spilt oil**

Thierry Jacques

09.45 - 10.30

**Recovery of oil at sea**

Thierry Jacques

10.30 - 10.50

Video: "Containment and Recovery"

10.50 - 11.15

*Coffee break*

11.15 - 12.00

**Use of dispersants**

Thierry Jacques

12.00 - 12.20

Video: "The Use of Dispersants"

12.20 - 14.00

*Lunch*

14.00 - 14.45

**New strategies for oil spill response**

Thierry Jacques

14.45 - 15.45

**Shoreline protection and clean-up techniques**

Chantal Guénette

15.45 - 16.05

Video: "Shoreline Clean-up"

16.05 - 16.35

**Deactivation of response**

Chantal Guénette

Day 4

Wednesday, 10 January

09.00 - 09.45

**Storage, transportation and disposal of oily waste material**

Peter Hayward

09.45 - 10.15

**Communications and reporting**

Darko Domovic

10.15 - 11.00

**Compensation for oil pollution damage**

Chantal Guénette

11.00 - 11.30

*Coffee break*

11.30 - 12.15

**Pooling resources and international co-operation**

Darko Domovic

12.15 - 12.45

**Record keeping for compensation claims**

Chantal Guénette

Day 4

Wednesday, 10 January (cont.)

12.45 - 14.15

*Lunch*

14.15 - 14.45

**Public relations and the media**

Peter Hayward

14.45 - 15.25

Video: "The *Sea Empress* Incident: The Counter Pollution Operation"

15.25 - 16.15

**Status of the national system for preparedness and response to marine spills of oil and other harmful substances**

Captain Mohamed Taoudi

16.15 - 16.30

Introduction to the table-top exercise

Darko Domovic

Day 5

Thursday, 11 January

09.00 - 12.30

**Table-top exercise**

12.30 - 14.00

*Lunch*

14.00 - 14.30

Preparation of Groups' reports/presentations

14.30 - 15.30

Exercise wash-up

15.30 - 16.00

Close of training course  
Presentation of certificates

### ANNEX 3

## COURS NATIONAL DE FORMATION DU PERSONNEL D'ENCADREMENT ET DES COMMANDANTS SUR ZONE A LA PREPARATION A LA LUTTE ET AL LA LUTTE CONTRE LA POLLUTION MARINE ACCIDENTELLE: (DEVERSEMENTS D'HYDROCARBURES ET DE PRODUITS CHIMIQUES)

Casablanca, Maroc: 7 - 10 janvier 2001

### PROGRAMME RÉEL

1er Jour      Dimanche, le 7 janvier

08.30 - 09.00 Inscriptions

09.00 - 09.15 Cérémonie d'ouverture: Présentation du stage

09.15 - 09.45 Film: "Présentation des produits et de leur mode de transport"

09.45 - 10.10 **Evaluation des dangers suscités par les produits chimiques**  
Stefan Micallef

10.10 - 10.30 *Pause café*

10.30 - 11.00 Exercice théorique N° 1

11.00 - 11.45 **Classification des produits chimiques**                      Stefan Micallef

11.45 - 12.30 Exercice théorique N° 2

12.30 - 14.00 *Déjeuner*

14.00 - 14.45 **Ecotoxicologie et évaluation de l'impact des produits  
chimiques sur l'environnement**  
Stefan Micallef

14.45 - 15.30 Exercice théorique N° 3

15.30 - 16.15 **La sécurité dans la zone d'un déversement**                      Stefan  
Micallef

16.15 - 16.30 Film: "Les options d'intervention sur les déversements de produits  
chimiques"

16.30 - 17.00 **Groupement des ressources et coopération internationale**  
Darko Domovic





12.20 - 14.00 *Déjeuner*

14.00 - 14.45 **Nouvelles stratégies d'intervention sur les marées noires**  
Thierry Jacques

14.45 - 15.45 **Protection du rivage et techniques du nettoyage** Chantal  
Guénette

15.45 - 16.05 Film: "Le nettoyage du rivage"

16.05 - 16.35 **Cessation de l'intervention** Chantal  
Guénette



## ANNEX 4

### LIST OF LECTURERS

**Mr Peter HAYWARD**                      Course Director  
Senior Partner

Peter Hayward Associates  
10 Court Lane Gardens  
Dulwich  
London SE21 7DZ  
United Kingdom

**Dr Thierry JACQUES**

Management Unit of the North Sea Mathematical Model (MUMM)  
Royal Belgian Institute of Natural Science  
Gulledelle 100  
B-1200 Brussels  
Belgium

**Ms Chantal GUENETTE**

Technical Adviser

International Tanker Owners Pollution Federation  
Staple Hall, Stonehouse Court  
87-90 Houndsditch  
London EC3A 7AX  
United Kingdom

**Mr Darko DOMOVIC**

Technical Expert

**Dr Stefan MICALLEF**

Chemical Expert

Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea  
(REMPEC)  
Manoel Island  
Gzira GZR 03  
Malta

## **ANNEX 5**

### **LIST OF DOCUMENTS**

The following list includes only printed IMO and ITOPF documents that were distributed to the participants. In addition, the trainees' Course Manuals contained copies of all the papers produced or slide (PowerPoint) presentations presented by the lecturers on each of the lesson sessions.

OMI            Manuel sur la pollution par les hydrocarbures (Section IV).

OMI            Manuel sur la pollution chimique (Section 2).

IOPC Fund    Manuel sur les Demandes d'Indemnisation, juin 1998

## ANNEX 6

### ANALYSIS OF COURSE EVALUATION QUESTIONNAIRE

1. How did the course fulfil your expectations?

Better than expected: 40%  
More or less as expected: 60%  
Did not fulfil my expectations: 0%

2. Overall, what did you think of the quality of the lectures and course material?

	Very good	Good	Adequate	Not good enough
Lectures	50%	45%	5%	
Visual aids	60%	40%		
Handouts	65%	30%	5%	
Use of video	55%	45%		

3. Have you learned much new material during this course?

Very much: 95%  
Some: 5%  
Not much: 0%

4. Will the information you have learned help you in your present job?

Very much: 55%  
Some: 45%  
Not much: 0%

5. Did you find the exercises helpful?

Very helpful: 80%  
Of some help: 20%  
Not much help: 0%

6. Were there any other subjects you would have liked the course to cover?

- practical implementation of anti-pollution equipment;
- more information on different types of oil;
- more details on legal framework especially international maritime law;

- concrete examples of compensation payments following specific incidents;
- case studies: step by step accounts of combating operations.

7. Have you found it helpful to meet people from other administrations?

Yes: 95%

No: 5%

8. Overall, how satisfied are you with the course?

Very satisfied: 70%

Satisfied: 30%

Not very satisfied: 0%

9. Please add any additional comments below.

The following comments were made (not in any order of priority). It should, perhaps, be stressed that apart from a general feeling that there should be more training, most of the comments made below were made by single individuals. The number of comments is an indication of the depth of interest of the participants generated by the course.

- practical demonstrations of the use of equipment, eg skimmers, boom deployment (several trainees);
- longer course duration (15 days) to gain more benefit (many trainees); course programme too loaded;
- more table-top/theoretical exercises and longer time for exercises (several trainees);
- practical exercises to consolidate theoretical knowledge;
- more basic training on chemical products and oil types;
- specific focus on the Mediterranean;
- continuing training desirable;
- "the course is perfect"; "the lecturers were of the highest quality"; "the course was knowledgeably prepared ... perfect".