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FINAL REPORT

“Mediterranean PRTR Kick-off Workshop”

Alexandria, Egypt

19-20 December 2001

organized by

ICS

in collaboration with

UNEP/MAP

and the

Egyptian Environmental Affairs Agency

BACKGROUND

One of the premier goals of Subprogramme 2.1 of ICS-UNIDO, which specifically deals with Technologies for Sustainable Industrial Development, is the distribution of knowledge on decision support systems towards developing countries. In this area the Subprogramme acts as a 'knowledge collection centre' to gain expertise on general issues such as process simulation, remote sensing and geographical information systems, and to acquire skills in using the relevant information tools which implement the general ideas. The Subprogramme also acts as a prime mover to facilitate a direct action in the field of monitoring systems, risk analysis and assessment, as well as the effective transfer of technology in response to environmental problems caused by industrial activities.

In the specific area of process simulation, analysis, optimization and control, the topic has been presented and illustrated by specialists in a series of meetings and ad-hoc workshops. As follow-up of these activities, ICS started organizing several training courses with the aim of presenting the state of the art in process simulation and optimization, as well as in control system and dynamic simulation, and of providing case studies, exercises and hands-on sessions

The activity dealing with the development of a public tracking and reporting system of pollutants, known generically as Pollutant Release and Transfer Register (PRTR) as a chemical management system, is getting increasing importance throughout the Mediterranean countries. In this context, during the Meeting of the National MED POL Focal Points held in Venice, Italy in May 2001, three countries expressed their interest in the PRTR system and showed readiness for its implementation.

A PRTR is an environmental database or inventory of potentially harmful releases or transfer to air, water and soil as well as waste transported off site for treatment or disposal. In addition to collecting data for PRTR from stationary sources, PRTRs are also designed to include estimates of releases from diffuse sources such as agriculture and transport activities.

It was decided to launch the implementation of the Mediterranean PRTR pilot project in the Alexandria Branch of the Egyptian Environmental Affairs Agency (EEAA) in view of the experience of the regional branch of EEAA and the activities already carried out.

The joint project involves three partners: the Alexandria Branch of EEAA, responsible for the implementation of the project and the preparation of the report and the follow-up of activities in Alexandria; the industrial partners, who will periodically provide information on releases; UNEP/MAP in close cooperation with ICS-UNIDO, who will provide technical support to the implementation process.

Within the framework of the UNEP/MAP PRTR pilot project, it has been jointly decided to organize a Kick-off meeting for the project in Alexandria, Egypt from 19 to 20 December 2001. The main goal of the meeting was to bring together the actors of the projects and to discuss the starting point and the procedures for the project.

JUSTIFICATION

The PRTR project fits very well within the sustainable industrial development framework: the knowledge of the quality and quantity of the pollutants is a net result of a material and energy balance of the process and is the major indicator of the sustainability of an industrial process.

The development and implementation of a PRTR system adapted to national needs represents a mean for governments to track generation, release and the fate of various pollutants over time. A PRTR can therefore be an important tool in the total environment policy of a government and encouraging reporters to reduce pollution by implementation of cleaner technologies. PRTRs can be complementary to industry programmes such as ISO 14000.

PRTRs have generally these defining characteristics:

- reporting on individual chemicals
- by individual industrial facilities
- on all releases and transfers
- to all environmental media (air, water, land)
- periodically
- with consistently structured data
- entered into a computer database
- actively disseminated to the public
- with limited data held as trade secrets
- with the aim to improve environmental quality and promote cleaner technology.

OBJECTIVES

The project aims at the implementation of a PRTR system for selected chemicals, as pilot project, in one Mediterranean country. The implementation strategy falls under the on-job training system. The goals of the entire project are the following:

- 1- identification and validation of a data bank on chemicals to be used as information sources and in the reporting system of the PRTR.
- 2- quantification of releases by means of (i) monitoring campaign, (ii) using available software for process simulation and (iii) a combination of the previous options.

With these objectives in mind, the aim of the meeting in Alexandria is to perform the technical set up of the following activities:

- installation and operation of the chemical data bank;
- set up of an industrial inventory;
- installation and operation of the release quantification software;
- elaboration and operation of the monitoring programme;
- technical training definition and organization.

STRUCTURE OF THE KICK-OFF WORKSHOP

The Workshop was directed to technologists, planners, decision-makers and NGO's who are working in close contact with industry, particularly engineers, scientists and managers directly

involved in the implementation of this specific project. A strong interaction among the participants was established and active discussions on the subject took place during the meeting.

The meeting has been organized in two days according to the following programme:

First day: December 19:

- Session 1: Opening
- Session 2: Introductory presentations by UNEP/MAP, ICS-UNIDO, EEAA (PRTR previous work)
- Session 3: Presentation of industrial partners

Second day: December 20

- Session 4: Set up of the list of chemicals
- Session 5: Elaboration of the reporting system on chemical releases
- Session 6: Set up of the reporting procedure and form
- Session 7: Organization of the project implementation and follow up
- Session 8: Conclusions

During the first day the objective of the project and the objective of the Kick-off Workshop were defined and the different industrial participants presented their activities. In the second day a long discussion session took place at the end of which the participants have agreed upon the list of chemicals and the reporting system. Also the organization of the project implementation and follow up was discussed in the final part of the meeting.

RESULTS

The outputs of the meeting in Alexandria were the following:

- Presentation and discussion of data presented by the industrial participants to the project: these data will be prepared according to a template elaborated by ICS – UNIDO.
- Definition of the list of chemicals of interest to the project and identification of the chemical code to be used in the project.
- Set up of the reporting procedure and forms with the definition of the main information to be included.
- Organization of the project implementation and follow up.

CONCLUSIONS AND RECOMMENDATIONS

The establishment of the list of chemicals and the agreement on the reporting system allowed starting the full project in the right way. All the goals planned for the Kick-off meeting were achieved.

IMMEDIATE FOLLOW-UP

The immediate and medium range (2 months) activities to be carried out as follow-up of the meeting are the following:

- Set up of a Web site containing all the relevant material for the PRTR project including documents, reports, links, etc.
- Prepare a CD-ROM containing the same material and send it to the Alexandria Branch of the EEAA as soon as it is ready.
- Arrange in a final version the list of chemicals discussed during the meeting and send it back to the industries to be checked and verified.
- Prepare an electronic version of the questionnaire (form) for the industries to help them in the first stage of the reporting, before the database is available on the web. This work will be done after a description of all the fields and the relevant meaning and examples will be provided by UNEP/MAP, Athens.
- Define and arrange the training programme for the two fellows that will be trained in Trieste on (i) database technology and web data access and (ii) process simulation.

LIST OF ANNEXES

PROGRAMME

See attached Annex I.

LIST OF PARTICIPANTS

See attached Annex II.

PRESENTATIONS

See attached Annex III.

PROGRAMME

“Mediterranean PRTR Kick-off Workshop”

Alexandria, Egypt
19-20 December 2001

Wednesday, 19 December 2001

- 09:30-10:00 Registration
- 10:00-10:30 **Opening Ceremony and Welcome addresses**
- Dr. Fatma Abou Shouk, General Director, Alexandria RBO, EEAA
 - Dr. Gennaro Longo, Area Director, Earth, Environmental and Marine Sciences and Technologies, ICS-UNIDO
 - Dr. Fouad Abou Samra, MED POL Programme Officer, UNEP/MAP
 - Dr. Ibrahim Abdel-Gelil, CEO, EEAA
 - H.E. Mohamed A. El-Mahgoub, Governor of Alexandria
 - H.E. Prof. Mamdouh Riad, Minister of State for Environmental Affairs
- 10:30-11:00 *Coffee break*
- 11:00-12:00 **Introductory Presentations**
- Presentation of EEAA activities, Dr. Fatma Abou Shouk
 - Presentation of UNEP/MAP activities, Dr. Fouad Abou Samra
 - Presentation of ICS activities, Dr. Gennaro Longo
 - Presentation of the objectives of the Workshop, by Prof. M. Fermeglia
- 12:00-13:00 **Presentation of Industrial Partners**
- Abu Qir Fertilizers and Chemical Industries Co.
 - Alexandria Carbon Black Co.
- 13:00-14:00 *Lunch break*
- 14:00-15:30
- Amreya Petroleum Refining Co.
 - Egyptian Petrochemical Co.
 - El-Nasr Tanning Co.
- 15:30-17:00
- Islamic Co. for Industrial Detergents
 - Misr. Chemical Industry Co.
 - Sherif Clothing Co.

Thursday, 20 December 2001

- | | |
|-------------|---------------------------------------------------------------------------|
| 09:00-10:30 | Set up of the list of chemicals |
| 10:30-11:00 | <i>Coffee break</i> |
| 11:00-12:30 | Reporting system on chemical release |
| 12:30-14:00 | <i>Lunch break</i> |
| 14:00-15:30 | Set up of the reporting procedure and form |
| 15:30-17:00 | Project implementation and follow-up: organization and conclusions |

Annex II
LIST OF PARTICIPANTS



Cabinet of Ministers
Ministry of State for Environmental Affairs □
Egyptian Environmental Affairs Agency □
Alexandria Regional Branch Office

Environmental Development Department
Attachments: (2)

Reg. No. 6050 / /
Date: 4/12/2001

**List of participants in
the kick-off meeting of the PRTR project**

1. Participants in the opening ceremony

- * H.E. Prof. Dr. Mamdouh Riad, Minister of State for Environmental Affairs
- * H.E. Mohamed A. El-Mahgoub, Governor of Alexandria.
- * Dr. Ibrahim Abdel-Gelil, Chief Executive Officer, EEAA.
- * Mr. Sayed El-Sharkawy, Director, Regional Branches Establishment Project, EEAA.
- * Dr. Mahmoud Fahmy Abdel-Razek, Chairman, Misr Chemical Industry Co.
- * Eng. Mohamed Afifi, Chairman, Amreya Petroleum Refining Co.
- * Eng. Mohamed M. E. Ammar, Chairman, El-Nasr Tanning Co.
- * Dr. Abbas Anwar, Chairman, ASPEC Co for petrochemicals.

1.1 Local Media

- * Ms. Maha Abd El-Tawab, Director, Channel 5, Alexandria TV.
- * Mr. Farouk Abd El-Moneim, Editor Al-Akhbar newspaper.

1.2 Non-Governmental Organizations

- * Mr. Abd El-Aziz El-Gendy, Head of friends of Environment Association.
- * Mr. Mohamed Dawood, General Egyptian Association for Environmental and Social Protection and Information Technology.

1.3 Alexandria Governorate:

- * Mr. Fathy Mohamed Hassan, Director Environmental Management Unit, Alexandria Governorate.

2. Participants in the workshop, EEAA Headquarter:

1. Dr. Ahmed Gamal, Head of the Environmental Quality Sector, EEAA.
2. Dr. Ahmed Aboul-Seoud, Director of the Information and Environmental Monitoring Program, EEAA.

3. Dr. Nefissa Aboul-Seoud, General Director, Dept. of Hazardous Material and Waste, EEAA.
4. Eng. Mohamed Kamal, Supervisor of the Central Dept. for Information and Environmental Awareness. , EEAA.
5. Dr. Moussa Ibrahim, Head of the Information and Computer Central Dept., EEAA.
6. Yehia El-Mahgary, Expert at the Environmental Pollution Abatement Project.
7. Dr. Mohamed El-Zarka, Director of the Environment Unit, Social Fund for Development; EEAA consultant.
8. Captain Mahmoud Ismail, EEAA.

2.1 Local Media

9. Mr.Wagdi Riad, Editor, Al-Ahram Newspaper.

2.2 Alexandria University

10. Prof. Dr. Mohamed El-Raey, Dean of the Institute of Graduate Studies and Research, Alexandria University.
11. Prof. Dr. Mohamed Waguih Badawi, Faculty of Engineering, Alexandria University
12. Prof. Dr. Mohamed Gaber, Faculty of Engineering, Alexandria University
13. Prof. Dr. Ahmed Hossam El-Deen, Prof.Environmental Health Department, High Institute of Public Health, Alexandria University; Secretary General of the Environmental and Industrial Association.

2.3 Participants From Alexandria Regional Branch Office (RBO), EEAA:

14. Dr. Fatma Abou Shouk, General Director, Alexandria Regional, EEAA.
15. Eng. Mohamed Sherif Mostafa, GIS Specialist, Alexandria RBO, EEAA.
16. Ch. Anwar Sarwat, Supervisor, Environmental Development Dept., Alexandria RBO, EEAA.
17. Ch. Essam Hashem, Environmental Researcher, Environmental Development Dept., Alexandria RBO, EEAA.
18. Ch. Ghada Abdel-Moneim, Environmental Researcher, Environmental Development Dept., Alexandria RBO, EEAA.
19. Ch. Hoda Mostafa, Environmental Quality Dept., Alexandria RBO, EEAA.
20. Ch. Mohamed Ismaiel ,Environmental Quality Dept., Alexandria RBO, EEAA.

21. Eng. Mostafa Othman, Environmental Monitoring Lab, Alexandria RBO, EEAA.
22. Ch. Sameh Reyad, Environmental Monitoring Lab, Alexandria RBO, EEAA.
23. Ch. Tarek M. Nasser, Environmental Monitoring Lab, Alexandria RBO, EEAA.
24. Dr. Samia Massoud, Environmental Consultant, EEAA.

2.4 Participants from the Industrial Establishments

25. Ch. Ibrahim Abdel-Hakim, Environmental Management Responsible, Misr Chemical Industry Co.
26. Ch. Bayoumy Kahla, General Director of the Dept. of Safety, Occupational Health and Environment, Egyptian Petrochemical Co.
27. Eng. Abdel Kader Abdel Ghany, General Director of the Dept. of Utilities, Egyptian Petrochemical Co.
28. Eng. Atef El-Oshy, Vice-Director General for Production Maintenance Affairs, Alexandria Carbon Black Co.
29. Ch. Taher A. Abdel-Raouf, General Director, Safety and Environmental Protection Dept., Amreya Petroleum Refining Co.
30. Eng. Bayoumi M. El-Ghor, Assistant General Director, Safety and Environmental protection Dept., Amreya Petroleum Refining Co.
31. Ch. Yehya Zaccaria Mohamed, Director of Environmental Protection Dept., Amreya Petroleum Refining Co.
32. Eng. Abdel-Aziz A. Kotb, General Director, Research and Quality Control Dept., El-Nasr Tanning Co.
33. Mr. Samir El-Salahy, Head of the Chemical Sector, Abu Qir Fertilizers and Chemical Industries Co.
34. Ch. Khaled A. K. Khorshed, Head of Abu Qir Lab, Abu Qir Fertilizers and Chemical Industries Co.
35. Mr. Sherif K. Negm, Administrative Manager, Sherif Clothing Co.
36. Ch. Tamer El-Gioushy, Dyeing House Director, Sherif Clothing Co.
37. Ch. Fahim Hamed Ibrahim, Quality Control & Research Dept., Islamia Co. for Industrial Detergents.

Observers

38. Ms. Reem Abd Rabboh, Expert from Syria.

Others:

- * Dr. Assem Barakat, Faculty of Science, Alexandria University.
- * Ms. Dalia Abd El- Moneim, General Director, Human Resources Dept., Alexandria Carbon Black Co.
- * Mr. Ahmed Saleh, Egyptian Association for Building Services.
- * Mr. Hassan Moawad, Radio News.
- * Dr. Manal Mahmoud El-Naggar, Alexandria University.
- * Dr. Ahdy El- Sayed Khaleel, Agriculture waste Consultant.
- * Shahd Helmy, Radio of Alexandria
- * Aly El-Baroudy, Journalist.
- * Hossam Yousef Mohamed, Journalist, Al-Akhbar International newspaper
- * Samira Abd El-Salam, Journalist, Watany newspaper