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1. ミニッツ（合同評価報告書）

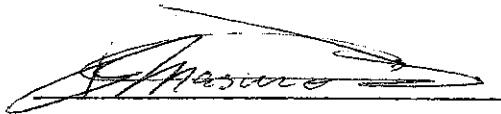
Minutes of Meeting
Between
The Egyptian Mid-Term Evaluation Team
And
The Japanese Mid-Term Evaluation Team
On
The Regional Environmental Management Improvement Project
In
The Arab Republic of Egypt

The Japanese Mid-Term Evaluation Team (hereinafter referred to as 'the Japanese Team'), organized by Japan International Cooperation Agency (hereinafter referred to as 'JICA') and headed by Mr. Kiyoshi Masumoto, visited the Arab Republic of Egypt (hereinafter referred to as 'Egypt') from June 11 to July 4, for the purpose of conducting the joint mid-term evaluation on the Regional Environmental Management Improvement Project (hereinafter referred to as 'the Project') on the basis of the Record of Discussions signed on October 31, 2005.

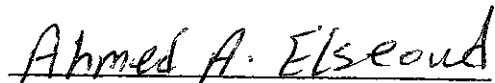
During its stay in Egypt, the Japanese Team had a series of discussions and exchanged views with the Egyptian Mid-Term Evaluation Team (hereinafter referred to as 'the Egyptian Team') headed by Eng. Ahmad Abou Elseoud.

As a result of discussions, the Egyptian Team and the Japanese Team mutually agreed upon the Mid-Term Evaluation Report and Revised PDM / PO attached as annexes.

Cairo, 4 July, 2007



Mr. Kiyoshi Masumoto
Leader
Japanese Mid-Term Evaluation Team
Japan International Cooperation Agency
(JICA)



Mr. Ahmed Abou El Seoud Ahmed
Project Director
Under secretary of Central
Department of Air Quality and Noise
The Egyptian Environmental Affairs
Agency (EEAA)

Appendix I The Mid-Term Evaluation Report

**THE MID-TERM EVALUATION REPORT
ON
REGIONAL ENVIRONMENT MANAGEMENT IMPROVEMENT
PROJECT IN THE ARAB REPUBLIC OF EGYPT**

Cairo, July 4, 2007

Mid-Term Evaluation Team

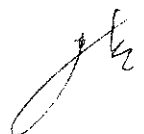
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Abbreviations and Acronyms

A	AlexRBO	Alexandria Regional Branch Office
	AQD	Air Quality Department
	AQM	Air Quality Monitoring
	AQI	Air Quality Index
B	BAU	Business as usual
	BD	Basic Design
	BTEX	Benzene, Toluene, Ethylene, and Xylene
C	CA	Chief Advisor
	CAIP	Cairo Air Improvement Project
	CC	Coordination Committee
	CCC	Cairo Central Center, EQS
	CDBA	Central Department of Branch Affairs, EEAA
	CDCEA	Central Department for Communication and Environmental Awareness, EEAA
	CIDA	Canadian International Development Agency
	CMB	Chemical Mass Balance (Method)
	C/P	Counterpart Personnel
D	DANIDA	Danish International Development Assistance
E	EEAA	Egyptian Environmental Affairs Agency
	EIA	Environmental Impact Assessment
	EMD	Environmental Management Department, RBO
	EMG	Environmental Management in the Governorates
	EMS	Environmental Management Sector, EEAA
	EMTP	Environmental Monitoring Training Center Project
	EMTP-FU	Environmental Monitoring Training Center Project (Follow-up)
	EMU	Environmental Management Unit, Governorates
	EPAP	Egyptian Pollution Abatement Project
	EPRI	Egyptian Petroleum Research Institute
	EQD	Environmental Quality Department, RBO
	EQS	Environmental Quality Sector, EEAA
	ESP	Environmental Sector Programme
	E/N	Exchange of Notes
F	FGM	Flue Gas Measurement
	FT-IR	Fourier Transform Infrared Spectrophotometer
	FY	Fiscal Year
G	GC	Gas Chromatograph
	GC-MS	Gas Chromatograph-Mass Spectrometer
	GC-FID	Gas Chromatograph-Flame Ionization Detector
	GCRBO	Greater Cairo RBO
	GDP	Gross Domestic Product
	GDT	General Department for Training (in CDCEA)
	GDME&E	General Directorate of Media and Environmental Education
	GEAP	Governorate Environmental Action Plan
	GIS	Geographical Information System
	GNP	Gross National Product
	GOE	Government of the Arab Republic of Egypt
I	ISOS	Identification System of Spilled Oil Sources
J	JBIC	Japan Bank for International Cooperation
	JCC	Joint Coordinating Committee
	JICA	Japan International Cooperation Agency
	JIS	Japanese Industrial Standards
L	LE	Egyptian Pound
M	M/M	Minutes of Meeting

AA. 

	MNR	Mansura
N	NEAP	National Environmental Action Plan
	NGOs	Nongovernmental Organizations
	NOx	Nitrogen Oxides
	NRC	National Research Center
O	ODA	Official Development Assistance
	OJT	On the Job Training
	O/M	Operation and Maintenance
P	PAHs	Poly-cyclic Aromatic Hydrocarbons
	PCB	Polychlorinated Biphenyl
	PCM	Project Cycle Management
	PDM	Project Design Matrix
	PM	Particle Matter
	PO	Plan of Operation
	POPs	Persistent Organic Pollutants
	PVC	Polyvinyl Chloride
R	RBOs	Regional Branch Offices
	R/D	Record of Discussions
S	SOx	Sulfur Oxides
	SPM	Suspended Particle Matter
	SRBA	Sector for Regional Branches Affairs (in EEAA)
T	TA	Technical Assistance
	TNA	Training Needs Analysis
	TNT	Tanta
	TOR	Terms of Reference
	TOT	Training of Trainers
	TSP	Total Suspended Particles
U	UF	Fluorescence Spectroscopy
	UNEP	United Nations Environment Programme
	USAID	The United States Agency for International Development
	UV-VIS	Ultraviolet-Visible Spectrophotometer
V	VIS	Vehicle Inventory Survey
	VOCs	Volatile Organic Compound
W	WB	World Bank
	WG	Working Group

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1. INTRODUCTION

1-1 Objectives of the Evaluation

The evaluation activities were performed with the following objectives:

- (1) To exchange opinions with counterparts in order to assess the present situations, including achievements, according to the project plan
- (2) To evaluate based on the Five Evaluation Criteria (Relevance, Effectiveness, Efficiency, Impact and Sustainability)
- (3) To discuss together with Egyptian counterparts based on the evaluation and make necessary decisions, including revision of PDM for the remaining period of the project
- (4) To sign on Minutes of Meeting attached with the Evaluation Report

1-2 Method of the Evaluation

The Evaluation Team (hereinafter referred to as "the Team") conducted surveys by questionnaires and interviewed the counterpart personnel (herein after referred to as "C/Ps"), and the Japanese experts as well as those officials concerned with the Project. The Team also made the field visit to the RBOs and other project sites. The Team analyzed and evaluated the Project from the viewpoints of evaluation criteria according to the method of Project Cycle Management (PCM).

The Evaluation Team reviewed all activities and achievement, and evaluated the Project based on the following five criteria:

(1) Relevance:

The extent to which the Project Purpose and Overall Goal are consistent with the government development policy of Egypt as well as the development assistant policy of Japan, and needs of beneficiaries.

(2) Effectiveness:

The extent to which the Project has achieved its purpose, clarifying the relationship between the Project Purpose and Outputs.

(3) Efficiency:

The extent to how economically resources/inputs (funds, expertise, time, etc.) are converted to results/output with particular focus on the relationship between inputs and outputs in terms of timing, quantity and quality.

(4) Impact:

Project effect on the surrounding environment in terms of technical, socio-economic, cultural, institutional and environmental factors. Project impacts are cross-tallied according to positive or negative effects.

(5) Sustainability

Sustainability of the Project is assessed from the standpoint of organizational, financial and technical aspects, by examining the extent to what the achievements of the Project will be sustained or expanded after the assistance is completed.

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1-3 Members of the Evaluation Team

<Egyptian side>

1	Eng. Ahmed Abou El Soeud	Project Director WG6 Leader	Undersecretary, Air and Noise Pollution Department, EEAA
2	Ms. Kawser Hefny	WG1 Leader	Deputy Manager, Air Quality Dept., and Chief of CCC, EQS
3	Ms. Laila El Khouli	WG2 Leader	General Director, Suez RBO
4	Dr. Hoda Elshayeb	WG3 Leader	General Director, GDT
5	Mr. Hussein Emam	WG3 Sub-Leader	GDT
6	Ms. Eng. Hoda Mostafa	WG4 Leader	Director of the Lab. Alex RBO
7	Ms. Elham Rafaat	CC1 Leader	Director, Hazardous Substance Dept. EMS
8	Mr. Fouad Megahed	WG5 Leader	General Director, Public Awareness Dept., CDCEA
9	Eng. Sayed Mostafa	CC2	SRBA
10	Ms. Heba M. Hasaanein	Assistant Project Director	International Relation Department, EEAA

<Japanese side>

1	Mr. Kiyoshi Masumoto	Leader	Director, Group II, Global Environment Dept. JICA
2	Mr. Hiromi Chihara	Environmental Management	Senior Advisor, Institute for International Cooperation, JICA
3	Ms. Eriko Tamura	Cooperation Planning	Environmental Management Team II, Group II, Global Environment Dept. JICA
4	Ms. Shinobu Mamiya	Evaluation Analysis	Consultant, Global Link Management
5	Mr. Alaa El-din Hassan Moussa	Evaluation Analysis	Evaluation Advisor JICA Egypt Office

1-4 Schedule of the Evaluation

Date		Schedule	
10/Jun.	Sun		(Ms.Mamiya) Departure from Japan
11/Jun.	Mon		(Ms.Mamiya) Arrival at Egypt
12/Jun.	Tue	12:00	Meeting with JICA Egypt, Expert Team. Courtesy call and Orientation Meeting w/ key C/Ps of EEAA(Eng. Ahmed, Ms. Heba, Ms Kawser, representative of SRBA, Dr. Hoda (or Ms. Laila), Mr. Fouad, and Ms. Elham) Collection of data/ information from Expert
13/Jun.	Wed		Interview Meeting with Suez RBO
14/Jun.	Thu		Interview and Meeting with GC RBO
15/Jun.	Fri		Interpretation of data and information/Data Analysis

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16/Jun.	Sat		Interpretation of data and information/Data Analysis
17/Jun.	Sun	10:00 12:00	Meeting with WG1 Meeting with WG6
18/Jun.	Mon	10:00 12:00	Interview with Donors (DANIDA) Meeting with CC1 -> Move to Alexandria
19/Jun.	Tue		Meeting with Alex RBO -> Move to Cairo
20/Jun.	Wed	11:00 13:00	Meeting with WG3 Meeting with CC2
21/Jun.	Thu	10:00	Meeting with WG5 Preparation for Workshop
22/Jun.	Fri		Interpretation of data and information/Data analysis (Mr. Masumoto) Departure from Japan
23/Jun.	Sat		(Mr. Masumoto) Arrival at Egypt (Ms. Tamura) Departure from Israel, Arrival at Egypt Interpretation of data and information/Data analysis Preparation of Workshop
24/Jun.	Sun	9:30 11:00 14:00 15:00	Meeting with JICA Egypt Courtesy call to EOJ Meeting with Project Director and Assistant Project Director Meeting w/ Expert Team
25/Jun.	Mon		Evaluation Workshop with key C/Ps of EEAA/ RBOs • Presentation on REMIP activities by key C/Ps of EEAA/ RBOs • Review of the Achievement of activities by WG/CC
26/Jun.	Tue		Evaluation Workshop with key C/Ps of EEAA/ RBOs • Problem Identification • Discussion for countermeasures
27/Jun.	Wed	12:30	Inspection/ fact-finding visit to GC RBO
28/Jun.	Thu	10:00 12:00	Discussion/ Evaluation on achievements of CC1 Discussion/ Evaluation on achievements of CC2, WG2 (Mr. Chihara) Departure from Japan
29/Jun.	Fri		(Mr. Chihara) Arrival at Egypt Preparation of the draft of the Evaluation Report
30/Jun.	Sat		Preparation of the draft of the Evaluation Report
1/Jul.	Sun	9:30 11:00 12:00 13:00	Discussion/ Evaluation on achievements of WG6 Discussion/ Evaluation on achievements of WG3 Discussion/ Evaluation on achievements of WG5 Discussion/ Evaluation on achievements of WG1
2/Jul.	Mon	10:00 11:00	Discussion/ Evaluation on achievements of WG4 Joint Preparation of Evaluation Report
3/Jul.	Tue		Preparation of Evaluation Report
4/Jul.	Wed		Signing on Minutes of Meeting and Evaluation Report Reporting to JICA Egypt and EOJ Departure from Egypt
5/Jul.	Thu		Arrival at Japan

2. OUTLINES OF THE PROJECT

2-1 Background of the Project

The executive statutes (promulgation in 1995) based on the Environment Law No.4 /1994 have been enforced completely in 1998. The Egyptian Environmental Affairs Agency (EEAA) has set up Cairo Central Center (CCC) at central level and eight (8) Regional Branch Offices (RBOs) as the agency branch local offices, which act roles of monitoring environmental affairs and sources of pollutants in order to strengthen the enforcement of the Environment Law. The Government of Japan (GOJ) through Japan International Cooperation Agency (JICA) provided the technical support in the form of technical

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cooperation projects, i.e. the Environmental Monitoring Training Center Project (EMTP) and its follow-up project (EMTP-FU), from August 1997 to October 2004 to develop the capacities of EEAA staff in environmental analytical and monitoring fields. Besides, the GOJ provided the fundamental and also advanced analytical laboratory equipment to CCC and RBOs on the grant basis.

While EEAA presently has possessed the basic environmental analytical and monitoring technologies through the previous cooperation projects, EEAA has not yet completely acquired the sufficient level of technologies for proposing countermeasures against the existing regional environmental issues. Under these circumstances, the Government of Egypt (GOE) requested the new project for the purpose of the capacity development in environmental management based on the technical achievements obtained through EMTP and EMTP-FU.

According to the request above, the JICA dispatched the 1st and the 2nd Preliminary Study Mission to Egypt in December 2004 and March 2005 respectively. Based on the result of the preliminary studies, the both sides agreed on the contents of the Regional Environmental Management Improvement Project (REMIP) and signed on the Record of Discussions (R/D) on October 31, 2005, which stipulated the framework of the project. The project was started from November 2005.

2-2 Objective of the Project

The expected Overall Goal, Project Purpose and Outputs written in the original PDM for REMIP are as follows:

Overall Goal:

Egyptian Environmental Affairs Agency (EEAA) and its Regional Branch Offices (RBOs) together with other competent stakeholders become capable of evaluating environmental situations, identifying the problems, defining the causes of such problems, acknowledging possible solutions, and implementing countermeasures through raising the environmental awareness of EMUs, enterprises, NGOs, and citizens.

Project Purpose:

EEAA and its RBOs are enhanced on the capability of managing environmental data and information, suggesting countermeasures through On-the-Job Training.

Outputs:

1. Staff of EQS and EQD of RBOs becomes capable of proposing countermeasures against environmental pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted.
2. Staff of EQS and EMS of EEAA, and EQDs and EMDs of RBOs becomes capable of designing and identifying hazardous substances, compiling the data and information, and assessing their risks.
3. Staff of CDCEA becomes capable of planning, designing, and implementing trainings within EEAA based on the information provided by all other relevant departments/organizations.
4. EEAA and its RBOs become capable of raising public awareness to EMUs, enterprises, NGOs, and citizens.

Through the discussion on the Evaluation Workshop held on 25th and 26th June 2007, the C/Ps and the Evaluation Team found that the modification of Outputs in PDM, based on the work plans utilized in REMIP would be necessary for the smooth monitoring of the project activities and agreed to use the modified Outputs shown below for monitoring after this Mid-Term Evaluation Study.

Modified Outputs:

1. EQS of EEAA and EQDs of RBOs become capable of proposing countermeasures against air pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted. (WG1)
2. Suez RBO becomes capable of proposing countermeasures against oil pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted.(WG2)
3. EQS and EMS of EEAA, and EQDs and EMDs of RBOs become capable of identifying hazardous substances, compiling the data and information, and identifying their risks.(CC1)
4. CDCEA(GDT) of EEAA becomes capable of planning, designing, and implementing trainings within EEAA based on the information provided by all other relevant departments/organizations.(WG3)
5. EQD and EMD of Alex RBO become capable of proposing Production Process Improvement as well as the Pollution Abatement for industries/factories based on the data and information collected and interpreted.(WG4)
6. EEAA and concerned RBOs become capable of raising public awareness to EMUs, enterprises, NGOs, and citizens.(WG5)
7. AQD and GDME&E of EEAA become capable of disseminating the environmental information to the public by effectively utilizing the Real-Time Air Monitoring Station with Display. (WG6)
8. SRBA of EEAA and concerned RBOs become capable of enhancing their capacities by mutual interaction through CC2 mechanism.(CC2)

2-3 Project Framework

See ANNEX 8 (Conceptual Diagram of REMIP/JICA).

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3. PROGRESS OF THE PROJECT

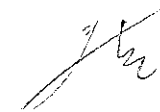
The Team reviewed the progress of the Project in accordance with the modified PDM. (PDMI)

3-1 Progress of Activities

Overall, some delays in progress of activities have been observed. The different interpretation of project concepts and procedures by both Egyptian and Japanese sides caused the delays in project implementation in the first year. Some planned activities needed to be rescheduled and work plan of each working group /coordination committee (WG/CC) required modification. However, after the consensus was made in each WG/CC, the progress of activities has been accelerated and steady progress has now been observed.

Progress of activities has been examined at the Evaluation Workshop by those representing each WG/CC according to their work plans. Activities carried out up to the Mid-Term Evaluation are summarized as follows:


Activities		Current Progress
Output 1: EQS of EEAA and EQDs of RBOs become capable of proposing countermeasures against air pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted.(WG1)		
1-1	To enhance the capability of making emission inventories and analyzing emission loads at the selected areas.	According to the self-evaluation at Evaluation Workshop, activities have been progressed as planned in general except (1-1-1) in which some constraints were raised. Activities (1-1-4) and (1-1-7) will be carried out in the latter half of project period.
1-1-1	Conduct Stationary Inventory Survey and database	
1-1-2	Conduct Vehicle Inventory Survey	
1-1-3	Conduct Survey of Present Rice Straw Burning Pattern	
1-1-4	Conduct Survey on Other Surface Emission Inventory	
1-1-5	Conduct Flue Gas Measurements	
1-1-6	Conduct Rice Straw Burning Experiment	
1-1-7	Investigate Emission Factors	
1-2	To enhance the capability of collecting data related to ambient air quality at sites.	The data collection has been progressed as planned.
1-2-1	Collect Past Monitor Record (Two years)	
1-2-2	Collect Past Measurements on Lead, EPAP programme	
1-3	To monitor air quality of regional hot spots with passive samplers in Nile delta area and the Greater Cairo.	Integrated Passive Sample Measurements were conducted by three RBOs. Tanta and Mansura RBOs have achieved a great deal. It is expected to improve the achievement of GC RBO.
1-3-1	Conduct Four Season's Integrated Passive Sampling Measurements and one extra during the black smoke period in GCRBO, TNT and MNR.	
1-4	To enhance the capability of interpreting and appreciate overall ambient air quality at sites.	Activities are slightly delayed. Many discussion were conducted to clarify the contents of activities.
1-4-1	To analyze the data of all pollutants on SOx NOx, TSP measured in the activities 1-2-1, 1-2-2 and 1-3-1 as OJT.	
1-5	To develop the tool of preparing the countermeasures against air pollutions.	Activities have not yet started. They are scheduled to start from the early July, 2007.
1-5-1	Conduct Overall Load Analysis	
1-5-2	Conduct Simulation Model Development	
1-6	To implement On-the-Job Training for proposing countermeasure plan against air pollution	Activities are scheduled at the end of the project period when the countermeasures are to be prepared and examined. The final outcome will be shared at the workshop.
1-6-1	Conduct OJT Training on Methodology for Countermeasure Preparation	
1-6-2	Conduct OJT Training and workshop on Analysis of Survey Results	

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Output 2: Suez RBO becomes capable of proposing countermeasures against oil pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted. (WG2)		
2-1	To implement On-the-Job Training for proposing countermeasure plan for reducing oil pollution risk in Suez region.	Equipment was received at April 2006 and activities were progressed steadily. Baseline survey has been progressed as planned.
2-1-1	<Setup and initiation of the working group> Organize WG2 for oil pollution program. Discuss the basic policy and strategy of the WG2's activities.	Three workshops for inventory survey capacity building for EMD taskforces were done.
2-1-2	<Baseline data survey> Collect data/information on the current situation of oil pollution issues in Suez Region and share them among group members.	Crude oil & derivatives inventory survey database are being built.
2-1-3	<Problem identification on present oil pollution issues> Identify problems in present management systems of oil pollution.	Inventory survey by Suez RBO has almost been finalized.
2-1-4	<Inventory survey of oil pollution sources> Make the inventory and clarify possible oil pollution sources.	As for the activity (2-1-3) and (2-1-4), some delays have been observed.
2-1-5	<Examination of the countermeasures and evaluation of their effect> Formulate the countermeasures against oil pollution issues. Evaluate the countermeasures against oil pollution issues.	Activities from (2-1-5) through (2-1-8) are scheduled to start at the end of June, 2007.
2-1-6	<Preparation of recommendation report> Recommend integrated countermeasures against oil pollution issues in the Suez Region.	
2-1-7	<Seminar of presentation of the OJT results> Share the results of OJTs on the countermeasure formulation and the fingerprint analysis technology in the seminar.	
2-1-8	<Preparation of data book and dissemination of WG2 activities' results> Make the data book for all results generated from WG2 activities. Disseminate the results of WG2 activities to the public, reporting the countermeasure plan in State of Environment.	
2-2	To implement On-the-Job training dealing with oil fingerprint analysis.	Several technical trainings were conducted, and their evaluation and skill needs assessment were done.
2-2-1	<Training program for oil fingerprint analysis and identification system of oil pollution sources (ISOS)> Prepare the training program for fingerprint analysis. Discuss basic scheme and methodology for identifying oil pollution sources (ISOS).	Preparation for countermeasure plan for Northern Suez Gulf Region is in progress.
2-2-2	<Discussion of fingerprint data collection> Discuss and make the plan for collection concerning fingerprint data of oils.	
2-2-3	<Technical Training of fingerprint analysis> Hold the 1st technical training of fingerprint analysis and data evaluation to carry out the identification of oil pollution sources. Hold the 2nd technical training to supplement the 1st technical training.	Activities (2-2-3) and (2-2-4) will be started after July, 2007.
2-2-4	<Measuring and compiling of oil fingerprint data> Collect crude oils to be analyzed. Conduct fingerprint analysis of crude oils and furnish the database of fingerprint data.	
Output 3: EQS and EMS of EEAA, and EQDs and EMDs of RBOs become capable of identifying hazardous substances, compiling the data and information, and identifying their risks.(CC1)		
3-1	To establish committees among hazardous substances department and stakeholders	CC1 started the activities dealing with PCBs for the first stage. PAHs and heavy metals

3-2	To collect information to identify hazardous chemical substances in order to implement surveys for preparation of inventory, monitoring and treatment	(Cd, Cr) will be focused on the second stage which will start from Sept. 2007 Baseline survey on PCBs has been carried out as planned.
3-2-1	To collect existing research and monitoring data on PCBs	
3-2-2	To collect existing research and monitoring data on PAHs	
3-2-3	To collect existing research and monitoring data on heavy metals (Cd, Cr)	
3-3	To implement surveys for preparation of inventories and to identify potential contaminated sites	Inventory survey was conducted to identify potential contaminated sites for PCBs.
3-3-1	To implement surveys on PCBs	
3-3-2	To implement surveys on PAHs	
3-3-3	To implement surveys on heavy metals (Cd, Cr)	
3-4	To implement On-the-Job Training for sampling and analyzing hazardous chemical substances, monitoring and interpreting of monitoring data, and proposing counter measures	Training was conducted for sampling and analyzing PCBs.
3-4-1	To implement On-the-Job Training on PCBs	
3-4-2	To implement On-the-Job Training on PAHs	
3-5	To share information through coordination committee with other ministries, institutions, universities, etc. related to hazardous chemical substance management	With the collaboration of other stakeholders, monitoring and analysis on polluted sites were done for PCBs.
3-5-1	To prepare a report and to share information on PCBs	
3-5-2	To prepare a report and to share information on PAHs	
3-5-3	To prepare a report and to share information on heavy metals (Cd, Cr)	
3-6	To hold seminar(s) on monitoring of hazardous chemical substances and countermeasures such as best available technologies of handling hazardous chemical substances	A seminar was done to monitor the PCBs and reports were prepared.
3-6-1	To hold a seminar for discussion about existing condition of PCBs pollution, possible pollution sources and countermeasures on the problem with relevant stakeholders	
3-6-2	To hold a seminar for discussion about existing condition of PAHs pollution, possible pollution sources and countermeasures on the problem with relevant stakeholders	
3-6-3	To hold a seminar for discussion about existing condition of heavy metals (Cd,Cr) pollution, possible pollution sources and countermeasures on the problem with relevant stakeholders	
3-7	To hold a seminar (Environmental Monitoring of hazardous chemical substances in Arab Countries) hosted by Egypt (EEAA)	
3-8	To establish a database to be used for PCBs /PAHs/heavy metals (Cd, Cr)	Database formulation using the existing database will be included as REMIP activities.
3-8-1	To make a data entry of D.B of PCBs	
3-8-2	To make a data entry of D.B for PAHs	
3-8-3	To make a data entry of D.B. for heavy metals (Cd, Cr)	
3-9	To prepare guidelines for hazardous substances management including recommendation to strengthen the institutional system and to identify the risks.	Report preparation with management recommendations will be made at the end.
Output 4: GDCEA(GDT) of EEAA becomes capable of planning, designing, and implementing trainings within EEAA based on the information provided by all other relevant departments /organizations.(WG3)		
4-1	To register all courses of staff trainings of departments within EEAA including RBOs	Current training courses in EEAA/RBOs were reviewed as planned.
4-1-1	Review the current training courses	


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4-2	To discuss and summarize needs of training with RBOs and departments of EEAA	In the process of conducting the Training Needs Analysis, the format and the scope of analysis were revised. Questionnaires for Training Needs Analysis (TNA) were completed and the analysis and data input are in progress.
4-2-1	Review mandates and required skills	
4-2-2	Conduct Training Needs Analysis (TNA)	
4-3	To advise specific courses to be participated in by RBOs and EEAA staff	Preliminary planning of training courses will be conducted shortly.
4-4	To administer and implement training courses, in correspondence with other project activities. To prepare and compile materials for training courses	Implementation of training courses based on the plan will be started on November, 2007.
4-4-1	Practice trainings under REMIP	Upgrading of database was discussed. It was found that the existing database was not efficient through the discussion.
4-4-2	Plan the preliminary training courses	
4-4-3	Discuss on the database for training	
4-4-4	Implement the training course based on the plan	
4-5	To make feedback system of final evaluation of training participants to be reflected on the course program.	Activities under (4-5) will be carried out as planned.
4-5-1	Revise the training plan	
4-5-2	Continue the training	
4-5-3	Finalize the procedure of management of training courses	
Output 5: EQD and EMD of Alex RBO become capable of proposing Production Process Improvement as well as the Pollution Abatement for industries/factories based on the data and information collected and interpreted.(WG4)		
5-1	To collect information on industrial pollution abatement technologies including process improvements for compiling as knowledge basis at selected industrial area(s) to use for making factory inspection manuals/ guidelines for inspectors of RBOs and EEAA, and for holding seminar(s) to introduce and disseminate some successful cases of introductions of pollution abatement technologies for factories.	Collection of information on overview of industrial sector in the Alexandria area, inventory of petroleum-related and petrochemical in Alexandria were completed. Final report for baseline survey was completed. Ten companies were selected for the interviews. Survey checklist designed by WG4 was used for the interviews. Interviews for selected companies were completed. Seminar is to be held in Jan. 2008 to disseminate successful cases of pollution abatement technology for petroleum-related industry.
5-1-1	To set up Working Group 4 (WG4) for Production Process Improvement Guidance	
5-1-2	To collect baseline information of industrial sector of Alexandria, carry out inventory for petroleum-related, petrochemical and cement industry, and to compile the information into a report.	
5-1-3	To implement training and instruction of for pollution abatement and process improvement for petroleum-related, petrochemical and cement industry.	
5-1-4	To implement factory interview surveys for collecting information of planned project to adopt pollution abatement technologies by factories themselves and proposing possible new measures for pollution abatement on factories	
5-1-5	To prepare a report of best practices and recommendations for the industries.	
5-1-6	To hold a seminar to exchange information of pollution abatement technologies among relevant stakeholders to adopt pollution abatement technologies	
5-2	To implement OJT dealing with the factory inspections of RBOs staffs for reflecting those experiences to prepare a new inspection manual.	On the Job Training was conducted in the form of lecture and sampling of BTEX and solvent extraction for the 1 st phase. 2 nd Phase training included the analysis by GC-FID, quality assurance /quality control, data interpretation and evaluation.
5-2-1	To assist inspectors and other related staff of Alex RBO for inspection.	
5-2-2	To prepare an inspection manual for petroleum-related and petrochemical industry	

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Output 6: GDME&E of EEAA and concerned RBOs become capable of raising public awareness to EMUs, enterprises, NGOs, and citizens. (WG5)		
6-1	To implement prototype surveys of public awareness of potential target groups at selected site(s).	The first environmental awareness survey was implemented in five governorates targeting for youth, women and farmers. The final report was completed by local consultant. Four (4) members of WG5 were trained through the process of conducting survey.
6-1-1	Preparation of Work Plan for WG5 -Setting up WG5 -Preparation of draft Work Plan and finalization	
6-1-2	Implementation of the 1st public awareness survey -Selection of target areas and groups -TOR for the Survey -Implementation of the Survey	
6-2	To analyze needs of awareness raising activities in consultation with REMIP components and RBOs.	Activities under (6-2) have been rescheduled based on the discussion at the Consultation Mission.
6-2-1	To specify outcomes, timing and target group for public awareness activities	
6-2-2	Review of the current public awareness activities	
6-2-3	Identify suitable public awareness activities	
6-3	To design awareness raising activities by using REMIP outcomes in coordination with RBOs, other stakeholders such as media and NGOs.	Activities under (6-3) have been rescheduled based on the discussion at the Consultation Mission.
6-3-1	To determine a message to each target group	
6-3-2	To select means (media and communication network) for dissemination of environmental information	
6-4	To administer and implement awareness raising activities for industries, NGOs, farmers, citizens on the selected topics as indicated in the design sheets. To prepare and compile materials and to distribute to RBOs.	Activities under (6-4) are to be started from Sep. 2007.
6-4-1	Prepare necessary materials for public awareness activities	
6-4-2	Implementation of public awareness activities by using REMIP outcomes in coordination with RBOS.	
6-5	To implement the second survey for examining impact of 6-4 activities in RBOs.	Activities under (6-5) will be carried out in 2008.
6-5-1	Prepare the TOR for the survey	
6-5-2	Implementation of the survey	
6-6	To share information through working group with other ministries, institutions, universities, etc. related to public awareness raising.	Activity (6-7) is to be carried out at the end of the project period.
6-7	To improve the existing awareness plan based on lessons learned up to activities 6-5	Activity (6-6) will be carried out in 2008.
Output 7: AQD and GDME&E of EEAA become capable of disseminating the environmental information to the public by effectively utilizing the Real-Time Air Monitoring Station with Display. (WG6)		
7-1	To install and operate the Real-Time Air Monitoring Station at Tahrir Square.	Executive work was done to establish the station approvals at Tahrir Square. The installation of the station equipment and test operation are in progress. Training on operation and maintenance of the station equipment will be conducted. (end of June 2007) The station will be linked to the National Air Quality Monitoring Network in the middle of July, 2007.
7-2	To Install the Display as a system to monitor the air pollution in Cairo city.	The specification, tender for purchase will be prepared and installation will be carried out.
7-3	To manage the monitored data to ensure its relevance in collaboration with AQD.	Mechanism for the display operation procedure will be developed. After training

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		on its operation and maintenance, the dissemination of data will be started with the collaboration of AQD.
7-4	To implement awareness raising activities by utilizing a Real-Time Air Quality Monitoring Station with Display in collaboration with GDME&E.	All activities under (7-4) will be carried out in close collaboration with GDME&E.
7-4-1	To review the air monitoring data	
7-4-2	To design the contents to be displayed including AQI and environmental messages	
7-4-3	To conduct the experimental dissemination of AQI and environmental messages on the display	
7-4-4	To implement the campaign for explaining the air quality parameters	
7-4-5	To review the design of the contents based on the findings of experimental dissemination of information	
7-4-6	To enter into the daily operation of display	
7-4-7	To conduct the survey to measure the level of recognition by the public of Cairo	
7-5	To implement the OJT and other training through all the activities of 7-1 ~ 7-4.	
Output 8: SRBA of EEAA and concerned RBOs become capable of enhancing their capacities by mutual interaction through CC2 mechanism.(CC2)		
8-1	To hold coordination committees among RBOs	Establishment of CC2 was done as planned. Key department members and CC2 organization structure were finalized.
8-1-1	<Setting of Coordination Committee 2 for information sharing> -Selecting group members -Holding kick-off meeting -Discussion of basic approach to develop the CC2 mechanism	
8-1-2	<Understanding needs for information sharing> -Understanding of basic RBOs' capability related to technical topics under REMIP -Confirmation of the basic CC2 mechanism	A kick-off seminar was held in Jan. 2007 to share the concept of CC2 mechanism.
8-2	To implement seminars to share experiences of the OJT activities at RBOs with other RBOs and departments.	
8-2-1	<Preparation and implementation of seminar(s) to share experiences and knowledge obtained through REMIP activities/ OJT among RBOs> -Determination of information and topics to be presented in sharing seminar -Selecting of presenter from leading RBOs -Holding of sharing seminar	Action plan of CC2 was developed and was submitted to all WGs/CCs and the JICA experts for review. After the approvals of WGs/CCs, the request will be made to WG3 to obtain the funds for training.
8-3	To implement follow-up activities for the seminars of activity 8-2 at each RBOs.	
8-3-1	< Preparation of the information sharing mechanism among RBOs> To develop the mechanism to share information under REMIP	Sharing activities and training will be conducted among RBOs.
8-3-1-1	To develop the action plan of CC2	
8-3-1-2	To request all WGs/CCs and the JICA experts to review the action plan.	
8-3-1-3	To obtain the approval from WGs/CCs.	
8-3-1-4	To obtain the funds from WG3 for one year training.	
8-3-2	<Implementation of information sharing (Advices from leading RBOs to the other RBOs)> To implement training by leading RBOs to the other RBOs under CC2 and WG3 initiatives	

8-3-2-1	Materials, textbooks used through OJT by each WG/CC are collected by CC2.	
8-3-2-2	To send these materials and textbooks to all other RBOs.	
8-3-2-3	To conduct training according to the action plan for specific RBOs.	

3-2 Inputs

Inputs to the Project during the past one and a half (1.5) years since its inception in November 20 2005 are as follows: Inputs were generally appropriate in terms of quantity and quality, however, timing of inputs, especially for some equipment provision have not served well to facilitate the implementation.

3-2-1 Japanese Side

Most of the inputs from the Japanese side, such as dispatch of experts, training of C/Ps and local cost support, are executed as planned. Some delays have been observed for equipment provision.

(1) Dispatch of Japanese experts

Fifteen (15) experts in the thirteen (13) fields were dispatched. Details are given in the ANNEX 1.

(2) Counterpart Training in Japan

Total of eight (8) counterparts participated in the counterpart trainings in Japan from January to February, 2007. Details are given in the ANNEX 2.

(3) Provision of Equipment

Equipment used for the technical transfer was provided from Japan. Details are given in the ANNEX 3 and ANNEX 4.

3-2-2 Egyptian Side

The Egyptian side nominated six (6) administrative management counterparts and sixty-six (66) technical counterparts for conducting project activities in the R/D. Some of them have left due to various reasons, and some has been newly appointed. Currently, six (6) administrative management counterparts and ninety-eight (98) technical counterpart in EEAA/RBOs have been carrying out the project activities in eight (8) WGs/CCs. The list of counterparts is shown in ANNEX 5. In addition, the Egyptian side has allocated the office space with utilities and some furniture for the Project.

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4. RESULTS OF EVALUATION

4-1 Achievement of the Outputs and Project Purpose

The Team evaluated the achievements of Outputs and Project Purpose according to the indicators on PDM1 and summarized as follows:

4-1-1 Achievements of the Outputs

Output 1:

“EQS of EEAA and EQDs of RBOs become capable of proposing countermeasures against air pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted.”

Output 1 is the expected goal for WG1 on Regional Air Pollution Control Management System.

Indicators:

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|---|
| 1-1 60% of energy consumption for 9 related target governorates are directly captured. |
| 1-2 Emission Inventory Reports are prepared at selected sites. |
| 1-3 Internal reports are issued based on the analysis of collected data. |
| 1-4 EMA/EEAA MM5/CAMAX model are to be validated and executed in five scenarios (Present, 2012, 2017 in BAU and two scenarios in different social and economic development rates for Sox, Nox and TSP) with the reasonable level of accuracy. |
| 1-5 Four activities required for countermeasure preparation are mastered by at least 10 staff representing EEAA, GCRBO, Tanta RBO and Mansura RBO. |
| 1-6 Integrated workshop with at least 60 participants is to be conducted before the end of August 2008 in order to share countermeasure proposals for air quality. |

According to the self-evaluation by the WG1 at the Evaluation Workshop, currently 20% of the energy consumption (mainly for power plant and cement sectors) has been captured. (Indicator of 1-1) The emission inventory reports have been in the process of preparation on rice straw burning test, vehicles and passive sampling. (1-2) And 80 % of data necessary for report preparation were collected and compiled. (1-3) Technical trainings on flue gas measurement, passive sampling, dispersion modeling, etc were conducted.

Although they have suffered the delay in the implementation for the first year, efforts by members have made it possible to keep them on the track. It is likely that Output 1 will be achieved by the end of the project period.

Output 2:

“Suez RBO becomes capable of proposing countermeasures against oil pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted.”

Output 2 is the expected goal for WG2 on Oil Pollution Program.

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Indicators:

- 2-1 Integrated countermeasure plan that is effective for reducing oil pollution risk in Northern Gulf Region and viable for Suez RBO is prepared and approved by EEAA.
- 2-2 Database for fingerprint data on crude oil and derivatives is furnished.

In spite of the delay of equipment provision, most of activities have been implemented as planned. Suez RBO has now taken the strong initiative in expanding technical capacity in terms of reduction of oil polluted risk as well as working to establish the better collaboration with local government, such as EMUs. Considering the remarkable progress made up to now, it is very likely that Output 2 will be achieved by the end of the project period.

Output 3:

“EQS and EMS of EEAA, and EQDs and EMDs of RBOs become capable of identifying hazardous substances, compiling the data and information, and identifying their risks.”

Output 3 is the expected goal for CC1 on Sound Management on Hazardous Chemical Substances.

Indicators:

- 3-1 Monitoring report(s) are annually issued on hazardous chemical substances and information reported is shared and discussed with relevant stakeholders.
- 3-2 Reports of Egyptian situation of hazardous chemical substances are issued.
- 3-3 Number of staff acquires knowledge and skills to manage the process from identifying possible pollution sources by sampling and analysis of hazardous chemical substances, evaluation of analyzed data, identification of hazardous chemical substances risks, and proposing countermeasures.
- 3-4 Data of pollutants is compiled as database, and shared the database with EEAA and RBOs.
- 3-5 Guidelines for hazardous substances management are prepared.

CC1 started the activities dealing with PCBs for the first stage. PAHs and heavy metals (Cd, Cr) will be focused on the second stage which will start from Aug. or Sep.2007. Baseline survey on PCBs has been carried out as planned. Other planned activities have been steadily in progress. CC1 has successfully taken the initiative to conduct the activity for hazardous chemical substances management involving the external stakeholders, such as EMUs and universities. It is very likely that Output 3 will be achieved by the end of the project period.

Output 4:

“CDCEA (GDT) of EEAA becomes capable of planning, designing, and implementing trainings within EEAA based on the information provided by all other relevant departments/organizations.”

Output 4 is the expected goal for WG3 on Training Capability Enhancement Program.

Indicators:

- 4-1 All training courses held by EEAA are registered at GDT.
- 4-2 Training courses are implemented.
- 4-3 Evaluation by participants of training courses is utilized for improving new courses.
- 4-4 Materials for training are compiled in GDT.
- 4-5 At least 6 staff under GDT becomes capable of managing the procedures of training activities. (to conduct/analyze TNA, plan, implement and evaluate the training course)

Current training courses in EEAA/RBOs were reviewed as planned. The indicator (4-1), therefore, was



achieved. Preliminary training courses will be started from July 2007, it is expected that members of WG3 can acquire the knowledge and skills to manage the courses in the process of implementing the trainings on-the-job basis. With the strong leaderships and initiatives of members of WG3, the Output 4 is expected to be achieved by the end of the project period.

Output 5:

“EQD and EMD of Alex RBO become capable of Production Process Improvement as well as the Pollution Abatement for industries/factories based on the data and information collected and interpreted.”

Output 5 is the expected goal for WG 4 on Improvement Guidance of Production Process.

Indicators:

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|-----|--|
| 5-1 | Manuals/guidelines for inspectors are prepared and published. |
| 5-2 | Seminars are held for industries to introduce successful introduction of cleaner production process including any good practices and of other organization(s). |
| 5-3 | Number of countermeasure proposals prepared by RBOs is increased in the target industries. |
| 5-4 | Assessed inspection reports for the selected industries show significant improvement in quality. |
| 5-5 | A report of best practices and recommendations for the selected industries is prepared and distributed. |

Although they have encountered some difficulties such as cancellation of the sub-contract work and change of the key department in the implementation process for the first year, members have made a great effort to resolve issues in collaboration with JICA experts. Final report for baseline survey on overview of industrial sector in the Alexandria was completed and inventory of Petroleum-related and Petrochemical in Alexandria has been finished. It is very likely that Output 5 will be achieved by the end of the project period.

Output 6:

“GDME&E of EEAA and concerned RBOs become capable of raising public awareness to EMUs, enterprises, NGOs, and citizens.”

Output 6 is the expected goal for WG5 on Promotion of Public Awareness Raising Activities.

Indicators:

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|-----|--|
| 6-1 | Reports of baseline surveys of public awareness are issued. |
| 6-2 | The number and details of awareness raising activities conducted in REMIP are registered in CDCEA. |
| 6-3 | The report of second survey is issued. |
| 6-4 | Evaluation by participants of awareness raising activities is utilized for designing new activities. |

The first environmental awareness survey was implemented in five governorates targeting for youth, women and farmers. The final report was prepared by the local consultant. Therefore, the indicator (6-1) has already been achieved. In this process, four (4) members of WG5 were trained in conducting survey.

On the other hand, the work plan of WG5 was revised at the Evaluation Workshop to clarify the roadmap to achieve the output. Therefore, it is suggested for WG5 to take necessary actions, such as assignment of the staff in charge for implementing the designed activities. If such actions are taken, it is likely that

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Output 6 will be achieved by the end of the project period.

Output 7:

“AQD and GDME&E of EEAA become capable of disseminating the environmental information to the public by effectively utilizing the Real-Time Air Monitoring Station with Display.”

Output 7 is the expected goal for WG6 on Public Awareness Raising Activities Using Air Monitoring Station w/Display.

Indicators:

- | |
|---|
| 7-1 Real-time Air Monitoring Station with Display is operated and properly maintained. |
| 7-2 Management plan of contents of the display is prepared. |
| 7-3 Real-time Air Monitoring Station with Display is well-recognized by the people in Cairo city serving as “a symbol of environmental watchdog.” |

As for the indicator (7-1), the executive work was done to install the station at Tahrir Square and test operations are in progress. However, the progress of the activities has been delayed mainly due to the late preparation of the display specification before reaching to the consensus on the type of the display. Considering the time necessary for finalizing the procurement, it is likely that the Output 7 may not be completed within the project period. Therefore, it is expected that Output 7 will not be fully achieved by the end of the project period.

Output 8:

“SRBA of EEAA and concerned RBOs become capable of enhancing their capacities by mutual interaction through CC2 mechanism.”

Output 8 is the expected goal for CC 2 on Sharing Information on REMIP among RBOs.

Indicators:

- | |
|--|
| 8-1 Seminar(s) for sharing the experiences and information obtained through REMIP activities are held among RBOs. |
| 8-2 To ensure that the mechanism for sharing the experiences and information among RBOs are developed, monthly reports from all RBOs include CC2 activities. |

A kick off seminar of CC2 was done in Jan. 2007. And the framework of CC2 including the organizational structure was prepared. The Action Plan of CC2 was developed. Once the approval is obtained from all WGs/CCs, the CC2 will proceed the process to obtain the budget for training in consultation with WG3. As CC2 mechanism has been well-recognized among project members, it is expected that the communication and information sharing will be further enhanced among concerned RBOs. Therefore, it is likely that Output 8 will be achieved by the end of the project period.

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4-1-2 Achievement of the Project Purpose

Project Purpose:

「EEAA and its RBOs are enhanced on the capability of managing environmental data and information, suggesting countermeasures through On-the-Job Training.」

Indicators:

- | |
|---|
| PP1 Effective countermeasures for environmental pollution, hazardous substances are prepared. |
| PP2 More concrete data, information and achievements obtained from RBO activities (including proposal of decrees) are published. (as a part of State of Environment (SOE) if SOE is published.) |
| PP3 EEAA/RBOs start their new activities after sharing information and implementation of trainings. |

In the field of air pollution, oil pollution and hazardous substances, relevant WGs/CC have now been carrying out their activities. Through these processes of activities, the capability to develop and to propose countermeasures are to be enhanced. Considering the current progress of those WGs/CC, it is likely that the effective countermeasure proposals are to be produced by the end of the project. (PP1)

Through the project activities, the relevant environmental data and information have been collected and analyzed by EEAA/ RBOs. These data and information has already been utilized in several reports. Therefore, it is very likely that they will regularly be used for the publication, such as the State of Environment. (PP2)

The information sharing activity initiated by CC2 has been well recognized among other WGs/CC as the promising mechanism to facilitate the collaboration among RBOs. Many of those interviewed during the evaluation study mentioned that there are great needs for EEAA/RBOs to expand its capacity by exchanging their knowledge and skills among themselves through such practices as trainings. And the CC2 will serve as the self-dependent mechanism for capacity development in EEAA/RBOs. On the other hand, as the activities using the Real-Time Air Monitoring Station with Display may not take place as planned considering the time necessary for finalizing the procurement, the capacity development of managing the environmental information will not be completed within the project period. For this reason, the indicator of PP3 will not be completely attained by the end of the project period. (PP3)

Although the capacity of staff of EEAA/RBOs has been steadily improved, it is difficult to conclude that the intended Project Purpose will fully be achieved within the project period.

4-2 Project Implementation Process

The different interpretation of project concepts and procedures by both Egyptian and Japanese sides and the unclear administrative procedures in EEAA caused the delays in project implementation in the first year. However, after the consensus was made in each WG/CC, activities have been progressed as planned for the most of WGs/CCs in the second year. Most of C/Ps are actively participating in the project activities. Japanese experts and Egyptian C/Ps have been closely working together at EEAA headquarter as well as in leading RBOs such as Alexandria and Suez RBOs. Activities under Output 4, 6 and 7 have shown some delays. In order to speed up the implementation of activities, strong commitment is required.

It appears that the progress of project activities has been monitored according to the work plan that was

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supplimentarily prepared for the original PDM/PO. The communication among the project members has been very well. More efforts will be made to establish the collaboration and better communication with external stakeholders.

4-3 Evaluation under Five Criteria

4-3-1 Relevance

The National Environmental Action Plan 2002-2017 (NEAP) which represents Egypt's agenda for environmental actions, includes three (3) major components that are the mandates of EEAA, such as the information and monitoring; preventive and corrective measures; and supportive measures. The five-year action plan of Environment (2002-2007) has fourteen (14) action programmes including "Capacity Development of EEAA and RBOs." In this aspect, the project's overall goal and project purpose have been consistent with the policy of the GOE and its needs of the target people.

The project has also relevant with the policy of Japanese Development Assistance. Japanese ODA policy puts high priority on environmental protection among three pillars in the sustainable development toward the assistance for Egypt. According to the JICA's Country-Specific-Assistance Program for Egypt, as of July 2006, it is stated that there is a great need to enhance the capability of EEAA so that it can cope with the emerging environmental issues as a key environmental organization. Furthermore, the Japanese assistance has its comparative advantages in transferring her environmental technologies to combat the environmental pollutions, as well as in sharing her experiences in public awareness raising and the environmental education.

4-3-2 Effectiveness

1) Project Purpose

In the field of air pollution, oil pollution and hazardous substances, relevant WGs/CC have now been carrying out their activities. Through these processes of activities, the capability to developing and proposing countermeasures are to be enhanced. Considering the current progress of those WG/CCs, it is likely that the effective countermeasure proposals are to be produced by the end of the project.

Through the project activities, the relevant environmental data and information have been collected and analyzed by each RBO in collaboration with EEAA/ RBOs. These information and data has already been utilized in several publications. Therefore, it is very likely that they will regularly be used for the publication, such as the State of Environment.

The information sharing activity initiated by CC2 has well recognized among other WG/CC as the possible effective mechanism to facilitate the collaboration among RBOs. Many of those interviewed during the evaluation study mentioned that there is a great needs for EEAA/RBOs to expand its capacity by exchanging their knowledge and skills among themselves in the form of trainings. And the CC2 mechanism should make this happen in the economical and effective way. As a result, it is very likely that the EEAA/RBOs will eventually generate and start their new activities.

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2) Contribution of each output

Eight (8) outputs have been directly contributing to the Project Purpose and the Project is heading for the right direction. Combined efforts of Egyptian and Japanese sides have contributed to strengthening the capacity of EEAA/RBOs.

As shown in the attached diagram, each output is closely related each other. (See ANNEX 8 Conceptual Diagram of REMIP/JICA). Each output has been contributing to the achievement of the Project Purpose in the following manner. Output 1 (conducted by WG1), Output 2 (WG2) and Output 3 (CC1) have been carrying out activities to develop the effective countermeasures for air pollution, oil pollution and chemical hazardous substances respectively. Their activities are mainly focused on the data collection and analysis and its application to the countermeasure for specific environmental issues by strengthening the technical capacities. Output 5 (WG4) also carries out similar types of activities, but rather focused on the data collection through surveys in the production process improvement and pollution abatement.

Output 4 (WG3) would serve to further upgrade the technical capacity internally in collaboration with CC2, while Output 6 (WG5) will act together with external bodies, such as national and local authorities (EMUs), NGOs, private sectors and citizens, to mobilize them through awareness raising activities. Activities carried out by Output 7 (WG6) are expected to boost the project outcome with the presence of symbolic Real-Time Air Quality Monitoring with Display to the public of Cairo city. Achievements of most of these outputs are expected to be sustained through the information sharing mechanism of Output 8 (CC2) that will be built in EEAA/RBOs. In summary, most of all these Outputs are contributing to improve the individual capacity as well as the organizational capacity of EEAA/RBOs in the relevant fields.

3) Inhibiting factors to achieve the Project Purpose

The delay in awareness raising activity using the Real-time Air Monitoring Station with Display is likely to negatively affect the full achievement of Project Purpose within the project period. This implies that it might need more time to achieve the intended Project Purpose.

4-3-3 Efficiency

As previously explained, the Project suffered some delays of activities for the first year. Activities themselves were actually started from several months to one year later than its onset. However, combined efforts by both Egyptian and Japanese have greatly contributed to overcome such obstacles, and most of WGs/CCs have now been on right track for achieving their individual targets.

1) Japanese Side

Most of the inputs from Japanese side, such as dispatch of experts, training of counterparts in Japan and local cost support, are executed as planned. Some delays in procurement process negatively affected the progress of project implementation. As for the counterpart trainings in Japan, it greatly served to improve and inspire the Egyptian counterparts; however, some consideration should be given to programming of specific technical aspects that will meet the needs of the Egyptian counterparts.

2) Egyptian Side

Egyptian side nominated six (6) counterparts for project administration and management and sixty-six

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(66) technical counterparts at the onset of the project. In the process of project implementation, the number of counterparts has been changed to six (6) for project administration and management and ninety-eight (98) as technical counterparts. In some WGs/CCs, some counterparts have moved out due to the organizational transfer or personnel matters. Insufficiency was pointed out by both sides regarding the logistic inputs such as transportation, accommodation and per diems which affected the smooth implementation of the project.

3) Management of the Project

Different interpretation of the project concept and procedures have resulted in the delay of progress of project activities, however, it has also resulted in building the strong rapport among the project members through discussions and obtaining the mutual understanding at the end. According to the questionnaire surveys and interviews during the study, key counterparts have multiple responsibilities, thus it takes some time in decision-making process. In spite of this, the excellent navigation of Project Director and Assistant Project Director has greatly contributed to accelerating the project progress.

4-3-4 Impact

The impact of the Project to the Overall Goal cannot be judged at the middle point of the project period. However, following positive impacts by the Project have been observed.

According to the questionnaires and interviews conducted during the evaluation study, it is revealed that some activities to improve environment at the community level have already been started in collaboration with EMUs in the targeted governorates. It also revealed one episode that the project's intention has been well-accepted by the industries in the process of survey for Production Process Improvement. One of targeted factories has been considering the environmental aspects in selection criteria of its equipment and facilities. Technical tools that are indispensable for environmental management, such as emission inventory and passive sampling introduced by the Project are considered to be effective to monitor and analyze the environmental issues.

Up to now, the impact of the project on its policies and regulations has not been observed yet. However, if concerned authorities have accepted countermeasures developed by EEAA/RBOs, it is very likely that the project will have significant impact on policies and institutions of environmental sector of Egypt.

No negative impact has been observed.

4-3-5 Sustainability

1) Organizational aspects

The GOE has put high priority on the environmental issues by practicing the environmental law of No. 4 and National Environmental Action Plan (2002-2017), and the framework of environmental institutions has been established. Therefore, the GOE is expected to continue to support the environmental improvement. The GOE has placed the EEAA/RBOs to play a major role in the environmental sector. To retain the organizational sustainability, it is recommended that the EEAA should make continuous effort to upgrade its technical as well as organizational capacities.

2) Financial aspects

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It is difficult to judge the financial sustainability at the middle of the project period. Considering that major donors may fade out gradually to provide the financial support to EEAA, the EEAA should make more effort to strengthen the budgetary sufficiency to sustain the impact of the Project. In this context, such efforts by Suez RBO to secure the sustainable laboratory management can be considered as a good practice to be expanded to other RBOs.

3) Technical aspects

Most of the counterparts have actively been participating in the project activities to improve their technical capabilities. A system of maintaining the technical capability obtained through the Project should be developed in EEAA/RBOs. Appropriate maintenance of equipment including the budgetary allocation is also necessary to secure the technical sustainability.

5. MODIFICATION OF THE PDM


Based on the discussions among the Team and the concerned Egyptian authorities, it was agreed that the revised PDM (PDM1) will be used to monitor the project activities for the remaining period of the Project. Details of modification of the PDM are listed below:

Details of Modification of PDM

Items	Modifications	Reasons
Outputs were rephrased in order to make it more specific for each WG/CC.		
Output 1	Output 1: EQS of EEAA and EQDs of RBOs become capable of proposing countermeasures against air pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted. (WG1)	Through the discussion on the Evaluation Workshop held on 25th and 26th June 2007, the C/Ps and the Evaluation Team found that the modification of Outputs in PDM, based on the work plans utilized in REMIP would be necessary for the smooth monitoring of the project activities. Therefore, each output was rephrased to make it more specific to each WG/CC, and key departments that are in charge are specified.
	Output 2: Suez RBO becomes capable of proposing countermeasures against oil pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted. (WG2)	
	Output 7: AQD and GDME&E of EEAA become capable of disseminating the user-friendly environmental information by effectively utilizing the Real-Time Air Monitoring Station with Display. (WG6)	
Output 2	Output 3: EQS and EMS of EEAA, and EQDs and EMDs of RBOs become capable of designing and identifying hazardous substances, compiling the data and information, and identifying their risks. (CC1)	It was agreed that the modified Outputs should be used after the Mid-Term Evaluation Study.
Output 3	Output 4: CDCEA (GDT) of EEAA becomes capable of planning, designing, and implementing trainings within EEAA based on the information provided by all other relevant departments/organizations. (WG3)	
	Output 5: EQD and EQM of Alex RBO become capable of Production Process Improvement as well as the Pollution Abatement for industries/factories based on the data and information collected and interpreted. (WG4)	
	Output 8: SRBA of EEAA and concerned RBOs become capable of enhancing their capacities by mutual interaction through CC2 mechanism. (CC2)	
Output 4	Output 6: GDME&E of EEAA and concerned RBOs become capable of raising public awareness to EMUs, enterprises, NGOs, and citizens. (WG5)	

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Following indicators were added and rephrased to reflect the proper state of achievement level.		
Overall Goal	<p>Indicators for Overall Goal</p> <p>OG2 Regulations/decrees which enhance the implementation of countermeasures proposed by the project are stipulated.</p> <p>OG3 The regulations and guidelines, etc. to support the implementation of countermeasures suggested by the project are promulgated and executed by sector ministries concerned.</p> <p>OG5 New activities to improve environment at the community level are started with combined efforts among EEAA/RBOs together with other competent stakeholders.</p>	<p>OG2, OG3 and OG5</p> <p>In order to properly express the state of achievement, indicators of OG2, OG3 and OG5 were rephrased.</p>
Project Purpose	<p>Indicators for Project Purpose</p> <p>PP1 Effective countermeasures for environmental pollution, hazardous substances are prepared.</p> <p>PP3 EEAA/RBOs start their new activities after sharing information and implementation of trainings.</p>	<p>PP1 This indicator was added to replace the previous indicator which does not appropriately serve to examine the state of achievement.</p> <p>PP3 This indicator was rephrased, so that the state of achievement is properly expressed.</p>
Outputs	<p>Indicators for Output 1</p> <p>1-1 60% of energy consumption for 9 related target governorates are directly captured.</p> <p>1-2 Emission Inventory Report are prepared at selected cites.</p> <p>1-3 Internal reports are issued based on the analysis of collected data.</p> <p>1-4 EMA/EEAA MM5/CAMAX model are to be validated and executed in five scenarios (Present, 2012, 2017 in BAU and two scenarios in different social and economic development rates for Sox, Nox, and TSP) with the reasonable level of accuracy.</p> <p>1-5 Four activities required for countermeasure preparation are mastered by at least 10 staff representing EEAA, GCRBO, Tanta RBO and Mansura RBO.</p> <p>1-6 Integrated workshop with at least 60 participants is to be conducted before the end of August 2008 in order to share countermeasure proposals for air quality.</p>	<p>1-1 ~ 1-6</p> <p>In order to add technical aspects to the state of achievement, these six indicators were rephrased and quantitative targets were added to make it more specific.</p>
	<p>Indicators for Output 2</p> <p>2-1 Integrated countermeasure plan that is effective for reducing oil pollution risk in Northern Gulf Region and viable for Suez RBO is prepared and approved by EEAA.</p> <p>2-2 Database for fingerprint data on crude oil and derivatives is furnished.</p>	<p>2-1 and 2-2</p> <p>In order to add technical aspects to the state of achievement, these indicators were rephrased</p>

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<p>Indicators for Output 3</p> <p>3-3 Number of staff acquires knowledge and skills to manage the process from identifying possible pollution sources by sampling and analysis of hazardous chemical substances, evaluation of analyzed data, identification of hazardous chemical substances risks, and proposing countermeasures.</p> <p>3-4 Data of pollutants is compiled as database, and shared the database with EEAA and RBOs.</p> <p>3-5 Guidelines for hazardous substances management are prepared.</p>	<p>3-3, 3-5 These two indicators were added to examine the state of achievement more specifically.</p> <p>3-4 This indicator was rephrased to examine the state of achievement more specifically.</p>
<p>Indicators for Output 4</p> <p>4-5 At least 6 staff under GDT become capable of managing the procedures of training activities. (to conduct/analyze TNA, plan, implement and evaluate the training course)</p>	<p>4-5 This indicator was added to examine the achievement level of individual capacity.</p>
<p>Indicators for Output 5</p> <p>5-1 Manuals/guidelines for inspectors are prepared and published.</p> <p>5-2 Seminars are held for industries to introduce successful introduction of cleaner production process including any good practices and of other organization(s).</p> <p>5-3 Number of countermeasure proposals prepared by RBOs is increased.</p> <p>5-4 Assessed inspection reports for the selected industries show significant improvement in quality.</p> <p>5-5 A report of good practices and recommendations for the selected industries is prepared and distributed.</p>	<p>5-1 ~ 5-4 The original two indicators included two aspects of achievement, therefore, they were divided.</p> <p>5-5 This indicator was added to examine the state of achievement more specifically.</p>
<p>Indicators for Output 6</p> <p>6-2 The number and details of awareness activities conducted in REMIP are registered in CDCEA.</p> <p>6-3 The report of second survey is issued.</p>	<p>6-2 This indicator was rephrased to make it more specific.</p> <p>6-3 This indicator was added to examine the result produced by the newly added activities.</p>
<p>Indicators for Output 7</p> <p>7-2 Management plan of contents of display is prepared.</p> <p>7-3 Real-Time Air Monitoring Station with Display is well-recognized by people in Cairo city serving as "a symbol of environmental watch dog".</p>	<p>7-2 and 7-3 These indicators were added to examine the aspect of achievement produced by awareness raising activities by utilized the Real-Time Air Monitoring Station with Display.</p>

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	<p>Indicators for Output 8</p> <p>8-1 Seminar(s) for sharing the experiences and information obtained through REMIP activities are held among RBOs.</p> <p>8-2 To ensure that the mechanism for sharing the experiences and information among RBOs are developed, monthly report from all RBOs in includes CC2 activities.</p>	<p>8-1 The indicator was rephrased, so that the state of achievement is properly expressed.</p> <p>8-2 This indicator was added to ensure the state of achievement.</p>
Important Assumptions: Following important assumptions were added.		
	<p>From Activities to Outputs [Counterparts remain assigned to carry out the activity]</p> <p>[Appropriate budget (including cost for equipment maintenance) is continuously allocated.</p>	<p>In order to secure the sustainability of technical capacity to achieve the Outputs, C/Ps of the Project should remain in the organization. Therefore, this factor needs to be monitored.</p> <p>Budget allocation for equipment maintenance is essential by the Egyptian side to achieve the Outputs. Therefore, this factor needs to be monitored.</p>
	<p>From Outputs to Project Purpose [Progress of other projects assisted by other donor agencies does not negatively affect the project activities]</p> <p>[Other depts. of EEAA/RBOs are cooperative to the Project]</p>	<p>Other external donors' assistance to EEAA will have potential influence to achieve the project purpose. Therefore this factor needs to be monitored.</p> <p>Other depts. of EEAA/RBOs that are not involved in the project may have potential influence to achieve the project purpose.</p>
	<p>From Project Purpose to Overall Goal [Governorates, local public organizations, enterprises and beneficiaries are cooperative to implement the environmental awareness activities.]</p> <p>[Egyptian Policy for environmental sector will not drastically change.]</p> <p>[Other external organizations and industries do not take negative reaction against implementing countermeasures by EEAA]</p>	<p>In order for EEAA to implement awareness raising activities, it is necessary to secure the cooperation from external stakeholders. Therefore, it is stated as the important assumption to monitor the progress of this factor.</p> <p>In order for EEAA to implement countermeasures, it is necessary to secure the cooperation from other related ministries as well as the support of governmental policy Therefore, it is stated as the important assumption to monitor the progress of these factors.</p>
Important Assumptions: Following important assumption was deleted.		
	<p>From Project Purpose to Overall Goal [EEAA continues further application of the technologies transferred through the Project after the project completion.]</p>	<p>This factor is very likely to be materialized. Therefore, it is not necessary to monitor.</p>

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Activities are being carried out based on the Work plan. Following activities were modified to reflect the current situation.		
Output 1 (WG1)	1-5 To develop the tool of preparing the countermeasures against air pollutions	This activity was restated to reflect the current situation.
	1-6 To implement On-the-Job Training for proposing countermeasure plan against air pollution	This activity was restated to reflect the current situation.
	1-8 To implement On-the-Job Training dealing with fingerprint for pollutants of black smoke.	This activity was deleted because the project did not take the CMB approach.
Output 3 (CC1)	3-8 To establish a database to be used for PCBs/PAHs/heavy metals (Cd, Cr) 3-8-1 To make a data entry for database of PCBs 3-8-2 To make a data entry for database of PAHs 3-8-3 To make a data entry for database of heavy metals(Cd, Cr)	These activities were added to reflect the current situation.
	3-9 To prepare guidelines for hazardous substances management including recommendation to strengthen the institutional system and to identify the risks.	This activity was added to reflect the current situation.
Output 5 (WG4)	5-1 To collect information on industrial pollution abatement technologies including process improvements for compiling as knowledge basis at selected industrial area(s) to use for making factory inspection manuals /guidelines for inspector of RBOs and EEAA, and for holding seminar(s) to introduce and disseminate some successful cases of introductions of pollution abatement technologies for factories. 5-1-2 To collect baseline information of industrial sector of Alexandria, carry out inventory petroleum-related, petrochemical and cement industry and to compile the information into a report. 5-2 To implement OJT dealing with the factory inspections of RBO staffs for reflecting those experiences to prepare a new inspection manual.	These activities were rephrased to reflect the current situation.
Output 6 (WG5)	6-2 To analyze needs of awareness raising activities in consultation with REMIP components and RBOs.	These activities were rephrased to reflect the current situation.
	6-3 To design awareness raising activities by using REMIP outcomes in coordination with RBOs, other stakeholders such as media and NGOs.	
	6-4 To administer and implement awareness raising activities for industries, NGOs, farmers, citizens on the selected topics as indicated in the design sheets. To prepare and compile materials and to distribute to RBOs.	
	6-5 To implement the second survey for examining impact of 6-4 activities in RBOs.	
	6-6 To share information through working group with other ministries, institutions, universities, etc. related to public awareness raising.	
	6-7 To improve the existing awareness plan based on lessons learned up to activities 6-5	

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<p>Output 7 (WG6)</p>	<p>7-4 To implement awareness raising activities by utilizing a Real-Time Air Quality Monitoring Station with Display in collaboration with GDME&E. 7-4-1 To review air monitoring data 7-4-2 To design the contents to be displayed including AQI and environmental messages 7-4-3 To conduct the experimental dissemination of AQI and environmental message on the display 7-4-4 To implement the campaign for explaining the air quality parameters 7-4-5 To review the design of the contents based on the findings of experimental dissemination of information 7-4-6 To enter into the daily operation of display 7-4-7 To conduct the survey to measure the level of recognition by the public of Cairo 7-5 To implement the OJT and other trainings through all the activities of 7-1 ~ 7-4.</p>	<p>These activities were added to Output 7 to reflect the current situation of the Output. WG6 is going to manage the awareness raising activities by utilizing a Real-Time Air Quality Monitoring Station with Display.</p>
<p>Output 8 (CC2)</p>	<p>8-3-1-1 To develop the Action Plan 8-3-1-2 To request all WGs/CCs and JICA expert to review the Action Plan 8-3-1-3 To obtain the approval from WGs/CCs. 8-3-1-4 To obtain the funds from WG3 for one year training 8-3-2-1 Materials, textbooks used through OJT by each WG/CC are collected by CC2 8-3-2-2 To send these materials and textbooks to all other RBOs 8-3-2-3 To conduct training according to the plan of specific RBOs.</p>	<p>Two activities were broken down to reflect the current situation of the Output.</p>

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6. CONCLUSION

Despite the delay of the progress of the project activities, most WGs/CCs has been trying to recover these delays and successfully producing outputs. However, the delay in awareness raising activity using the Real-time Air Monitoring Station with Display is likely to negatively affect the full achievement of Project Purpose within the project period. This implies that it might need more time to achieve the intended Project Purpose. The measures to cope with this difficulty including the extension of the project period may be considered.

Regarding the capacity development in three levels (individual/organizational/institutional& social levels), capacity development in the individual level and organizational levels is steadily progressed, thanks to the efforts of concerned WGs/CCs. However, capacity development in institutional and social levels needs to be more enhanced by strengthening the communication with various stakeholders. In order to achieve this, effective utilization of the Real-time Air Monitoring Station with Display is important.

7. RECOMMENDATIONS

<Recommendations for the Project as a whole>

1. Securing Running Expenses for the Project

(1) As shown in the ANNEX9, EEAA has prepared some part of the necessary budget for the implementation of the Project. Despite of the effort of EEAA, not all the budget has been secured yet. Insufficiency of expense for transportation and travel allowances for the seminars/workshops are still big concern and the further effort to secure the budget is required.

(2) The continuous monitoring for budget allocation using “Demarcation of Items to be Inputted for REMIP Operation from April 2007 to March 2008” is very important for the sustainability of the Project. The update information would be confirmed at the Steering Committees.

(3) Since the preparatory work for the budget plan for the next Egyptian Fiscal Year will be started very soon, the C/Ps are recommended to prepare the budget plans necessary for project implementation based on the detail activity schedules in consultation with the JICA expert team, in order to maximize the benefits from the Project.

2. Monitoring of the project activities

(1) Since some of project activities have been behind the planned schedule, the acceleration of implementation of project activities is necessary. The PDM and PO were modified according to the actual situation of the Project and working plans used in the Project. C/Ps and the JICA expert team are required to monitor the progress of activities using the modified PDM and PO, including indicators to measure the achievement. The progress would be reported and shared at the Steering Committees.

(2) EEAA has recognized the importance of initiating some countermeasures by using knowledge and experiences of the Project and already produced some positive impacts on the improvement of environment. Therefore such information should be reported to the Steering Committees and widely disseminated to the public through reports such as “State of Environment” and the display to be installed in

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Tahrir Square as one of the effective PR of the Project.

3. Office Space for the JICA Expert Team

Although EEAA provides the office for the JICA Expert Team as undertaking stipulated in the R/D, the office space is observed to be insufficient. It can be said that the office for the JICA Expert Team is not only for the experts' duties but also for the daily meetings/ communication with and instruction to the C/Ps as well as for keeping the Project records and technical materials. Therefore, the more office space is recommended to be allocated in EEAA headquarters for the JICA Expert Team.

4. Appointment of Acting Leader when necessary

Some of key C/Ps of WGs/ CCs are holding two or more posts and/ or leading post(s) concurrently important for navigating the WG/CC activities. In order to accelerate the facilitation of daily activities and decision making related to the WG/CC activities, an Acting Leader is recommended to be assigned when necessary.

5. Capacity Development in three different levels: (1) Individual level, (2) Organizational level, (3) Institutional & Social level

To sustain the outcomes of the Project, capacity development of three different levels is important. The following issues will be considered in the latter period of the Project.

(1) Individual level

To monitor the progress of capacity development for all C/Ps involved in the Project is important, so that the leader of each WG/CC and concerned JICA Experts are required to grasp the technical capacity of each C/P in order to follow up the effects of capacity development. The clarification of job description would be considered by EEAA for the establishment of better human resource development plans in future.

2) Organization level

Some departments and RBOs have already acquired the advanced technologies. In order to enhance organizational capacity of EEAA as a whole, information exchange among departments and RBOs should be enhanced. For this purpose, the following measures and allocation of the necessary budget by EEAA would be considered.

- Systematic information exchange plan (i.e. utilization of monthly reports submitted to SRBA, and development of an annual plan for information sharing)
- Utilization of ex-participants of the trainings in Japan
Ex-participants of the trainings in Japan are important resources for the development of EEAA. Their knowledge and experience should be diffused to all EEAA. The report meetings by ex-participants with participation of CDCEA, the report of action plans developed in Japan at the Steering Committees, distribution of the texts and materials would be encouraged.

3) Institutional/ Social levels

EEAA has an important mission to tackle the environmental problems through cooperation with stakeholders such as EMUs, enterprises, NGOs and citizens.

In this regard, it is recommended to promote involvement of the various stakeholders into the course of the project activities which leads to the capacity development in institutional and social levels in the environmental management sector.

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<Recommendations for each WG/CC>

(1) Repair of the tank at the laboratory of GC RBO (WG1, CC1)

Some activities planned to be conducted at the laboratory of GC RBO have been suspended due to the malfunction of the tank. Immediate repair of the tank is requested.

(2) Repair or Replacement of the existing flameless AAS (CC1)

To conduct heavy metal monitoring activities, the existing flameless AAS in CCC should be fixed.

(3) Auto thermal dissolver (ATD) for Air Auto Sampler (WG4)

JICA will consider the procurement of the ATD for Air Auto Sampler under the condition that EEAA will identify the necessary items to be prepared for operating the ATD and will take an action to fulfill the items such as consumables, chemicals, and spare parts. The commitment will be informed by the letter to JICA.

(4) Necessity of the organizational arrangement for public awareness raising activities (WG5 and WG6)

1) It took a long time for discussion of work plan of WG5 in the beginning of the project. Thus, some activities have not been implemented as scheduled. Based on this fact, the PO for WG5 was revised based on the discussion with the Project Consultation Mission Team in April 2007 and at the Evaluation Workshop in June 2007. Therefore, WG5 is recommended to put best efforts to implement the revised activities in collaboration with the JICA experts team for realizing the capacity development of WG5 members.

2) The EEAA Team put much effort to facilitate the installation of the Air Monitoring Station at the Tahrir Square. Afterward, the full utilization of the display to be attached to the station will be vital for the enhancement of communication with public, and thus the EEAA Team in particular in awareness raising activity is required to be further strengthened.

(5) Launching the smooth operation of the Real-time Air Monitoring Station with Display and modification of the activity schedule (WG6)

Due to various reasons such as the time consumed for building consensus for specifying the type of the display, the procurement process has so far delayed. Consequently, the schedule of the Project specific to this particular portion may be discussed for extension.

WG6 consists of AQD and Public Awareness Department as shown in ANNEX 5. Due to some engineering complexity in the system configuration, the AQD should bear the overall responsible for the operation and maintenance (O&M) of the station and display as a whole, And the Public Awareness Department will be responsible for the contents managing of environmental messages on the display open to the public.

WG6 are requested to prepare the standard operational procedure and budgetary plan of the station and display as a total system, by considering each mandate of the relevant departments of WG6 for the post Project.

During the Project period, the AQD will play a leading role for initializing the operation of the station and display by more attaching importance on the engineering aspects of the system, followed by the progressive development of environmental messages to be delivered by the Public Awareness Department.

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8. LESSONS LEARNED

(1) Effectiveness to show the good practices by the leading branches

Some RBOs such as Suez RBO and Alexandria RBO have leading roles in dealing with spilled oil issues and improvement of the production process issues and have been working very actively. The challenges of these leading RBOs are recognized as visible good examples from other RBOs. Tanta RBO also shows the remarkable achievement especially in the WG1 activity.

The mechanism to nominate leading branches as pilot organizations works effectively to show the good practices and contributes to the capacity development of the C/P organization as a whole.

(2) Effectiveness to assign a capable coordinator for the Project

Assistant Project Director of the REMIP has been working for the Project since the formulation stage of the Project and coordinating lots of C/Ps efficiently and effectively. Assistant Project Director has been functioning to facilitate and monitor the project activity with the Project Director.

The support, coordination, and monitoring by the capable coordinator who knows the history and background of projects from the beginning is essential to the success of projects, especially with large number of C/Ps and with frequent changes of key persons and concerned personnel.

(3) Utilization of the knowledge acquired in the trainings in Japan

As observed in CC1 for example, some C/Ps joined in the trainings in Japan fully utilizes the acquired knowledge to the daily work and development of ideas for future actions. These C/Ps are expected to be a pioneer to lead new perspectives and challenges towards the upper goal.

Dispatch records of Japanese Experts (as of the End of June, 2007)

ANNEX 1

Name	Field	Period of Dispatch	(day)	Organization/Company Name
Norihiko INOUE	Chief Advisor	25 Nov. 2005 - 09 Mar. 2006	105	Nippon Koei Co. LTD
		13 May 2006 - 09 Oct. 2006	150	
		14 Nov. 2006 - 26 Feb. 2007	105	
Yoichi IWAI	Training Advisor	25 May 2007 - present	-	Nippon Koei Co. LTD
		25 Nov. 2005 - 09 Dec. 2005	15	
		28 May 2006 - 11 Jul. 2006	45	
		16 Sep. 2006 - 06 Oct. 2006	21	
		14 Nov. 2006 - 04 Dec. 2006	21	
		01 Jun. 2007 - 30 Jun. 2007	30	
Akira YUKAWA	Local Environmental Management (Air Quality)	15 Jan. 2006 - 28 Feb. 2006	45	Nippon Koei Co. LTD (Cooperating Staff)
		22 May 2006 - 20 Jul. 2006	60	
		01 Sep. 2006 - 09 Oct. 2006	39	
		30 Jan. 2007 - 06 Mar. 2007	36	
Tadashi SHOJI	Local Environmental Management (Water Quality)	18 May 2007 - present	-	Nippon Koei Co. LTD (Cooperating Staff)
		25 Nov. 2005 - 07 Feb. 2006	75	
		13 May 2006 - 02 Jul. 2006	51	
Kenichi TAKAHASHI	Suspended Particle Matters and Countermeasures	11 Dec. 2006 - 26 Feb. 2007	78	Nippon Koei Co. LTD
		11 May 2007 - present	-	
		16 Jul. 2006 - 01 Aug. 2006	17	
		07 Aug. 2006 - 09 Oct. 2006	64	
Makoto FUYUMURO	Analysis of Spilled Oil and Countermeasures	14 Nov. 2006 - 28 Dec. 2006	45	Nippon Koei Co. LTD (Cooperating Staff)
		16 Mar. 2007 - 30 Mar. 2007	15	
		11 May 2007 - present	-	
		24 Jun. 2006 - 14 Jul. 2006	21	
		25 Aug. 2006 - 14 Sep. 2006	21	
Kengo NAGANUMA	Hazardous Substance Analysis and Management	23 Dec. 2005 - 21 Jan. 2006	30	Nippon Koei Co. LTD
		03 Jun. 2006 - 05 Aug. 2006	64	
		16 Dec. 2006 - 29 Jan. 2007	45	
		25 May 2007 - 14 Jun. 2007	21	
Toshiyasu KANEKO Kengo NAGANUMA Toyosaku KATO	Production Process Improvement (Industrial Pollution Abatement) Equipment Management/ Equipment Procurement	03 Jun. 2006 - 02 Jul. 2006	30	Nippon Koei Co. LTD
		05 Feb. 2007 - 06 Mar. 2007	30	
		02 Jan. 2006 - 31 Jan. 2006	30	
Kazuyuki SATO Tomoo AOKI	Public Awareness Raising and Public Relations	22 May 2006 - 29 Jun. 2006	30	Nippon Koei Co. LTD (Cooperating Staff)
		28 Nov. 2006 - 27 Dec. 2006	30	
		19 May 2007 - 17 Jun. 2007	30	
		22 Jul. 2006 - 03 Aug. 2006	13	
Naoki NAKAGAWA	Analysis of Smoke Pollution Source	15 Dec. 2006 - 29 Dec. 2006	15	Nippon Koei Co. LTD (Cooperating Staff)
		07 Feb. 2007 - 26 Feb. 2007	20	
		01 Dec. 2006 - 15 Dec. 2006	15	
Hiroshi YOSHIKADO	Dispersion Model Approach	25 May 2007 - 08 Jun. 2007	15	Nippon Koei Co. LTD (Cooperating Staff)
Tomoko OTA	Public Awareness Raising and Public Relations (2) Administrative Sharing Mechanism Development/ Coordinator	25 Nov. 2005 - 09 Mar. 2006	105	Nippon Koei Co. LTD (Cooperating Staff)
		22 May 2006 - 09 Oct. 2006	141	
		14 Nov. 2006 - 06 Mar. 2007	113	
		18 Jun. 2007 - present	-	

Dispatch records of Project Consultation Mission (as of the End of June, 2007)

Name	Field	Period of Dispatch	(day)	Organization/Company Name
Toyoaki KATO	Equipment Procurement and Inspection	29 Mar. 2006 - 18 Apr. 2006	21	JICA
Toyoaki KATO	Equipment Procurement and Inspection	09 Mar. 2007 - 29 Mar. 2007	21	JICA
Kiyoshi MASUMOTO Kentaro INOUE Hitomi CHIHARA Enko TAMURA Norihiko INOUE	Leader Environmental Policy Air Quality Management Cooperation Planning REMIP Chief Advisor	20 Apr. 2006 - 27 Apr. 2007	8	JICA

Records of Home Assignment of Japanese Experts in Japan (as of the End of June, 2007)

Name	Field	Period of Dispatch	(day)	Organization/Company Name
Norihiko INOUE	Chief Advisor	15 Nov. 2005 - 24 Nov. 2005 10 Mar. 2006 - 12 Mar. 2006 01 May. 2006 - 10 May. 2006 07 May. 2007 - 10 May. 2007	10 3 10 4	Nippon Koei Co. LTD
Akira YUKAWA	Local Environmental Management (Air Quality)	18 Nov. 2005 - 24 Nov. 2005 10 Mar. 2006 - 12 Mar. 2006 01 May. 2006 - 06 May. 2006	7 3 6	Nippon Koei Co. LTD (Cooperating Staff)
Tadashi SHOJI	Local Environmental Management (Water Quality)	18 Nov. 2005 - 24 Nov. 2005 10 Mar. 2006 - 12 Mar. 2006	7 3	Nippon Koei Co. LTD (Cooperating Staff)

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Record of Counterpart Training in Japan

Name of Trainee	Field	Period of Training	Contents and Places	Occupation during Training
Kawser Hefny Korany Abou El Scoud (Ms)	Environmental Management	2007/01/20~2007/02/04	Environmental policy, management, and legal system in Japan, Tokyo Metropolitan, Local Authorities, ICETT, etc.	General Director of Cairo Central Center, EEAA
Elham Rifaat Abdel Aziz Sayed Ahmed (Ms)	Environmental Management	2007/01/20~2007/02/04		Director of Hazardous Substance Department, EEAA
Asmaa Sayed Harouda (Ms)	Hazardous Chemical Management	2007/01/20~2007/02/18	Hazardous substance control and management, Analysis of PCBs, Ministry of Environment, Tokyo Metropolitan, Local Authorities, ICETT, etc.	Environmental Reseacher, Inspection Department, EEAA
Mohamed Galal Eldin Mohame Ali Mahmoud (Mr)	Hazardous Chemical Management	2007/01/20~2007/02/18		Reseacher of Water Pollution Environment, Greater Cairo RBO
Essam Edin Eldway Ibrahim Saleh (Mr)	Hazardous Chemical Management	2007/01/20~2007/02/18		Lab Chemist/ Environmental Reseacher, Cairo Central Center, EEAA
El Shalakamy Mohamed Amir Ahmed (Mr)	Air Pollution Problem and Existing Air Quality Management	2007/01/20~2007/02/18		Environmental Reseacher, Industrial Unit, EEAA
Abou El Ela Mostafa Mohamed Mourad (Mr)	Air Pollution Problem and Existing Air Quality Management	2007/01/20~2007/02/18	Air pollution control and management, Measurement of air pollutants, Tokyo Metropolitan, Local Authorities, ICETT, etc.	Division Chief, Air Quality Department, EEAA
Abdel Hadi Omar Fathi (Mr)	Air Pollution Problem and Existing Air Quality Management	2007/01/20~2007/02/18		Reseacher of Air Pollution Environment, Cairo Central Center, EEAA

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List of equipment provided under the Project

Field	Equipment Name	JFY Granted	Quantity	Allocation	Setup Date	Working Situation as of Mid of June '07
	To analyze efficiency for the Air monitoring (Measurement of Sox, Nox, etc)					
	Measurement of air quality by passive sampling method	2005	1 set	CCC	04/2006	Working
	UV-VIS Spectrophotometer	2005	2 sets	GC-RBO	04/2006	Working
	Ion Chromatography Analyzer	2005	1 set	CCC	04/2006	Working
	GPS and lap top computer	2005 added	each 1set	CCC	04/2006	Working
	PM10 Cyclone for in-stack cascade sampler	2005 added	1 set	CCC	05/2006	Working
	Air Quality Monitoring Station	2006	1 set	Tahrir Square		Under Construction
	To analyze and measure the spilled oil in the Suez canal by Finger print method					
	Fluorescence Spectrophotometer	2005	1 set	Suez-RBO	04/2006	Working
	FTIR (Infrared Spectrophotometer)	2005	1 set	Suez-RBO	04/2006	Working
	* Density meter	2005	1 set	Suez-RBO	04/2006	to be used from 07/07
	* Refractometer	2005	1 set	Suez-RBO	04/2006	to be used from 07/07
	Viscometer	2005	1 set	Suez-RBO	05/2006	to be used from 07/07
	Water bath for Viscometer	2005	1 set	Suez-RBO	05/2006	Working
	Solvent , reagent, standards and fused silica column	2005 added	1 set	Suez-RBO	05/2006	Working
	Soxhlet Apparatus Heating Mantle	2005 added	1 set	Suez-RBO	05/2007	to be used from 07/07
	Attachment for FTIR	2006 added*2	1 set	Suez-RBO	05/2007	to be used from 07/07
	Attachment for the Existing Gas Chromatography	2006 added*2	1 set	Suez-RBO	05/2007	to be used from 07/07
	Standard Reagent to analyze for the spilled oil	2006 added*2	1 set	Suez-RBO	05/2007	to be used from 07/07
	POPs monitoring in Egypt certified by Stockholm, convention					
	Multifunctional Fluorescence Detector for HPLC	2005	1 set	CCC	04/2006	to be used from 08/07
	Standards solution of PCBs , PAH and Hydrocarbons	2005	1 set	CCC	03/2006	Working
	* Clean-up equipment and reagents	2005	1 set	CCC	05/2006	to be used from 08/07
	A.A.S. Attachment Hydrogenation-Reductive vapourization	2005	1 set	CCC	04/2006	to be used from 08/07
	Microwave Oven	2005	1 set	CCC	04/2006	to be used from 08/07
	Equipment for water analysis	2005	1 set	EEAA	04/2006	to be used from 08/07
	DO meter	2005	1 set	EEAA	04/2006	to be used from 08/07
	GPS , Lap-top Computer and LCD Projector	2005	each 1set	EEAA	02/2006	Working
	Gas Chromatography ECD system	2005	1 set	EEAA	03/2007	Working
	Attachment for the Existing Gas Chromatography for PAH	2006	1 set	CCC	03/2007	Working
	Software for control and solution for the Existing GS-MS	2006	1 set	CCC	03/2007	Working
	To contribute the process improvement of industries for the region of the Alexandria					
	Auto Sampler for air	2005	1 set	Alex-RBO	04/2006	to be working from 08/07
	Auto Sampler for water	2005	1 set	Alex-RBO	05/2006	to be working from 08/07
	Total					

*. Procurement was done by combining as a LOT. Amount of this LOT was 270,170 LE

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List of equipment accompanied with the JICA Expert Team under the Project

Equipment Name	JFY Granted	Quantity	Site installed	Setup Date	Working Situation as of Mid of June '07
Copy Machine	2005	1 set	REMIP office	02/2006	Working
Computer (Desktop Type)	2005	1 set	REMIP office	02/2006	Working
Computer (Note Type)	2005	1 set	REMIP office	02/2006	Working
Printer	2005	1 set	REMIP office	02/2006	Working
Color Printer	2005	1 set	REMIP office	02/2006	Working
Scanner	2005	1 set	REMIP office	02/2006	Working
Office LAN System	2005	1 set	REMIP office	02/2006	Working
Projector	2005	1 set	REMIP office	02/2006	Working
Video Camera	2005	1 set	REMIP office	02/2006	Working
Fax Machine	2005	1 set	REMIP office	02/2006	Working
PCB Standard Materials	2006	1 set	CCC	08/2006	Working
Flue Gas Calculation Soft	2006	1 set	CCC	05/2006	Working
Devices for Flue Gas Measurement	2006	1 set	CCC	11/2006	Working
Standards for PAH and Heavy Metal	2006	1 set	CCC	02/2007	to be used from 08/07
Oil Weathering Test Unit	2006	1 set	Suez-RBO	06/2006	Working
Chemicals for Passive Sampling and Measurement	2006	1 set	CCC, RBOs	07/2006	Working
HP Software	2006	1 set	REMIP office	01/2007	Working
Total					

*1: Actual procurement was done by the Expert Team in Egypt by Egyptian currency.

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**LIST OF COUNTERPARTS
FOR REGIONAL ENVIRONMENTAL MANAGEMENT IMPROVEMENT PROJECT
(AS OF 1ST JULY 2007)**

Project Administrative Management Counterpart

Name	Role in the Project	Position
Mawaheb Abou El Azm	Chairperson of Joint Steering Committee	Chief Executive Officer
Ahmed Abou Elseoud Ahmed	Project Director	Undersecretary, Central Department of Air and Noise, EQS
Fatma Mohamed Abou El Shouk	Project Manager	Head of Environmental Management Sector (EMS)
Yehia Abdalkader Abdallah	Project Manager	Head of Central Department of Communication and Environmental Awareness (CDCEA)
Ali Abu Sedira	Project Manager	Head of Sector of Regional Branch Affairs (SRBA)
Heba M. Hassanein	Assistant Project Director	International Relation Officer, Department of International Relation and Technical Cooperation

Technical Counterpart

Output 1 (WG1): Regional Air Pollution Control Management System Improvement

Name	Position	Remark
Kawser Hefny	Deputy Manager of AQD and Chief of CCC, EQS	Leader of WG1 *
Moustafa Mohamed Mourad	Section Chief, Air Quality Department, EQS	Sub-Leader of WG1 *
Mohamed Hagag	Specialist, Air Quality Department, EQS	*
Wael Abd Hamid	Air Quality Department, EQS	*
Hany Mohamed Nabil	Air Quality Department, EQS	*
Ashraf Saleh Ibrahim	Air Quality Department, EQS	*
Usama Ahmed Faramawy	Air Quality Department, EQS	*
Mahamoud Abd ElRahim Ahmed	Air Quality Department, EQS	*
Metwally Abd El Baki	Air Quality Department, EQS	(in UEA now) *
Mohamad Ezziddin Sayour	Chief of Air Quality Section of CCC, EQS	*
Omar Fathi Abd El Hadi	Air Quality Section of CCC, EQS	*
Mohamoud Mohammed Nourddin	Air Quality Section of CCC, EQS	*
Mahmoud Said Rwash	Air Quality Section of CCC, EQS	*
Mohamed Gamal Zenhom	Air Quality Section of CCC, EQS	*
Samy Ashraf	Air Quality Section of CCC, EQS	*
Mohamed Yassin	Air Quality Section of CCC, EQS	*
Mohamed Sallam Bayoumi	Air Quality Section of CCC, EQS	*
Mohammed Mossad	Director of Laboratory, EQD, GC RBO	*
Mohamed Hamdy	Air Laboratory, EQD, GC RBO	*
Hussein Moawad	Director of EMD, GC RBO	*
Mostafa Zayed	Director of Laboratory, Tanta RBO	*
Amir Fawzy Kharoub	Chief of Air Section of Laboratory, Tanta RBO	*
Mohammad Gamal Eldein Hassanien	Air Section of Laboratory, Tanta RBO	*
Osama El-Bastawese Harhash	Air Section of Laboratory, Tanta RBO	*
Mohamed Ismail Elsaidy	Air Section of Laboratory, Tanta RBO	*
Emad Fares	Air Section of Laboratory, Tanta RBO	*
Wail Shapan Aji	Air Section of Laboratory, Tanta RBO	*
Amir Abdel Rahman	Water Section of Laboratory, Tanta RBO	in charge of IC analysis *
Ashraf Abou El Fotouh Mahmoud	Senior Inspector,, EMD, Tanta RBO	*
Maged Mohamed El-Sayed	Chief of Air Section of Laboratory, Mansoura RBO	*
Hatem Ibrahim Mohamed El-Nady	Air Section of Laboratory, Mansoura RBO	*

Walid Abdel Karim Ragab Ali	Air Section of Laboratory, Mansoura RBO		*
Amin Mohamed Arafa	Air Section of Laboratory, Mansoura RBO		*
Magdy Mohamed El-Hossry	Air Section of Laboratory, Mansoura RBO		*
Ahmed El-Said Rady	Air Section of Laboratory, Mansoura RBO		*
Abeer Agha El-Desoky	Air Section of Laboratory, Mansoura RBO		*
Mamdouh Ahmed El-Naggar	Air Section of Laboratory, Mansoura RBO		*
Abou Bakrr	Director of EMD, Mansoura RBO		*
Heba Ibrahim	Industrial Unit, EMS	Participatory base	
Hussein Gouda	Industrial Unit, EMS	Participatory base	
Mohamed Amir Ahmed	Environment Researcher, Industrial Unit, EMS	Participatory base	
Ahlam Farouk Ammar	Manager of Inspection Department, EMS	Participatory base	
Basem Abdel	Inspection Department, EMS	Participatory base	
Hossam El Shakhs	Programmer, Data Management Department	Participatory base	
Asmaa Hamouda	Manager of Hazardous Substances Department, EMS	Participatory base	

*: Primary counterpart targeted for technical transfer and capacity development through training, OJT and joint work

Output 2 (WG2): Oil Pollution Program

Name	Position	Remark	
Ali Abu Sedira	Head of SRBA	Supervisor	
Laila El-Khouhi	General Director of Suez RBO	Leader of WG2	*
Ghareeb Morsy	Director of EMD, Suez RBO	Sub-Leader of WG2	*
Mohamed Alasmar	Director of EQD, Suez RBO	Sub-Leader of WG2	*
Gamal Radwan	Manager of Planning & Management Dept, Suez RBO		*
Mohamed Ismail	Environmental Disaster Unit, EEAA		*
Ahmed Kasem Sheta	Central Operation Room, EMS, EEAA		*
Kossay Mahmoud	Central Operation Room, EMS, EEAA		*
Ehab Hussein	EMD, Suez RBO		*
Ahmed Hassan	EMD, Suez RBO		*
Ahmed Abbas	EMD, Suez RBO		*
Hoda Mostafa Ibrahim	Deputy Director of Alexandria RBO	Participatory base	
Saad Zamal	EQD, Alexandria RBO	Participatory base	
George Mousa	EQD, Alexandria RBO	Participatory base	
Bakhet Metawi	EQD, Red Sea RBO	Participatory base	
Kawser Hefny	Deputy Manager of AQD and Chief of CCC, EQS	Participatory base	
Hanaa El-Sheftawy	CCC, EQS	Participatory base	
Abdallah El-Lithy	CCC, EQS	Participatory base	
Sameh Hamza	CCC, EQS	Participatory base	
Gehan Elsakka	EQS	Participatory base	

*: Primary counterpart targeted for technical transfer and capacity development through training, OJT and joint work

Output 3 (CC1): Sound Management of Hazardous Chemical Substances

Name	Position	Remark	
Fatma Mohamed Abou El Shouk	Head of Environmental Management Sector (EMS)	Supervisor	
Atwa Hussein Atwa	General Director, Greater Cairo RBO	Supervisor	
Eng. Adel El Shafi	Manager, General Department of Hazardous Substance and Hazardous Waste Management, EEAA	Supervisor	
Elham Refaat Abed El Aziz	Manager, Hazardous Substance Management Department (HSMD)	Leader of CC1	*
Mohamed Esmail	Manager, Hazardous Waste Management Department		*
Kawser Hefni	Chief of Cairo Central Center		*
Assrna Said	Expert of HSMD		*
Engy Sehata	Expert of HSMD		*
Medhat Yosef	Expert of HSMD		*
Yaser Bader	Expert of HSMD		*
Mohamed Lotfy Kamel Abu Zeed	General Department for Environmental Development		*
Hanaa Mohmoud El Sheltawi	Chief of Water Quality Section of CCC		*

Essam Eldin Eldawy Ibrahim Saleh	Technical Expert of CCC		*
Mahmoud Nour El-Din	Technical Expert of CCC		*
Mohammed Yassin	Technical Expert of CCC		*
Ahmed Abo El-Seoud	Technical Expert of CCC		*
Abdallah El-Lithy	Technical Expert of CCC		*
Sameh Mohammed Hamza	Technical Expert of CCC		*
Ahmed Rifaat	Technical Expert of CCC		*
Eman Shahen	Technical Expert of CCC		*
Yassir Risk	Technical Expert of CCC		*
Mohamed Mosaad	Director, Laboratory of GC RBO		*
Mohamed Galal	Water Quality Laboratory Expert of GC RBO		*
Ahmed Farouk Ammar	Manager, General Dept. of Env. Inspection of EEAA	Participatory base	
Arnaal Taha Sayed	Director of Students Education & Awareness, CDCEA	Participatory base	
Ahmed Mostafa	Manager, GIS Section in Information Department of EEAA	Participatory base	
Mohamed Farouk Amen Abdel Rahman	Environmental Development Department	Participatory base	
Hussen Gouela	Industrial Unit of EEAA	Participatory base	

*: Primary counterpart targeted for technical transfer and capacity development through training, OJT and joint work

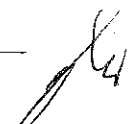
Output 4 (WG3): Training Capability Enhancement Program

Name	Position	Remark	
Yehia Abdalkader Abdallah	Head of CDCEA	Supervisor	
Hoda Abbas El-Shayeb	General Director of GDTD, CDCEA	Leader of WG3	*
Hussein Emmam	Chief Training Expert of, GDTD, CDCEA	Sub- Leader of WG3	*
Laila Abd El Azim Kandil	Training specialist, GDTD, CDCEA	Sub- Leader of WG3	*
Salah M. Ahmed	Director of Training Department, CDCEA		*
Rasha Khaled	Training specialist, GDTD, CDCEA		*
Alaa Mourad	Training specialist, GDTD, CDCEA		*
Doaa Mohamed	Training specialist, GDTD, CDCEA	Participatory base	
Ahmed El Shater	Training specialist, Training Department GDTD, CDCEA	Participatory base	
Ahmed Abdel Khalek	Training specialist, Training Department GDTD, CDCEA	Participatory base	
Mohamed Abd El Hamid	Training specialist, Training Department GDTD, CDCEA	Participatory base	
Wafaa Hassan	Training specialist, Training Department GDTD, CDCEA	Participatory base	
Abdelaleem Ahmed	Training specialist, Training Department GDTD, CDCEA	Participatory base	

*: Primary counterpart targeted for technical transfer and capacity development through training, OJT and joint work

Output 5 (WG4): Improvement Guidance of Production Process

Name	Position	Remark	
Ali Abu Sedira	Head of SRBA	Supervisor	
Mona Gamal El Dein	General Director of Alexandria RBO	Leading RBO	
Hoda Mostafa Ibrahim	Deputy Director of Alexandria RBO	Leader of WG4	*
Lamyaa Mostafa	Chief of Water Quality Section of Alex RBO Laboratory		*
Ghada Abdel-Moneim	Chief of Environmental Development Dep. in Alex RBO		*
Gihan Ramadan	Expert of Air Quality Laboratory of Alex RBO		*
Saad Zamel	Expert of Water Quality Laboratory of Alex RBO		*
Ihab Sharkawy	Chief of EQD of Alex RBO		*
George Zarif Mousa	Expert of Water Quality Laboratory of Alex RBO	Participatory base	
Emad ElGarnal	Law researcher of Alex RBO	Participatory base	
Mohammed Hair	Law supervisor of Alex RBO	Participatory base	
Mohamed Gamal	Expert of Env. Development Dep. of Alex RBO	Participatory base	
Heba Ibrahim	Industrial Unit, EMS	Participatory base	
Wafaa Allam	Public Awareness & Information Dep of Alex RBO	Participatory base	

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*: Primary counterpart targeted for technical transfer and capacity development through training, OJT and joint work

Output 6 (WG5): Promotion of Public Awareness Raising Activities

Name	Position	Remark	
Yehia Abdalkader Abdallah	Head of CDCEA	Supervisor	
Fouad Megaheed	General Director of GDME&E, CDCEA	Leader of WG5	*
Mostafa Kamel	Director of GDME&E, CDCEA	In charge of supporting RBOs	*
Abd El Rahim Mahmoud	GDME&E, CDCEA	In charge of supporting RBOs	*
Amaal Taha Sayed	Director of Students Education & Awareness, CDCEA	In charge of supporting CC1	*
Mamdouh Koeib	GDME&E, CDCEA	In charge of supporting CC1	*
Hind Gharib	GDME&E, CDCEA	Coordinator of WG5	*
Mohamed Ahmed Hussein	Director of Media Dept, Tanta RBO		*
Mohamed F. El-Shorbani	Mass media coordinator, Assuit RBO		*
Essa Shady	GC RBO		*
(to be named)	Alexandria RBO		*
(to be named)	Suez RBO		*

*: Primary counterpart targeted for technical transfer and capacity development through training, OJT and joint work

Output 7 (WG6): Public Awareness Raising Activities Using Air Monitoring Station w/ Display

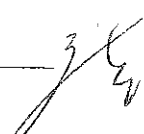
Name	Position	Remark	
Ahmed Abou Elseoud Ahmed	Undersecretary, Central Department of Air and Noise, EQS	Leader of WG6	*
Fouad Magahed	General Director, Public Awareness Department, CDCEA		*
Hany Mohamed Nabil	Air Quality Department, EQS		*
Asraf Saleh	Air Quality Department, EQS		*
Abd El Rahim Mahmoud	Awareness Specialist, Public Awareness Department, CDCEA		*
Moustafa Kamal	Public Awareness Department, CDCEA	Participatory base	
Amaal Taha Sayed	Director of Students Education & Awareness, CDCEA	Participatory base	

*: Primary counterpart targeted for technical transfer and capacity development through training, OJT and joint work

Output 8 (CC2): Sharing of Information on REMIP among RBOs

Name	Position	Remark	
Ali Abu Sedira	Head of SRBA	Chairman	
Sayed Mostafa	SRBA	Deputy Chairman	*
Fatma El Zahraa	SRBA	Deputy Chairman	*
Atwa Hussein Atwa	General Director of GC RBO	Leading RBO	
Sheweker Mostafa	General Director of Tanta RBO	Leading RBO	
Mostafa Zayed	Director of Laboratory, Tanta RBO	Leading RBO	
Mona Gamal El Dein	General Director of Alexandria RBO	Leading RBO	
Hoda Mostafa Ibrahim	Deputy Director of Alexandria RBO	Leading RBO	
Laila El-Khouhi	General Director of Suez RBO	Leading RBO	
Mohamed Alasmar	Director of EQD, Suez RBO	Leading RBO	
Nader Shehata	General Director of Assuit RBO		
El Sayed Madyan	General Director of Red Sea RBO		
Mohamed Gad El Rab	General Director of Aswan RBO		
Gaml El Seidy	General Director of Mansoura RBO		
Kawser Hefny	Deputy Manager of AQD and Chief of CCC, EQS	Key Technical Department, EEAA	
Elham Rafaat	Manager of Hazardous Substance Department, EMS	Key Technical Department, EEAA	
Fouad Megaheed	General Director of GDME&E, CDCEA	Key Technical Department, EEAA	

*: Primary counterpart targeted for technical transfer and capacity development through training, OJT and joint work

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Project Design Matrix (PDM1)
 Project Title: Regional Environment Management Improvement Project in the Arab Republic of Egypt (REMIP)
 Implementing Agency: EEAA
 Target Group: EEAA, RBOs
 Duration: Nov. 2005 - Oct. 2008
 Revised Date: July 3, 2007

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>Overall Goal</p> <p>EEAA and its RBOs together with other competent stakeholders become capable of evaluating environmental situations, identifying the problems, defining the causes of such problems, acknowledging possible solutions, and implementing countermeasures through raising the environmental awareness of EMUs, enterprises, NGOs, and citizens.</p>	<p>OG1 EEAA is acknowledged as the reliable supporting agency for private and public sectors in Egypt.</p> <p>OG2 Regulations/decrees which enhance the implementation of countermeasures proposed by the project are stipulated.</p> <p>OG3 The regulations and guidelines, etc. to support the implementation of countermeasures suggested by the project are promulgated and executed by sector ministries concerned.</p> <p>OG4 Environmental awareness of enterprises and the citizens is enhanced.</p> <p>OG5 New activities to improve environment at the community level are started with combined efforts among EEAA /RBOs together with other competent stakeholders.</p>	<p>Survey / Questionnaires</p> <p>Regulation / Decrees</p> <p>Regulation / Decrees</p> <p>Questionnaire surveys</p> <p>EEAA/RBO's Records</p>	<p>- Policy and financial support is continuously provided by the Egyptian Government after the Project completion.</p> <p>- governments, local public organizations, enterprises and beneficiaries are cooperative to implement the environmental activities.</p> <p>- Egyptian Policy for environmental sector will not drastically change.</p> <p>- Other external organizations and industries do not take negative reaction against implementing countermeasures by EEAA</p>
<p>Project Purpose</p> <p>EEAA and its RBOs are enhanced on the capability of managing environmental data and information, suggesting countermeasures through On-the-Job Training.</p>	<p>PP1 Effective countermeasures for environmental pollution, hazardous substances are prepared.</p> <p>PP2 More concrete data, information and achievements obtained from RBO activities (including proposal of decrees) are published. (as a part of State of Environment (SOE) if SOE is published.)</p> <p>PP3 EEAA/RBOs start their new activities after sharing information and implementation of trainings.</p>	<p>Project records</p> <p>SOE, other publication</p> <p>Project records</p>	<p>- Progress of other projects assisted by other donor agencies does not negatively affect the project activities.</p> <p>- Other Depts of EEAA/RBO are cooperative to the Project.</p>
<p>OUTPUTS</p> <p>1 EQS of EEAA and EQDs of RBOs become capable of proposing countermeasures against air pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted. (WG1)</p> <p>2 Suez RBO becomes capable of proposing countermeasures against oil pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted. (WG2)</p> <p>3 EQS and EMS of EEAA, and EQDs and EMDs of RBOs become capable of identifying hazardous substances, compiling the data and information, and identifying their risks. (CC1)</p>	<p>1-1 60% of energy consumption for 9 related target governorates are directly captured.</p> <p>1-2 Emission Inventory Report are prepared at selected sites.</p> <p>1-3 Internal reports are issued based on the analysis of collected data.</p> <p>1-4 EIA/EEAA MMS/CAMAX model are to be validated and executed in five scenarios (Present, 2012, 2017 in BAU and two scenarios in different social and economic development rates for Sox, Nox and TSP) with the reasonable level of accuracy.</p> <p>1-5 Four activities required for countermeasure preparation are mastered by at least 10 staff representing EEAA, GCREO, Tanta RBO and Mansura RBO.</p> <p>1-6 Integrated workshop with at least 60 participants is to be conducted before the end of August 2008 in order to share countermeasure proposals for air quality.</p> <p>2-1 Integrated countermeasure plan that is effective for reducing oil pollution risk in Northern Gulf Region and viable for Suez RBO is prepared and approved by EEAA.</p> <p>2-2 Database for fingerprint data on crude oil and derivatives is furnished.</p> <p>3-1 Monitoring report(s) are annually issued on hazardous chemical substances and information reported is shared and discussed with relevant stakeholders.</p> <p>3-2 Reports of Egyptian situation of hazardous chemical substances are issued.</p> <p>3-3 Number of staff acquires knowledge and skills to manage the process from identifying possible pollution sources by sampling and analysis of hazardous chemical substances, evaluation of analysed data, identification of hazardous chemical substances risks, and emission countermeasures.</p> <p>3-4 Data of pollutants is compiled as database, and shared the database with EEAA and RBOs.</p> <p>3-5 Guidelines for hazardous substances management are prepared.</p>	<p>EEAA/RBOs Report</p> <p>EEAA/RBOs reports</p> <p>EEAA/RBOs reports</p> <p>Project records</p> <p>Project records</p> <p>Project records</p> <p>Project records</p> <p>Project records</p> <p>EEAA/RBOs reports</p> <p>Project records</p> <p>EEAA/RBOs reports</p> <p>Project records</p> <p>EEAA/RBOs reports</p> <p>EEAA/RBOs reports</p>	<p>- Progress of other projects assisted by other donor agencies does not negatively affect the project activities.</p> <p>- Other Depts of EEAA/RBO are cooperative to the Project.</p>

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<p>4 CDCEA(GDT) of EEAA becomes capable of planning, designing, and implementing trainings within EEAA based on the information provided by all other relevant departments/organizations.(WG3)</p> <p>5 EQD and EMD of Alex RBO become capable of proposing Production Process Improvement as well as the Pollution Abatement for industries/factories based on the data and information collected and interpreted.(WG4)</p> <p>6 GDME&E of EEAA and concerned RBOs become capable of raising public awareness to EMUs, enterprises, NGOs, and citizens.(WG5)</p> <p>7 AOD and GDME&E of EEAA become capable of disseminating the environmental information to the public by effectively utilizing the Real-Time Air Monitoring Station with Display.(WG6)</p> <p>8 SRBA of EEAA and concerned RBOs become capable of enhancing their capacities by mutual interaction through CC2 mechanism.(CC2)</p>	<p>4-1 All training courses held by EEAA are registered at GDT.</p> <p>4-2 Training courses are implemented.</p> <p>4-3 Evaluation by participants of training courses is utilized for improving new courses.</p> <p>4-4 Materials for training are compiled in GDT.</p> <p>4-5 At least 6 staff under GDTD become capable of managing the procedures of training activities. (to conduct/analyze TNA, plan, implement and evaluate the training course)</p> <p>5-1 Manuals/guidelines for inspectors are prepared and published.</p> <p>5-2 Seminars are held for industries to introduce successful introduction of cleaner production process including any good practices and of other organization(s).</p> <p>5-3 Number of countermeasure proposals prepared by RBOs is increased in the target industries.</p> <p>5-4 Assessed inspection reports for the selected industries show significant improvement in quality.</p> <p>5-5 A report of best practices and recommendations for the selected industries is prepared and distributed.</p> <p>6-1 Reports of baseline surveys of public awareness are issued.</p> <p>6-2 The number and details of awareness raising activities conducted in REMIP are registered in CDCEA.</p> <p>6-3 The report of second survey are issued.</p> <p>6-4 Evaluation by participants of awareness raising activities is utilized for designing new activities.</p> <p>7-1 Real-Time Air Monitoring Station with Display is operated and properly maintained.</p> <p>7-2 Management plan of contents of display is prepared.</p> <p>7-3 Real-time Air Monitoring Station with Display is well-recognized by the people in Cairo city serving as "a symbol of environmental watchdog."</p> <p>8-1 Seminar(s) for sharing the experiences and information obtained through REMIP activities are held among RBOs.</p> <p>8-2 To ensure that the mechanism for sharing the experiences and information among RBOs are developed, monthly report from all RBOs includes CC2 activities.</p>	<p>Project reports</p> <p>Project reports</p> <p>Project reports</p> <p>Project reports</p> <p>Project reports</p> <p>Project records</p> <p>Project records</p> <p>Project records</p> <p>Project records</p> <p>Project records</p> <p>Project records</p> <p>Project records</p> <p>Project records</p> <p>EEAA/RBOs records</p> <p>Project records</p> <p>Project records</p> <p>EEAA/RBOs report</p> <p>EEAA/RBOs records</p> <p>Questionnaire Survey</p> <p>EEAA/RBO records</p> <p>Monthly report to SRBA</p>	<p>Activity</p> <p>See the Plan of Operation for details</p> <p>Inputs</p> <p>The Egyptian Side</p> <ol style="list-style-type: none"> 1. Assignment of counterpart personnel and other necessary personnel 2. Land, building and facilities for the Project 3. Running expenses for the Project <p>The Japanese Side</p> <p>Dispatch of experts</p> <p>Training of counterpart personnel in Japan</p> <p>Provision of equipment</p> <p>Counterparts remain assigned to carry out the activity.</p> <p>Appropriate budget (including cost for equipment maintenance) is continuously allocated.</p> <p>Pre-Conditions</p>
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Activities	EG 2005				EG 2006				EG 2007				EG 2008				Key Depts.
	JP 2005		EG 2005		JP 2006		EG 2006		JP 2007		EG 2007		JP 2008		EG 2008		
	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	
OUTPUT 1: (WGT)																	
EQS of EEAA and EQDs of RBOs become capable of proposing countermeasures against air pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted.																	
1-1 To enhance the capability of making emission inventories and analyzing emission loads at the selected areas.																	
1-1-1 Conduct Stationary Inventory Survey and database																	AQD, GC RBO, Tanta RBO, Mansura RBO
1-1-2 Conduct Vehicle Inventory Survey																	AQD, GC RBO, Tanta RBO, Mansura RBO
1-1-3 Conduct Survey of Present Rice Straw Burning Pattern																	AQD, GC RBO, Tanta RBO, Mansura RBO
1-1-4 Conduct Survey on Other Surface Emission Inventory																	AQD, GC RBO, Tanta RBO, Mansura RBO
1-1-5 Conduct Flue Gas Measurements																	AQD, CCC
1-1-6 Conduct Rice Straw Burning Experiment																	AQD, CCC
1-1-7 Investigate Emission Factors																	AQD, GC RBO, Tanta RBO, Mansura RBO
1-2 To enhance the capability of collecting data related to ambient air quality at sites.																	
1-2-1 Collect Past Monitor Record (Two years)																	AQD
1-2-2 Collect Past Measurements on Lead, EPAP programme																	AQD, CCC
1-3 To monitor air quality of regional hot spots with passive samplers in Nile delta area and the Greater Cairo.																	
1-3-1 Conduct Four Season's Integrated Passive Sampling Measurements and one extra during the black smoke period in GCRBO, TNT and MNR.																	AQD, CCC, GC RBO, Tanta RBO, Mansura RBO
1-4 To enhance the capability of interpreting and appreciate overall ambient air quality at sites.																	
1-4-1 To analyze the data of all pollutants on SOx, NOx, TSP measured in the activities 1-2-1, 1-2-2 and 1-3-1 as OJT.																	AQD, CCC, GC RBO, Tanta RBO, Mansura RBO
1-5 To develop the tool of preparing the countermeasures against air pollutions.																	
1-5-1 Conduct Overall Load Analysis																	AQD, CCC, GC RBO, Tanta RBO, Mansura RBO
1-5-2 Conduct Simulation Model Development																	AQD, CCC, GC RBO, Tanta RBO, Mansura RBO
1-6 To implement On-the-Job Training for proposing countermeasure plan against air pollution																	
1-6-1 Conduct OJT Training on Methodology for Countermeasure Preparation																	AQD, CCC, GC RBO, Tanta RBO, Mansura RBO
1-6-2 Conduct OJT Training and workshop on Analysis of Survey Results																	AQD, CCC, GC RBO, Tanta RBO, Mansura RBO

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Activities	EG 2005				EG 2006				EG 2007				EG 2008				Key Depts.
	JP 2005		JP 2006		JP 2006		JP 2007		JP 2007		JP 2008		JP 2008				
	III 11-12	IV 1-3	I 4-6	II 7-9	III 10-12	IV 1-3	I 4-6	II 7-9	III 10-12	IV 1-3	I 4-6	II 7-9	III 10-12	IV 1-3			
OUTPUT 2:(WG2) Suez RBO becomes capable of proposing countermeasures against oil pollutions (site-evaluation, technical and administrative measures) based on the data and information collected and interpreted.																	
2-1	To implement On-the-Job Training for proposing countermeasure plan for reducing oil pollution risk in Suez region																
2-1-1 (Step 1)	<ul style="list-style-type: none"> <Setup and initiation of the working group> • Organize WG2 for oil pollution program. • Discuss the basic policy and strategy of the WG2's activities. 																
2-1-2 (Step 2)	<ul style="list-style-type: none"> <Baseline data survey> Collect data/information on the current situation of oil pollution issues in Suez Region and share them among group members. 																
2-1-3 (Step 3)	<ul style="list-style-type: none"> <Problem identification on present oil pollution issues> Identify problems in present management systems of oil pollution. 																
2-1-4 (Step 4)	<ul style="list-style-type: none"> <Inventory survey of oil pollution sources> Make the inventory and clarify possible oil pollution sources. 																
2-1-5 (Step 9-a & 9-b)	<ul style="list-style-type: none"> <Examination of the countermeasures and evaluation of their effect> • Formulate the countermeasures against oil pollution issues. • Evaluate the countermeasures against oil pollution issues. 																
2-1-6 (Step 10)	<ul style="list-style-type: none"> <Preparation of recommendation report> Recommend integrated countermeasures against oil pollution issues in the Suez Region. 																
2-1-7 (Step 11)	<ul style="list-style-type: none"> <Seminar of presentation of the OTT results> Share the results of OTTs on the countermeasure formulation and the fingerprint analysis technology in the seminar. 																
2-1-8 (Step 12)	<ul style="list-style-type: none"> <Preparation of data book and dissemination of WG2 activities' results> • Make the data book for all results generated from WG2 activities. • Disseminate the results of WG2 activities to the public, reporting the countermeasure plan in State of Environment. 																
2-2	To implement On-the-Job training dealing with oil fingerprint analysis.																
2-2-1 (Step 5)	<ul style="list-style-type: none"> <Training program for oil fingerprint analysis and identification system of oil pollution sources (ISOS)> • Prepare the training program for fingerprint analysis. • Discuss basic scheme and methodology for identifying oil pollution sources (ISOS). 																
2-2-2 (Step 6)	<ul style="list-style-type: none"> <Discussion of fingerprint data collection> Discuss and make the plan for collection concerning fingerprint data of oils. 																
2-2-3 (Step 7-a & 7-b)	<ul style="list-style-type: none"> <Technical Training of fingerprint analysis> • Hold the 1st technical training of fingerprint analysis and data evaluation to carry out the identification of oil pollution sources. • Hold the 2nd technical training to supplement the 1st technical training. 																
2-2-4 (Step 8-a & 8-b)	<ul style="list-style-type: none"> <Measuring and compiling of oil fingerprint data> • Collect crude oils to be analyzed. • Conduct fingerprint analysis of crude oils and furnish the database of fingerprint data. 																

Activities	EG 2005		EG 2006		EG 2007				EG 2008		Key Depts.	
	III	IV	III	IV	II	III	IV	I	II	III		
	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3		4-6
OUTPUT 3 : (CC1) EQS and EMS of ECAA, and EQDs and EMBs of RBOs become capable of identifying hazardous substances, compiling the data and information, and identifying their risks.												
3-1 To establish committees among hazardous substances department and stakeholders.												HSMD, CCC, GC RBO, etc.
3-2 To collect information to identify hazardous chemical substances in order to implement surveys for preparation of inventory, monitoring and treatment												
3-2-1 To collect existing research and monitoring data on PCBs												HSMD, CCC, GC RBO, etc.
3-2-2 To collect existing research and monitoring data on PAHs												HSMD, CCC, GC RBO, etc.
3-2-3 To collect existing research and monitoring data on heavy metals (Cd, Cr)												HSMD, CCC, GC RBO, etc.
3-3 To implement surveys for preparation of inventories and to identify potential contaminated sites												
3-3-1 To implement surveys on PCBs												HSMD, CCC, GC RBO, etc.
3-3-2 To implement surveys on PAHs												HSMD, CCC, GC RBO, etc.
3-3-3 To implement surveys on heavy metals (Cd, Cr)												HSMD, CCC, GC RBO, etc.
3-4 To implement On-the-Job Training for sampling and analyzing hazardous chemical substances, monitoring and interpreting of monitoring data, and proposing counter measures												
3-4-1 To implement On-the-Job Training on PCBs												HSMD, CCC, GC RBO, etc.
3-4-2 To implement On-the-Job Training on PAHs												HSMD, CCC, GC RBO, etc.
3-5 To share information through coordination committee with other ministries, institutions, universities, etc. related to hazardous chemical substance management												
3-5-1 To prepare a report and to share information on PCBs												HSMD, CCC, GC RBO, etc.
3-5-2 To prepare a report and to share information on PAHs												HSMD, CCC, GC RBO, etc.
3-5-3 To prepare a report and to share information on heavy metals (Cd, Cr)												HSMD, CCC, GC RBO, etc.
3-6 To hold seminar(s) on monitoring of hazardous chemical substances and countermeasures such as best available technologies of handling hazardous chemical substances												HSMD, CCC, GC RBO, etc.

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Activities	EG 2005				EG 2006				EG 2007				EG 2008				Key Depts.		
	JP 2005		JP 2006		JP 2006		JP 2007		JP 2007		JP 2008		JP 2008						
	I	II	I	II	III	IV	I	II	III	IV	I	II	III	IV					
3-6-1 To hold a seminar for discussion about existing condition of PCBs pollution, possible pollution sources and countermeasures on the problem with relevant stakeholders																			
3-6-2 To hold a seminar for discussion about existing condition of PAHs pollution, possible pollution sources and countermeasures on the problem with relevant stakeholders																			
3-6-3 To hold a seminar for discussion about existing condition of heavy metals (Cd, Cr) pollution, possible pollution sources and countermeasures on the problem with relevant stakeholders																			
3-7 To hold a seminar (Environmental Monitoring of hazardous chemical substances in Arab Countries) hosted by Egypt (EEAA)																			
3-8 To establish a database to be used for PCBs /PAHs/heavy metals (Cd, Cr)																			
3-8-1 To make a data entry for a database of PCBs																			
3-8-2 To make a data entry for a database of PAHs																			
3-8-3 To make a data entry for a database of heavy metals (Cd, Cr)																			
3-9 To prepare guidelines for hazardous substances management including recommendation to strengthen the institutional system and to identify the risks.																			

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Activities	EG 2005				EG 2006				EG 2007				EG 2008				Key Depts.
	JP 2005		JP 2006		JP 2006		JP 2007		JP 2007		JP 2008		JP 2008				
	III 11-12	IV 1-3	I 4-6	II 7-9	III 10-12	IV 1-3	I 4-6	II 7-9	III 10-12	IV 1-3	I 4-6	II 7-9	III 10	IV 1-3			
OUTPUT 4 : (WG3) CDCEA(GDT) becomes capable of planning, designing, and implementing trainings within EEAA based on the information provided by all other relevant departments/ organizations.																	
4-1 RBOs																	
4-1-1 Step-1																	
Review the current training courses																	
4-2 EEAA																	
4-2-1 Step-2																	
Review mandates and required skills																	
4-2-2 Step-3																	
Conduct Training Needs Analysis (TNA)																	
4-3 To advise specific courses to be participated in by RBOs and EEAA staff																	
4-4 To administer and implement training courses, in correspondence with other project activities. To prepare and compile materials for training courses																	
4-4-1 Step-4																	
Practice trainings under REMIP																	
4-4-2 Step-5																	
Plan the preliminary training courses																	
4-4-3 Step-6																	
Discuss on the database for training																	
4-4-4 Step-7																	
Implement the training course based on the plan																	
4-5 To make feedback system of final evaluation of training participants to be reflected on the course program																	
4-5-1 Step-8																	
Revise the training plan																	
4-5-2 Step-9																	
Continue the training																	
4-5-3 Step-10																	
Finalize the procedure of management of training courses																	

Activities	EG 2005		EG 2006				EG 2007				EG 2008		Key Depts.	
	JP 2005		JP 2006		JP 2007		JP 2007		JP 2008		-	-		
	III	IV	I	II	III	IV	I	II	III	IV				
	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10	
OUTPUT 5: (WG4) EQD and EMD of Alex RBO become capable of proposing Production Process Improvement as well as the Pollution Abatement for industries/factories based on the data and information collected and interpreted.														
To collect information on industrial pollution abatement technologies including process improvements for compiling as knowledge basis at selected industrial area(s) to use for making factory inspection manuals/ guidelines for inspectors of RBOs and EEAA, and for holding seminar(s) to introduce and disseminate some successful cases of introductions of pollution abatement technologies for factories.														
5-1-1	To set up Working Group 4 (WG4) for Production Process Improvement Guidance [Redacted]													Alex RBO
5-1-2	To collect baseline information on industrial sector of Alexandria, carry out inventory for petroleum-related, petrochemical and cement industry, and to compile the information into a report. [Redacted]													Alex RBO
5-1-3	To implement training and instruction of for pollution abatement and process improvement for petroleum-related, petrochemical and cement industry including more technical assistance from Japanese side. [Redacted]													Alex RBO
5-1-4	To implement factory interview surveys for collecting information of planned project to adopt pollution abatement technologies by factories themselves and proposing possible new measures for pollution abatement on factories [Redacted]													Alex RBO
5-1-5	To prepare a report of best practices and recommendations for the industries. [Redacted]													Alex RBO
5-1-6	To hold a seminar to exchange information of pollution abatement technologies among relevant stakeholders to adopt pollution abatement technologies [Redacted]													Alex RBO
5-2 To implement OJT dealing with the factory inspections of RBOs staffs for reflecting those experiences to prepare a new inspection manual.														
5-2-1	To assist factory inspectors and other related staff of Alex RBO for inspection [Redacted]													Alex RBO
5-2-2	To prepare an inspection manual for petroleum-related and petrochemical industry [Redacted]													Alex RBO

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Activities	EG 2005		EG 2006				EG 2007				EG 2008				Key Depts.
	JP 2005		JP 2006		JP 2007		JP 2007		JP 2008		JP 2008				
	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
OUTPUT 6: (WGS)															
GDME&E of E&AA and concerned RBOs become capable of raising public awareness to EMUs, enterprises, NGOs, and citizens.															
6-1 To implement prototype surveys of public awareness of potential target groups at selected site(s).															
6-1-1 Preparation of Work Plan for WGS -Setting up WGS -Preparation of Draft Work Plan and finalization Implementation of the 1st public awareness survey															
6-1-2 -Selection of target areas and groups -TOR for the survey -Implementation of the survey															
6-2 To analyze needs of awareness raising activities in consultation with REMIP components and RBOs.															
6-2-1 To specify outcomes, timing and target group for public awareness activities															
6-2-2 Review of the current public awareness activities															
6-2-3 Identify suitable public awareness activities															
6-3 To design awareness raising activities by using REMIP outcomes in coordination with RBOs, other stakeholders such as media and NGOs.															
6-3-1 To determine a message to each target group															
6-3-2 To select means (media and communication network) for dissemination of environmental information															
6-4 To administer and implement awareness raising activities for industries, NGOs, farmers, citizens on the selected topics as indicated in the design sheets. To prepare and compile materials and to distribute to RBOs.															
6-4-1 Prepare necessary materials for public awareness activities															
6-4-2 Implementation of public awareness activities by using REMIP outcomes in coordination with RBOs.															
6-5 To implement the second survey for examining impact of 6-4 activities in RBOs.															
6-5-1 Prepare the TOR for the survey															
6-5-2 Implementation of the survey															
6-6 To share information through working group with other ministries, institutions, universities, etc. related to public awareness raising.															
6-7 To improve the existing awareness plan based on lessons learned up to activities 6-5															

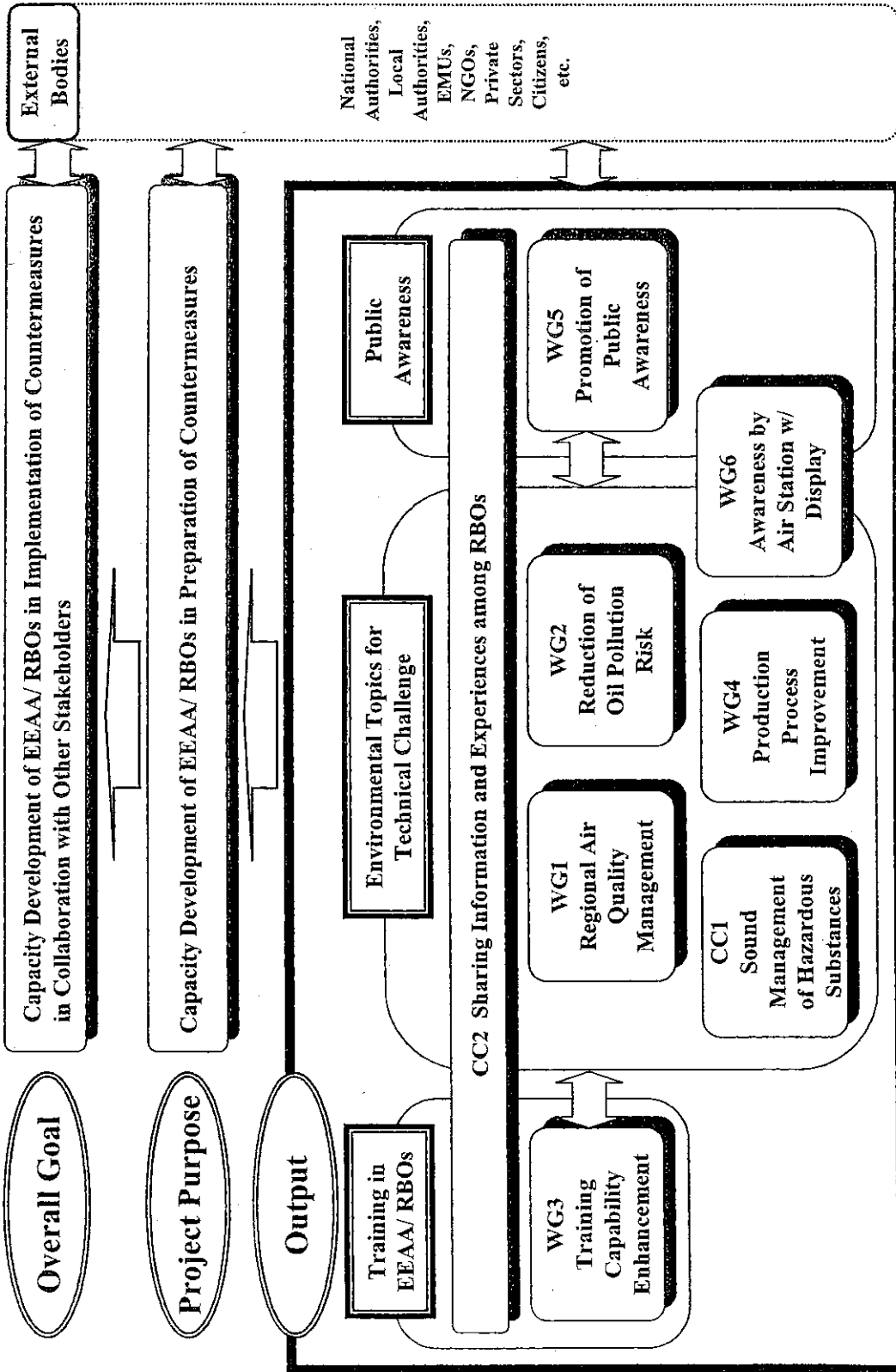
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Activities	EG 2005		EG 2006				EG 2007				EG 2008				Key Depts.
	JP 2005		JP 2006		JP 2007		JP 2007		JP 2008		JP 2008		JP 2008		
	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
OUTPUT 8: (CC2) SRBA of EEAA and concerned RBOs become capable of enhancing their capacities by mutual interaction through CC2 mechanism:															
8-1 To hold coordinating committees among RBOs.															
8-1-1 Step 1 <Setting of Coordination Committee 2 for information sharing> -Selecting group members -Holding kick-off meeting -Discussion of basic approach to develop the CC2 mechanism															
8-1-2 Step 2 <Understanding needs for information sharing> -Understanding of basic RBOs' capability related to technical topics under REMIP -Confirmation of the basic CC2 mechanism															
8-2 To implement seminars to share experiences of the OJT activities at RBOs with other RBOs and departments.															
8-2-1 Step 3 <Preparation and implementation of seminar(s) to share experiences and knowledge obtained through REMIP activities/OJT among RBOs> -Determination of information and topics to be presented in sharing seminar -Selecting of presenter from leading RBOs -Holding of sharing seminar															
8-3 To implement follow-up activities for the seminars of activity 8-2 at each RBOs.															
8-3-1 Step 4 <Preparation of the information sharing mechanism among RBOs> Develop the mechanism to share information under REMIP															
8-3-1-1 Action plan of CC2 is developed															
8-3-1-2 Request all WG/CC and JICA expert to review the Action Plan.															
8-3-1-3 Obtain the approval from WG/CC.															
8-3-1-4 Obtain the funds from WG3 for one year training.															
8-3-2 Step 5 <Implementation of information sharing (Advices from leading RBOs to the other RBOs)> Implement training by leading RBOs to the other RBOs under CC2 and WG3 initiatives															
8-3-2-1 Materials, textbooks used through OJT by each WG/CC are collected by CC2.															
8-3-2-2 Send these materials and textbooks to all other RBOs.															
8-3-2-3 Conduct training according to the plan for specific RBOs.															

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Conceptual Diagram of REMIP/ JICA Regional Environmental Management Improvement Project in EEAA/ RBOs

ANNEX8



A.A. *[Signature]*

Monitored by JICA Expert Team as of 30th June 2007

Demarcation of Items to be Inputted for REMIP Operation from April 2007 to March 2008

Input status: "A"= already or ready for arrangement, "B"= already or ready but insufficient, "C"= none, "U"= unknown/ not yet and to be monitored

WG/CC	Relevant Activities	1. Planned Inputs for Technical Assistance <u>These inputs will be provided by JICA. Inputs for training purpose are included.</u>	Implication Monitored	2. Inputs as Running Expenses <u>These inputs will be provided by EEAA.</u>	Implication Monitored
WG1 Regional Pollution Management System Improvement	(1) Preparation of stationary inventory survey	(i) JICA Expert Team (ii) National Expert for verifying the stationary inventory data & information (iii) Safety materials for inventory survey (iv) Transportation (vehicles) for collecting inventory survey information (v) Assistant surveyors	(i) A (ii) A (iii) A (iv) A (v) U	(i) Other transportation, accommodation and per diem (ii) Printed inventory survey sheet (iii) Communication cost (iv) Utilities for preparation of stationary inventory (v) Logistic cost To be specified	(i) U (ii) A (iii) A (iv) U (v) U
	(2) Preparation of mobile inventory survey	(i) JICA Expert Team (ii) Supplemental mobile inventory survey (Sub-contract work if necessary)	(i) A (ii) U	(i) Transportation, accommodation, and per diem (ii) Printed inventory survey sheet (iii) Communication cost (iv) Utilities for preparation of mobile inventory (v) Logistic cost To be specified	(i) U (ii) A (iii) A (iv) A (v) U
	(3) Measurement and analysis by passive sampling	(i) JICA Expert Team (ii) Transportation (vehicles) for collecting passive sampler (iii) Assistant surveyors	(i) A (ii) A (iii) A	(i) Labo-work cost including glassware, consumables, and chemicals for analysis of NOx, SO2, and PM (ii) Logistic cost To be specified	(i) U (ii) U
	(4) Development of dispersion approach	(i) JICA Expert Team (ii) National Expert for applying local resource for modeling of air pollution condition. (iii) Utilities for upgraded	(i) A (ii) U (iii) A	(i) Communication cost (ii) Utilities for running dispersion approach (iii) Logistic cost To be specified	(i) A (ii) A (iii) A

REMIP 22

WG/CC	Relevant Activities	1. Planned Inputs for Technical Assistance <u>These inputs will be provided by JICA. Inputs for training purpose are included.</u>	Implication Monitored	2. Inputs as Running Expenses <u>These inputs will be provided by EEAA.</u>	Implication Monitored
		simulation/computation (PC, etc.)			
WG1 Regional Air Pollution Control Management System Improvement	(5) Training workshop	(i) JICA Expert Team (ii) Venue of workshop (iii) Materials for workshop	(i) A (ii) U (iii) U	(i) Transportation, accommodation and per diem for participants from EEAA and RBOs To be specified	(i) U
WG2 Oil Pollution Program	(1) Supplemental training of fingerprint analysis (2) Measuring and compiling of fingerprint data	(i) JICA Expert Team (ii) National expert for support of supplemental fingerprint analysis training (iii) Chemicals and consumables for the training (i) JICA Expert Team	(i) A (ii) A (iii) A (i) A	(i) Accommodation and per diem for trainees (ii) Logistic cost To be specified (i) Labo-work cost including glassware, consumables, and chemicals for fingerprint analysis (ii) Utilities for compiling fingerprint data (iii) Logistic cost To be specified	(i) B (ii) A (i) A (ii) U (iii) A
	(3) Preparation of oil pollution source inventory	(i) JICA Expert Team	(i) A	(i) Inventory surveys (ii) Transportation, accommodation and per diem (iii) Printed inventory survey sheet (iv) Communication cost (v) Utilities for preparation of pollution inventory (vi) Logistic cost To be specified	(i) A (ii) U (iii) A (iv) A (v) A (vi) A
	(4) Evaluation of fingerprint data and examination of	(i) JICA Expert Team (ii) National Expert for supporting compilation and interpretation of obtained data/information	(i) A (ii) U	(i) Communication cost (ii) Logistic cost To be specified	(i) A (ii) A

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WG/CC	Relevant Activities	1. Planned Inputs for Technical Assistance <u>These inputs will be provided by JICA. Inputs for training purpose are included.</u>	Implication Monitored	2. Inputs as Running Expenses <u>These inputs will be provided by EEAA.</u>	Implication Monitored
	countermeasures				
	(5) Training workshop	(i) JICA Expert Team (ii) Venue of workshop (iii) Materials for workshop	(i) A (ii) U (iii) U	(i) Transportation, accommodation and per diem for participants from EEAA and RBOs To be specified	(i) U
WG3 Training Capability Enhancement Program	(1) Examination of Training Needs Analysis (TNA)	(i) JICA Expert Team (ii) National expert for support of TNA (iii) National expert for support of database preparation (iv) Utilities for database development (PC)	(i) A (ii) U (iii) A (iv) A	(i) Database software (ii) Printed material for discussion (iii) Utilities for database development (iv) Logistic cost To be specified	(i) C (ii) A (iii) U (iv) A
	(2) OJT for administering REMIP training	(i) JICA Expert Team (ii) Venue of training (iii) Materials for training	(i) A (ii) A (iii) U	(i) Certification (ii) Logistic cost for training To be specified	(i) U (ii) A
	(3) Assistance on Implementation of Training	(i) JICA Expert Team (ii) Technical materials for one training course as trial.	(i) A (ii) U	(i) Transportation, accommodation, and per diem for trainees (ii) Venue of trial training course (iii) Logistic cost for training To be specified	(i) U (ii) U (iii) U
	(4) Development of feed-back system for evaluation of training	(i) JICA Expert Team	(i) A	(i) Communication cost (ii) Logistic cost To be specified	(i) U (ii) U
	(5) Collaboration with CC2	(i) JICA Expert Team (ii) Venue of CC2 meeting (iii) Materials for CC2 meeting	(i) A (ii) U (iii) U	(i) Transportation, accommodation, and per diem for trainees (ii) Communication cost (iii) Logistic cost To be specified	(i) U (ii) U (iii) U

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REMIP 24

WG/CC	Relevant Activities	1. Planned Inputs for Technical Assistance <u>These inputs will be provided by JICA. Inputs for training purpose are included.</u>	Implication Monitored	2. Inputs as Running Expenses <u>These inputs will be provided by EEAA.</u>	Implication Monitored
WG4 Improvement of Guidance Production Process	(1) Assistance on factory inspection including production process improvement	(i) JICA Expert Team (ii) National expert for support of factory inspection (iii) National expert for supplemental training of BTEX analysis (iv) Safety materials (v) Technical introduction of the best practices for industrial pollution abatement	(i) A (ii) U (iii) U (iv) A (v) U	(i) Estimated budget for consumables for auto air sampler would be EGP 15,000. (ii) Transportation (iii) Printed factory inspection sheet (iv) Communication cost (v) Logistic cost To be specified	(i) U (ii) A (iii) A (iv) A (v) A
	(2) Preparation of inspection manual on petroleum related industries	(i) JICA Expert Team (ii) National expert for support of inspection manual preparation.	(i) A (ii) U	(i) Communication cost (ii) Logistic cost To be specified	(i) U (ii) U
WG5 Promotion of Public Awareness Raising Activities	(3) Seminar to disseminate successful cases of pollution abatement technologies	(i) JICA Expert Team (ii) Venue of seminar (iii) Materials for seminar	(i) A (ii) U (iii) U	(i) Transportation, accommodation and per diem for participants from EEAA and RBOs To be specified	(i) U
	(1) Planning and Implementation of Awareness Raising Activities	(i) JICA Expert Team (ii) National expert for support of awareness raising activities planning. (iii) Support for experimental awareness raising activities according to 5 design sheets corresponded to WG1, WG2, WG4 and CC1	(i) A (ii) U (iii) A	(i) Estimated budget for preparation of educational brochures and awareness raising activities using the brochures (Sub-contract work to private sector) would be EGP 120,000. (ii) Transportation, accommodation and per diem (iii) Communication cost (iv) Logistic cost To be specified	(i) A (ii) U (iii) U (iv) U
WG6 Public Awareness Raising Activities	(1) Planning and Implementation of Awareness	(i) JICA Expert Team (ii) Campaign for supporting awareness raising activities (Sub-contract work)	(i) A (ii) U (iii) A	(i) O/M cost of display (ii) Staffing arrangement for O/M of display including engineering O/M and contents	(i) A (ii) A (iii) A

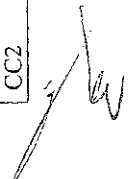
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WG/CC	Relevant Activities	1. Planned Inputs for Technical Assistance <u>These inputs will be provided by JICA. Inputs for training purpose are included.</u>	Implication Monitored	2. Inputs as Running Expenses <u>These inputs will be provided by E.E.A.A.</u>	Implication Monitored
Using Monitoring Station with Display	Raising Activities using Real-time Monitoring Station	(iii) Utilities for recording awareness raising activities using real-time monitoring station (PC, video, etc.) (iv) Installation of display	(iv) U	development/ renewal (iii) Transportation, accommodation and per diem (iv) Communication cost and other logistic cost <u>To be specified</u>	(iv) A
CCI Sound Management on Hazardous Chemical Substances	(1) Expansion of PCBs inventory survey on RBOs	(i) JICA Expert Team (ii) National expert for supporting continuation of inventory survey.	(i) A (ii) A	(i) Transportation, accommodation and per diem (ii) Printed inventory survey sheet (iii) Safety materials (iv) Communication cost (v) Logistic cost <u>To be specified</u>	(i) B (ii) A (iii) U (iv) U (v) A
	(2) PCB monitoring activity report finalization	(i) JICA Expert Team (ii) National expert for supporting finalization of the report	(i) A (ii) A	(i) Labo-work cost including glassware, consumables, and chemicals for analysis of PCBs (ii) Logistic cost <u>To be specified</u>	(i) U (ii) U
	(3) Continuous work for risk examination and development of PCBs database and finalize PCBs report	(i) JICA Expert Team (ii) National expert for support of risk examination (iii) National expert for integrating database preparation into existing DANIDA database (iv) National expert for support of PCBs management guideline preparation	(i) A (ii) U (iii) U (iv) U	(i) Database software (ii) Communication cost (iii) Utilities for development of PCBs database (iv) Logistic cost <u>To be specified</u>	(i) A (ii) A (iii) U (iv) A
	(4) Preparation of PAHs and heavy metals pollution source inventory	(i) JICA Expert Team (ii) Safety materials	(i) A (ii) A	(i) Inventory surveyors (ii) Transportation, accommodation and per diem (iii) Printed inventory survey sheet (vi) Communication cost (v) Logistic cost <u>To be specified</u>	(i) U (ii) U (iii) U (iv) U (v) U
	(5) Training of	(i) JICA Expert Team	(i) A	(i) Transportation, accommodation and per diem <u>To be specified</u>	(i) U

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WG/CC	Relevant Activities	1. Planned Inputs for Technical Assistance <u>These inputs will be provided by JICA. Inputs for training purpose are included.</u>	Implication Monitored	2. Inputs as Running Expenses <u>These inputs will be provided by EEAA.</u>	Implication Monitored
	PAHs analysis	(ii) National expert for support of PAHs analysis (iii) Chemicals and consumables for the training	(ii) A (iii) U	diem for trainees	(i) U (ii) U
	(6) PAHs and Heavy metal monitoring activity	(i) JICA Expert Team	(i) A	To be specified (i) The existing electro-thermal AAS should be fixed (repairing or replacement). In the case of repairing, the estimated budget for spare parts to improve operational condition of exiting electro-thermal AAS would be EGP 60,000. (ii) Utilization of the electro-thermal AAS in Greater Cairo RBO should be considered if the above is inapplicable. (iii) Labo-work cost including glassware, consumables, and chemicals for analysis (iv) Logistic cost	(i) U (ii) U (iii) U (iv) U
	(7) Preparation of database of PAHs and heavy metal pollution source and monitoring results	(i) JICA Expert Team	(i) A	(i) Database software (ii) Communication cost (iii) Utilities for preparation of database (iv) Logistic cost	(i) A (ii) U (iii) U (iv) U
	(8) Seminar	(i) JICA Expert Team (ii) Venue of seminar (iii) Materials for seminar	(i) A (ii) U (iii) U	(i) Transportation, accommodation and per diem for participants from EEAA To be specified	(i) U
	(9) International seminar	(i) JICA Expert Team (ii) Assistance to hold international seminar (Sub-contract work to private sector)	(i) A (ii) U	(i) Transportation, accommodation and per diem for participants from EEAA and RBOs To be specified	(i) U
CC2	(1) Advise on	(i) JICA Expert Team	(i) A	(i) Cost for initiation and expansion of the	(i) U

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WG/CC	Relevant Activities	1. Planned Inputs for Technical Assistance <u>These inputs will be provided by JICA. Inputs for training purpose are included.</u>	Implication Monitored	2. Inputs as Running Expenses <u>These inputs will be provided by EEAA.</u>	Implication Monitored
Sharing Information on REMIP among RBOs	RBOs' Activities after sharing Experience of OJT	(ii) Venue of CC2 meeting (iii) Materials of CC2 meeting	(ii) U (iii) U	experiences of REMIP toward the other RBOs (ii) Necessary training on the other RBOs for sharing information on REMIP. (iii) Logistic cost <u>To be specified</u>	(ii) U (iii) U

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REMIP 28

2. プロジェクトの実施体制

プロジェクトの実施体制

上位目標		環境庁 (EEAA) が関係するステークホルダー (地方自治体・事業者・NGO 及び市民) と共に、対策を実施できるようになる									
プロジェクト目標		環境庁 (EEAA) および RBO の環境汚染への対処能力 (環境保全対策の提言能力及び研修・意識啓発活動の実施能力) が向上する									
プロジェクト		1) 環境汚染対策の提言能力向上		2) 有害化学物質管理能力向上		3) 研修計画立案・実施・評価能力向上		4) 意識啓発活動実施能力向上		WG6 大気監視装置・意識啓発	
各アウトプットの 実施体制: WG/CC		WG1 SPM 対策	WG2 流出油対策	WG6 大気監視装置・ 意識啓発	CC1 有害化学物質管理 能力向上	WG3 研修能力	WG4 生産工程	CC2 RBO 共有化	WG5 意識啓発	WG6 大気監視装置・ 意識啓発	
<p><ターゲットグループ> ●: 主たる (Primary) ターゲットグループ、○: 二次的な (Secondary) ターゲットグループ</p>											
EEAA											
EQS	Air Quality Dept	●		●	○	○		○	○	○	
	CCC	●				○		○			
EMS	Costal Mgt Dept.		●								
	Hazardous Substance Dept.			●		○		○	●		
	Industrial Unit	○		○			○				
	Env. Inspection	○		●							
	Costal Marine Water Q.Dept.										
	Enn. Disaster Mgt		●								
EMD											
CDCE A	Public Awareness Dept			○				●	●	●	
	GDTD							●	●	●	
SRBA (Sector of Regional Branch Affairs)		●	●		○		●	●	●	●	
RBO レベル											
	グレーターカイロ (GC)	●		●		○	○	○	○	○	
	アレキサンドリア (Alex)		○			○	○	○	○	○	
	スエズ (Suez)		●			○	○	○	○	○	
	タンタ (Tanta)	●				○	○	○	○	○	
	マンズラ (Mansura)	●				○	○	○	○	○	
	アシユート (Assute)					○	○	○	○	○	
	紅海 (Red Sea)		○			○	○	○	○	○	
	アスワン (Aswan)					○	○	○	○	○	
連携する外部機関		EMU, Tabbin Institute, カイロ大学 (機械工学科, Center for Environment Hazard Mitigation)	NRC, Nasr Oil Company, スエズ地区 EMU, 紅海港務局, スエズ運河局, OII Sector 他	カイロ governorate	NRC, ショブラエルヘルマ地区行政機関及び EMU、保健省、カイロ地区電力公社、NGO (Day Hospital Institute 等)、DANIDA	DANIDA	WB, JBIC, EMU, Alex 地区石油関連・セメント関連工場環境管理部門、NRC		カイロ大学、NGO、6-October.	カイロ governorate	
外部関係者レベル											
EMU					○				○	○	
住民									○	○	

3. 評価グリッド

評価グリッド

エジプト国地域環境管理能力向上プロジェクト中間評価調査

1. 実績の検証 (ACHIEVEMENT)

調査項目		調査の視点/調査事項		情報源	
調査小項目		必要データ		調査手法	
実施状況	日本側投入は計画通り実施されたか？	投入実績・専門家派遣状況、研修員受け入れ状況、機材供与実績、経費		プログラズレポート、業務完了報告書、中間評価事前検討資料、専門家、CP	資料レビュー 聞き取り
	エジプト側投入は計画通り実施されたか？	投入実績・CP配置状況、施設機材配備状況、運営費の概要等		プログラズレポート、業務完了報告書、中間評価事前検討資料、専門家、CP	資料レビュー 聞き取り
実績の検証	アウトプット1: 環境庁が収集・評価したデータ及び情報に基づき、環境汚染に対する対策(サイト調査や技術的及び行政的方法)が提案できるようになったか？	<p>実行PDM上の指標</p> <p>1-1 選定された地域で発生源インベントリが作成される</p> <p>1-2 環境庁においてモニタリングデータ、発生源インベントリ及び排出負荷の分析に基づく(内部の)報告書が発行される</p> <p>1-3 環境庁によりモニタリングデータが毎年公式に取りまとめられ、公開される</p> <p>1-4 地方支局で作られた対策案の数が増加する</p> <p>1-5 黒煙の原因物質が特定され、報告される</p> <p>1-6 黒煙の発生原因となる活動(野焼き等)を管理する提案が作成される</p> <p>1-7 石油流出者が特定され、報告される</p> <p>1-8 石油流出の発生原因となる活動を管理する提案が作成されている</p> <p>1-9 表示機付大気監視装置が運営され、適切に維持される</p>	<p>修正案(暫定案)</p> <p>1-1 選定された地域で発生源に関するインベントリが作成される</p> <p>1-2 環境庁においてモニタリングデータ、発生源インベントリ及び排出負荷の分析に基づく(内部の)報告書が発行される</p> <p>1-3 環境庁によりモニタリングデータが毎年公式に取りまとめられ、公開される</p> <p>1-4 グレナター・カイロ、デルタ地域において大気汚染対策案が提案される</p> <p>1-5 黒煙の発生原因となる活動(野焼き等)を管理する提案が作成される</p> <p>1-6 スエズRBOが流出油を特定することができ、検査体制を確立し、スタッフが関連の技術習得する</p> <p>1-7 スエズ地域での流出油リスクを低減する対策案が提案される</p>	プログラズレポート、業務完了報告書、中間評価事前検討資料、専門家、CP	資料レビュー 聞き取り ワークショップ
	アウトプット2: 環境庁が有害化学物質の特定(Identifying)、データ及び情報の収集、ならびに有害性のリスク評価をできるようになったか？	<p>2-1 有害化学物質のモニタリング報告書が毎年発行される</p> <p>2-2 エジプトにおける有害化学物質の管理状況に関する報告書が発行される</p> <p>2-3 X名のスタッフが有害化学物質の特定、データ、情報の収集、リスク評価ができるようになる</p> <p>2-4 汚染物質のデータがデータブックとして集積される</p>	<p>2-1 有害化学物質のモニタリング報告書が毎年発行される</p> <p>2-2 エジプトにおける有害化学物質の管理状況に関する報告書が発行される</p> <p>2-3 X名のスタッフが有害化学物質の特定、データ、情報の収集、リスク評価ができるようになる</p> <p>2-4 汚染物質のデータがデータブックとして集積される</p>	プログラズレポート、業務完了報告書、中間評価事前検討資料、専門家、CP	資料レビュー 聞き取り ワークショップ
アウトプット3: 環境庁コミュニケーション・住民啓発高研修部が他の関連部署・機関が提供した情報に基づいて、研修を計画、設計及び実施できるようになったか？	<p>3-1 環境庁で行われる全ての研修が環境庁研修部にて登録される</p> <p>3-2 研修が実行される</p> <p>3-3 研修の教材が蓄積される</p> <p>3-4 研修への参加者による評価が新コースの作成に活かされる</p> <p>3-5 地方支局の間で連絡会議が開催される</p> <p>3-6 インスペクター用のマニュアル、ガイドブックが作成される</p> <p>3-7 工場での生産工程改善指導の数と地方支局によって作成された対策提言の数が増える</p>	<p>3-1 環境庁で行われる全ての研修が環境庁研修部にて登録される</p> <p>3-2 (少なくとも)X名のスタッフが研修の運営管理(企画、実施、評価)ができるようになる</p> <p>3-3 研修への参加者による評価が新コースの作成に活かされる</p> <p>3-4 インスペクター用のマニュアル、ガイドブックが作成され、企業を対象とした生産工程導入の成功例紹介のセミナーが開催される</p> <p>3-5 工場での生産工程改善指導の数と地方支局によって作成された対策提言の数が増える</p>	プログラズレポート、業務完了報告書、中間評価事前検討資料、専門家、CP	資料レビュー 聞き取り ワークショップ	

評価グリッド

<p>アウトプット4: 環境庁コミュニケーション・住民啓発局環境啓発部が、地方自治体・事業者・NGO・市民への意識啓発活動を行う能力が向上したか?</p>	<p>4-1 市民の環境認識のベースライン報告書が発行される 4-2 カイロ地方支局及びアレキサンドリア地方支局で行われている全ての市民啓発活動が取りまとめられる 4-3 ニーズ分析に基づいて立案された環境啓発活動が始まる 4-4 意識啓発活動参加者による評価が次の新しい活動計画の設計に活かされる 4-5 関係するステークホルダー間で情報が共有化される 4-6 表示機付大気監視装置が稼動し、適切に維持管理される 4-7 リアルタイム大気観測装置の表示を活かした意識啓発活動が環境庁意識啓発部によって実行される</p>	<p>4-1 市民の環境認識のベースライン報告書が発行される 4-2 カイロ地方支局及びアレキサンドリア地方支局で行われている全ての市民啓発活動が取りまとめられる 4-3 ニーズ分析に基づいて立案された環境啓発活動(少なくとも1回)実施される 4-4 意識啓発活動参加者による評価が次の新しい活動計画の設計に活かされる 4-5 リアルタイム大気観測装置の表示を活かした意識啓発活動が環境庁意識啓発部によって実行される</p>	<p>プログラムレスポート、業務完了報告書、中間評価事前検討資料 専門家、CP</p>	<p>資料レビュー 聞き取り ワークショップ</p>
<p>プロジェクト目標 環境庁の環境汚染への対処能力(環境保全対策の提案能力及び研修・意識啓発活動実施能力)が向上する</p>	<p>現行PDM上の指標 指標1: 対策の実施促進に必要な研修・意識啓発活動の数が増える</p>	<p>修正案(暫定案) 指標1: 環境庁(EEAA)の所轄部署とROOが連携して環境課題に対処する責任・役割分担が明示される 指標2: 環境汚染、有害物質に関する効果的な対策(実施計画)案が作成される 指標3: 地方支局の活動から得られたデータや情報、活動実績(条例decretee案などの対策案を含む)が取りまとめられ、公開される 指標4: 連絡会議(活動3-6参照)で共有した特定の地方支局の経験をもとに、他の地方支局でもデータ評価に基づく対策案の作成や研修、意識啓発活動が始まる</p>	<p>プログラムレスポート、業務完了報告書、中間評価事前検討資料、専門家、CP プログラムレスポート、業務完了報告書、中間評価事前検討資料、専門家、CP プログラムレスポート、業務完了報告書、中間評価事前検討資料、専門家、CP プログラムレスポート、業務完了報告書、中間評価事前検討資料、専門家、CP</p>	<p>資料レビュー 聞き取り 資料レビュー 聞き取り 資料レビュー 聞き取り</p>
<p>プロジェクト目標の達成状況</p>				

エジプト国地域環境管理能力向上プロジェクト中間評価調査

評価シート

2.実施プロセス(IMPLEMENTATION PROCESS)

調査項目		調査の視点/調査事項		必要なデータ		情報源		調査手法	
実施プロセス	活動実施状況	活動は計画通り実施されているか？ 活動計画の修正の理由は何か？	活動の実施状況 活動修正理由	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	資料レビュー 質問票、聞き取り ワークショッ			
	技術移転	技術移転の方法に問題はないか？ それぞれの技術移転の対象者数は？	各分野における技術移転の方法、内容 技術移転対象者の数と背景	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	資料レビュー 質問票、聞き取り ワークショッ			
	モニタリング	プロジェクトの進捗モニタリングは誰が、どのように、どのような頻度で実施、その結果がプロジェクト運営に反映されているか？	モニタリングの仕組み、計画の修正内容、手法 (軌跡)の見直し、フィードバックの体制	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	資料レビュー 質問票、聞き取り ワークショッ			
	意思決定プロセス	活動の変更、人員・地域の選定等にかかる決定はどのようなプロセスでなされているのか？	意思決定のプロセス、それに起因する問題点	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	資料レビュー 質問票、聞き取り ワークショッ			
	関係者との関わり方 (コミュニケーション)	JICA本部、在外事務所とのコミュニケーション(協議、連絡の頻度、内容、FBの方法)は効果的に行われているか？	コミュニケーションの頻度、方法、計画変更時の対応状況、協力内容	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	質問票、聞き取り ワークショッ			
		WG/CCの体制は効果的であるか？ (WG/CC内部とWG/CC間のコミュニケーション)	会議開催、会議運営状況、 報告・FBの仕組み、 計画変更時の対応状況、協力内容	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	質問票、聞き取り ワークショッ			
		プロジェクト内のコミュニケーションの仕組み -日本人専門家間、 -日本人専門家<->エジプト側CP	コミュニケーションの頻度、方法、計画変更時の対応状況、 共同作業時間、編度 共同で取り組む課題の解決方法	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	質問票、聞き取り ワークショッ			
	認識(オーナーシップ)	実施機関および関係機関とのコミュニケーションは効果的に行われているか？	実施機関および関係機関とのコミュニケーションは効果的に行われているか？	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	質問票、聞き取り ワークショッ			
		適切なCPが配置されているか？ また、CPがプロジェクト活動にどのように関わっているか？	CPの配置状況 CPのプロジェクト活動参加状況	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	質問票、聞き取り ワークショッ			
		WG/CC体制はプロジェクト活動の推進に効果的に機能しているか？	WG/CCの活動計画、実施状況	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	質問票、聞き取り ワークショッ			
その他、プロジェクトの実施過程で生じている問題は何か？ その原因は何か？		これまで提示された問題点と原因	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	プロジェクト側CP、プロジェクト専門家 JICAエジプト事務所	質問票、聞き取り ワークショッ				

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3. 妥当性 (RELEVANCE) プロジェクトの実施は妥当であるか？

調査項目	調査小項目	調査の視点/調査事項	必要なデータ	情報源	調査手法
妥当性	必要性	エジプト国対象地域、社会のニーズに合致しているか？ ターゲットグループのニーズに合致しているか？	エジプト国の環境セクターの課題 エジプト国政府の環境行政の政策	事前評価報告書 国家環境活動計画(2002-2017) 第5次国家経済社会開発計画 5か年環境活動計画(2002-2007) エジプト側CP, JICAエジプト事務所	資料レビュー 聞き取り 資料レビュー
	優先度	エジプト国の開発政策との整合性はあるか？ 日本の援助政策、JICA個別事業実施計画との整合性はあるか？	エジプト国の環境セクターの課題 エジプト国の環境行政の現状 エジプト国の開発政策、計画 日本の援助政策	事前評価報告書 国家環境活動計画(2002-2017) 第5次国家経済社会開発計画 5か年環境活動計画(2002-2007) エジプト側CP, JICAエジプト事務所 対エジプト国別援助計画(案) JICA個別事業実施計画 JICAエジプト事務所	聞き取り 資料レビュー 聞き取り
妥当性	手段としての適切性	プロジェクトはエジプト国の環境分野の開発課題に対する効果を挙げる戦略として適切か？(アプローチ、対象地域の選定、他ドナーとの援助協調による相乗効果等) ターゲットグループの選定は適切か？(対象、規模、男女比等) 日本の技術の優位性はあるか？(日本の経験を活かしているか？) 事業実施機関の選定は適切か？	現地既存・日本のノウハウの活用状況、現地の状況に適した協力形態、協力方法の選択ができているか ターゲットグループ選定のプロセス 日本の技術を用いた指導実績 実施機関の選定プロセス	事前評価報告書、無償資金協力、前案件(環境モニタリングセンタープロジェクト)の報告書 CP、専門家 事前評価報告書 専門家 事前評価報告書 専門家 事前評価報告書 専門家	資料レビュー 聞き取り 資料レビュー 質問票、聞き取り 資料レビュー 聞き取り
	その他	事前評価以降、プロジェクトを取り巻く環境(政治、経済、社会)の変化はないか？	政策、経済、社会などの変化を示す情報	プログレスレポート、業務完了報告書 運営指導調査報告書 CP、専門家, JICAエジプト事務所	資料レビュー 質問票、聞き取り

4. 有効性 (EFFECTIVENESS) プロジェクトの実施により、期待される効果が発現するか？

調査項目	調査小項目	調査の視点/調査事項	必要なデータ	情報源	調査手法
有効性	プロジェクト目標の達成予測	プロジェクト目標の達成の見込みはあるか？ アウトプット実施による結果としてもたらされているか	プロジェクト目標の達成度合い プロジェクト目標とアウトプットの関連	プログレスレポート、業務完了報告書 専門家、CP プログレスレポート、業務完了報告書 専門家、CP	聞き取り、協議 質問票 資料レビュー 聞き取り
	因果関係	4つのアウトプットは、プロジェクト目標を達成するために充分であるか？ アウトプットからプロジェクト目標に至るまでの外部条件は現時点においても正しいか？ 外部条件が満たされる可能性は高いか？ プロジェクト目標の達成を阻害する要因はあるか？	プロジェクト目標とアウトプットの関連 外部条件の影響 阻害・貢献要因の事例	プログレスレポート、業務完了報告書 専門家、CP, JICAエジプト事務所 プログレスレポート、業務完了報告書 専門家、CP, JICAエジプト事務所	資料レビュー 聞き取り 資料レビュー 聞き取り 資料レビュー 聞き取り、協議 資料レビュー 聞き取り、質問票

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5.効率性(EFFICIENCY) プロジェクトは効率的に実施されているか？

調査項目	調査小項目	調査の視点/調査事項	必要なデータ	情報源	調査手法
効 率 性	アウトプットの達成度	アウトプットの達成度は適切か？	各アウトプットの達成状況	専門家、CP、JICAエジプト事務所	質問票、聞き取り、ワークショップ、協議
		アウトプット達成を阻害している要因はあるか？	アウトプットの達成状況	専門家、CP、JICAエジプト事務所	聞き取り、ワークショップ、質問票、協議
	因果関係	アウトプットを産出するために十分な活動であったか？	活動実績、アウトプットの達成状況	専門家、CP、JICAエジプト事務所	聞き取り、協議
		アウトプットを産出するために十分な投入であったか？	投入実績、アウトプットの達成状況	専門家、CP、JICAエジプト事務所	聞き取り、協議
	タイミング	活動からアウトプットに至るまでの外部条件は現時点においても正しいか？ 外部条件による影響はないか？	アウトプットの達成状況、活動実績、投入実績	専門家、CP、JICAエジプト事務所	質問票、聞き取り、協議
		計画に沿って活動を行うために、過不足ない量・質の投入がタイミングよく実施されたか？	投入実績 プロジェクトの実施状況	専門家、CP、JICAエジプト事務所	質問票、聞き取り、協議
	プロジェクトの運営管理体制	投入のタイミングの問題(機材の調達遅れ等)にどのように対応しているか？	問題発生時の対応、解決策	専門家、CP、JICAエジプト事務所	質問票、聞き取り、協議
		プロジェクトの運営体制はプロジェクト活動推進に効果的になされているか？	プロジェクト間の会議議事録	専門家、CP、JICAエジプト事務所	質問票、聞き取り、協議
	その他	他のプロジェクトの教訓は生かされているか？	前案件の提言、教訓 他国での類似案件での提言、教訓	事前調査報告書 前案件(環境モニタリングセンター)の報告書 専門家、JICAエジプト事務所	資料レビュー 聞き取り

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8.インパクト (IMPACT) プロジェクト実施により波及効果はあるか?

調査項目	調査小項目	調査の視点/調査事項	必要なデータ	情報源	調査手法
インパクト	上位目標の達成 見込み	上位目標は、プロジェクトの効果として発現が見込まれるか？ (事後評価時点での検証が可能か?)	1. 環境庁がエジプトの公的セクター及び民間セクターにとって環境管理分野での信頼できる支援機関であること認識される 2. 環境管理に関する適切な規制・条約が策定される 3. 関係省庁で環境管理に関する規則、ガイドライン等が実施、発布される 4. 事業者及び市民の環境意識が向上する 5. 環境庁の環境啓発活動により、コミュニティレベルで新しい環境改善活動が始まる	修正案(暫定案) 1. 各環境課題に対処するにあたり、EEAA/RBOと各県のEMUの責任・役割分担が明示される 2. 環境管理に関する適切な規制・条約が策定される 3. 事業者及び市民の環境意識が向上する 4. 環境庁(EEAA/RBOs)と県レベルの環境管理部門(EMUs)の協力による環境啓発活動により、コミュニティレベルで新しい環境改善運動が開始される	専門家、CP、JICAエジプト事務所 質問票、聞き取り 協議
	因果関係	上位目標の達成を阻害する要因はあるか？ 上位目標とプロジェクト目標は乖離していないか？	該当する事例の確認 プロジェクトのロジック、外部条件の影響、貢献、阻害要因	専門家、CP、JICAエジプト事務所 専門家、CP、JICAエジプト事務所	聞き取り 協議 聞き取り 協議
社会経済状況への波及効果		政策レベル(制度、法律、基準等)の整備への影響	該当する事例の確認	専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
		経済面への影響	該当する事例の確認	専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
		ジェンダー・人権、貧困(社会的弱者層)など社会・文化的側面への影響	該当する事例の確認	専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
		環境保護への影響	該当する事例の確認	専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
		環境分野の技術面での変革(革新)への影響	該当する事例の確認	専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
		本プロジェクト実施によるマイナスの影響はあるか？ それを軽減する対策はとられているか？	該当する事例の確認	専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議

7.自立発展性(SUSTAINABILITY) プロジェクトの効果は、プロジェクト終了後も継続・発展していくか？

調査項目	調査小項目	調査の視点/調査事項	必要データ	情報源	調査手法
自立発展性	政策・制度面	環境セクターにおけるエジプト政府の政策支援は協力終了後も継続するか？	エジプト政府の政策	エジプト環境庁担当者 専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
		環境分野の関連規制、法制度は整備されているか？整備される予定か？	環境分野の関連法案、規制	エジプト環境庁担当者 専門家、CP、JICAエジプト事務所	聞き取り 協議
組織・財政面	組織・財政面	本プロジェクトの効果がエジプト全土に普及する取り組みが確保されているか？ (大気汚染、水質汚染、有害化学物質管理、生産工程管理の分野で本プロジェクトによる成果が環境庁・RBOによって他の地域(RBO)に指導、普及させるような体制ができるか？)	エジプト政府の方針、プロジェクトの今後の方針	エジプト環境庁担当者 専門家、CP、JICAエジプト事務所	聞き取り 協議
		協力終了後も効果をあげていくための活動を実施するに足る環境庁/RBOの組織能力は十分か？(人材配置、意思決定プロセス等)	環境庁の今後の方針 (環境セクターでの位置づけ、予算割り当て等)	エジプト環境庁担当者 専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
技術面	技術面	環境庁/RBOのプロジェクト実施による効果を維持するためのオーナーシップは十分に確保されているか？	環境庁の今後の方針 (環境セクターでの位置づけ、予算割り当て等)	エジプト環境庁担当者 専門家、CP、JICAエジプト事務所	聞き取り 協議
		大気汚染:環境庁/GC, Tanta, Mansura RBO が主軸となって、大気汚染問題に対応していくことができるようになるか？(そのためには、何か必要か？)	環境庁の今後の方針 (環境セクターでの位置づけ、人員体制、役割分担、技術レベル等)	エジプト環境庁担当者 専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
社会・文化・環境面	社会・文化・環境面	水質汚染(油汚染):環境庁/Suez RBOが主軸となって、油汚染問題に対処していくことができるようになるか？(そのためには何か必要か？)	環境庁の今後の方針 (環境セクターでの位置づけ、人員体制、役割分担、技術レベル等)	エジプト環境庁担当者 専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
		有害化学物質:環境庁/GC RBOが主軸となって、有害化学物質問題に対処していくことができるようになるか？(そのためには何か必要か？)	環境庁の今後の方針 (環境セクターでの位置づけ、人員体制、役割分担、技術レベル等)	エジプト環境庁担当者 専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
その他	その他	生産工程管理:環境庁/Alex RBOが主軸となって、生産工程管理問題に対処していくことができるようになるか？(そのためには何か必要か？)	環境庁の今後の方針 (環境セクターでの位置づけ、人員体制、役割分担、技術レベル等)	エジプト環境庁担当者 専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
		現在、必要な予算が確保されているか？ また今後、環境分野の予算が増える可能性はどの程度あるか？	エジプト政府の方針	エジプト環境庁担当者	聞き取り
その他	その他	プロジェクトで活用される技術移転の手法は受け入れられつつあるか (大気汚染、油汚染、有害化学物質、生産工程の分野での技術レベルの適切性、社会的・慣習的適切性)	CPの能力、技術力 これまでの活動状況	エジプト環境庁担当者 専門家、CP、産業界	質問票、聞き取り 協議
		資機材の維持管理は適切におこなわれているか？(CPが単独でできるようになるか？)	CPの能力、技術力 これまでの活動状況、機材整備状況	専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議
その他	その他	社会的弱者層(貧困、女性等)への配慮不足により、本プロジェクト実施による効果を妨げる可能性はないか？ または、本プロジェクト実施による相乗効果の可能性は？	阻害要因の事例	専門家、CP、JICAエジプト事務所	聞き取り 協議
		環境への配慮不足により持続的効果を妨げる可能性はないか？	阻害要因の事例	専門家、CP、JICAエジプト事務所	聞き取り 協議
その他	その他	それぞれの環境課題分野でのプロジェクトの効果の継続発展を阻害する要因はあるか？	阻害要因の事例	専門家、CP、JICAエジプト事務所	質問票、聞き取り 協議

実行計画(PO)

活動項目	EG 2005				EG 2006				EG 2007				EG 2008				担当部署
	JP 2005		JP 2006		JP 2006		JP 2007		JP 2007		JP 2008		JP 2008				
	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10				
アウトプット1<WG1:大気汚染>																	
環境庁EQSおよびRBOのEQDDが収集したデータを解析し、大気汚染に対する対策が提案できるようにする																	
1-1 発生源に関するインベントリーを作成し排出物質の汚染負荷を分析する能力が向上する																	
1-1-1 固定発生源のインベントリーサーベイを実施する																AQD,GC RBO, Tanta RBO, Mansura RBO	
1-1-2 移動発生源のインベントリーサーベイを実施する																AQD,GC RBO, Tanta RBO, Mansura RBO	
1-1-3 現在の稲藁燃焼パターンに関するサーベイを実施する																AQD,GC RBO, Tanta RBO, Mansura RBO	
1-1-4 その他の面発生源のインベントリーサーベイを実施する																AQD,GC RBO, Tanta RBO, Mansura RBO	
1-1-5 煤煙測定を実施する																AQD,GC RBO, Tanta RBO, Mansura RBO	
1-1-6 稲藁燃焼実験を実施する																AQD,GC RBO, Tanta RBO, Mansura RBO	
1-1-7 排出係数を調査・検証する																AQD,GC RBO, Tanta RBO, Mansura RBO	
1-2 大気質に関するモニタリングデータ等を公式に取りまとめる能力が向上する																	
1-2-1 過去(2年間)のモニタリング記録を収集する																AQD	
1-2-2 船,EPAPプログラムで測定されたデータを収集する																AQD,CCC	
1-3 ナイルデルタ地域やグレートカイロ圏においてパッシブサンブローを活用して、重汚染地域の大気質モニタリングを実施する																	
1-3-1 グレーターカイロ, タンタ, マンスーラそれぞれのRBOにおいて四季と黒煙発生期間に一度、パッシブサンブロー測定を実施する																AQD,CCC, GC RBO, Tanta RBO, Mansura RBO	
1-4 総合的環境状況を解析・評価する手法が開発される																	
1-4-1 活動項目1-2-1, 1-2-2 and 1-3-1において測定された硫黄酸化物(SOx), 窒素酸化物(NOx), 総浮遊粒子状物質(TSP)の測定データを分析する																AQD,CCC, GC RBO, Tanta RBO, Mansura RBO	
1-5 大気汚染対策立案の手法を開発する																	
1-5-1 総合的な汚染負荷分析を実施する。																AQD,CCC, GC RBO, Tanta RBO, Mansura RBO	
1-5-2 シミュレーションモデルを開発する																AQD,CCC, GC RBO, Tanta RBO, Mansura RBO	
1-6 大気汚染対策(案)を提言するためのOJTを実施する																	
1-6-1 対策策定手法に関するOJTを実施する																AQD,CCC, GC RBO, Tanta RBO, Mansura RBO	
1-6-2 大気汚染対策立案を総括するOJTおよびワークショップを実施する																AQD,CCC, GC RBO, Tanta RBO, Mansura RBO	

実行計画(PO)

活動項目	EG 2005				EG 2006				EG 2007				EG 2008				担当部署
	JP 2005		JP 2006		JP 2006		JP 2007		JP 2007		JP 2008		JP 2008				
	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV			
	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10				
<p>アウトプット2-2<WG2:油汚染> スエズRBOが収集・評価したデータ及び情報に基づき、油汚染に対する対策が提案できるようになる</p>																	
2-1	スエズ船場で油汚染リスク低減のための対策推進のOJTを実施する																
2-1-1 (Step 1)	<ワーキンググループの設置> ・油汚染プログラムワーキンググループ2を編成する ・ワーキンググループ2の基本的な活動方針、戦略を検討する																
2-1-2 (Step 2)	<ベースラインデータの収集> スエズ船場の油汚染問題の現状に関する情報を収集し、それをグループメンバーと共有する																
2-1-3 (Step 3)	<油汚染問題の現状分析> 船場の油汚染管理に関する問題点を特定する																
2-1-4 (Step 4)	<油流出源に關するインベントリー作成> インベントリーを作成し、油汚染源を特定する																
2-1-5 (Step 9-a & 9-b)	<油汚染対策の検討と回帰効果の評価> ・油汚染対策を作成する ・油汚染対策の評価をする																
2-1-6 (Step 10)	<行政への提言を含む報告書作成> スエズ船場における総合的な油汚染対策を提言する																
2-1-7 (Step 11)	<実施研修結果のセミナーでの報告> セミナーで対策策定とフィンガープリント分析のOJT結果を公表する																
2-1-8 (Step 12)	<データブックの取りまとめ、公開及WG2の活動結果の報告> ・WG2の活動で得た結果をデータブックにとりまとめ、公表する ・WG2活動の結果を環境白書に掲載しつつ公表する																
2-2	油フィンガープリント分析のOJTを行う																
2-2-1 (Step 5)	<油流出源特定システムの検討とフィンガープリント分析研修の計画策定 (ISOS)> ・フィンガープリント分析に関する研修計画を作成する ・油流出の発生源を特定するシステムを検討する(ISOS)。																
2-2-2 (Step 6)	<フィンガープリントデータ収集の検討> フィンガープリントデータに關するデータ収集方法を検討する																
2-2-3 (Step 7-a & 7-b)	<フィンガープリント分析技術トレーニング> ・フィンガープリント分析および油汚染源特定の手順に関する第一次技術研修を実施する ・第二次技術研修を準備するための第二次技術研修を実施する																
2-2-4 (Step 8-a & 8-b)	<フィンガープリントデータ分析実施・結果の解析> ・分析対象の原油を収集する ・原油のフィンガープリント分析を実施し、データベースを作成する																

実行計画(PO)

活動項目	EG 2005		EG 2006				EG 2007				EG 2008				担当部署	
	JP 2005		JP 2006				JP 2007				JP 2008					
	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		
アウトプット 3 : <CC1:有害物質> 環境庁EQS・EMS及びRBOのEQD・EMDが有害物質の特定、データ及び情報の整理、ならびに有害性のリスク評価を実施できるようにする																
3-1 環境庁環境管理局有害物質部と関係者の連絡会議を設立する																HSMD, CCC, GC RBO, etc.
3-2 有害化学物質の特定、インベントリ調査、モニタリング及び処理に関わる調査を実施するため、有害化学物質の情報を収集する																HSMD, CCC, GC RBO, etc.
3-2-1 PCBに関する既存の調査結果やモニタリングデータを収集する																HSMD, CCC, GC RBO, etc.
3-2-2 PAHsに関する既存の調査結果やモニタリングデータを収集する																HSMD, CCC, GC RBO, etc.
3-2-3 重金属(Cd, Cr)に関する既存の調査結果やモニタリングデータを収集する																HSMD, CCC, GC RBO, etc.
3-3 インベントリを作成し、潜在的な汚染地域を特定するための調査を実施する																
3-3-1 PCBに関する調査を実施する																HSMD, CCC, GC RBO, etc.
3-3-2 PAHsに関する調査を実施する																HSMD, CCC, GC RBO, etc.
3-3-3 重金属(Cd, Cr)に関する調査を実施する																HSMD, CCC, GC RBO, etc.
3-4 有害化学物質のサンプリング・分析、モニタリングデータの収集および解析、対策の提案を行うためのOJTを実施する																
3-4-1 PCBに関してOJTを実施する																HSMD, CCC, GC RBO, etc.
3-4-2 PAHsに関してOJTを実施する																HSMD, CCC, GC RBO, etc.
3-5 有害化学物質管理に関わる他省庁、研究機関、大学等と連絡会議を通じ、情報を共有する																
3-5-1 PCBの調査に関するレポートをまとめ、情報を共有する																HSMD, CCC, GC RBO, etc.
3-5-2 PAHsの調査に関するレポートをまとめ、情報を共有する																HSMD, CCC, GC RBO, etc.
3-5-3 重金属(Cd, Cr)の調査に関するレポートをまとめ、情報を共有する																HSMD, CCC, GC RBO, etc.
3-6 有害化学物質のモニタリングや有害化学物質管理に関わる利用可能な最善技術に係るセミナーを実施する																
3-6-1 PCB汚染に関する現状、汚染源とその対策に関して関係者と検討するセミナーを開催する																HSMD, CCC, GC RBO, etc.
3-6-2 PAH汚染に関する現状、汚染源とその対策に関して関係者と検討するセミナーを開催する																HSMD, CCC, GC RBO, etc.
3-6-3 重金属(Cd, Cr)汚染に関する現状、汚染源とその対策に関して関係者と検討するセミナーを開催する																HSMD, CCC, GC RBO, etc.

実行計画(PO)

活動項目	EG 2005		EG 2006				EG 2007				EG 2008				担当部署				
	JP 2005		JP 2006		JP 2007		JP 2008		JP 2007		JP 2008		JP 2008						
	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		I	II	III	IV
3-7 エジプト国主催によるセミナー(アラブ諸国の有害化学物質の環境モニタリング)を実施する	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10						HSMD, CCC, GC RBO, etc.
3-8 PCB, PAHs, 重金属(Cd, Cr)のデータベースを構築する																			
3-8-1 PBCのデータベースにデータを入力する																			HSMD, CCC, GC RBO, etc.
3-8-2 PAHのデータベースにデータを入力する																			HSMD, CCC, GC RBO, etc.
3-8-3 重金属(Cd, Cr)のデータベースにデータを入力する																			HSMD, CCC, GC RBO, etc.
3-9 有害化学物質管理(リスクの特定と制度の強化に関する提言も含めて)のガイドラインを作成する																			

実行計画 (PO)

活動項目	EG 2005		EG 2006				EG 2007				EG 2008		担当部署					
	JP	IV	JP	I	II	III	IV	JP	I	II	III	IV		JP	I	II	III	IV
	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9		10-12	1-3	4-6	7-9	10
アウトプット 4 : <WG3: 研修実施能力向上> 環境庁 CDCEA (GDT) が他の関連部署・機関が提供した情報に基づいて、研修を計画、設計及び実施できるようにする																		
4-1	EEAA および RBO のすべての職員研修を登録する																	
4-1-1	既存の研修をレビューする																	
4-2	EEAA の関連部署ならびに RBO とのトレーニングニーズに関して検討し、まとめる																	
4-2-1	環境庁内各部門のマンデートと必要なスキルをレビューする																	
4-2-2	研修のニーズ分析 (TNA) を実施する																	
4-3	環境庁及び RBO の職員が受講すべき特定の研修を助言する																	
4-4	プロジェクトの他の活動に対応して、研修を整理し、実行する。研修の教材を作成し、集積する																	
4-4-1	REMIP 下の研修を実践する																	
4-4-2	研修を企画する																	
4-4-3	研修に関するデータベース構築を検討する																	
4-4-4	研修企画案にそって研修を実施する																	
4-5	研修参加者による評価を次の研修コースに反映するフィードバックシステムを構築する																	
4-5-1	研修計画を改訂する																	
4-5-2	研修を継続する																	
4-5-3	研修の運営管理の一連の手続きを完成する																	

実行計画(PO)

活動項目	EG 2005				EG 2006				EG 2007				EG 2008				担当部署
	JP 2005		JP 2006		JP 2006		JP 2007		JP 2007		JP 2008		JP 2008				
	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV			
<p>アウトプット 5: <WG4: 生産工程改善> アレキサンドリアRBOが収集・評価したデータ及び情報に基づき、産業界、工場向けに生産工程改善や汚染削減の改善案が提案できるようになる</p>																	
5-1	<p>特定の産業に係る地方支局スタッフ向けの工場立入検査マニュアル・ガイドラインの作成のため、及び工場を対象とした汚染削減成功事例セミナー開催のため、工業汚染対策技術(プロセス改善含む)に関する情報を収集する</p>																
5-1-1																Alex RBO	
5-1-2																Alex RBO	
5-1-3																Alex RBO	
5-1-4																Alex RBO	
5-1-5																Alex RBO	
5-1-6																Alex RBO	
5-2	<p>(アレキサンドリア) 地方支局スタッフによる工場立入検査データやプロジェクト種録を反映した、新規の立入検査マニュアル作成のためのOJTを実施する</p>																
5-2-1																Alex RBO	
5-2-2																Alex RBO	

実行計画(PO)

活動項目	EG 2005		EG 2006				EG 2007				EG 2008				担当部署
	JP 2005		JP 2006		JP 2007		JP 2007		JP 2008		JP 2008				
	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9		10	
アウトプット6: <WG5:意識啓発活動> 環境庁GDME&E 及び関係RBOが、地方自治体・事業者・NGO・市民への意識啓発活動を行う能力が向上する															
6-1 選定した対象地域の対象グループに対し、環境意識調査を行う															
6-1-1 <WG5のワークプラン(活動計画)を作成する> -WG5を編成する -ワークプランのドラフトを作成し、確定する															GDME&E
6-1-2 <第一次環境意識調査を実施する> -ターゲット地域およびターゲットグループを選定する -サーベイのTORを確定する -サーベイを実施する															GDME&E
6-2 REMIP関係者やRBOが協議し、REMIP下で実施する意識啓発活動のニーズ分析を行う															
6-2-1 意識啓発活動の対象グループ、目的、実施タイミングを特定する															GDME&E, Air Quality Dept, Hazardous Substance Management GDME&E
6-2-2 現行の意識啓発活動をレビューする															GDME&E
6-2-3 効果的な意識啓発活動を特定する															
6-3 (ローカルNGOやメディアと協力しながら)RBOと連携し、REMIPの成果と関連した意識啓発活動計画を立案する															
6-3-1 それぞれのターゲットグループに列する啓発メッセージを決める															GDME&E, Air Quality Dept., Hazardous Substance Management GDME&E
6-3-2 環境情報の広報のための手法(メディアやネットワーク等)を選定する															Suez RBO, Alex RBO, Tanta RBO,
6-4 デザインシートに即して商業界、NGO、農民、市民を対象とした関連課題の意識啓発活動を実施する。資料を作成しRBOに配布する															
6-4-1 意識啓発活動に必要な資料を作成する															GDME&E Suez RBO, Alex RBO, Tanta RBO, GC RBO, Assuit RBO
6-4-2 RBOとGDME&Eが連携してREMIPの成果を活用した意識啓発活動を実施する															GDME&E Suez RBO, Alex RBO, Tanta RBO, GC RBO, Assuit RBO
6-5 RBOにおいて活動項目6-4の効果を測る第2次環境意識調査を実施する															
6-5-1 サーベイのTORを作成する															GDME&E
6-5-2 サーベイを実施する															GDME&E
6-6 ワーキンググループを通じて意識啓発活動に関する情報を他省庁、研究機関、大学等と共有する															
6-7 活動項目6-1~6-5で得られた教訓をもとに、既存の意識啓発活動計画を改訂する															GDME&E

実行計画(PO)

活動項目	EG 2005		EG 2006				EG 2007				EG 2008				担当部署	
	JP 2005		JP 2006		JP 2007		JP 2007		JP 2008		JP 2008		JP 2008			
	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10	1		2
アウトプット7: <WG6: 表示機付大気監視装置> 環境庁AQD及びGDME&Eが表示機付大気監視装置を利用し、市民向けの環境情報を公表できるようになる																
7-1	タリファール広場にリアルタイム大気監視測定局を設置する															Air Quality Dept.
7-2	カイロ市の大気汚染状況の広報を目的とした表示機を測定局に設置する															Air Quality Dept.
7-3	AQDが表示機付リアルタイム大気監視装置のデータの適合性を監理する															Air Quality Dept.
7-4	AQDとGDME&Eが連携して、表示機付リアルタイム大気監視装置を活用した意識啓発活動を実施する															
7-4-1	大気モニタリングデータをレビューする															Air Quality Dept
7-4-2	表示機を通して発信する大気質インデックスや環境メッセージを含むコンテンツを作成する															GDME&E
7-4-3	表示機を通して大気質インデックスや環境メッセージを実験的に発信する															GDME&E
7-4-4	大気質パラメーターを説明するためのパンフレット作成を含むコミュニケーションを実施する															GDME&E
7-4-5	実験的な情報発信から得られた結果にもとづいてコンテンツの表示内容や方法を見直す															GDME&E
7-4-6	表示機に見直したコンテンツをインプットし、通常運転を開始する															Air Quality Dept, GDME&E
7-4-7	カイロ市民が表示機に関してどれくらい認識しているかについてのサーベイを実施する															GDME&E
7-5	活動項目7-1 ~7-4に関連して、OJTおよびその他の研修を実施する															GDME&E

実行計画(PO)

活動項目	EG 2005			EG 2006			EG 2007			EG 2008			担当部署	
	JP 2005			JP 2006			JP 2007			JP 2008				
	III	IV	I	II	III	IV	I	II	III	IV	I	II		III
	11-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10-12	1-3	4-6	7-9	10	
<p>アウトプット 8: <CC2: RBO間の情報共有> 環境庁SRBA及び関係RBOが連絡会議(CC2)を通じた相互作用によって組織的能力が向上する</p>														
8-1 RBO間での連絡会議を設立する														
8-1-1 Step 1														
8-1-2 Step 2														
8-2 RBO間のOJT経験共有化セミナーをRBO及び関連技術部局と共同で実施する														
8-2-1 Step 3														
8-3 活動項目8-2のセミナーのフォローアップ活動を各RBOにおいて実施する														
8-3-1 Step 4														
8-3-1-1														
8-3-1-2														
8-3-1-3														
8-3-1-4														
8-3-2 Step 5														
8-3-2-1														
8-3-2-2														
8-3-2-3														