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January 31, 1994

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Dr. Barry N. Heyman  
Chief, Prevention, Mitigation & Preparedness  
Office of U.S. Foreign Disaster Assistance  
Food, Disaster Assistance and Crisis Management Bureau  
Washington, DC 20523-0008

Subject: LAMP Program Cooperative Agreement  
No. AOT-2515-A-00-2125-00 between  
A.I.D. and the World Environment  
Center (WEC)

Dear Barry,

The purpose of this letter is to forward five (5) copies of the Fifth Quarterly Progress Report for a "Program for Environmental Disaster Prevention, Mitigation and Preparedness in Developing Countries". The report describes activities initiated or completed during the period 1 October through 31 December 1993, plus activities in the planning stage for the next quarter and beyond. This Report is being submitted to you in fulfillment of the requirements of Section 1E.2.(c) of the subject Cooperative Agreement (CA).

If you have any questions or comments, please contact me.

Sincerely,

Richard M. Williams  
Project Manager

cc:

Antony Marcil, WEC/NY  
Jeffrey D. Bell, Grant Officer, Office of Procurement  
✓ PPC/CDIE/DI, Washington, DC 20523-1802 (2 copies)

The Office of U.S. Foreign Disaster Assistance (OFDA)

PROGRAM FOR ENVIRONMENTAL DISASTER PREVENTION,  
MITIGATION AND PREPAREDNESS IN DEVELOPING COUNTRIES

QUARTERLY REPORT #5

Issued by:

World Environment Center (WEC)

January 31, 1994

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Fifth Quarterly Report  
on a Program for Environmental Disaster Mitigation  
and Prevention in Developing Countries

**A. Program Description**

Under a Cooperative Agreement with U.S.A.I.D.'s Office of Foreign Disaster Assistance (OFDA), the World Environment Center (WEC) is establishing prototype prevention and mitigation programs for environmental and man-made disasters and emergencies in high-risk urban centers in India, Mexico, Indonesia and Thailand.

In India, the program is being managed by WEC in cooperation with the National Safety Council (NSC) of India. In Mexico, the program is managed by WEC through its office in Mexico City, in conjunction with the Ministry of Civil Protection, with whom WEC has signed a broad agreement for cooperation on industrial emergency preparedness activities. In Thailand and Indonesia, the programs are being managed through the local WEC office in each country.

The goal of the program is to contribute to sustained economic development in target countries and regions by preventing technological accidents and mitigating the impact of both technologically induced and natural disasters. The purposes of the program are to:

- Reduce risks to persons and property caused by the threat of technological accidents and disasters.
- Respond effectively to technological emergencies and natural disasters.

The measurable end of project indicators or impacts to assess achievement of the program goal are:

1. Comprehensive programs of local accident mitigation and prevention (LAMP) established and operated effectively at selected locations.
2. Programs replicated at multiple sites in target countries.
3. Participants at each site achieve capacity to prepare for and mitigate disasters.
4. Incidence and impact of industrial accidents abates proportionate to PMP activities.

At this phase in the implementation of local accident mitigation and prevention (LAMP) programs in each country, the following activities are being conducted or planned:

<u>Symbol</u>	<u>Activity</u>
SSS	Conduct APELL Seminar/Workshop at a particular site to promote the active involvement of all local segments in the formulation and activation of community preparedness plans.
AAA	Assess chemical risks at a particular site and define appropriate accident prevention measures.
PPP	Evaluate existing on-site and off-site industrial preparedness plans to respond to identified chemical risks.
TTT	Training in emergency plan preparation and execution. Includes modules on chemical risk assessment, delineation of likely accident scenarios and desk-top exercises to test effectiveness of proposed emergency response procedures and plans.
FFF	Training in chemical and industrial fire fighting and control of chemical spills, including public evacuation guidelines.
MMM	Training in medical response to chemical emergencies, including use of antidotes, detoxification, triage-based emergency treatment.
DDD	Organize/oversee mock emergency drills to test the completeness and effectiveness of emergency response plans that have been formulated to counteract particular chemical risks and accident scenarios.
CCC	Training in the use of computer aided management of emergency operations (CAMEO) as a tool for effective community based emergency planning.
RRR	Organize/coordinate training programs in industrial accident and loss prevention in chemical and process industries.
III	Training in the establishment and operation of chemical information centers, such as poison control centers, chemical transport emergency management (CHEMTREC) centers, etc.
WWW	Organize/coordinate training programs in the handling of hazardous wastes.

## B. Overall LAMP Program Implementation Schedule

An overall LAMP implementation schedule (in four segments, I through IV) for implementing the LAMP Program in FYs 93 and 94 is attached. This schedule uses the symbols listed above to

specify which activities will be initiated month-by-month in the various target countries. It should be noted that activities already completed are indicated in bold letters.

### C. Implementation of the LAMP Program in Mexico

The Lamp Program in Mexico is being implemented by the WEC Director in Mexico, in cooperation with the Ministry of Interior -Department of Civil Protection ("Gubernacion").

#### 1. Progress in this Quarter

##### Emergency Response Training Seminar and Exercise

On December 3, 1993, response teams from the government, local community organizations and industry joined forces in Coatzacoalcos, Mexico to respond to a simulated Chlorine leak. The simulation began at 11:20am when local response teams were informed that a railcar filled with chlorine was leaking just outside the Pajaritos Petrochemical Complex. Fifty-five minutes later the simulation ended, having sealed the leaking railcar, rescued a simulated victim, and decontaminated the responders. The simulation was the final event of a four day Emergency Response Training Seminar and Exercise program conducted by the Mexico City office of the World Environment Center (WEC). By the third day of classroom study over 150 local representatives were in attendance.

The Coatzacoalcos seminar used interactive training techniques to introduce major topics in community emergency preparedness and accident prevention (e.g. setting up the emergency planning process, conducting a community hazards analysis, developing and testing an emergency plan, technical assistance regarding specific response aspects). The seminar addressed both advance planning of a chemical/technological emergency, as well as technical issues regarding emergency response. The course covered chemical safety and transport issues, medical treatment and response, fire containment and chemical spill confinement and cleanup, as well as the full emergency response drill.

A hazardous materials transport accident was selected for the simulation, due to the large amount of hazardous materials transported in the area. Coatzacoalcos, with a population of 750,000, is one of Mexico's most important east coast ports. The city contains slightly less than one hundred petrochemical facilities, including three of Mexico's largest industrial complexes, each centered around large PEMEX facilities. The simulation allowed the participants to apply their emergency training, and work with the other organizations who would be involved in responding to a real disaster.

Robert Boldt, United Nations Representative, stated that both the training seminar and simulation were very successful. Boldt congratulated the participants on their first community wide drill, stating: "for your first community response I am extremely impressed, but remember to use this as a learning experience - there is always room for improvement in emergency response and preparedness." Other WEC experts echoed Boldt's comments, explaining that this seminar and simulation was only one step in a very long process toward true readiness and prevention. Community, industry, and government leaders agreed

with the experts's critiques during the closing session, urging their colleagues to maintain the momentum generated by WEC's seminar and drill.

WEC received strong support in putting on the Seminar and Drill in Coatzacoalcos from the local government of Coatzacoalcos, Civil Protection of Veracruz, ANIQ (the National Chemical Manufacturers' Association of Mexico), and local industry (including: PEMEX, Celanese, Cloro de Tehuantepec, and Resistol). The Governor of Veracruz, Patricio Chirinos, sent his personal congratulations to Ing. Enrique Bravo, WEC-Mexico Director, on the event and requests WEC organize similar programs in three other industrial cities within Veracruz.

The Coatzacoalcos seminar was conducted as part of WEC's broader Local Accident Mitigation and Prevention (LAMP) program in Mexico. Each aspect of the LAMP program seeks to facilitate better community organization to reduce the incidence and impact of major industrial, hazardous materials transport or other technological accidents and disasters in selected locales in the target countries. In addition to the support WEC receives from U.S. AID's Office of Foreign Disaster Assistance, WEC has worked closely with the Chemical Emergency Preparedness and Prevention Office of the U.S. Environmental Protection Agency, the U.S. Centers for Disease Control's Environmental Hazards and Health Effects, the United Nation Environment Program's Industry and Environment Office and the Chemical Manufacturers Association.

WEC in Mexico has already conducted a full Emergency Response Seminar, based on the APELL process, in Monterrey. In addition to Coatzacoalcos and Monterrey, WEC will also conduct organize emergency prevention and mitigation activities in Guadalajara and/or Puebla.

## 2. Impact to date of LAMP activities

In relation to the stated objectives listed in the preamble above, WEC/Mexico believes that one or more self-actuating emergency response groups are taking shape in Coatzacoalcos, led by the industry mutual aid group ("CLAM"), local Gubernacion agents and representatives of the different municipalities. All three groups were well represented in the seminar in late November and early December. WEC/Mexico will monitor their plans and programs to ensure that LAMP program objectives are achieved.

Similarly, WEC/Mexico will follow-up on previous seminars conducted in Monterrey to ensure that LAMP program overall objectives are consolidated, while initiating new activities in Guadalajara and/or Puebla.

## 3. Planned LAMP Implementation Activities

Various proposed LAMP implementation activities are indicated on the master implementation schedule ("I.S.") attached. In the future, there are plans to train community representatives from Monterrey and Guadalajara or Puebla in basic emergency planning and accident prevention. The training materials are essentially those developed by U.S.EPA\CEPPO for their CEP&AP course and are presently used to train representatives from Local Emergency

Planning Committees (LEPC's) in the U.S.

#### **D. Implementation of the LAMP Program in India**

The LAMP program is being implemented through the National Safety Council of India through its branches located in each Indian State.

##### **1. Progress in this Quarter**

##### **Presentation of CEP&AP Course in India**

A three-member U.S.EPA team conducted training in chemical emergency preparedness and accident prevention (CEP&AP) for industry, government, civil defense and health personnel, community leaders and others in October 1993 in Madras and Bombay. The two 4-day training courses covered the following topics: principles of preparedness, prevention and response; hazard analysis; chemical process safety management; training of cadres in different disciplines; development of on-site and off-site emergency plans; table top practices to test alternative emergency plans; coordination and communication in accident simulation exercises; and establishment of local emergency planning committees (LEPCs) and roles of its different members.

WEC and the National Safety Council of India (NSCI) made all local arrangements and invited the participants, in collaboration with local industries associations in Manali (Madras) and Thane (Bombay). The participants in the courses were senior policy makers of chemical disaster management plans in industry, government and local community.

The table-top exercises presented in the two courses (as used to test the effectiveness of alternative emergency response plans) have changed the complex of existing emergency plans in the two target industrial areas of Madras and Bombay. It was concluded that such table top exercises can be used to improve disaster management systems. Also, the U.S. experts emphasized the need for effective Local Emergency Planning Committees (LEPCs) comprising local governments, civil defense, and most importantly the community and others outside the periphery of the plant.

In Manali and Thane industrial belts a number of industries will now rework their emergency plans based on their experience in the table top exercises. Industries will now attempt to reach table-top perfection before venturing into actual mock emergency drills. Further, the local government in Thane District, immediately after the CEP&AP course, has requested all industries to submit on-site and off-site emergency plans to the government. Even before recommendations were submitted to appropriate authorities, corrective measures were in progress on the existing plans. The commitment of local and state governments to coordinate with industries, community organizations and others for strengthening effective disaster management was a positive outcome of the seminar.

Important recommendations of the CEP&AP course were: setting up of broad-based LEPCs with all parties concerned; finding more trainers for training; designating an Emergency Planning Officer

at the local government level; holding table top exercises more often; calculating vulnerability zones; improving coordination and communications among various groups; more training for fire fighters/police and other civil defense personnel; and training in hazard analysis.

## 2. Impact to date of LAMP activities

Poor socio-economic conditions (massive populations, ignorance, poverty, illiteracy, etc.) prevailing around the industrial sites; non-existence of effective disaster management systems; insufficient infrastructure for off-site emergency planning; lack of training for industry & community; poor coordination between industry, government and community; and ineffective enforcement of statutes are factors responsible for frequent chemical accidents in India.

With population growing in alarming proportion in urban and industrial centers and frequent accidents and loss of life, the industry, government and community have realized the need for cooperation and coordination for preparedness and to avert accidents. As first step, the federal government in 1987 enacted legislation relating to disaster management. These statutes made it mandatory for industries to prepare on-site emergency plans and test them periodically. Often, industries with chemical emergency plans have yet to test them through simulation exercises. Due to poor enforcement many chemical units have not begun complying with the government requirements.

The APELL seminar/workshops conducted in October 1992 in Madras and Bombay, training in medical response in April 1993 and the CEP&AP training programs have brought significant changes in the thinking of the government, industry and community in Madras and Bombay. There is greater concern, commitment and dedication to strengthen disaster management. A number of industrial firms and industry associations in Madras and Bombay have now decided to utilize table top modeling to bring perfection in their emergency planning. There are now firm assurances from local and state governments to cooperate with industry and community to develop good emergency preparedness systems. In a few units, mock emergency drill schedules have been postponed to a later date to allow more community participation. As demonstration of this commitment, within four days of the CEP&AP course, the local government in Thane District issued directives to industries on emergency planning requirements.

It will still take some time to fully achieve LAMP objectives in India. WEC has signed an agreement with NSCI in December 1993 to more fully accomplish LAMP objectives over the next three and a half years. A LAMP Coordinator is being recruited by NSCI to coordinate implementation activities throughout India. A national advisory committee will be constituted at the national level, comprising NSCI, Indian Chemical Manufacturers' Association and other industries associations, Ministry of Environment, Ministry of Petroleum - Dept. of Petrochemicals, Ministry of Labor and appropriate non-government organizations representing the views and opinions of the public on industrial emergency concerns. Four more chemically sensitive cities have been identified for future activities. These are Kanpur (North), Cochin (South), Haldia (East) and Baroda (West). Kanpur and Cochin have been selected as the sites for APELL

workshops in mid-April 1994. A full-fledged mock emergency drill, based on the experience derived from the CEP&AP course, is being planned for the Manali industrial area of Madras in early May 94.

### 3. Planned LAMP Implementation Activities

APELL-like seminars and workshops ("SSS" on the I.S.) will be presented in early 1994 in Cochin and Kanpur. The programs will follow the pattern of a normal APELL, but will have the maximum involvement of indigenous Indian officials, especially those who had been previous associated with various LAMP activities in Madras and Bombay.

The mock emergency drill originally schedule by the Manali-Ennore Industries Association for early November 1993 has been postponed until late Spring 1994, so as to allow more time for getting planning inputs from local government, fire department and community representatives. This has been indicated by "DDD" on the I.S.

Prior to or immediately after the above programs, WEC will offer training to local "LEPCs" in Computer-aided Management of Emergency Operations (CAMEO), to help improve the effectiveness of community-based emergency planning in the Manali and Thane industrial belts of Madras and Bombay, respectively.

Other tentative dates for proposed exercises and accident prevention training programs are identified on the I.S.

## E. Implementation of the LAMP Program in Thailand

The Lamp Program in Thailand is being implemented by the WEC Office in Bangkok.

### 1. Progress in this Quarter

#### Presentation of CEP&AP Course in Thailand

The EPA CEP&AP Course was presented in Thailand on October 25-28, 1993 in Map Ta Phut, in cooperation with Industrial Estate Authority of Thailand and the Bangpoo Industrial Club. Participants were drawn from industry, government and community representatives working on or living near the Bangpoo industrial estate, with a smaller representation from Map Ta Phut. The 35 participants included persons who had been associated with the Medical Response to Chemical Disasters presentation in March 1993 and cooperators from other emergency awareness programs of WEC/Thailand.

### 2. Impact to date of LAMP activities

Based on assessments by EPA experts in October 1992 of chemical risks and existing emergency response plans in the Map Ta Phut and Bangpoo industrial estates, WEC organized a seminar on medical response to chemical disasters in March 1993 and then the CEP&AP course in October. In addition, over the past year, the WEC/Thailand LAMP coordinator has done extensive field work with industry and government personnel associated with the two industrial estates. First, he was able to stimulate the

organizing of mutual aid industry clubs and the setting up of cooperatively-managed offices in both industrial estates. By this means he has been able to assess existing resources for emergency response, obtain pooling agreements for sharing of fire fighting and chemical spill control equipments, initiate specialized training of emergency response personnel and establish liaison procedures with nearby municipal authorities. One of the outputs of this effort is the agreement by the local municipal authority near Bangpoo to pre-position three (of six) fire-fighting trucks in the Bangpoo industrial estate itself, in a former testing laboratory and attached living quarters. Also, since the CEP&AP course, the local fire company has now been equipped with personal protection gear and other supplies for fighting chemical fires and spills.

### 3. Planned LAMP Implementation Activities

WEC Thailand is conducting on-going training on computerized support for emergency planning, based on the CAMEO programs supplied to WEC by EPA. In March, WEC will host a second "Medical Response to Chemical Disasters" seminar in Bangkok, on behalf of the Ministry of Health and the National Safety Council of Thailand.

Other tentative dates for proposed accident prevention training programs and mock emergency drills are identified on the I.S.

## F. Implementation of the LAMP Program in Indonesia

The Lamp Program in Indonesia is being implemented by the WEC Office in Jakarta, in cooperation with the Ministry of Population and Environment - Environmental Impact Management Agency (BAPEDAL).

### 1. Progress in this Quarter

WEC financed the participation of two presenters from EPA in the APELL S/W held in Lhokseumawe (Aceh Province) from 26 to 29 October 1993. A WEC chemical engineer from the New York office made a presentation at the seminar, as did the WEC/Thailand LAMP coordinator. The APELL workshop was attended by BAPEDAL staff, local industry, local community leaders and local government officials. The EPA experts concluded that the weakest link in the government - industry - community triangle (APELL concept) is the link with the community. The ability to convey information to the "general public" regarding the "potential" problems/threats of an accidental release of a hazardous material, and what to do in such an event without creating unnecessary fear/misunderstandings, is a key issue.

During the seminar, the foreign experts visited the PT Arun LNG plant in Lhokseumawe, where they were impressed by state of the art fire and spill response facilities, contingency planning, training, exercises, communications, etc. They recommended that personnel from the PT Arun plant be made available to advise local industry and government personnel in other industrial areas of Indonesia.

During the week following the seminar, the two EPA experts and WEC staff visited petrochemical and steel complexes at Cilegon

to assess chemical risks and reviewed existing local emergency response facilities and plans. All local contacts and arrangements for these assessments were made by the WEC/Indonesia LAMP Coordinator.

The EPA experts concluded that the Cilegon/Anyer/Merak area should be considered a high priority for an APELL seminar. There is a high concentration of industry with nearby civilian population. There is a potential for accidental releases of hazardous materials from both transportation and fixed facilities. Some low-level industry representatives of the different plants are already meeting on a regular basis to discuss worker safety and some public safety issues, through existing "BILIKs" (which are administered by the Ministry of Manpower). Hopefully, the BILIK in Cilegon can serve as the nucleus for the formation of work groups to develop contingency plans, mutual aid agreements, emergency response infrastructure needs, training, and establishing a communication strategy with the surrounding civilian population.

After the assessments, the WEC/Thailand LAMP Coordinator continued to meet with local industry and government officials from Cilegon to help organize an effective joint emergency response plan.

## 2. Impact to date of LAMP Activities

Lhokseumawe has three major industrial installations (an LNG plant and two fertilizer plants) in a remote part of Sumatra (Aceh Province). The PT Arun LNG plant in Lhokseumawe has state of the art fire and spill response facilities, contingency planning, training, exercises, and communications which can serve as a model to help educate local industry and government personnel in other industrial areas of Indonesia.

The Cilegon/Anyer/Merak area is a high priority area for improving local emergency planning for technological disasters. There is a high concentration of industry with nearby civilian population. The local "BILIK" can hopefully serve as the nucleus for the formation of work groups to develop contingency plans, mutual aid agreements, emergency response infrastructure needs, training, and establishing a communication strategy with the surrounding civilian population.

## 3. Planned LAMP Implementation Activities

WEC/Indonesia is planning the following LAMP implementation activities in the near future:

- a. Arrange two (2) Medical Response to Chemical Disaster seminars in Cilegon and Bandung/Jakarta for March 4 through 8, 1994. These will be led by Dr. Eric Noji of CDC, in cooperation with the Ministry of Health and the Cilegon BILIK. Dr. Noji will arrive Jakarta on 3 March and depart for Bangkok on 9 March.
- b. Conduct Chemical Emergency Preparedness (CEP) training in Cilegon and Bandung or Gresik (Surabaya) in May. This will be planned and led by the WEC/Indonesia LAMP Coordinator, with assistance from the WEC/Thailand LAMP Coordinator and, possibly, a consultant to conduct table top emergency exercises.

- c. Train local fire safety and chemical spill containment personnel in Cilegon and Bandung or Gresik in July/August, or sooner if practicable, using the Canadian Chemical Producers' Association (CCPS) training course designed around the CANUTEC Industrial Emergency Response Guide.

To date, there are no plans to have additional programs as a follow-on to the APELL S/W held in Lhokseumawe in October, unless WEC is specifically requested to do so by BAPEDAL

Other tentative dates for emergency preparedness, medical response and accident prevention training programs are identified on the I.S.

### G. Miscellaneous Activities

Consistent with the stated objectives and goals of the program, WEC may undertake miscellaneous activities to prevent or mitigate technological accidents in other developing countries. The specific scope and budget for each activity are defined jointly by WEC and the OFDA Project Officer.

#### 1. Progress in this Quarter

In early July, a contract was signed with the Environment and Natural Resources Center of Costa Rica (CEDARENA) to conduct legal investigations into appropriate laws and regulations for hazardous materials management in the country. WEC representative Jim Scherer, former EPA Region 8 Administrator and two-year resident advisor to the Ministry of Environment of the Czech Republic, visited CEDARENA in early December. Mr. Scherer reviewed CEDARENA's progress and was available to CEDARENA staff for consultation. Although impressed by CEDARENA's efforts and accomplishments to date, Mr. Scherer stated that he believed training may be necessary to heighten awareness before a climate is created that would make it politically feasible to enact CEDARENA's recommendations. CEDARENA and Mr. Scherer feel strongly that an APELL seminar should be conducted in San Jose as well as training for the local fire departments. The study and recommendation are due to be completed in early 1994.

#### 2. Planned LAMP Implementation Activities

Further efforts will be defined in cooperation with OFDA.

# WEC LAMP PROGRAM IMPLEMENTATION SCHEDULE I

1992/93

COUNTRY/SITE	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
<b>THAILAND</b>								
MTPhut		XXX			AAPP		HHH	
Bangpoo		XXX			AAPP		MMM	
<b>MEXICO</b>								
Coatzl.	XXX				HHH			
Montrey.				XXX				
Guadlhr.						YYY		SSS
<b>INDIA</b>								
Madras		SSS						
Bombay		XXX					MMM	
Kanpur							MMM	
<b>INDONESIA</b>								
Lhoksmwe.							HHH	
Cilegon							XXX	
<b>MISC. ACTIVITIES</b>								
Brazil			SSS					
Jamaica							AAPP	
Costa Rica								SCT

### LEGEND

XXX PRE SEMINAR/WORKSHOP MEETINGS (planned) (* = tentative) (actual)	SCT SCOUTING VISIT
YYY PRE SEMINAR/WORKSHOP SITE CHECK	SSS APELL SEMINAR/WORKSHOP
AAA SITE RISK ASSESSMENT	PPP SITE PLAN ASSESSMENT
TTT TRAINING IN EMERGENCY PLANNING	MMM TRNG. IN MED. RESPNS. TO CHEM. EMERGENCIES.
DDD MOCK EMERGENCY DRILL	HHH HIRING OF LOCAL EMERG. PREP. STAFF

# WEC LAMP PROGRAM IMPLEMENTATION SCHEDULE II

1993

COUNTRY/SITE	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV
<b>THAILAND</b>						TTEE		
MTPhut								
Bangpoo							TTT	
								TTT
<b>MEXICO</b>						TTEE		
Coatzl.								
Montrey								
Guadlhr.								
<b>INDIA</b>						TTEE		
Madras								
Bombay							TTT	
Kanpur							TTT	
	YYY							
<b>INDONESIA</b>						TTEE		
Lhoksmwe.								
Cilegon								
Bandung								
								SSS
								AAPP
<b>MISC. ACTIVITIES</b>								
Jamaica								
Costa Rica								
	YYY							

**LEGEND**

YYY PRE SEMINAR/WORKSHOP MEETINGS	(planned) (* = tentative) (actual)
SSS APELL SEMINAR/WORKSHOP	AAA SITE RISK ASSESSMENT
PPP SITE PLAN ASSESSMENT	TTT TRAINING IN EMERGENCY PLANNING
MMM TRNG. IN MED. RESPNS. TO CHEM. EMERGENCIES.	DDD MOCK EMERGENCY DRILL
EEE EMERGENCY EXERCISE TRAINING IN U.S.	RRR TRAINING IN ACCIDENT PREVENTION

# WEC LAMP PROGRAM IMPLEMENTATION SCHEDULE III

1993/94

COUNTRY/SITE	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
<b>THAILAND</b>								
MTPhut				CCC		MMM	FFF*	RRR*
Bangpoo				CCC		MMM	FFF*	RRR*
<b>MEXICO</b>								
Coatzl.		TTMMFFDD						
Montrey					MMFF*			
Guadlhr.							TTMMFF*	
<b>INDIA</b>								
Madras						CCC	DDD	
Bombay						CCC		
Kanpur							SSTTFF	
Cochin							SSTTFF	
<b>INDONESIA</b>								
Lhoksmwe								
Cilegon					MMM		TTFF	
Bandung					MMM			TTFF*
<b>MISC. ACTIVITIES</b>								

### LEGEND

SSS APELL SEMINAR/WORKSHOP	(planned)	(* = tentative) (actual)
AAA SITE RISK ASSESSMENT		PPP SITE PLAN ASSESSMENT
TTT TRAINING IN EMERGENCY PLANNING		FFF TRNG. IN IND. FIRE FTNG. & SPILL CONTROL
MMM TRNG. IN MED. RESPNS. TO CHEM. EMERGENCIES		DDD MOCK EMERGENCY DRILL
CCC TRNG. IN CAMEO SUPPORT TO EMERGENCY PLNG.		RRR TRAINING IN ACCIDENT PREVENTION

# WEC LAMP PROGRAM IMPLEMENTATION SCHEDULE IV

1994/95

COUNTRY/SITE	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN
<b>THAILAND</b>								
MTPhut			III*					
Bangpoo				WWW*			DDD*	
				WWW*			DDD*	
<b>MEXICO</b>								
Coatzl.			III*					
Montrey	RRR*			WWW*				
Guadlhr.	RRR*			WWW*			DDD*	
	RRR*			WWW*			DDD*	
<b>INDIA</b>								
Madras			III*					
Bombay	RRR*				WWW*			
Kanpur	RRR*				WWW*			
Cochin	RRR*				WWW*		DDD*	
					WWW*		DDD*	
<b>INDONESIA</b>								
Lhoksmwe.			III*					
Cilegon								
Bandung					RRR*		WWW*	DDD*
					RRR*		WWW*	DDD*
					RRR*		WWW*	DDD*
<b>MISC. ACTIVITIES</b>								

### LEGEND

SSS	APELL SEMINAR/WORKSHOP	(planned) (* = tentative) (actual)
AAA	SITE RISK ASSESSMENT	PPP SITE PLAN ASSESSMENT
TTT	TRAINING IN EMERGENCY PLANNING	FFF TRNG. IN IND. FIRE FTNG & SPILL CONTROL
MMM	TRNG. IN MED. RESPNS. TO CHEM. EMERGENCIES.	DDD MOCK EMERGENCY DRILL
CCC	TRNG. IN CAMEO SUPPORT TO EMERGENCY PLNG.	RRR TRAINING IN ACCIDENT PREVENTION
III	TRAINING IN CHEM. INFO. CTRS.	WWW TRAINING IN HAZARDOUS WASTE HANDLING