



DEPARTMENT OF
ENVIRONMENT AND
NATURAL RESOURCES

06 November 1991

SPECIAL ORDER NO. 1045
SERIES OF 1991

SUBJECT: WORKSHOP ON ENVIRONMENTAL MONITORING AND
RESEARCH ACTIVITIES FOR THE POLLUTION
ADJUDICATION BOARD

In the interest of the service, the following personnel of DENR-Regional Office are hereby designated to attend the Workshop on Environmental Monitoring and Research Activities for the Pollution Adjudication Board to be held on 20-23 November, 1991 at BMGS, Petrolab, North Avenue, Quezon City.

1. Engr. Narciso Zacarias	Chief, EQD	NCR
2. Engr. Jean Borromeo	Chief, Lab.	NCR
3. Engr. Fermin Weygan	Chief, EQD	CAR
4. Engr. Bernardita Lopez	Supvng. EMS	CAR
5. Engr. Joel Salvador	Chief, EQD	Reg. 1
6. Engr. Ma. Dorica Naz	Sr. EMS	Reg. 1
7. Mr. Lorenzo Azaula	Chief, EQD	Reg. 2
8. Engr. Ma. Garcia Mariano	EMS II	Reg. 2
9. Engr. Dominice Balerite	Chief, EQD	Reg. 3
10. Ms. Doreen Gamboa	OIC, Lab.	Reg. 3
11. Engr. Oscar Temporal	Chief, EQD	Reg. 4
12. Ms. Lilibeth Candolita	OIC, Lab.	Reg. 4
13. Engr. Eva Ocfemia	Chief, EQD	Reg. 5
14. Ms. Leonisa Madeloso	Chief, Lab.	Reg. 5
15. Engr. Samson Guillergan	Chief, EQD	Reg. 6
16. Ms. Nena Gerado	Sr. EMS	Reg. 6
17. Engr. Allan Arranguez	Chief, EQD	Reg. 7
18. Ms. Ester Gupiteo	Chief, Lab.	Reg. 7
19. Engr. Carlos Panaligan	Chief, EQD	Reg. 8
20. Engr. Ma. Corazon Millan	Sr. EMS	Reg. 8
21. Engr. Allan de Gala	Chief, EQD	Reg. 9
22. Ms. Arleen Munoz	EMS I	Reg. 9
23. Engr. Florencio Dominguez Jr.	Chief, EQD	Reg. 10
24. Ms. Marivic Fajardo	EMS II	Reg. 10
25. Engr. Bienvenido Lipayon	Chief, EQD	Reg. 11
26. Ms. Florencia Bongalo	Chief, Lab.	Reg. 11
27. Ms. Ma. Socorro Lanto	Chief, EQD	Reg. 12
28. Engr. Mulilodah Pasandalan	Sr. EMS	Reg. 12

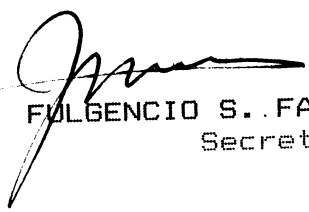


DEPARTMENT OF
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In addition, the following personnel of EMB are also authorized to attend the said workshop as participants and facilitators:


1. Ms. Ella S. Deocadiz	OIC, Asst. Director
2. Fiscal Oscar A. Pascua	OIC, Legal
3. Atty. Carmelo R. Segui	Atty. III
4. Atty. Evelyn Dominguez	PAB Coordinator
5. Engr. Erlinda A. Gonzales	Chief, EQD
6. Engr. Esterlito M. Pinlac	Chief, WQMS
7. Engr. Ramon B. Aguilar	Chief, AQMS
8. Ms. Angelita T. Brabante	Chief, STHWMS
9. Ms. Amy M. Lecciones	Supvg. EMS
10. Mr. Albert A. Magalang	Supvg. EMS
11. Ms. Teresita M. Liao	Inf. Officer
12. Ms. Leonita Baetiong	Supvg. EMS
13. Mr. Reynaldo P. Alcances	Chief, EMS
14. Mr. Renato T. Cruz	Supvg. EMS
15. Ms. Clarissa C. Arida	Sr. SRS
16. Ms. Araceli V. Cantre	Sr. EMS
17. Mr. Manuel S. Sabater	Sr. SRS
18. Mr. Salvador T. Passe	Supvg. EMS
19. Engr. Jose Reynato M. Morente	SRS II
20. Ms. Virginia V. Quimio	Sr. EMS
21. Ms. Sonia R. Barlis	Statistician II

All expenses incurred in connection with the workshop shall be charged against PAB funds and shall be subject to the usual accounting and auditing rules and regulations.


FULGENCIO S. FACTORAN, JR.
Secretary

Recommending Approval:


VICTOR O. RAMOS
USEC, for Field Operations


DELFIN GANAPIN, JR.
USEC, for Environment and Research

**WORKSHOP ON ENVIRONMENTAL
MONITORING AND RESEARCH
ACTIVITIES FOR THE
POLLUTION ADJUDICATION BOARD**

Quezon City, 20-22 November 1991

Workshop Venue: Petrolab, North Avenue, Q.C.

Participants Accommodations: PCED Hostel, UP Campus, Q.C.

PROVISIONAL WORKSHOP TOPICS

1. Introduction: purpose and scope of the workshop
2. Approval of the provisional workshop topics and designation of working groups

Environmental Monitoring

3. Presentation of the environmental monitoring framework of the DENR: rationale for environmental monitoring, areas to be monitored, industries/activities to be monitored, parameters, frequency of monitoring, quality assurance procedures, coordination with local and international groups, data storage, retrieval, and reporting
4. Presentation and review of DENR capability for environmental monitoring: staff, equipment, supplies and materials
5. Identification of gaps and formulation of framework plan to include training plan for environmental monitoring

Environmental Research

6. Presentation of DENR environmental research framework
7. Review of DENR environmental research activities and capability
8. Formulation of framework plan for environmental research; discussion of procedures for the conduct of interlaboratory exercises

Integrative Aspects

- 9. Finalization of framework plans
- 10. Adoption of the report

INPUTS REQUESTED FROM PAB

Substantive inputs

Problems and issues in the conduct of PAB activities related to environmental monitoring and research

Staff inputs

Technical staff to assist in the preparation of the working documents

Financial inputs

Travelling expenses (Fare of participants from the regional offices)	P 52,498.00
Food and accommodation of participants	35,444.00
Supplies and materials	10,000.00
Printing cost	20,000.00

T o t a l	P 117,942.00

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INPUTS FROM EMB

Substantive Inputs

Overall framework of the workshop
Reporting forms
Existing data and information on regional capability
for environmental monitoring and research
DENR environmental monitoring framework
DENR environmental research framework
Operational guidelines for environmental monitoring
for DENR
Draft protocol on laboratory accreditation

Staff inputs

- Technical staff to prepare the working documents and workshop report
- Support staff to take care of workshop arrangements and provide clerical support

INPUTS FROM PARTICIPANTS

Substantive inputs

- Environmental monitoring plan of the Region
 - * Rationale of the environmental monitoring plan
 - * Coverage of the ideal environmental monitoring plan for the Region in terms of water bodies, industrial establishments, projects under the EIS System, other activities and projects, equipment and facilities, manpower complement, quality assurance exercises, and training
 - * Map of water bodies currently monitored
 - Details of current monitoring activities
 - * Map of industrial establishments
 - Details of current monitoring activities
 - * Map of projects under EIS System
 - Details of current monitoring activities
 - * Other projects/activities that entail monitoring
 - Details of current monitoring activities
 - * List of staff (including educational background, training courses attended, and experience) involved in current environmental monitoring activities
 - * Map of stationary monitoring stations
 - Detailed description (including fixtures, equipment, etc.) of stations, information on how and when these stations were acquired, funding source, cost (itemized into construction, equipment and accessories, and maintenance)
 - * List of field equipment
 - (including name of field equipment, brand, model, capability, i.e. parameters analyzed and detection limits, how and when the equipment were acquired, and status, i.e. serviceable/unserviceable/to be condemned/condemned)
 - * List of laboratory equipment
 - (including name of equipment, brand, model, capability, i.e. parameters analyzed and detection limits, how and when the equipment were acquired, and status, i.e. serviceable/unserviceable/to be condemned/condemned)
 - * List of analytical methodologies in the measurement of parameters)

- * List of quality assurance practices adopted in environmental monitoring, particularly in the analysis of samples
- * Description of equipment maintenance program
- * List of water bodies, industrial establishments, projects under EIS, and other activities/projects to be monitored
- * List of institutions and groups in the Region that have environmental monitoring capability; brief assessment of capability
- * Gaps between ideal and current capability
- * Recommendations
 - Priorities relative to manpower training, equipment acquisition, and facilities upgrading
 - Other recommendations

Environmental research framework of the Region

- * Researchable areas in the Region classified under the following categories:
 - Testing of analytical and research methodologies
 - Establishment of baseline/background data
 - Water quality management
 - Air quality management
 - Land/soil quality management
 - Waste management (including solid, toxic, and hazardous waste)
 - Environmental health
 - Environmental impact assessment
 - Environmental economics
 - Climate change and other global phenomena
- * Research capability of the Regional Office with respect to research topics currently worked on, staff, facilities, and equipment
- * Research capability of other institutions and groups in the Region
- * Recommendations
 - Priorities relative to research areas/subjects, capability building, and coordination with EMB and other groups

Staff inputs

Participants: EQD Chiefs and Laboratory Section Chiefs of the Regional Offices of the DENR

Workshop Output

DENR Environmental Monitoring Framework
DENR Environmental Research Framework

TENTATIVE LIST OF PARTICIPANTS

DENR - REGIONAL OFFICES

NCR

1. Engr. Narciso Zacarias Chief, EQD
2. Engr. Jean Borromeo Chief, Lab. Section

CAR

1. Engr. Fermin Weygan Chief, EQD
2. Engr. Brnardita Lopez Supvng. EMS

Region 1

1. Engr. Joel Salvador Chief, EQD
2. Engr. Ma. Dorica Naz Sr. EMS

Region 2

1. Mr. Lorenzo Azaula Chief, EQD
2. Engr. Ma. Gracia Mariano EMS II

Region 3

1. Engr. Dominice Balerite Chief, EQD
2. Ms. Doreen Gamboa OIC. Lab. Section

Region 4

1. Engr. Oscar Temporal Chief, EQD
2. Engr. Lilibeth Candolita OIC, Lab. Section

Region 5

1. Engr. Eva Ocfemia Chief, EQD
2. Ms. Leonisa Madeloso SRS III

Region 6

1. Engr. Samson Guillergan Chief, EQD
2. Ms. Nena Gerrado Sr. EMS

Region 7

1. Engr. Allan Arranguez Chief, EQD
2. Ms. Ester Gupiteo Sr. SRS

Region 8

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| 1. | Engr. Carlos Panaligan | Chief, EQD |
| 2. | Engr. Ma. Corazon Millan | Sr. EMS |

Region 9

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| 1. | Engr. Allan de Gala | Chief, EQD |
| 2. | Ms. Arleen Munoz | SRS II |

Region 10

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| 1. | Engr. Florencio Dominguez, Jr. | Chief, EQD |
| 2. | Ms. Marivic Fajardo | EMS II |

Region 11

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| 1. | Engr. Bienvenido Lipayon | Chief, EQD |
| 2. | Engr. Florencio Bungalo | Sr. EMS |

Region 12

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| 1. | Ms. Ma. Socorro Lanto | Chief, EQD |
| 2. | Engr. Mulilodah Pasandalan | Sr. EMS |

DETAILED BUDGETARY ESTIMATES

I. TRAVELLING EXPENSES P 52,498.00

Fare [Round trip fare for two representatives each region]	P	52,498.00
CAR.....	P	680.00
Region 1....		640.00
Region 2....		920.00
Region 3....		400.00
Region 5....		2,189.00
Region 6....		4,439.00
Region 7....		5,415.00
Region 8....		5,367.00
Region 9....		7,679.00
Region 10...		7,107.00
Region 11...		9,699.00
Region 12...		7,963.00

II. FOOD AND ACCOMMODATION 35,444.00

A. Food

1. Dinner at P78.00/person [for 28 Regional Participants checking-in in the evening of 20 Nov. plus 22 EMB Personnel	P	3,900.00
2. Breakfast at P62.00/person/day x 3 days [for the breakfast on Nov 21-23 of the 28 Regional Participants billeted]		5,208.00
3. Snacks (AM & PM) at P25.00/snack x 2 snacks/day x 2 days (for 50 participants)		5,000.00
4. Lunch at P50.00/person/day x 2 days (for 50 participants)		5,000.00
5. Dinner at P50.00/person/day x 2 days (for 50 participants)		5,000.00

B. Accommodation

1. Rooms for the Regional Participants	P 11,336.00
8 rooms (triple) at P 408.00 each per night x 3 nights	9,792.00
1 room (quadrouple) at P 468.00 each per night x 3 nights	1,404.00
2. Function Room at a rate of P 140.00 for the first two hours	P 140.00
(to be used for the opening ceremonies on 20 November)	

III. SUPPLIES AND MATERIALS P 10,000.00

IV. PRINTING COST 20,000.00

T O T A L P 117,942.00

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T E N T A T I V E P R O G R A M M E

20 November 1991

1900 HRS Opening Ceremonies

21 November 1991

AM Workshop objectives and scope

DENR Environmental Monitoring
Framework

Discussion

PM Mapping activities

22 November 1991

AM Continuation of mapping activities

DENR Environmental Research Framework

PM Discussion

Consolidation of outputs

Closing Remarks