

AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20523

PD PRATT 803 42  
SN = 46876

MEMORANDUM

July 29, 1986

TO: Distribution

FROM: ANE/PD/EA:Robert Shoemaker *RS*

SUBJECT: THAILAND - Provincial Waterworks Authority  
(493-0331)  
Project Committee Meeting

A Project Committee meeting to review the subject document will be held on Tuesday, August 12, 1986 at 10a.m. in Conference Room 3320A.

Your participation is invited.

Attachment: Bangkok 33314

*DI-ACG*

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*Project  
Amendment*

*RS*

cc: AA/ANE:CGreenleaf, JNorris, JEsposito  
XA/PA/M:BSnead  
STATE/EA  
NANEAP/PC:Director  
OTAPS/IO:Director  
ANE/PD/PCS:File

ANE/PD/EA:RShoemaker:rl:8/6/86:0722o

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ACTION AID-00

BANGKO 33314 PD OF 03 161252Z 2101 093906 AID2183  
AREAS WILL BE PLANNED AND IMPLEMENTED FOR APPROPRIATE  
STAFF.

ACTION OFFICE AID-05  
INFO SEOP-01 SEFP-01 SECS-02 ANAD-01 GC-01 SECC-02 GOFI-01  
ANMG-01 ANTR-06 STNE-01 PFR-01 SASI-01 AID-01 RELO-01  
PRE-05 AREA-02 /214 AB

A.2. TRAINING INFORMATION SYSTEM  
ESTABLISH COMPUTERIZED SYSTEM FOR TRAINING INFORMATION.

INFO LOG-00 COPY-01 CIAE-00 EG-08 DODE-00 EAP-00 /209 W  
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A.3 SPECIAL TRAINING PROGRAM  
DEVELOP AND CONDUCT CERTIFICATE TRAINING FOR TWO  
LEVELS OF PWA PERSONNEL, I.E., WATERWORKS OPERATING  
STAFF AND STARTING LEVEL OF SUPERVISORY STAFF.

R 161155Z JUL 85  
FM AMEMBASSY BANGKOK  
TO SECSTATE WASHDC 4865

DEVELOP AND PREPARE DRAFT CURRICULUM FOR TRAINING OF  
WATERWORKS MANAGER (6-MONTH COURSE).

UNCLAS BANGKOK 1  
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**B. CORPORATE PLANNING**

AIDAC

FOR AHE/PD, ANE/TR/HPII, AND ST/H

UPDATE PWA'S FIVE- AND TEN-YEAR CORPORATE PLANS. THE  
PLANS WILL INCLUDE CORPORATE POLICIES, GOALS AND  
OBJECTIVES, PROJECTED INVESTMENTS AND REVENUES,  
ADMINISTRATIVE PROCEDURES, ORGANIZATIONAL FRAMEWORKS,  
AND MANPOWER DISTRIBUTION REQUIREMENTS.  
DETAILED OPERATIONAL PLANS WILL ALSO BE COMPLETED FOR  
THE SECOND AND THIRD YEARS OF THE PROJECT.

E.O. 12356: N/A  
SUBJECT: PROVINCIAL WATERWORKS AUTHORITY (PWA)  
INSTITUTIONAL DEVELOPMENT (49J-0331)

TWO FEASIBILITY STUDIES WILL BE CONDUCTED IN AREAS  
WHERE PWA IS CONSIDERING TO EXPAND EXISTING COVERAGE  
OR TO ESTABLISH NEW SYSTEMS, E.G., GROUNDWATER VERSUS  
SURFACE WATER. FEASIBILITY STUDY MANUALS WILL BE  
PREPARED IN ACCORDANCE WITH LOCAL CONDITIONS.

1. DUE TO UNRESOLVED PYRAMIDING TAX BURDEN ON PWA AS A  
RESULT OF ORIGINALLY REQUIRED EXPATRIATE CONSULTANCY,  
AND RECENT EXTERNAL ASSISTANCE THAT PWA HAS RECEIVED  
FROM SEVERAL OTHER DONORS SUCH AS GTZ (GERMAN  
TECHNICAL COOPERATION AGENCY) AND JICA (JAPAN), PWA  
AND USAID HAVE AGREED IN PRINCIPLE TO AMEND THE  
SUBJECT PROJECT AS FOLLOWS:

A COST/BENEFIT ANALYSIS WILL BE CONDUCTED ON THE  
POTENTIAL IN-COUNTRY ACQUISITION AND USE OF GROUNDWATER  
DRILLING EQUIPMENT.

**A. TRAINING SCHEME**

**A.1. TRAINING SYSTEM DEVELOPMENT**

APPROXIMATELY 35 OF PWA'S TRAINING CENTER STAFF WILL  
BE TRAINED IN-COUNTRY TO PLAN, DESIGN, IMPLEMENT AND  
EVALUATE A WIDE VARIETY OF TRAINING ACTIVITIES.  
EVALUATIVE FOLLOW UP CRITERIA WILL BE DEVELOPED FOR  
EACH TRAINING ACTIVITY.

1. DUE TO UNRESOLVED PYRAMIDING TAX BURDEN ON PWA AS A  
RESULT OF ORIGINALLY REQUIRED EXPATRIATE CONSULTANCY,

APPROXIMATELY 60 SELECTED PWA STAFF WILL COMPLETE  
IN-COUNTRY TRAINING OF TRAINERS COURSES INCLUDING  
METHODOLOGY, COMMUNICATION, GROUP INTERACTION,  
EVALUATION, USE OF AUDIO-VISUAL AIDS, AND COMPUTERIZED  
RECORD KEEPING. IN ADDITION, ABOVE SELECTED TRAINEES  
WILL RECEIVE IN-COUNTRY TRAINING TO BECOME SUBJECT  
MATTER SPECIALIST/TRAINERS IN THE FOLLOWING AREAS:

**C. WATER SUPPLY AND ENGINEERING DESIGN**

IMPROVED DESIGN CRITERIA WILL BE DEVELOPED,  
SOURCE-TO-TAP, FOR SMALL, MEDIUM AND LARGE SYSTEMS.

- (1) SUPERVISION
- (2) MANPOWER DEVELOPMENT:
  - ORGANIZATION DEVELOPMENT (TEAM BUILDING)
  - MANPOWER AND PERSONNEL MANAGEMENT
- (3) BUSINESS ADMINISTRATION:
  - FINANCIAL MANAGEMENT
  - MARKETING
- (4) OPERATION AND MAINTENANCE:
  - PLANT OPERATION
  - MECHANICAL AND ELECTRICAL EQUIPMENT INSTALLATION,  
OPERATION AND MAINTENANCE
  - POWER AND COST SAVING
- (5) LEAK DETECTION

AT LEAST THREE MODEL SYSTEMS WILL BE DESIGNED IN  
DETAIL IN ACCORDANCE WITH CRITERIA AND METHODOLOGY  
DEVELOPED ABOVE.

A COMPREHENSIVE DESIGN MANUAL WILL BE DEVELOPED.

CONDUCT BASIC, INTERMEDIATE AND ADVANCED ENGINEERING  
COURSES.

**D. CONSTRUCTION SUPERVISION**

DEVELOP GUIDELINES AND CHECKLISTS FOR SUPERVISING AND  
MONITORING THE CONSTRUCTION OF DRINKING WATER SYSTEMS.

ON-THE-JOB TRAINING WILL BE GIVEN TO CENTRAL AND  
REGIONAL ENGINEERS IN DEVELOPING CONSTRUCTION PLANS  
FOR GROUNDWATER INCLUDING WELL DRILLING AND EQUIPMENT  
AND WELL CONSTRUCTION AND NEW SYSTEM DESIGN.

A WORKSHOP WILL BE GIVEN ON HOW TO DEVELOP, SUPERVISE  
AND MONITOR THE IMPLEMENTATION OF A CONSTRUCTION PLAN  
FOR WELL WATER SYSTEM AND NEW SYSTEM DESIGNS.  
GUIDELINES AND TEST CRITERIA WILL BE DEVELOPED FOR  
EVALUATING STRESS RESISTANCE FACTORS FOR VARIOUS  
CONSTRUCTION MATERIALS.

TRAINING MANUALS (EACH COMPOSED OF 3 PARTS: TEXT,  
PROCEDURE AND INSTRUCTOR HANDBOOK) WILL BE DEVELOPED  
FOR EACH OF THE ABOVE SUBJECT AREAS. EACH  
COMPREHENSIVE TRAINING COURSE IN ALL OF THE ABOVE

**E. PERSONNEL AND CONTRACTING IMPROVEMENT**

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MORE EFFECTIVE PERSONNEL POLICIES, PROCESSES AND PROCEDURES, COVERING PERSONNEL PLANNING AND JOB PROMOTION WILL BE DEVELOPED AND PREPARED.

SUBSIDY FOR THIS PURPOSE FROM THE RFG.  
4. PROJECT FUNDING BY LINE ITEM WOULD BE ADJUSTED AS FOLLOWS (IN US DOLLAR 000):

EXISTING CONTRACT PROCEDURES/FORMATS WILL BE REVISED.

LINE ITEM	ORIGINAL	REVISED
(1) U.S. CONSULTANTS	1,995	1,375
(2) LOCAL CONSULTANTS	819	969
(3) PERSONNEL-RELATED COSTS	226	259
SUB-TOTAL (123)	(3,040)	(2,313)
(4) COMMODITIES	1,924	2,714
(5) CONFERENCE	100	100
(6) PROJECT-RELATED TRAVEL	75	75
(7) EVALUATION	50	50
(8) INNOVATIVE ACTIVITIES	291	351
(9) CONTINGENCIES	220	47
TOTAL	5,700	5,700

F. RESEARCH AND DEVELOPMENT

A RESEARCH PROGRAM WILL BE DEVELOPED AND RESEARCH ACTIVITIES WILL BE IMPLEMENTED THROUGHOUT THE PROJECT LIFE.

PILOT TESTING FACILITIES WILL BE DESIGNED AND CONSTRUCTED.

PWA ENGINEERS AND SCIENTISTS WILL BE TRAINED IN-COUNTRY IN RESEARCH TECHNIQUES AND WILL BE CONDUCTING BENCH SCALE AND PILOT TESTS AND/OR ADAPT NEW TECHNOLOGIES, WHERE APPROPRIATE, RELATED TO PLANT DESIGN, EQUIPMENT, INSTRUMENTATION AND PLANT AUTOMATION.

G. INNOVATIVE ACTIVITIES

THE CONSULTANTS WILL IDENTIFY AND DESIGN INNOVATIVE ACTIVITIES IN ACCORDANCE WITH ANNUAL PROJECT IMPLEMENTATION AND FINANCIAL PLANS TO REDUCE COSTS AND GENERATE MORE REVENUE.

2. TO ACCURATELY RESPOND TO CURRENT NEEDS OF PWA AND INCREASED EXPERTISE OF LOCAL CONSULTANTS AS WELL AS TAX LIABILITY BURDEN, THE NUMBER OF CONSULTANTS' PERSON-MONTHS HAS BEEN REDUCED BY ABOUT 40 PERCENT. IN KEY AREA OF CORPORATE PLANNING, ONE U.S. LONG-TERM CONSULTANT WILL REMAIN THROUGHOUT LOP. AN EXPATRIATE RESIDENT HUMAN RESOURCES DEVELOPMENT SPECIALIST WILL NO LONGER BE NEEDED. RATHER, THE PROJECT WILL MAKE USE OF A LOCAL CONSULTANT INSTEAD. TA FOR ADMINISTRATION IMPROVEMENT ACTIVITIES IS TOTALLY DROPPED BECAUSE GTZ HAS ALREADY PROVIDED ASSISTANCE IN THIS AREA. MINOR REDUCTIONS WILL TAKE PLACE IN OTHER AREAS OF ENGINEERING DESIGN AND PERSONNEL DEVELOPMENT. SUCH AREAS AS CONSTRUCTION AND RESEARCH REMAIN UNCHANGED.

THE FOLLOWING ARE THE NUMBERS OF PERSON-MONTHS ORIGINALLY PROPOSED COMPARED TO NEWLY REVISED:

AREA	ORIGINAL		REVISED	
	EXP.	LOCAL	EXP.	LOCAL
TRAINING CENTER	66	133	16	60
CORPORATE PLANNING	80	48	52	28
CONSTRUCTION	-	36	-	36
ENGINEERING DESIGN	12	41	10	39
RESEARCH	14	18	14	18
PERSONNEL	8	36	6	18
ADMINISTRATION	-	45	-	-
PROJECT MANAGEMENT	4	96	3	96
TOTAL	184	445	101	287

3. WITHIN THE REVISED EXPATRIATE TECHNICAL ASSISTANCE LEVEL, PWA AGREES TO ABSORB ALL THAT TAX BURDEN TO BE INCURRED EVEN THOUGH THERE IS NO ADDITIONAL BUDGETARY

5. AS REFLECTED IN BUDGET BREAKDOWN IN PARA 4, SAVINGS FROM PERSONNEL COSTS HAVE BEEN ADDED TO COMMODITIES AND INNOVATIVE ACTIVITIES. THIS IS TO PROVIDE PWA WITH AN EXPANDED DATA PROCESSING SYSTEM CAPABLE OF HANDLING ITS MANAGEMENT AND OPERATIONAL INFORMATION LEADING TO IMPROVED EFFICIENCY OF THE INSTITUTION. SINCE PWA IS EXPANDING ITS ROLE TO INCLUDE RURAL WATER SUPPLY SCHEMES, SOME EQUIPMENT FOR INCOME-GENERATING OPERATIONS SUCH AS PUMPS, METERS, ETC., WOULD BE PURCHASED FOR WATERWORKS RECENTLY, OR TO BE, TAKEN OVER BY PWA FROM LOCAL MUNICIPALITIES. A DETAILED LIST OF COMMODITIES IS YET TO BE DEVELOPED.

6. THE SCOPE OF INNOVATIVE ACTIVITIES WOULD ALSO BE EXPANDED TO INCLUDE THE ROLE OF THE PRIVATE SECTOR IN THE MANAGEMENT AND PROVISION OF WATER SUPPLY.

7. WITH THE CURRENT PACO OF MAY 31, 1989 IN MIND, WE EXPECT TO EXPEDITE THE TA PROCUREMENT IN ORDER THAT THE CONSULTANTS WILL BE ON BOARD EARLY CY 1997. THE PROJECT SHOULD BE FUNCTIONING, ACCORDING TO THE REVISED INPUTS, FROM CY 1987-1989. THEREFORE WE PLAN TO EXTEND FOR ONE YEAR.

8. WE BELIEVE THESE MODIFICATIONS TO BE SENSIBLE. THEY REFLECT THE CHANGED CIRCUMSTANCES WHICH HAVE COME ABOUT SINCE THE PROJECT AGREEMENT IN MAY 1984, YET THEY DO NOT RESULT IN A SIGNIFICANT DEPARTURE FROM THE ORIGINAL PROJECT CONCEPT AND OBJECTIVES. TECHNICAL ASSISTANCE AND RELATED (NON-COMMODITY) ACTIVITIES ACCOUNT FOR OVER 50 PER CENT OF TOTAL COST. THE ENTIRE PROJECT REMAINS ON LOAN TERMS. PWA REMAINS STRONGLY COMMITTED TO THE PROJECT, AS EVIDENCED BY ITS AGREEMENT (AS NOTED IN PARA 3) TO ABSORB THE ENTIRE THAT TAX BURDEN FOR EXPATRIATE TECHNICAL ASSISTANCE.

9. PLEASE ADVISE ANY COMMENTS OR SUGGESTIONS. BROWN

*EAST ASIA*

ACTION OFFICER \_\_\_\_\_  
DATE REC'D. 7-21-86  
DUE DATE 7-28-86

UNCLASSIFIED RETURN TO PCS WITH NOTATION OF:

ACTION TAKEN \_\_\_\_\_