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1. Record of Discussions (R/D)

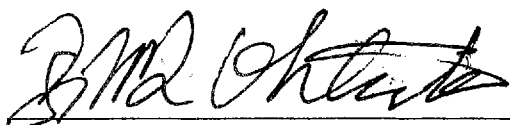
**THE RECORD OF DISCUSSIONS
BETWEEN
THE JAPANESE PROJECT DESIGN TEAM
AND
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE REPUBLIC OF INDONESIA
ON
JAPANESE TECHNICAL COOPERATION
FOR
THE PROJECT FOR STRENGTHENING DECENTRALIZED
ENVIRONMENTAL MANAGEMENT SYSTEM IN INDONESIA**

The Japanese Project Design Team (hereinafter referred to as "the Team") organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Dr. Kuninori OTSUBO, visited the Republic of Indonesia from March 17, 2002 to March 22, 2002 for the purpose of working out the details of the technical cooperation program concerning the Project for Strengthening Decentralized Environmental Management System in Indonesia in the Republic of Indonesia.

During its stay, the Team exchanged views and had a series of discussions with the Indonesian authorities concerned in respect of the desirable measures to be taken by both Governments for successful implementation of the above-mentioned Project.

As a result of the discussions, both parties agreed to recommend to their respective Governments all items referred to the document attached hereto.

Jakarta, March 22, 2002



Dr. Kuninori OTSUBO
Leader,
Japanese Project Design Team,
Japan International Cooperation Agency,
Japan



Ms. Masnellyarti
Deputy Minister for Technical Facilities of
Environmental Management,
Ministry of Environment,
The Republic of Indonesia

ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of the Republic of Indonesia will implement the Project for Strengthening Decentralized Environmental Management System in Indonesia (hereinafter referred to as "the Project") in cooperation with the Government of Japan.
2. The Project will be implemented in accordance with the Master Plan as shown in Annex I. In case that the Master Plan is needed to be revised due to the situation of the Project, agreement and confirmation by both Governments shall be made with Minutes of Meetings.

II. MEASURES TO BE TAKEN BY THE GOVERNMENT OF JAPAN

In accordance with the laws and regulations in force in Japan, the Government of Japan will take, at its own expenses, the following measures through JICA according to the normal procedures under the technical cooperation scheme of Japan.

1. DISPATCH OF JAPANESE EXPERTS

The Government of Japan will provide services of the Japanese experts as listed in Annex II.

2. PROVISION OF MACHINERY AND EQUIPMENT

The Government of Japan will provide such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in Annex III. The Equipment will become the property of the Government of the Republic of Indonesia upon being delivered C.I.F. to the Indonesian authorities concerned at the ports and/or airports of disembarkation.

3. TRAINING OF INDONESIAN PERSONNEL IN JAPAN

The Government of Japan will receive Indonesian personnel connected with the Project for technical training in Japan.



III. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE REPUBLIC OF INDONESIA

1. The Government of the Republic of Indonesia will take necessary measures to ensure that the self-reliant operation of the Project will be sustainable during and after the period of Japanese technical cooperation, through the full and active involvement of all related authorities in the Project.
2. The Government of the Republic of Indonesia will take necessary measures to ensure that the technologies and knowledge acquired by the Indonesian side as a result of Japanese technical cooperation will contribute to the economic and social development of the Republic of Indonesia.
3. The Government of the Republic of Indonesia will take necessary measures to grant privileges, exemptions and benefits as listed in Annex IV to the Japanese experts above referred to in II-1 and their families in the Republic of Indonesia.
4. The Government of the Republic of Indonesia will take necessary measures to ensure that the Equipment above referred to in II-2 will be utilized effectively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.
5. The Government of the Republic of Indonesia will take necessary measures to ensure that the knowledge and experience acquired by the Indonesian personnel through technical training in Japan will be utilized effectively in the implementation of the Project.
6. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take necessary measures to provide the following at its own expenses:
 - (1) Services of the Indonesian counterpart personnel and administrative personnel as listed in Annex V,
 - (2) Land, buildings and facilities as listed in Annex VI,
 - (3) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the Equipment provided through JICA above referred to in



II-2, and

(4) Means of transportation for official trips of the Japanese experts within the Republic of Indonesia.

7. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take necessary measures to allocate the following necessary expenses:

(1) for the transportation of the Equipment above referred to in II-2 within the Republic of Indonesia as well as for the installation, operation and maintenance thereof, and

(2) for the implementation of the Project.

8. In accordance with the laws and regulations in force in the Republic of Indonesia, the Government of the Republic of Indonesia will take necessary measures to exempt the customs duties, internal taxes and any other charges imposed in the People's Republic of Indonesia on the Equipment above referred to in II-2.

IV. ADMINISTRATION OF THE PROJECT

1. Deputy Minister for Technical Facilities of Environmental Management of the Ministry of Environment (hereinafter referred to as "KLH"), as the Project Director, will bear overall responsibility for the administration and implementation of the Project.

2. Assistant Deputy for Environmental Management Center (hereinafter referred to as "PUSARPEDAL"), as the Project Manager, will be responsible for the managerial and technical matters of the Project.

3. The Japanese Chief Advisor will provide necessary recommendations and advice to the Project Director and the Project Manager on any matters pertaining to the implementation of the Project.

4. The Japanese experts will give necessary technical guidance and advice to the Indonesian counterpart personnel on technical matters pertaining to the implementation of the Project.

5. For the effective and successful implementation of the Project, a Joint Coordinating

Committee will be established with functions and composition as shown in Annex VII.

V. JOINT EVALUATION

The Project will be evaluated jointly by the both Governments through JICA and the Indonesian authorities concerned, at the middle and the last periods of the cooperation term for checking the achievements.

VI. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Republic of Indonesia undertakes to bear claims, if any arises, against the Japanese experts engaged in technical cooperation for the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Republic of Indonesia except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VII. MUTUAL CONSULTATION

There will be mutual consultation between both Governments on any major issues arising from, or in connection with this document.

VIII. MEASURES TO PROMOTE UNDERSTANDING OF AND SUPPORT TO THE PROJECT

For the purpose of promoting the support of the people of the Republic of Indonesia to the Project, the Government of the Republic of Indonesia will take appropriate measures to make the Project widely known to the people of the Republic of Indonesia.

IX. TERM OF COOPERATION

The duration of technical cooperation for the Project under this Attached Document will be four (4) years from July 1st, 2002.



ANNEX I	MASTER PLAN
ANNEX II	LIST OF JAPANESE EXPERTS
ANNEX III	LIST OF MACHINERY AND EQUIPMENT
ANNEX IV	PRIVILEGES, EXEMPTION AND BENEFITS FOR JAPANESE EXPERTS
ANNEX V	LIST OF INDONESIAN COUNTERPARTS AND ADMINISTRATIVE PERSONNEL
ANNEX VI	LIST OF LAND, BUILDINGS AND FACILITIES
ANNEX VII	JOINT COORDINATING COMMITTEE

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ANNEX I MASTER PLAN

1. Project Purpose

Project purpose is the objective that is expected to be achieved by the time the Project is completed. The following project purpose is set in the Project.

"A framework of Environmental Management System in which PUSARPEDAL and BAPEDALDA work together is established by initiative of PUSARPEDAL"

2 Overall Goal

This is the development effect expected as a result of the achievement of the project purpose. In other words, the overall goal refers to the positive impact effected by the achievement of the project purpose, and direction of the Project.

The following overall goal is set for the Project, which also corresponds to environmental policy designated in PROPENAS (2001 - 2005).

"The national and local level's capabilities of environmental management are strengthened in Indonesia."

3. Outputs and Activities

Outputs are objectives to be realized by the Project in order to achieve the project purpose. The expected outputs by the Project are as follows:

- (1) Options of countermeasures to specific environmental problems are developed in the model site (North Sumatra province) based on reliable monitoring data and scientific knowledge.
- (2) Capabilities of PUSARPEDAL for providing KLH and BAPEDALDA with scientific knowledge and technical guidance on environmental management are reinforced.
- (3) Know-how of proper environmental monitoring and surveillance methods are transferred

Activities are specific actions intended to produce the outputs of the Project by the effective use of inputs. It is important to include the activities needed for monitoring and evaluation and those for the management of the Project. Referring to each of the numbered outputs, add corresponding activities in sequential order as shown below.

3.1 Pilot Project in the Model Site (Activities for Outputs 1)

1-1 Improving Laboratory Management of PUSARPEDALDA

1-1-1 Implement maintenance and calibration of laboratory equipment

1-1-2 Develop laboratory management system

1-1-3 Establish QA/QC in the laboratory

1-2 Conducting Monitoring and Assessment of Specific Issues

1-2-1 Conduct monitoring and surveillance

1-2-2 Conduct study on pollution level and pollution sources

1-3 Developing Options of Countermeasures of Specific Issues

1-3-1 Assess causes of pollution

1-3-2 Preparation of strategic program of environmental quality improvement

3.2 Capacity Development of PUSARPEDAL on Development of Policies (Activities for Outputs 2)

2-1 Improving Laboratory Management of PUSARPEDAL

2-1-1 Produce standard methods/procedures of sampling and analysis

2-1-2 Produce SRM/CRM

2-1-3 Develop laboratory management system

2-2 Conducting Studies on Environmental Monitoring and Management

2-2-1 Evaluate existing pollution control facilities

2-2-2 Evaluate the existing environmental standards based on background data

2-2-3 Conduct study on air quality modeling (Jakarta)

3.3 Capacity Development of Local Governments on Environmental Monitoring and Surveillance (Activities for Outputs 3)

3-1 Improving Management Capabilities of Local Laboratories

3-1-1 Training staff of local laboratories on advanced analytical methods

3-1-2 Conduct proficiency tests



3-1-3 Training staff of local laboratories on laboratory quality management system (LQMS)

3-1-4 Hold workshops among local laboratories for exchanging information

3-2 Training for Methods of Environmental Monitoring and Surveillance

3-2-1 Provide technical assistance to local laboratories for implementation methods and surveillance

3-2-2 Implement technical guidance to local governments on monitoring program and surveillance

3-3 Training for Impact Assessment

3-3-1 Produce training modules of environmental management for local governments

3-3-2 Train staff of local governments on environmental management

3-3-3 Hold workshops among local governments on environmental management



ANNEX II LIST OF JAPANESE EXPERTS

1. Long-term Experts

- (1) Chief Advisor/Environmental Management
- (2) Coordinator/Training program
- (3) Long-term experts in the following technical fields;
 - a. Environmental monitoring
 - b. Laboratory management
 - c. Applied environmental analysis

Note: Other technical experts may serve concurrently as an expert listed in (3) according to the implementation of the Project.

2. Short-term Experts

Short-term experts in related fields will be dispatched as the necessary for smooth implementation of the Project. Fields, number and term of assignment of short-term experts will be decided each Japanese fiscal year considering the progress of the Project through mutual consultation.

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ANNEX III LIST OF MACHINERY AND EQUIPMENT

1. Necessary machinery, equipment and training materials will be provided for the purpose of necessary technology transfer in implementing the Project at request of the Government of the Republic of Indonesia.
2. Specification and selection of the above mentioned equipment will be decided in due course through mutual consultation within the budget of Japanese side of each Japanese fiscal year.



ANNEX IV PRIVILEGES, EXEMPTION AND BENEFITS FOR JAPANESE EXPERTS

1. The Government of the Republic of Indonesia will exempt the Japanese experts and their families from income taxes and charges of any kind of imposed on or in connection with the living allowances remitted from abroad in relation to the implementation of the Project.

2. The Government of the Republic of Indonesia will exempt the Japanese experts and their families from import and export duties and any other charges imposed on personal articles and equipment necessary for the implementation of the Project, which may be brought in from abroad to or taken out of the Republic of Indonesia.

3. The Government of the Republic of Indonesia will facilitate the Japanese experts and their families if medical services are needed.

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**ANNEX V LIST OF INDONESIAN COUNTERPARTS AND
ADMINISTRATIVE PERSONNEL**

1. Project Director:

- Deputy Minister for Technical Facilities of Environmental Management (Deputy VII)

2. Project Manager:

- Assistant Deputy for Environmental Management Center (Head of PUSARPEDAL)

3. Counterparts in the fields of :

- (1) Environmental quality test
- (2) Environmental monitoring and surveillance (air quality)
- (3) Environmental monitoring and surveillance (water quality)
- (4) Laboratory management
- (5) Calibration and maintenance
- (6) Environmental information system
- (7) Air pollution (assessment, control)
- (8) Water pollution (assessment, control)
- (9) Toxic and hazardous substances

4. Administrative Personnel

- (1) Administration staff
- (2) Accounting staff
- (3) Secretaries
- (4) Typists
- (5) Drivers
- (6) Security guards
- (7) Operators and maintenance personnel for equipment
- (8) Other staff necessary for the implementation of the Project



ANNEX VI LIST OF LAND, BUILDINGS, AND FACILITIES

1. Land, buildings and facilities necessary for the implementation of the Project (PUSARPEDAL, Serpong, Indonesia)
2. Buildings and facilities necessary for the installation and storage of the equipment provided by the Government of Japan.
3. Suitable office rooms and any other facilities necessary for the Japanese chief advisor, coordinator and other experts.

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ANNEX VII JOINT COORDINATING COMMITTEE

1. Functions

The Joint Coordinating Committee will meet at least once a year or whenever necessity arises, and work:

- (1) To supervise the annual plan of operation to be formulated by the Project in accordance with the Record of Discussions;
- (2) To review the overall progress of the technical cooperation program and activities carried out under the above-mentioned annual plan of operation in particular; and
- (3) To review and exchange views on major issues arising from or in connection with the technical cooperation program.

2. Composition

- (1) Chairperson
 - Secretary, Ministry of Environment
- (2) Vice-Chairperson
 - Deputy Minister for Technical Facilities of Environmental Management, Ministry of Environment
- (3) Japanese members
 - Chief advisor
 - Coordinator
 - Other long-term Japanese experts
 - Long-term Japanese advisor for the Ministry of Environment
 - Other Japanese experts appointed by Chief advisor
 - Members of missions dispatched by JICA, if necessary
 - Representative(s) of the JICA Indonesia Office
- (4) Indonesian members
 - Deputy for Regional Environmental Management Capacity Development (Deputy II)
 - Deputy for Environmental Impact Management of Institution Source (Deputy IV)
 - Deputy for Environmental Impact Management of Non-Institution Source (Deputy V)
 - Assistant Deputy for Environmental Management Center (Head of PUSARPEDAL)
 - Head of BAPEDALDA of North Sumatra Province



- Head of each division of PUSARPEDAL
- Other staff of PUSARPEDAL appointed by Head of PUSARPEDAL
- Representative(s) of the Ministry of Environment

(5) Secretariat

- Assistant Deputy for Environmental Management Center
(Head of PUSARPEDAL)

Notes: 1) A representative can attend the Joint Coordinating Committee if the member mentioned above is absent. Chairperson can request the attendance of the persons concerned if necessary.

2) Official(s) of the Embassy of Japan may attend this committee as observer(s).



2. Minutes of Meetings (M/M)

**MINUTES OF MEETINGS
BETWEEN
THE JAPANESE PROJECT DESIGN TEAM
AND
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE REPUBLIC OF INDONESIA
ON
JAPANESE TECHNICAL COOPERATION
FOR
THE PROJECT FOR STRENGTHENING DECENTRALIZED
ENVIRONMENTAL MANAGEMENT SYSTEM IN INDONESIA**

The Japanese Project Design Team and the Indonesian authorities concerned signed the Record of Discussions (hereinafter referred to as "the R/D") on technical cooperation for the Project for Strengthening Decentralized Environmental Management System in Indonesia (hereinafter referred to as "the Project") after mutual consultations.

In order to clarify the provisions prescribed in the R/D, contents consented by both sides are recorded in the attachment.

Jakarta, March 22, 2002



Dr. Kuninori OTSUBO
Leader,
Japanese Project Design Team,
Japan International Cooperation Agency,
Japan



Ms. Masnellyarti
Deputy Minister for Technical Facilities of
Environmental Management,
Ministry of Environment,
The Republic of Indonesia

ATTACHMENT

1. MANAGEMENT AND EVALUATION METHOD OF PROJECT

Both Indonesian and Japanese sides (hereinafter called as "both sides") agreed that the Project will be implemented and evaluated based on the Project Design Matrix (PDM) as per attached in Appendix I. This PDM could be changed within the framework of the R/D through mutual consultation when the occasion demands in the course of the implementation of the Project.

2. IMPLEMENTATION ORGANIZATION OF THE PROJECT

Both sides confirmed the implementation organization of the Project as shown in Appendix II. Both sides also confirmed that the Project Management Meeting will be held once a month.

3. FUNCTIONS AND ROLES OF PUSARPEDAL

Both sides confirmed the basic functions and roles of PUSARPEDAL relating to the Project as follows (but not limited to these). The Japanese side recommended that such functions and roles of PUSARPEDAL will be described in the decree of Minister relating to the new organization of the Ministry, the Ministry of Environment of the Republic of Indonesia (hereinafter called as "KLH") will make every effort to achieve the recommendations as follows.

- to prepare technical policies and plans relating to environmental monitoring and environmental laboratory network,
- to give technical guidance to local governments relating to the environmental monitoring and the implementation of environmental policies,
- to coordinate and implement research and development relating to environmental impact management and control,
- to provide other relating sections of KLH with scientific data and knowledge to implement environmental policies,
- to coordinate other relating sections of KLH relating to technical aspects of environmental management for smooth implementation of environmental policies,
- to evaluate technical aspects and to develop methodologies relating to standardization of environmental technology, and
- to collect, verify and process environmental data obtained by local governments.



4. UTILIZATION OF PUSARPEDAL

Both sides confirmed the following regarding utilization of PUSARPEDAL.

- (1) KLH will have a responsibility to utilize PUSARPEDAL for environmental management as technical advisory center. The Deputy Minister for Technical Facilities of Environmental Management (Deputy VII) will facilitate such function of PUSARPEDAL and promote better relationship between PUSARPEDAL and other Deputies in KLH.
- (2) KLH will have an internal consultation meeting regularly to exchange technical and scientific information between PUSARPEDAL and other sections of KLH. The Deputy VII will be in the chair of this internal consultation meeting.
- (3) PUSARPEDAL will keep a section or staff in charge of coordination for technical assistance to BAPEDALDAs even after the reorganization.
- (4) KLH will suggest to BAPEDALDAs that BAPEDALDAs should consult with PUSARPEDAL for environmental management especially in scientific aspects.

5. NORTH SUMATRA PROVINCE FOR THE PILOT PROJECT

Both sides agreed that North Sumatra province would be the model site of the pilot project.

6. ACTIVITY PLAN OF THE PROJECT

Both sides agreed that an annual plan of activities will be prepared immediately after the Project has started, and this annual plan will be submitted to the related organizations.

7. TECHNICAL TRAINING OF COUNTERPARTS IN JAPAN

Both sides confirmed that the number of trainees, training period and training programs will be decided by discussion between both sides every fiscal year of Japan considering the progress of the Project.

8. PROCUREMENT OF MACHINERY AND EQUIPMENT

Both sides confirmed that the procurement plan of the machinery and equipment will be prepared every fiscal year of Japan, based on the annual activity plan made after the Project has started. The Indonesian side agreed to prepare request forms

(A-4 forms) and to submit them to the Japanese side every fiscal year of Japan.

9. DISPATCH OF THE LONG-TERM EXPERTS

The Japanese side stated that the long-term experts as shown in the R/D Annex II, will be dispatched to Indonesia in July 2002. The Indonesian side agreed to this dispatch plan, and to prepare a request form (A-1 form) and submit it to the Japanese side by May 1st, 2002.

10. THE PROJECT DOCUMENT

Both sides reached common understandings concerning the matter referred to the Project Document as per attached in Appendix III.

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プロジェクト名：インドネシア地方環境管理システム強化プロジェクト
 対象地域：ジャカルタ首都圏、北スマトラ州

期間：2002年7月1日～2006年6月30日
 ターゲットグループ：EMC 及び地方政府の職員

プロジェクトの要約	指標	指標データ入手手段	外部条件
<p>【上位目標】 国家及び地方レベルの環境管理能力が強化される。</p>	<ol style="list-style-type: none"> 1. 環境モニタリング・監視が、適切に管理された枠を用いて地方政府環境管理局 (BAPEDALDA) によって実施される。 2. 信頼性の高いモニタリング・監視データに基づいて環境対策が実施される。 	<ul style="list-style-type: none"> ・環境統計 ・環境省 (KLH) 年次報告書 ・地方環境報告書 (NKLD) 	<ul style="list-style-type: none"> ・「イ」国政府の環境管理に係る KLH 及び BAPEDALDA の役割が変わらない。
<p>【プロジェクト目標】 環境管理センター (EMC) の主導のもと、EMC と BAPEDALDA が協働する環境管理体制が構築される。</p>	<ol style="list-style-type: none"> 1. 2006年までに、北スマトラ州 BAPEDALDA と EMC の協働によって、3分野の環境問題に対する対策のオプションが、幾つか実施される。 2. 2006年までに、5つの技術ガイドラインが EMC から北スマトラ州 BAPEDALDA に提供・更新される。 3. 2006年までに、360人の地方政府職員に対するトレーニングが EMC によって行われる。 	<ol style="list-style-type: none"> 1-1 プロジェクト報告書 1-2 北スマトラ州 NKLD 1-3 EMC 年次報告書 2-1 プロジェクト報告書 2-2 EMC 年次報告書 3-1 プロジェクト報告書 3-2 EMC 年次報告書 	<ul style="list-style-type: none"> ・モデル地域において実施された対策オプションの効果が認められる。 ・モデル地域での事例や手法が他の地方政府に公開される。 ・工場などのステークホルダーがプロジェクトに反対しない。
<p>【成果】</p> <ol style="list-style-type: none"> 1. 信頼性の高いモニタリングデータと科学的知見をもとに、モデル地域（北スマトラ州）において特定の環境問題に対する対策のオプションが提案される。 2. EMC の、KLH および BAPEDALDA に対する科学的知見・技術的ガイダンスを提供する能力が強化される。 	<ol style="list-style-type: none"> 1.1 2006年まで、北スマトラ州 BAPEDALDA と EMC の協働によって、毎年3部の環境モニタリング・監視報告書が作成される。 1.2 2006年まで、EMC と北スマトラ州 BAPEDALDA によって、オプション提案のための会議が、毎年3回開催される。 2.1 2006年まで、EMC から KLH の他のセクションへ、毎年3部の科学的知見に関する報告書が提出される。 2.2 2006年まで、EMC によって毎年5つの標準作業手順書 	<ol style="list-style-type: none"> 1-1 プロジェクト報告書 1-2 北スマトラ州 NKLD 1-3 EMC 年次報告書 2-1 プロジェクト報告書 2-2 北スマトラ州 NKLD 2-3 EMC 年次報告書 	<ul style="list-style-type: none"> ・モデル地域において、幾つかのオプションが実施される。

<p>3. 適切な環境モニタリング・監視方法に関するノウハウが、地方政府に移転される。</p>	<p>(SOP)が作成される。 2.3 2006年までに、分析60項目にかかるISO17025が、国家認証委員会(KAN)により認証される。 2.4 2006年までに、EMCによって20項目の標準物質(SRM/CRM)が製造される。 3.1 2006年まで、EMCによって毎年3個のトレーニング・モジュールが作成される。 3.2 2006年までに、EMCによって地方ラボに対する18項目の精度管理試験が行われる。 3.3 2006年まで、EMCによって毎年2回の地方政府職員に対するワークショップが開催される。</p>	<p>3-1 プロジェクト報告書 3-2 北スマトラ州 NKLD 3-3 EMC 年次報告書</p>	
<p>【活動】 (別紙のとおり)</p>	<p>【投入】 日本国側 (1) 人材 1) 長期専門家 - チーフ・アドバイザー/環境管理 48M/M - 業務調整/トレーニング計画 48M/M - 環境モニタリング 48M/M - ラボ管理 24M/M - 環境応用分析 24M/M 2) 短期専門家 (2) 資機材 (3) カウンターパート研修 3名/年 - カウンターパート - 北スマトラ州 BAPEDALDA 職員</p>	<p>「イ」国側 (1) 人材 1) プロジェクト・ダイレクター 2) プロジェクト・マネージャー 3) カウンターパート (以下の分野) - 環境分析 - 環境モニタリング・監視 (大気質) - 環境モニタリング・監視 (水質) - ラボ管理 - キャリブレーション - 環境情報システム - 大気汚染 - 水質汚濁 - 有害物質 (2) 資機材 土地、建物、分析室・機材、トレーニング施設等</p>	<p>・技術トレーニングを受けた職員が EMC で働き続ける。 ・トレーニングを受けた地方政府職員が、地方政府 (または関連機関) で働き続ける。</p> <p>【前提条件】 ・「イ」国政府が地方分権化政策を続ける。</p>

別紙

【活動】

1. モデル地域におけるパイロット事業（成果1に対する活動）

1-1 PUSARPEDALDA におけるラボ管理の改善

1-1-1 ラボ機器のメンテナンス及びキャリブレーションを行う

1-1-2 ラボ管理システムを構築する

1-1-3 品質管理（QA/QC）システムを構築する

1-2 環境モニタリングの実施と特定問題点に関するアセスメントの実施

1-2-1 環境モニタリング・監視を行う

1-2-2 環境汚染状況と汚染源に関するスタディーを行う

1-3 環境対策のオプションの検討

1-3-1 汚染源のアセスメントを行う

1-3-2 環境質改善のための戦略プログラムを策定する

2. EMC の政策立案に係るキャパシティー・デベロップメント（成果2に対する活動）

2-1 PUSARPEDAL におけるラボ管理の改善

2-1-1 サンプルング及び分析に関する標準作業手順書/方法書を作成する

2-1-2 標準物質（SRM/CRM）を製造する

2-1-3 ラボ管理システムを構築する

2-2 環境モニタリング及び管理に係るスタディーの実施

2-2-1 汚染対策施設を評価する

2-2-2 環境のバックグラウンドデータに基づく、現行の環境基準を評価する

2-2-3 大気汚染モデリング（ジャカルタ）に関するスタディーを行う

3. 地方政府の環境モニタリング・監視に関するキャパシティー・デベロップメント（成果3に対する活動）

3-1 地方ラボの管理能力の向上

3-1-1 基礎項目に続く項目の分析に関する地方ラボ職員のトレーニングを行う

- 3-1-2 精度管理試験 (proficiency tests) を行う
- 3-1-3 ラボ管理 (LQMS) に関し地方ラボ職員のトレーニングを行う
- 3-1-4 地方ラボ間での分析方法、ラボ管理に関する情報交換のためワークショップを開催する

3-2 環境モニタリング・監視方法に関するトレーニングの実施

- 3-2-1 地方ラボに対して、環境モニタリング・監視方法に関する技術的なガイダンスを行う
- 3-2-2 地方ラボに対して、モニタリング実施に際しての技術的なガイダンスを行う
- 3-2-3 施策立案のためのモニタリングデータの活用に関し、地方政府職員のトレーニングを行う

3-3 インパクト・アセスメントに関するトレーニングを実施する

- 3-3-1 地方政府による環境管理に必要なトレーニング用教材を作成する
- 3-3-2 環境管理に関し地方政府職員のトレーニングを行う
- 3-3-3 環境管理に関するワークショップを開催する

ORGANIZATIONAL STRUCTURE OF THE MINISTRY OF ENVIRONMENT

