Attachments

Attachment 1

Record of Discussions

RECORD OF DISCUSSIONS BETWEEN JAPAN INTERNATIONAL COOPERATION AGENCY AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIET NAM ON JAPANESE TECHNICAL COOPERATION FOR THE PROJECT FOR STRENGTHENING CAPACITY OF WATER ENVIRONMENTAL MANAGEMENT IN VIET NAM

In response to the proposal of the Government of the Socialist Republic of Viet Nam (herein after referred to as the "GOV"), the Government of Japan (herein after referred to as the "GOJ") has decided to cooperate on the Project for Strengthening Capacity of Water Environmental Management in Viet Nam (hereinafter referred to as "the Project") in accordance with the Agreement on Technical Cooperation between the GOJ and the GOV signed on October 20, 1998 (hereinafter referred to as "the Agreement").

Accordingly, Japan International Cooperation Agency (hereinafter referred to as "JICA"), the implementation agency responsible for the implementation of the technical cooperation program of the GOJ, will cooperate with the authorities concerned of the GOV for the Project.

JICA and the Vietnamese authorities concerned had a series of discussions on the framework of the project. As a result of discussions, JICA and Vietnamese authorities concerned agreed on the matters referred to in the document attached hereto.

Mr. Motonori Tsuno Chief Representative Viet Nam Office Japan International Cooperation Agency JAPAN

Hanoi, January 8, 2010

Mr. Bui Cach Tuyen Administrator Vietnam Environment Administration Ministry of Natural Resources and Environment (MONRE) Socialist Republic of Viet Nam

Witnessed by

(Mr. Nguyen Xuan Tien Deputy Director General Foreign Economic Relations Department Ministry of Planning and Investment Socialist Republic of Viet Nam

ATTACHED DOCUMENT

I. COOPERATION BETWEEN JICA AND THE GOVERNMENT OF VIET NAM

1 The GOV will implement the Project in cooperation with JICA.

2 The Project will be implemented in accordance with the Master Plan, which is given in **ANNEX I**.

II. MEASURES TO BE TAKEN BY JICA

In accordance with the laws and regulations in force in Japan and the provisions of Article III of the Agreement, JICA, as the executing agency for technical cooperation by the GOJ, will take, at its own expense, the following measures according to the normal procedures of its technical cooperation scheme.

1. DISPATCH OF JAPANESE EXPERTS

JICA will provide the services of the Japanese experts (hereinafter referred to as "the Experts") listed in **ANNEX II**. The provisions of Article VI of the Agreement will be applied to the above-mentioned experts.

2. TRAINING OF VIETNAMESE PERSONNEL IN JAPAN

JICA will receive Vietnamese personnel connected with the Project for technical training in Japan.

3. PROVISION OF MACHINERY AND EQUIPMENT

JICA will provide, according to the priority, such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project. The provision of Article VIII of the Agreement will be applied to the Equipment.

III. MEASURES TO BE TAKEN BY THE GOVERNMENT OF VIETNAM

- 1. The GOV will take necessary measures to ensure that the self-reliant operation of the Project will be sustained during and after the period of Japanese technical cooperation, through full and active involvement in the Project by all related authorities, beneficiary groups and institutions.
- 2. In accordance with the provisions of Article IV of the Agreement, the GOV will ensure that the technologies and knowledge acquired by the Vietnamese side as a result of

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Japanese technical cooperation will contribute to the economic and social development of Viet Nam.

- 3. In accordance with the provisions of Article VI of the Agreement, the GOV will grant in Vietnamese privileges, exemptions and benefits to the Experts referred to in II-1 above and their families.
- 4. The GOV will take the measures necessary to receive and use the equipment provided by JICA under II-3 above and equipment, machinery and materials carried in by the Experts referred to in II-1 above.
- 5. The GOV will take necessary measures to ensure that the knowledge and experience acquired by the Vietnamese personnel from technical training in Japan will be utilized effectively in the implementation of the Project.
- 6. In accordance with the provision of Article V-(b) of the Agreement, the GOV will provide the services of Vietnamese counterpart personnel and administrative personnel as listed in ANNEX III.
- 7. In accordance with the provisions of Article V-(a) of the Agreement, the GOV will provide the office spaces and facilities as listed in **ANNEX IV**.
- 8. In accordance with the laws and regulations in force in the Socialist Republic of Viet Nam, the GOV will take necessary measures to supply or replace at its own expense machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA under II-3 above.
- 9. In accordance with the laws and regulations in force in the Socialist Republic of Viet Nam, the GOV will take necessary measures to meet the running expenses necessary for the implementation of the Project.

IV. ADMINISTRATION OF THE PROJECT

1. Responsible Agencies

Vietnam Environment Administration (hereinafter referred to as "VEA"), Ministry of Natural Resources and Environment, and Department of Natural Resources and Environment (hereinafter referred to as "DONRE") of target provinces shall be the

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responsible agencies of the Project.

2. Project Director

A Deputy Administrator of VEA as the Project Director will bear overall responsibility for the administration and implementation of the Project.

3. Project Manager

Director of Department of International Co-operation and Science, Technology, VEA as the Project Manager will be responsible for the managerial and technical matters of Project.

4. Project Co-Managers

Directors of relevant departments of VEA and Directors of each target DONRE as the Project Co-Managers will be co-responsible for the managerial and technical matters of the Project.

- 5. The leader of the Experts will provide necessary recommendations and technical advice to the Project Director, Project Manager and Project Co-Managers on any matters pertaining to the implementation of the Project.
- 6. The Experts will give necessary technical guidance and advice to the Vietnamese counterpart personnel on technical matters pertaining to the implementation of the Project.
- 7. For the effective and successful implementation of technical cooperation for the Project, Joint Coordinating Committee will be established whose functions and composition are described in ANNEX V.

V. JOINT EVALUATION

Mid-term review and terminal evaluation of the Project will be conducted jointly by the Vietnamese authorities and JICA, at the middle and during the last six months of the term of the Project in order to examine the level of achievement of the objective.

VI. CLAIMS AGAINST THE EXPERTS

In accordance with the provision of Article VII of the Agreement, the GOV undertakes to bear claims, if any arises, against the Experts engaged in technical cooperation for the Project resulting from, occurring in the course of, or otherwise connected with the

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discharge of their official functions in the Socialist Republic of Viet Nam except for those arising from the willful misconduct or gross negligence of the Experts.

VII. MUTUAL CONSULTATION

There will be mutual consultation between JICA and the GOV on any major issues arising from, or in connection with, this Attached Document.

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

For the purpose of promoting support for the Project among the people of the Socialist Republic of Viet Nam, the GOV will take appropriate measures to make the Project widely known to the people of the Socialist Republic of Viet Nam.

IX. TERMS OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be three (3) years from June 2010.

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- ANNEX I MASTER PLAN
- ANNEX II LIST OF THE EXPERTS
- ANNEX III LIST OF VIETNAMESE COUNTERPARTS AND ADMINISTRATIVE PERSONNEL

ANNEX IV LIST OF OFFICE SPACES AND FACILITIES

ANNEX V JOINT COORDINATING COMMITTEE

Overall Goal

Enforcement capacity of MONRE and DONREs on water environmental management is strengthened.

Project Purpose

Capacity of MONRE and target DONREs regarding water environmental management* is strengthened.

 Capacity of water environmental management covers the followings: MONRE - capacities of making policy and management system, and information management and utilization.

DONRE – capacities of enforcing basic water pollution control, making pollution control measures, promoting awareness, and information management & utilization.

<u>Outputs</u>

- 1) MONRE's capacity of making policy and management tools that are more effective and enforceable is strengthened.
- 2) Enforcement capacity of target DONREs on basic water pollution control (environmental monitoring, pollution sources inventory, pollution sources inspection) is strengthened.
- 3) Target DONRE's capacity of making effective water pollution control measures is strengthened.
- 4) Target DONRE's capacity of promoting awareness of public and industrial sectors on water environment is strengthened.
- 5) Capacity of MONRE and DONREs on information management and utilization is strengthened.

Activities of the Project*

- 1) MONRE's capacity of making policy and management tools that are more effective and enforceable is strengthened.
- 1-1 Collect basic information on water environmental management policy and tools at national level, and analyze as well as organize the necessary issues to improve.
- 1-2 Study issues that target DONREs are faced, regarding implementation of water environmental management policy and tools.
- 1-3 Based on the results of 1-1 and 1-2, review water environmental management policy and tools, and conduct evaluation regarding effectiveness and enforceability of these water environmental policy and management tools with focus on pollutions from industries.
- 1-4 Train staff of MONRE and DONREs on studying, developing, reviewing, and revising policy and management tools.

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- 1-5 Prepare the draft amendment on water environmental management policy and tools for their improvement.
- 1-6 Organize workshops for sharing and collecting comments and opinions based on implementing activities in Output 2 and Output 3.
- 1-7 Review the draft amendment prepared in 1-5.
- 1-8 Propose the amendment on water environmental management policy and tools.
- 2) Enforcement capacity of target DONREs on basic water pollution control (environmental monitoring, pollution sources inventory, pollution sources inspection) is strengthened.
- 2-1 Conduct capacity assessment of target DONREs regarding enforcement of basic water pollution control.
- 2-2 Select main component(s) from the list below and also select activities under the selected component(s), and prepare activities plans for each DONRE.
- 2-3 Conduct activities selected in 2-2 in each DONRE.

[Component 1 Monitoring]

- C1-1 Review water quality monitoring guidelines/manuals.⁽¹⁾
- C1-2 Based on above guidelines/manuals (revised if necessary), prepare/improve a monitoring plan, taking into consideration of regional characters at target DONREs.
- C1-3 Implement regular monitoring in accordance with the plan above.
- C1-4 Conduct training on water quality monitoring including quality control for improving reliability of monitoring.

(note: change training contents based on situations of target DONREs)

C1-5 Interpret and evaluate results of monitoring and feedback to the monitoring plan.

⁽¹⁾Guidelines/manuals prepared by the Study for Water Environment Management on River Basins and the Project for Enhancing Capacity of Vietnamese Academy of Science and Technology in Water Environment Protection Phase II are also included.

[Component 2 Inventory]

- C2-1 Conduct capacity assessment of target DONREs regarding pollution sources inventory.
- C2-2 Review and modify existing inventory formats based on the current conditions of target DONREs ⁽²⁾.
- C2-3 Conduct inventory survey with the revised inventory formats.
- C2-4 Organize collected information on main pollution sources.
- C2-5 Regularly conduct inventory survey and add/update information on main pollution sources.

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⁽²⁾ Inventory format prepared by the Study for Water Environment Management on River Basins is also included.

[Component 3 Inspection]

- C3-1 Conduct capacity assessment of target DONREs regarding inspection for water pollution control.
- C3-2 Review existing guidelines on inspection.
- C3-3 Prepare the inspection plan, based on the above guidelines (revised if necessary) and results of inventory survey.
- C3-4 Conduct training on more effective inspection.
- C3-5 Clarify criteria for taking administrative guidance and orders in accordance with the inspection results.
- C3-6 Conduct inspection based on activities C3-1 to C3-5
- C3-7 Issue improvement order or administrative guidance based on activity C3-6 by target DONREs.
- 3) Target DONRE's capacity in making effective water pollution control measures is strengthened.
- 3-1 Evaluate the enforcement performances of target DONREs on water pollution control, including the various systems implemented in the past, and organize issues for improvement.
- 3-2 Select the target province(s) where the activities 3-3 and 3-4 would be conducted, after reviewing the feasibility of application of the draft amendment prepared in 1-5.
- 3-3 Specify the target regions and/or industries for application of the effective water pollution control measures.
- 3-4 Draft an outline for effective water pollution control measures.
- 4) Target DONRE's capacity in promoting awareness of public and industrial sectors on water environment is strengthened.
- 4-1 Review the current system and situation of environmental awareness activities at target provinces.
- 4-2 Make awareness raising plans for water environment to be conducted by target DONREs.
- 4-3 Conduct awareness raising activities in accordance with the plan set at 4-2.
- 4-4 Review and improve awareness raising activities based on the result of 4-3.
- 5) Capacity of MONRE and DONREs in information management and utilization is strengthened.
- 5-1 Review the current situation of information collection and management regarding water environment, and organize issues for improvement.
- 5-2 Prioritize information necessary for MONRE and DONREs to come up with

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administrative measures and their implementation.

- 5-3 Develop more effective ways and means (formats, reporting modes, frequencies, etc.) to collect information from all the DONREs.
- 5-4 Conduct trials to collect information from target DONREs by use of the ways and means developed in 5-3, and utilize information at MONRE.
- 5-5 Conduct workshops to share the results of 5-4.
- 5-6 Prepare a proposal of actual application of the ways and means at MONRE.
- * All activities by target DONREs, especially for Output 2 and Output 4, will be implemented with MONRE's guidance and collaboration.

ANNEX II LIST OF THE EXPERTS

- Long term expert
 Project Leader/Water Environmental Policy
 Water Environment Management/Project Coordinator
- 2) Short term expert Planning Water Environmental Policy at Provincial Level Information Management
- 3) Short term expert team, comprised of the following fields; Leader
 Water Environmental Management/Sub-Leader
 Environmental Monitoring (1,2)
 Water Quality Analysis/QAQC (1,2)
 Pollution Sources Inventory (1,2)
 Pollution Sources Inspection (1,2)
 Environmental Awareness (1,2)

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ANNEX III: LIST OF VIETNAMESE COUNTERPARTS AND ADMINISTRATIVE PERSONNEL

MONRE	
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Organization	Section	Position	Related Outputs
VEA		anna a la suite frank la tresse la tresse de la company de la constant de la constant de la constant de la cons	inter en
		Administrator	1,2,3,4,5
		Deputy	1,2,3,4,5
		Administrator	
	ICST	Director	1,2,3,4,5
		Officer(s)	1,2,3,4,5
	PCD	Director	1,
		Officer(s)	1,
	ISEM	Director	1,
		Officer(s)	1,
	CIED	Director	5,
		Officer(s)	5,
	ID	Director	1,2
	·	Officer(s)	1,2
ICD, MONRE		Officer	1,2

ICST: Department of International Co-operation and Science, Technology

PCD: Pollution Control Department

ISEM: Institute of Science for Environmental Management

CEID: Centre of Environmental Information and Data

ID: Inspection Department

Ha Noi, Hai Phong, Th	iua Inien-Hue	, Ho Chi Minh	City and Ba R	ia-Vung Tau
Organization	See	ction	Position	Related Outputs
Ha Noi DONRE			Leader	2,3,4,5
	Office		Officer	2,3,4,5
	Provincial	Environment	Officer	2,3,4,5
	Protection Ag	ency		
Ha Noi			Leader	2,3,4,5
Environmental Police			Officer	2,3,4,5
Hai Phong DONRE			Leader	2,3,4,5
	Office		Officer	2,3,4,5
	Provincial	Environment	Officer	2,3,4,5
	Protection Ag	ency		
Hai Phong			Leader	2,3,4,5
Environmental Police			Officer	2,3,4,5
Thua Thien Hue			Leader	2,3,4,5
DONRE	Office		Officer	2,3,4,5
	Provincial	Environment	Officer	2,3,4,5
	Protection Ag	ency		
Thua Thien Hue			Leader	2,3,4,5
Environmental Police			Officer	2,3,4,5
Ho Chi Minh City			Leader	2,3,4,5
DONRE	Office		Officer	2,3,4,5
	Provincial	Environment	Officer	2,3,4,5
	Protection Ag	ency		
Ho Chi Minh City			Leader	2,3,4,5
Environmental Police			Officer	2,3,4,5
Ba Ria-Vung Tau			Leader	2,3,4,5
DONRE	Office		Officer	2,3,4,5
	Provincial	Environment	Officer	2,3,4,5
	Protection Ag	ency		
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Ba Ria-Vung Tau		· · · · · · · · · · · · · · · · · · ·	Leader	2,3,4,5

Ha Noi, Hai Phong, Thua Thien-Hue, Ho Chi Minh City and Ba Ria-Vung Tau

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ANNEX IV LIST OF OFFICE SPACES AND FACILITIES

- 1. The office and meeting space for the performance of duties by the Experts in VEA and each DONRE.
- 2. Facilities such as desks, chairs, book shelves, internet access and telephones, etc necessary for the Project activities.
- 3. Other facilities mutually agreed upon as necessary.

ANNEX V JOINT COORDINATING COMMITTEE

1. FUNCTION

The Joint Coordinating Committee (hereinafter referred to as "JCC"), composed of members listed in 2 below, will meet at least every six (6) month and whenever the necessity arises. The main functions of JCC shall be as follows;

- To formulate the annual operational work plan of the Project based on the tentative schedule of implementation within the framework of the Record of Discussions (R/D)
- (2) To review the overall progress and achievements of the Project
- (3) To examine major issues arising from or in connection with the Project
- (4) To work out the modification of activities depending on the necessity, and
- (5) To ensure smooth implementation of the Project and to secure coordination with ministries and provinces concerned.

2. COMMITTEE COMPOSITION

(1) Chairperson:

Administrator of VEA

- (2) Committee Members:
 - 1) Vietnamese side
 - Project Director

Project Manager

Project Co-Managers

Representative from International Co-operation Department, MONRE

Representative from Foreign Economic Relations Department, Ministry of Planning and Investment

Representative from International Co-operation and Science, Technology, VEA

Other official(s) invited by Project Director may attend the Committee meeting as member(s).

2) Japanese side

The Experts to be dispatched by JICA

Representative(s) of JICA Viet Nam Office

Other personnel concerned to be decided and/or dispatched by JICA, if necessary

3) Observer

Official(s) of the Embassy of Japan in Viet Nam

Other official(s) appointed by the Project Director and Leader may attend the Committee meetings as observer(s).

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MINUTES OF MEETING BETWEEN THE JAPAN INTERNATIONAL COOPERATION AGENCY AND MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT ON JAPANESE TECHNICAL COOPERATION FOR THE PROJECT FOR STRENGTHENING CAPACITY OF WATER ENVIRONMENTAL MANAGEMENT IN VIET NAM

The Japan International Cooperation Agency (hereinafter referred to as "JICA") had a series of discussions on implementation of the Project for "Strengthening Capacity of Water Environmental Management in Viet Nam (hereinafter referred to as "the **Project**")" with Ministry of Natural Resources and Environment (hereinafter referred to as "**MONRE**") and other related institutions of the Vietnamese side.

As a result of discussions, MONRE and JICA agreed to summarize the matters referred to in the document attached hereto as a supplement to the Record of Discussions (hereinafter referred to as "**R/D**").

Hanoi, January 8, 2010

Mr. Motonor Tsuno Chief Representative Vietnam Office Japan International Cooperation Agency JAPAN

Mr. Bui Cach Tuyen Administrator Vietnam Environmental Administration Ministry of Natural Resources and Environment (MONRE) Socialist Republic of Viet Nam

Witnessed by

Mr. Nguyen Xuan Tien Deputy Director General Foreign Economic Relations Department Ministry of Planning and Investment Socialist Republic of Viet Nam

THE ATTACHED DOCUMENT

This document has been prepared for the better understanding of the R/D agreed upon between the Vietnamese side and JICA on the date of signing. The main items that had been discussed and agreed upon by both sides are summarized as follows.

I. Project Design Matrix and Plan of Operation

JICA explained that the Project Design Matrix (hereinafter referred to as "the PDM") is to be introduced for the efficient and effective management and evaluation of the Project. Both sides agreed the PDM to the Project as shown in **ANNEX I**.

Plan of Operation (hereinafter referred to as "the PO") based on the PDM is shown in ANNEX II.

The PDM and the PO will be reviewed and revised if necessity arises. Especially, Objectively Verifiable Indicators and Means of Verification of the PDM will be determined within one year after starting the Project.

II. Project Implementation Provinces

Both sides agreed that the Project will be implemented at five (5) provinces of Ha Noi, Hai Phong, Thua Thien-Hue, Ho Chi Minh and Ba Ria-Vung Tau.

III. Activities for Output 3 "Capacity of target DONREs to develop effective water pollution control measures is strengthened."

- 1. Hanoi is the candidate province for activities for Output 3.
- 2. If the drafting of the outline of measures described in activity 3-4 is completed earlier than the original schedule, actions for further steps would be discussed between Vietnamese side and Japanese side under the technical cooperation at the Mid-term Review.

IV. Explanation of Terms

Both sides agreed the explanation of terms attached as ANNEX III for the same understanding under the Project.

In view of the Project purpose, both sides agreed the Project to follow the laws and regulations in force in the Social Republic of Viet Nam and the JICA guidelines.

ANNEX I PROJECT DESIGN MATRIX (PDM)

ANNEX II PLAN OF OPERATION (PO)

ANNEX III DEFINITION OF TERMS

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ANNEX I: PROJECT DESIGN MATRIX (PDM)

oject Name : The Project for Strengthening Capacity of Water Environmental Management in Viet Nam oject Target Area: Hanoi, Hai Phong, Thua Thien-Hue, Ho Chi Minh, Ba Ria-Vung Tau uration of Project : 2010-2013 (3 years)

Inget Group : Ministry of Natural Resources and Environment (MONRE) and target Departments of Natural Resources and Environment (DONREs)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<u>Vverall Goal</u> Enforcement capacity of MONRE and DONREs on water environmental management is strengthened.	 The rate of levying environmental protection charge for waste water increases. 	Data at MONRE and DONREs	Drafted amendments that would be
	2. The rate for industries to follow orders / administrative guidance increases.		reversion in the Project are officially issued.
	The rate for industries to comply with the effluent standards increases.		
<u>Project Purpose</u> Capacity of MONRE and target DONREs regarding water environmental nanagement* is strengthened.	Evaluation results show improvement, compared with the initial stage of the project as follows:	Questionnaire survey for MONRE and target DONREs at the initial. mid-term. and	The results of activities and lessons are properly extended
Capacity of water environmental management covers the followings: MONREcanacities of making noticev and management system.	 MONRE conducts self-evaluation on their own capacity of policy and system making regarding water environmental management; and 2) target DONREs conduct self-evaluation on their own enforcement 	final stage of the project	and applied to other DONREs nationwide.
nd information management & utilization, DONRE – capacities of enforcing basic water pollution control, naking pollution control measures, promoting awareness, and	capacity of water environmental management.		
Dutputs MONRE's capacity of making policy and management tools that are	1-1 More than XX draft amendments to improve water	1-1 Hearing from MONRE	PPCs at target
more effective and enforceable is strengthened. 2) Enforcement capacity of target DONREs on basic water pollution control (environmental monitoring, pollution sources inventory,	environmental management policy and systems are developed among XX issues extracted as necessary issues to improve.	1-2 Hearing from MONRE 1-3 Working products from Activity 1-3 and	provinces make commitments to cooperate the project.
 pollution sources inspection) is strengthened. 3) Target DONRE's capacity of making effective water pollution control measures is strengthened. target DONRE's capacity of promoting awareness of public and 	1-2 The amendments are received and authorized by MONRE.	tollow-up survey	Related organizations such as environmental police,

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 Capacity of WONREs on information menagement and utilization is stranghmend. Capacity of WONREs on information menagement and compared with the initial stage of full priority. Carl The existin of fulfithmend is a first number of learnings. Carl The existin of fulfithmend is a first number of learnings. Carl The existin of fulfithmend of fulfithmend is a first number of learnings. Carl The existin of fulfithmend of fulfithmend is a first number of learnings. Carl The existin of fulfithmend of fulfithmend of fulfithmend in accordance with monthing points, and frequendes etc., in accordance monthing points, and frequendes etc., in accordance and/or used on on the inventory is attequately added to domation on the inventory for attegrates of inspections. Carl The existing of the priority. Carl The existing of the priority and monthistative guidance is increased. Carl The existing of the priority of a tradying and monthistative guidance basis of annuel work specific of the priority of a tradying and monthistative guidance basis of annuel work specinter and continues is prin
Capacity of MONREs and DONREs on information management and utilization is strengthened.

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			 4-1 Questionnaire survey Creport showing the results) Record of media coverage 4-2 Tools to promote environmental awareness 4-3 Record of event 	4-4 Implementation plans and record			5-2 Hearing from MONRE		
	contents of the draft outline for effective water pollution control measures.	3-3 The draft outline for effective water pollution control measures is submitted to PPC.	 4-1 The results of questionnaire survey to public and industries on environmental awareness shows improvement, compared with the initial stage of the project (consider the environmental awareness events as opportunities to conduct surveys). No. of coverage by media on water environment. 	4-2 No. of tools developed and utilized to promote environmental awareness targeting public and industries.	4-3 Environmental awareness events are conducted, making use of newly developed tools.	4-4 The implementation rate of events on the basis of annual working plan is increased.	5-1 MONRE and the target DONREs realize more smooth communication between the both than before in terms of frequency and contents (Questionnaire survey at the initial stage and final stage of the project period is required).	5-2 A working group to study the feasibility to apply the ways and means is established in MONRE.	Inputs Japanese side Japanese side 1) Long term experts - Project Leader/Water Environmental Policy - Water Environment Management / Project Coordinator 2) Short term experts - Water Environmental Policy at provincial level - Environmental Awareness
		-				-			 <u>ctivities</u> MONRE's capacity of making policy and management tools that re more effective and enforceable is strengthened. 1 Collect basic information on water environmental management olicy and tools at national level, and analyze as well as organize the ecessary issues to improve. 2 Study issues that target DONREs are faced, regarding nplementation of water environmental management policy and tools. 3 Based on the results of 1-1 and 1-2, review water environmental

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		pollution sources inventory.
		[Component 2 Inventory] C2-1 Conduct capacity assessment of target DONREs regarding
		monitoring plan. (1)Guidelines/manuals prepared by the Study for Water Environment Management on River Basins and the Project for Enhancing Capacity of Vietnamese Academy of Science and Technology in Water Environment Protection Phase II are also included.
		C1-3 Implement regular monitoring in accordance with the plan above. C1-4 Conduct training on water quality monitoring including quality control for improving reliability of monitoring. (note: change training contents based on situations of target DONREs) C1-5 Interpret and evaluate results of monitoring and feedback to the
		prepare/improve a monitoring plan, taking into consideration of regional characters at target DONREs.
		C1-1 Review water quality monitoring guidelines/manuals ⁽¹⁾ . C1-2 Based on above guidelines/manuals (revised if necessary),
	 z) Fluged Once space at MONRE and each DONRE 3) Necessary operation costs 	Component 1 Monitoring]
		prepare activities plans for each DONRE.
	1) Counterpart MONBE - Outhout 1 3 & 5	2-2 Select main component(s) from the list below and also select activities under the selected commonent(s) for each DONRE and
	F	enforcement of basic water pollution control.
		2-1 Conduct capacity assessment of target DONREs regarding
personnel.	project activities 7) Local Consultants	control (environmental momenta), pollution sources inventory, pollution sources inspection) is strengthened.
for counterpart	6	2) Enforcement capacity of target DONREs on basic water pollution
øð	5) Training in Japan : X time/ year (for DONRE	policy and tools.
		1-8 Propose the amendment on water environmental management
governmental poli	 Environmental Education (1, 2) 3 Workshop (overall : X time/ year in Hanoi. regional: 	opinions based on implementing activities in Output z and Output 3. 1-7 Review the draft amendment prepared in 1-5.
protection within th	- Pollution Sources Inspection (1, 2)	1-6 Organize workshops for sharing and collecting comments and
water environmen	- Pollution Sources Inventory (1, 2)	policy and tools for their improvement.
government keeps the significance of	- Environmental Monitoring (1, 2) - Water Quality Analysis/QAQC (1, 2)	1-5 Prepare the draft amendment on water environmental management
	- Water Environmental Management /Sub-Leader	1-4 Train staff of MONRE and DONREs on studying, developing,
	•	tools with focus on pollutions from industries.
Pre-conditions	(()	
BA		effectiveness and enforceability of these water environmental nolicy and

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· ·	 2-2 Review and modify existing inventory formats based on the current onditions of target DONREs.⁽²⁾ 2-3 Conduct inventory survey with the revised inventory formats. 2-4 Organize collected information on main pollution sources. 2-5 Regularly conduct inventory survey and add/update information on rain pollution sources. ¹Inventory format prepared by the Study for Water Environment langement on River Basins is also included. 	Component 3 Inspection] 3-1 Conduct capacity assessment of target DONREs regarding ispection for water pollution control. 3-2 Review existing guidelines on inspection. 3-3 Prepare the inspection plan, based on the above guidelines evised if necessary) and results of inventory survey. 3-4 Conduct training on more effective inspection. 3-5 Clarify criteria for taking administrative guidance and orders in coordance with the inspection results. 3-6 Conduct inspection based on activities C3-1 to C3-5 3-7 Issue improvement order or administrative guidance based on ctivity C3-6 by target DONREs.	 Target DONRE's capacity of making effective water pollution ontrol measures is strengthened. -1 Evaluate the enforcement performances of target DONREs on water ollution control, including the various systems implemented in the past, nd organize issues for improvement. -2 Select target province(s) where the activities 3-3 and 3-4 would be onducted, after reviewing the feasibility of application of the draft mendment prepared in 1-5. -3 Specify target regions and/or industries for application of the ffective water pollution control measures. 4 Draft an outline for effective water pollution control measures.) Target DONRE's capacity of promoting awareness of public and rdustrial sectors on water environment is strengthened. -1 Review the current system and situation of environmental wareness activities at target provinces. -2 Make awareness raising plans for water environment to be onducted by target DONREs*. -3 Conduct awareness raising activities in accordance with the plan set it 4-2.

4-4 Review and improve awareness raising activities based on the result of 4-3.	
5) Capacity of MONRE and DONREs on information management and utilization is strengthened.	
5-1 Review the current situation of information collection and management regarding water environment, and organize issues for improvement	
5-2 Prioritize information necessary for MONRE and DONREs to come up with administrative measures and their implementation.	
5-3 Develop more effective ways and means (formats, reporting modes, frequencies, etc.) to collect information from all the DONREs. 5-4 Conduct trials to collect information from target DONREs by use of	
the ways and means developed in 5-3, and utilize information at MONRE.	
5-5 Conduct workshops to share the results of 5-4. 5-6 Prepare a proposal of actual application of the ways and means at MONRE.	
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ANNEX III: EXPLANATION OF TERMS

1. Water environmental management (Overall goal, Project purpose)

Water environmental management (WEM) is broader in concept, countermeasures to be employed and the area's space compared with basic water pollution control by regulatory systems alone such as the inspection and penalty over the enterprises.

WEM takes into account the balance between the socio-economic development and the environment while ensuring the requirements stipulated by environmental laws.

WEM employs variety of systems for water environmental management including, on top of the basic regulatory systems, economic systems, information-based systems, self-management systems and so forth.

When formulating a plan for WEM, usually the area consisting of urban area(s) and industrial clusters and therefore requiring comprehensive countermeasures will be chosen. In such a plan, consideration will be made on the character of pollution, the future trend of the development and anticipated impacts over the environment and so forth.

2. Management tools (Output 1)

There are many tools for water environmental management. They will be categorized into 4 taking into account the characters of the tools as follows.

Regulatory Tool

- Effluent water quality standards
- Pollution source inspection
- Penalty
- Administrative measures
- EIA
- License

Economic Tool

- Wastewater fee
- Exemption/relaxation of taxes
- Subsidies for pollution control
- Environmental protection fund
- Two-step loans for pollution control
- Incentives

Self-management Tools

- ISO 14001
- Self-monitoring reporting by enterprise
- Pollution control agreement between local government and enterprise(s)

Information-based Tools

- Environmental performance rating of enterprises

- Incentives (awards etc.)

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- Disclosure of the name of serious pollution enterprises
- Environmental status report by local government
- Self-monitoring reporting by enterprise

3. Environmental monitoring (Output 2)

The action for continuous study regarding water quality of public water area such as river, lake, costal area and groundwater for the purpose of identifying the compliance with ambient water quality standard, investigating special pollutions. Environmental monitoring should be conducted at appropriate measurement points to pursue the purpose according to the monitoring plan with appropriate frequency, measurement parameters, sampling, analysis and evaluation of data.

4. Quality control of monitoring (C1/Output 2)

This is an overall action for ensuring high quality data. There are many necessary actions as follow,

Regarding sampling

- Appropriate sampling method
- Preparation of field note
- Calibration of onsite measurement equipments
- Correct pre-treatment for sample bringing back to laboratory

Regarding analysis

- Selection of analytical method
- Maintenance of analytical equipments
- Quality management for chemicals used for analysis
- Preparation of analysis note

Development of date error checking system

5. Inventory survey (C2/Output 2)

Inventory survey is a survey to be carried out for creation of pollution sources inventory. Based on the inventory survey, the results are secured, added, and updated in the inventory.

6. Pollution sources inventory (C2/Output 2)

Inventory shall include outline of pollution sources, wastewater discharge point, discharge condition of wastewater, treatment facility for wastewater, flow of water from intake-use at production process,-wastewater treatment-discharge of wastewater, and so forth.

7. Inspection Plan (C3/Output 2)

Inspection plan is made every year prior to the implementation. The Plan includes frequency of inspection, time schedule of implementation, selection of target pollution sources, selection of type of inspection (prior notice, sudden etc.).

8. Criteria for taking administrative guidance and orders in accordance with the inspection results (C3/Output 2)

Criteria for taking administrative guidance and orders are the tools to ensure the appropriate judgment in taking proper administrative measures in case the pollution source violates the effluent standards.

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According to the criteria, oral guidance, recommendation for improvement of wastewater treatment, order for improvement of wastewater treatment will be taken based on the degree of violation, frequency of violation, seriousness of malicious conduct and so forth.

Usually the criteria are established by local government, but it is worth thinking establishing the criteria by the central government, and allowing the local government to establish stringent criteria taking into account the local conditions.

9. Effective water pollution control measures (Output 3)

Effective water pollution control measures mean such measures that

- consists of various systems for water environmental management considering synergy effects of their combination
- take into account the effects of future development over the water environment
- present appropriate pollution reduction plan that takes into account the character of pollution (contribution of industrial wastewater and domestic waste water, pollution load vs. water quality and so forth)
- consider the cost-effectiveness of the investment
- consider the support systems to encourage the pollution sources to take actions
- consider the appropriate sources for the investment for pollution control

10. Outline for Effective Water Pollution Control Measures (Output 3)

Given rather limited time in this project, the outline for Effective Water Pollution Control will be drafted. With the above in mind, the work in this project can be considered as a preparatory work focusing on the following major components

- preliminary analysis on the present condition and character of water pollution
- preliminary analysis on the major water pollution sources and their relative contribution
- consideration of candidate management tools both existing tools that are considered as applicable based on the performance so far and draft amendments (Output 1, Activity 1-5)
- financial sources for investment

The outline will present the summary of the results of preliminary works and serve as a basis for further steps including preparation of detailed measures, trial-base implementation and so forth.

11. Information management and utilization (Output 5)

Better information management is a precondition of better utilization of the information collected and stored. Therefore to improve the information management, the ideas of MONRE and DONREs on how they wish to or shall utilize the information shall be clarified. The information to be collected and utilized will be prioritized through these considerations.

In general, the primary purpose of utilization of the information will be for administrative measures. Among administrative measures, very important one is to utilize to develop measures for the protection and improvement of water environment through the analysis of present water environmental conditions, trend of water quality,

identifying the seriously polluted areas, and the progress of measures and their effectiveness, and so forth.

For the improvement of water environment, enhanced awareness of and strong support from citizens, enterprises, mass media are necessary. Therefore the release of water environment related information is important. There are several ways and means for the information release such as Environmental Status Report (White Paper), brochures, Website.

Information management and utilization will need well designed and coordinated data collection, data process and data interpretation. Ways and means to ensure this might be considered taking into account conditions in MONRE and DONREs. It has to be stressed that database formats and reporting modes are preconditions for better information management.

Attachment 2

Minutes of Receipt of Equipment/Assets

SOCIALIST REPUBLIC OF VIETNAM

Independence - Freedom - Happiness

MINUTES OF RECEIPT OF EQUIPMENT/ASSETS

BETWEEN

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

AND

THE VIETNAM ENVIRONMENT ADMINISTRATION (VEA), MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT OF VIETNAM

FOR THE PROJECT FOR STRENGTHENING CAPACITY OF WATER ENVIRONMENT MANAGEMENT IN VIETNAM

Today, 21 May, 2013, we are:

- Representative of Transferor: JICA

Mr. OKIURA Fumihiko Title: Senior Representative of JICA Vietnam

- Representative of Transferee: VEA/MONRE

Dr. Nguyen The Dong Title: Deputy Director General of Vietnam Environment Administration, Ministry of Natural Resources and Environment

The assets for transferring are:

1. Office Equipment

No.	(categorize	Item d according to the type of asset)	Unit	Year of putting into use	Quantit y	Existing condition	Asset value	Notes
1		2	3	4	5	of asset 6	(USD) 7	0
	A. Means o	f transport				0	1	8
	Including:							
	B. Machine	s and equipment						
	Desk top computer	CPU: Core i7 930 2.80 Ghz RAM: DDR3 2GB Monitor: Philips 20 OS: Microsoft Windows 7 Pro 64-bit Application: Microsoft Office Pro 2010	pcs	2011	1	Working	1,640	VEA
		CPU: Core i7 2600 3.40 Ghz RAM: DDR3 4GB Monitor: Samsung LED 18.5 OS: Microsoft Windows 7 Pro 64-bit Application: Microsoft	pcs	2011	1	Working	1,950	VEA

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-		ditto	pes	2011	1	Working Working	446	DONRE
		ditto	pes	2011	1	Working	446	DONRE HCMC
		ditto	pcs	2011 2011	1	Working	446	HPG DONRE TT-HUE
	Urs	ditto			1	Working	446	DONRE
	Simplified GPS	GPS MAP 78	pes	2011	1	Working	2,072	DONRE
		ditto	pes	2011		Working	2,072	DONRE
		ditto	pcs	2011	1			DONRE HCMC
		ditto	pcs	2011	1	Working	2,072	DONRE TT-HUE
		ditto	pcs	2011	1	Working	2,072	DONRE HPG
		ditto	pcs	2011	1	Working	2,072	HNI
		dítto	pcs	2011	1	Working	2,072	VEA
+			pcs	2011	1	Working	2,072	VEA
-	GIS software	ditto ArcGIS DeskTop 10	pcs	2011	1	Working	110	BRVT DONRE
		ditto	pes	2011	1	Working	110	HCMC DONRE
		ditto	pcs	2011	1	Working	110	TT-HUE DONRE
-		ditto	pcs	2011	1	Working	110	HPG DONRE
-			pcs	2011	1	Working	110	HNI DONRE
		1000VA ditto	pcs	2011	1	Working	110	VEA
		SANTAK OFFLINE					43	VEA
-	UPS	Upselect Offline 500VA	pes	2011	1	Working	485	VEA VEA
		KODAK Scan Mate i920	pcs	2011	1	Working		
	Portable scanner	Image Formula P-150	pes	2011	1	Working Working	929 295	VEA VEA
		CP2025DN ditto	pes	2011	1	Working	1,250	VEA
	Laser printer	HP Laser Printer	pcs	2011 2011	1	Working	3,226	VEA
		ditto	-		1	Working	3,750	VEA
	Photo copier	CANON IR 2520	pcs pcs	2011 2011	1	Working	217	VEA
		ditto	pcs	2011	1	Working	355	VEA
	Phone /FAX	ditto Panasonic KX FL422	pcs	2011	1	Working	2,370	VEA
-		ditto	pcs	2011	1	Working	2,370	VEA
		HP PAVILION DV4- 3003TX-LN339PA	pcs	2011	1	Working	2,370	VEA
_	Lap top computer		pcs	2011	1	Working	1,585	VEA
		ditto	pcs	2011	1	Working	1,950	BRVT
		ditto	pcs	2011	1	Working	1,950	HCMC
		ditto	pcs	2011	1	Working	1,950	TT-HU DONR
		ditto	pes	2011	1	Working	1,950	HPG
		ditto	pcs	2011	1	Working	1,950	HNI DONR

No.	Item (categorized according to the type of asset)	Unit	Year of putting into use	Quantit y	Existing condition of asset	Asset value (USD)	Notes
1	2	3	4	5	6	7	8
	A. Means of transport						-
	Including:	-					
	B. Machines and equipment					-	
	Laptop- Dell Inspiration 15R	pcs	2012	1	Good	762	
	Laptop - Acer AS4830- 2452G50Mnbb Blue-LX RK 70 C	pes	2012	1	Good	545.5	
	Laptop - Dell V131/2450M/2G/500G/Win7HB	pcs	2011	1	Good	692.2	
	Laptop - HP Pavilion dv3	pcs	2011	1	Good	790	
	Photocopier - Fuji Xerox DC- 2007 CP, CT20416	pcs	2011	1	Good	3878.77	
	Phone - Panasonic KX- TG6461CX	pcs	2011	1	Good	90	
	Fax - Panasonic KX-FL612	pcs	2011	1	Good	233.3	
	Printer - HP color laser Jet CP 2025N	pcs	2011	1	Good	873.23	
	Scanner - HP Scanjet G4010	pcs	2011	1	Good	228.5	
	Heater - Nonan	pcs	2011	1	Good	116	
	Heater - Coex DF-HT208	pcs	2012	2	Good	85.7	
	Fridge - Funiki FR-125CL	pcs	2011	1	Good	228.5	
-	Modem - 2WIRE 2701HG-T	pcs	2012	1	Good	90	
-	Water Purifier - Lavie	pcs	2011	1	Good	266.6	
_	C. Other equipment						
-	Safety box - Hoà Phát	pcs	2011	1	Good	119	
_	Desks	pcs	2011	6	Good	371.4	
-	Swivel chairs	pcs	2011	5	Good	93	
-	Big meeting table	pcs	2011	1	Good		
	Meeting chairs	pcs	2011	8	Good	266.6	l broken
	File Cabinet	pcs	2011	1	Good	88.5	oronen
	Big bookshelf	pcs	2012	1	Good	77.3	
_	TO	ΓAL				9896.1	

2. Laboratory Equipment, Consumable and Reagent 1) List of Equipment Procured by JICA Expert Team

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No.	(categorized	Item I according to the type of asset)	Unit	Year of putting into use	Quantit y	Existing condition of asset	Asset value	Notes
1		2	3	4	5		(USD)	0
1	A. Means o	f transport			5	6	1	8
	Including:							
	B. Machine	s and equipment						
	Water purifier	Aquatron Automatic Water Stills A4000D	pcs	2012	1	Working	8,300	TT-HUE DONRE
	COD digester	CR- 4200	pcs	2012	1	Working	2,100	TT-HUE DONRE

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		TOTAL				119,100	
Reagents		set	2012	1	Working	8,500	TT-HUE DONRE
Glassware		set	2012	1	Working	26,400	TT-HUE DONRE
Fume hood	EFH-4A1	pcs	2012	1	Working	38,000	TT-HUE DONRE
Dry oven	UNE 550	pcs	2012	1	Working	2,000	TT-HUE DONRE
meter (DO)	OM-51	pcs	2012	1	Working	1,400	TT-HUE DONRE
Incubator BOD (DO)	PR205740R	pcs	2012	1	Working	3,000	TT-HUE DONRE
pump	Linicon LV-125A	pcs	2012	1	Working	700	TT-HUE DONRE
stirrer Vacuum	RH basic 2	pcs	2012	1	Working	800	TT-HUE DONRE
Balance Magnetic	PL202-S	pcs	2012	I	Working	500	TT-HUE DONRE
Analytical balance	MS204S	pcs	2012	1	Working	5,000	TT-HUE DONRE
UV-VIS spectrophoto meter	photoLab® 6600	pcs	2012	1	Working	12,300	TT-HUI DONRE
Portable multi analyzer	U-52	pcs	2012	1	Working	6,700	TT-HU DONRI
EC meter	DS-51	pcs	2012	1	Working	1,400	TT-HU DONRI
pH meter	F-51BW	pcs	2012	1	Working	1,700	TT-HU DONRI

2) List of Equipment procured by JICA Vietnam office

No.	(categorize	Item ed according to the type of asset)	Unit	Year of putting into use	Quantit y	Existing condition of asset	Asset value (USD)	Notes
1		2	3	4	5	6	7	8
_		of transport		1.000				
	Including:							
	B. Machine	es and equipment						
	Extraction apparatus	 SPE Vacuum Manifolds (Supelco Cat No. 57030-U) Supelco Cat Nos. 57033, 57032, 57041, 57047 from the top Supelco Cat No. 57120-U Supelco Cat No. 57100-U Supelco Cat Nos. 57095, 57098, 57096 from the top Visiprep Large Volume Sampler (Supelco Cat No. 57275) KNF Laboport mini- pump (Supelco Cat No. Z28,826-8) 	Set	2012	1	Working	7,201.40	HNI
	Cartridge for solid-phase extraction	"Bond Elut C18 500mg 6ml (PK/30) Part No. 12102052 (Varian)"	Box	2012	10	Working	1,023.00	HNI

Micro syringe	Hamilton 701N, 702N, 705N, 710N, 750N	Set	2012	1	Working	236.60	HNI
GC columns DB-5ms	Agilent J&W GC column DB-5ms	Set	2012	1	Working	1,088.50	HNI
Mixing machine	MaxiMix* II Vortex Mixer (Thermo)	Set	2012	1	Working	300.00	HNI
Draft chamber	EFH-4A1	Set	2012	1	Working	6,500.00	HPG
COD Digester	DRB200 (Hach)	Set	2012	1	Working	1,560.00	HPG
Decompositi on analysis kit for Kjeldahl nitrogen	Distillation: VAP 45s; Digester: KB8s; Turbosog Scrubber: TUR/K;	Set	2012	I	Working	22,670.00	HPG
Water distilling machine	Aquatron Automatic Water Stills A4000D	Set	2012	1	Working	3,625.00	HPG
Refrigerator with Freezer	SR-F78NH	pcs	2012	3	Working	2,268.00	HPG (Q'ty =1) and TT- HUE (2)
Hot plate with stirrer	SP131630-33Q	pcs	2012	1	Working	776.00	TT-HUE
Dehumidifier	ED-12B	pes	2012	2	Working	488.00	TT-HUE
Water Bath	Model 260	pcs	2012	í	Working	946.00	TT-HUE
Flow meter	Flow Probe, FP201	Set	2012	4	Working	6,192.00	HPG (1), TT-HUE (1), HCMC (1) and BRVT (1)
Van Dorn sampler	Alpha Water Sampler(Wildco)	Set	2012	2	Working	2,100.00	НСМС
Multi- parameter water quality analyzer	U-52	Set	2012	5	Working	25,000.00	HPG (2),HCM C (2) and
Micro-pipette for 1000 µL	Pipetman P-1000G (Gilson) "AUTOCLAVABLE TIPACK D1000(Gilson)"	Set	2012	1	Working	196.50	BRVT (1) TT-HUE
Micro-pipette for 5000 µL	Pipetman P- 5000G(Gilson)	Set	2012	1	Working	210.30	TT-HUE
Micro-pipette for 10mL	Pipetman P- 10MLG(Gilson)	Set	2012	1	Working	196.70	TT-HUE
Micro-pipette for 100 µL	Pipetman P- 100G(Gilson) D200(Gilson)	Set	2012	1	Working	196.50	BRVT
Micro-pipette for 1000 μL	Pipetman P- 1000G(Gilson) "AUTOCLAVABLE TIPACK D1000(Gilson)"	Set	2012	I	Working	196.50	BRVT
Micro-pipette for 5000 µL	Pipetman P- 5000(Gilson) D5000(Gilson)	Set	2012	1	Working	210.30	BRVT
Pipette holder	TRIOTM pipette holder	pcs	2012	2	Working	130.80	TT-HUE (1) and BRVT (1)
POPs standard solution	CIL Code: EO-5405 "ROHS PBDE Native PAR Spike (1,2 mL)"	pcs	2012	3	Working	5,160.00	HNI
solution							

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7	TOTAL				171,119	
Parts of GC-ECD (Gas Chromatography - Electron Capture Detector)	set	2013	1	Working	13,310.00	BRVT
AAS (Atomic Absorption Spectrophotometer) instrument and parts of AAS	set	2013	1	Working	49,565.00	BRVT
Reagents and glassware for analysis	set	2012	1	Consumable	17,743.10	BRVT

REPRESENTATIVE OF JICA

RERENTATIVE OF VEA/MONRE

(Sign)

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Attachment 3

Minutes of Joint Coordination Committee Meetings (No.1-6)

MINUTES OF MEETING ON THE JOINT COORDINATING COMMITTEE FOR THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVRIONMENTAL MANAGEMETN IN VIET NAM

In line with the Record of Discussions (hereinafter referred to as "R/D") signed between the Government of the Socialist Republic of Viet Nam (hereinafter referred to as "the Government of Viet Nam") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on January 8th, 2010, the Viet Nam Environment Administration (hereinafter referred to as "VEA"), Ministry of Natural Resources and Environment (hereinafter referred to as "MONRE") held the first Joint Coordinating Committee (hereinafter referred to as "JCC") meeting in Hanoi on November 1st, 2010.

In the course of the meeting, both Japanese side and Vietnamese side discussed progress of the Project as attached hereto.

Mr. Akira Shimizu Senior Representative Viet Nam Office Japan International Cooperation Agency JAPAN

Mr. Shigenobu Obayashi JICA Expert Japan International Cooperation Agency JAPAN

Hanoi, November 1st .2010

Mr. Bui Cach Tuyen Deputy Minister of Ministry of Natural Resources and Environment Director General of Viet Nam Environment Administration SOCIALIST REPUBLIC OF VIET NAM

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Mr. Nguyen The Dong Deputy Director General of Viet Nam Environment Administration SOCIALIST REPUBLIC OF VIET NAM

MINUTES OF MEETING

THE FIRST MEETING OF THE JOINT COORDINATING COMMITTEE FOR THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVRIONMENTAL MANAGEMETNT IN VIET NAM

1. Objective

To report on results of the JICA monitoring mission (hereinafter referred to as "the JICA Mission")

To discuss progress of the Project activities

2. Date and Venue

Date: Monday, November 1st, 2010 Time: 14:00- 18:00 Venue: Melia Hanoi, Viet Nam

3. Number of participants

From Japanese side: (11 persons)

No:	Name	Tide	Name of Organization
1	Mr.Akira SHIMIZU	Senior Representative	JICA Viet Nam office
2	Mr. Nguyen Vu Tiep	Program officer	JICA Viet Nam office
3	Mr. Hideo NODA	Director	ЛСА HQ
		Environmental Management	
		Division 1, Environmental	
ľ		Management Group, Global	
		Environment Department	
4	Ms.Akiko KAWATA	Deputy Director	JICA HQ
1		Environmental Management	
		Division 1, Environmental	
		Management Group, Global	
		Environment Department	
5	Mr.Shigenobu OBAYASHI	JICA Expert (Chief Advisor)	Project for Strengthening
			Capacity of Water Environmental
			Management in Viet Nam
6	Ms.Saori USHIMI	JICA Expert (Project Coordinator)	Project for Strengthening
			Capacity of Water Environmental
			Management in Viet Nam
7	Ms.Dinh Thu Binh	Project Secretary	Project for Strengthening
1			Capacity of Water Environmental
			Management in Viet Nam
8	Mr. Jun TSUMORI	JICA Expert	Urban Environmental (Sewage)
		_	Policy Advisor
9	Ms.Takako ONO	JICA Expert (Chief Advisor)	Project for Capacity Building of
·			National Greenhouse Gas
			Inventory in Viet Nam
10	Ms.Tran Hue Chi	Project Secretary	Project for Capacity Building of
			National Greenhouse Gas
			Inventory in Viet Nam
11	Ms.Pham Thi Thu Hien	Project Secretary	Environmental Policy Adviser

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No.	Name	Title	Name of Organization
1	Mr. Bui Cach Tuyen	Deputy Minister	MONRE
		Director General	VEA
2	Mr. Nguyen The Dong	Deputy Director General	VEA
3			Ministry of Planning and
			Investment
4	Mr Nguyen Xuan Bao Tam	Vice Director	ICD, MONRE
5	Mr Phi Quoc Hao	Director	
6	Mr Pham Van Loi	Director	ISD, DWRM, MONRE
7	Mr Tran The Loan	Deputy Director	ISEM, VEA
8	Mr Luong Duy Hanh	Deputy Inspector	PCD, VEA
9	Mr Nguyen Van Thuy		ID, VEA
10	Ms Vu Thi Thu Thuy	Deputy Director	CEM, VEA
		Official	CEID, VEA
11	Mr Dang Van Loi	Director	ISD, VEA
12	Mr Nguyen Viet Thang	Official	ISD, VEA
13	Mr Nguyen Anh Dung	Official	ISD, VEA
14	Mr.Ho Dac Truong	Vice Director	Hue DONRE
15	Mr Nguyen Viet Hung	Director	Hue EPA
16	Mr Le Van Sam	Director	Ba Ria Vung Tau DONRE
17	Mr Le Tan Cuong	Director	Ba Ria Vung Tau EPA
18	Ms Dao Thi Anh Diep	Vice Director	Hanoi EPA
19	Mr Vu Dục A	Director of Project Management	Hanoi EPA
		Division	
20	Mr Cao Tung Son	Deupty Director	Ho Chi Minh DONRE
		Environmental Management	
		Department	
21	Ms Le Thanh Dung	Official	Ho Chi Minh DONRE
		Environmental Management	
		Department	
22	Mr Phung Van Thanh	Vice Director	Hai Phong DONRE
23	Mr Le Son	Vice Director of Haiphong EPA	Hani Phong EPA
24	Ms Nguyen Thi Tuyet Lan	Director	Hai Phong Monitoring Center

From Vietnamese side (25 persons)

DONRE: Department of Natural Recourse and Environment

EPA: Environmental Protection Agency

ICD: International Cooperation Department

DWRM: Department of Water Resources Management

ISEM: Institute of Science for Environmental Management

PCD: Pollution Control Department

ID: Inspection Department

DWEP: Department of Waste Management and Environment Promotion

CEM: Centre for Environmental Monitoring

CEID: Centre for Environmental Information and Data

ISD: International Cooperation and Science, Technology Department

4. Language used: English

5. Program: Attached as Annex I A. Openings

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- B. Introduction of participants
- C. Presentation of the project outlines
- D. Presentation of DONRE's Action Plans
- E. Break
- F. Report of the mission results
- G. Comments and Discussions
- H. Discussion of Minutes of Meeting
- I. Break
- J. Signings -Signing of Action Plans by each DONRE -Signing of the M/M
- K. Closing

6. Annex List

Annex I	Program of the JCC Meeting
Annex II	Outline of consultations and basic stance of the JICA Monitoring
	Mission on the activities of Output 1, Output 2 and Output3
Annex III	Tentative Action Plans of DONREs as of November 1, 2010
Annex IV	Plan of Operation as of November 1, 2010

7. DISCUSSION AND SUMMARY

JICA, all the relevant departments of MONRE and target DONREs confirmed and reached an agreement as follows:

(1) Outputs of the Project

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- a. The activities for Output from 1 to 3 were confirmed as per Annex II and III.
- b. The activities for Output 2 are to strengthen enforcement capacity of target DONREs on basic water pollution control. Those activities should be implemented in close collaboration with the Inspection Department and other related departments, VEA/MONRE.
- c. The activities for Output 4 aim at effective information disclosure and raising the public awareness by using the results of the water environmental management activities by DONRE. Those activities should be implemented step by step within the current framework. The activities will be implemented in close collaboration with the Centre for Environmental Training and Communication and other related departments, VEA/MONRE.
- d. The activities for Output 5 also should be implemented within the current framework based on gathered information from Output 1 and 2, and the current information management system. The activities will be implemented in close collaboration with the Centre for Information and Data and other related departments, VEA/MONRE.

e. All of the activities at all outputs will be implemented under guidance of VEA/MONRE

(2) Project Approval

MONRE and DONREs shall smoothly implement the procedures of the project approval based on Annex II and III.

(3) Measures to be taken by Vietnamese side

MONRE and each DONRE shall secure the office space and facilities including internet connection as soon as possible for JICA Experts.

(4) Equipment

As described in the R/D, the purpose of the Project is to improve environmental management capacity in MONRE and DONREs, through hands-on training and advice by JICA experts with provision of minimum equipment.

JICA monitoring mission explained at JCC meeting as well as meetings with each DONRE held on October 28th and 29th that the mission appraised that each DONRE, except for Hue DONRE that does not have the basic equipments to conduct monitoring and inspection, conducted monitoring and inspection in accordance with individual plan by existing equipments. Thus, the mission suggested that the following selected basic equipments would be the minimum equipments to be provided for the Project for Hue DONRE.

	Name of equipment	Purpose of use
1	Water purifier	Water purification for laboratory grade
2	COD digester	COD
3	pHimeter	pH
4	EC meter	Electric Conductivity
5	Portable multi analyzer	pH, DO, EC. Salinity, temperature etc.
6	UV-VIS spectrophotometer	NO3, NO2, PO4, NH4 etc.
7	Analytical balance	SS, TDS, etc.
8	Balance	weighing
9	Magnetic stirrer	Preparation of reagent
10	Vacuum pump	Filtration
11	Incubator	BOD
12	BOD (DO) meter	BOD, DO
13	Dry Oven	SS, TDS, etc.
14	Fume hood	Chemical analysis
15	Glassware	General
16	Reagents	General

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In the meantime, MONRE/DONREs emphasized the need of technical equipments and knowledge for monitoring, analysis and pollution forecast on chemicals such as POPs, pesticides, herbisides, cancinogens, Endocrine Disrupting Chemicals- EDCs, etc., the need of automatic, continuous monitoring stations at sensitive hotspots as well as the importance of equipment provision for project management such as vehicles, office equipments etc.

In response to this request, JICA responded that JICA would consider, in consultation with MONRE and DONREs, the necessity of equipment, with careful examination in the course of the Project if equipments are inevitable for the purpose of the Project and within the limit and constraint of its budget.

(5) Others

-The title of the position of "Administrator" and "Deputy Administrator" which are used in Record of Discussion are amended to "Director General" and "Deputy Director General" respectively.

-Tentative Action Plans, signed by JICA and DONREs, is the first step to implement the Project and that this Action Plan will be reviewed in the course of implementation of the activities.

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MINUTES OF MEETING ON THE JOINT COORDINATING COMMITTEE FOR

THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVIRONMENTAL MANAGEMETN IN VIET NAM

In line with the Record of Discussions (hereinafter referred to as "R/D") signed between the Government of the Socialist Republic of Viet Nam (hereinafter referred to as "the Government of Viet Nam") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on January 8th, 2010, the Vietnamese side and the Japanese side held the second Joint Coordinating Committee (hereinafter referred to as "JCC") meeting in Hanoi on June 10th, 2011.

In the course of the meeting, both Vietnamese side and Japanese side discussed progress of the Project as attached hereto.

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Hanoi, June 10th ,2010

Mr. Akira Shimizu

Senior Representative Viet Nam Office Japan International Cooperation Agency JAPAN

Mr. Bui Cach Tuyen Deputy Minister of Ministry of Natural Resources and Environment Director General of Viet Nam Environment Administration SOCIALIST REPUBLIC OF VIET NAM

MINUTES OF MEETING

THE SECOND MEETING OF THE JOINT COORDINATING COMMITTEE FOR THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVRIONMENTAL MANAGEMETNT IN VIET NAM

1. Objective

To discuss the contents of the Inception Report (Ic/R) To discuss progress of the project activities

2. Date and Venue

Date: Friday, 10th June, 2011 Time: 13:30-16:10 Venue: Cong Doan Hotel, Hanoi, Viet Nam

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3. Participants

No.	Name	Name of Organization	Current Position
I. J	ICC members		
<i>1.1.</i> V	Vietnam side		
1	Mr. Bui Cach Tuyen	MONRE, VEA	Deputy Minister, Director General of VEA
2	Mr. Nguyen The Dong	VEA	Deputy Director General of VEA
3	Mr. Nguyen Viet Thang	ISD, VEA	Officer
4	Mr. Nguyen Huu Quyet	Hue DONRE	Deputy Director
5	Mr. Phung Van Thanh	Hai Phong DONRE	Deputy Director
I.2. J	ICA side		
6	Mr. Shigenobu Obayashi	JICA Expert Team	Leader
7	Ms. Saori Ushimi	JICA Expert Team	Project Coordinator
8	Mr. Yochi Iwai	JICA Expert Team	Chief Advisor
9	Mr. Akira Shimizu	JICA Vietnam Office	Senior Representative
II. P	articipants	1	
II.1. I	Vietnam side		
10	Mr. Nguyen Van Thuy	CEM/ VEA	Deputy Director of CEM
11	Ms. Nguyen Thi Nguyet Anh	CEM/ VEA	Officer
12	Mr. Chu Ngoc Kien	ISD/ VEA	Officer
13	Mr. Vu The Hung	DEAIA/ VEA	Officer
14	Mr. Hoang Quoc Lam	CENTAC/ VEA	Officer
15	Ms. Tran Linh Chi	CENTAC/ VEA	Officer
16	Mr. Nguyen Tu Nam	BPA/ VEA	Officer
17	Ms. Nguyen Nhan Hue	PCD/ VEA	Officer
18	Ms. Tran Thi Le Anh	DWEP/VEA	Officer
19	Ms. Le Thanh Nga	ISEM/VEA	Officer

No.	Name	Name of Organization	Current Position
20	Ms. Tran Thi Thu Huong	ID/MONRE	Officer
21	Mr. Nguyen Viet Hung	Thu Thien - Hue EPA	Director
22	Mr. Le Tan Cuong	Ba Ria Vung Tau EPA	Director
23	Ms. Le Thanh Thuy	Hanoi EPA	Officer
24	Mr. Ta Ngoc Son	Project Management Division/ Hanoi DONRE	Officer
25	Mr. Cao Tung Son	Environmental Management Division/ HCMC DONRE	Deputy Manager
26	Ms. Le Thi Thanh Dung	Environmental Management Division/ HCMC DONRE	Officer
27	Ms. Nguyen Thi Tuyet Lan	Centre for Environmental Monitoring/ Hai Phong DONRE	Director
II.2. J	IICA officers and experts		
28	Mr. Shigeru Kishida	Embassy of Japan in Vietnam	Second Secretary
29	Mr. Tadashi Suzuki	ЛСА Vietnam office	Representative
30	Mr. Nguyen Vu Tiep	JICA Vietnam office	Program officer
31	Mr. Mitsuhiro Yamamoto	ЛСА	Expert
32	Mr. Koji Nishimiya	ЛСА	Expert
33	Mr. Jun Tsumori	JICA Expert	Policy Advisor
34	Mr. Takeshi Higo	JICA Expert, Project for Enhancing Capacity of Vietnamese Academy of Science and Technology in Water Environment Protection, Phase II	Chief Advisor
35	Ms. Takako Ono	JICA Expert, Project for Capacity Building of National Greenhouse Gas Inventory in Vietnam	Chief Advisor
36	Mr. Itaru Okuda	JICA Expert team Deputy Chief Advis	
	Mr. Shinsuke Sato	JICA Expert Team	Member

No.	Name	Name of Organization	Current Position
38	Ms. Tomoe Takeda	JICA Expert Team	Member
39	Mr. Masahiro Ibayashi	ЛСА Expert Team	Member
40	Mr. Hiroshi Nakano	JICA Expert Team	Member
41	Ms. Dinh Thu Binh	ЛСА Expert Team	Secretary
42	Ms. Nguyen Thanh Lan	JICA Expert Team	Staff
43	Mr. Nguyen Thanh Phuong	ЛСА Expert Team	Staff
44	Mr. Vu Dinh Thai	ЛСА Expert Team	Staff
45	Ms. Pham Thu Hien	ЛСА at MONRE	Staff

Note: JCC members from ICD (MONRE) and DWRM (MONRE) did not participate in the meeting this time

BPA:	Biodiversity Protection Agency
CEID:	Centre for Environmental Information and Data
CEM:	Centre for Environmental Monitoring
CENTAC:	Center for Environment Training and Communication
DAEIA:	Department of Environmental Appraisal and Impact Assessment
DONRE:	Department of Natural Resources and Environment
DWEP:	Department of Waste Management and Environment Promotion
DWRM:	Department of Water Resources Management
EPA:	Environmental Protection Agency
ID:	Inspection Department
ICD:	International Cooperation Department
ISD:	International Cooperation and Science, Technology Department
ISEM:	Institute of Science for Environmental Management
PCD:	Pollution Control Department
MONRE:	Ministry of Natural Resources and Environment
VEA:	Vietnam Environment Administration

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4. Program: Attached as Annex I

A.	Introduction of participants	Mr. Nguyen Viet Thang, VEA
Β.	Opening speech	Mr. Bui Cach Tuyen, Deputy Minister, MONRE
C.	Opening speech	Mr. Akira Shimizu, Senior Representative, JICA Vietnam Office
D.	Presentation of the Inception Report	Mr. Shigenobu Obayashi and Mr. Itaru Okuda, JICA Expert Team
E.	Comments and discussions	Chaired by Mr. Nguyen The Dong
F.	Presentation of project progress	Mr. Nguyen Viet Thang, VEA
G.	Comments and discussions	Chaired by Mr. Nguyen The Dong
H.	Conclusions	Mr. Nguyen The Dong, VEA Mr. Akira Shimizu, Senior Representative, JICA Vietnam Office
I.	Signing of Minutes of Meeting	Mr. Bui Cach Tuyen, Deputy Minister, MONRE Mr. Akira Shimizu, Senior Representative, JICA Vietnam Office
J.	Closing	Mr. Nguyen The Dong, VEA

5. Annex List

Annex IProgram of the JCC MeetingAnnex IIPlan of Operation as of 10th June, 2011

6. Discussions and Summary

6.1. Introduction and presentations

The second JCC meeting was started by opening remarks of Prof. Dr. Bui Cach Tuyen, Deputy Minister of Ministry of Natural Resources and Environment (MONRE), Director General of Vietnam Environment Administration (VEA), and Mr. Akira Shimizu, Senior Representative of JICA Vietnam office. Then, Dr. Nguyen The Dong, Deputy Director General of VEA, introduced the agenda of the meeting.

The presentations about the Inception Report (Ic/R) of the Project were made by Mr. Shigenobu Obayashi, leader – JICA Expert Team (JET), for Outputs 1 and 5, and Mr. Itaru Okuda, Deputy Chief Advisor – JET, for Outputs 2, 3 and 4.

6.2. Discussions

The discussion was chaired by Dr. Nguyen The Dong, Deputy Director General of VEA with the participation of all meeting members. The comments on the Ic/R and project implementation raised by VEA and DONREs in the project area in both written and oral

forms are summarized as follows:

6.2.1. Project Inception Report (Ic/R):

1) General evaluation

Most of the JCC members agreed with the general contents of the Ic/R. The members of the JCC have highly appreciated the efforts of JICA Expert Team (JET) and VEA in (1) working closely with DONREs and units under VEA to develop detailed plans of activities, (2) preparing and submitting the Project to MONRE for official approval in Vietnam, and (3) preparing the draft Ic/R.

- 2) JCC and PMU
 - Roles, functions, operation mechanism and components of JCC and PMU should be explained in detail, such as roles in approving project activities and outputs, expenses for approved project activities, meeting frequencies...etc.
 - Coordinating and supervising mechanisms between PMU, JET and Vietnamese counterparts should be described in the Ic/R, including the interaction between PMU, JET and Vietnamese counterparts, and cooperation among JICA experts, Vietnamese counterparts and local experts.
 - For the JCC member list in the original R/D, representatives from MPI and ICD/MONRE were listed. However, based on experiences of other project implementation, they often do not have much time to participate in project activities. Their absence would not cause any influence to the project implementation because the project activities will be managed by and reported to relevant government organizations. Therefore, after consideration, JCC decided to relieve these officers of the duties of regular JCC members, and to withdraw their names from the JCC member list.
- 3) JICA Experts and Vietnamese counterparts
 - Annual and monthly working schedule/ assignment of JET should be discussed with VEA.
 - Roles of VEA and DONREs in each output and detailed assistance that JICA could provide for each province should be explained.
- 4) Project activities and outputs
 - Project activities which reflect the needs raised by DONREs and units under VEA related to the following fields: (1) policy optimization; (2) survey and evaluating the current organization structures of DONREs and units under VEA; (3) training on capacity enhancement for DONREs staffs and other counterparts; (4) modernization of water environmental monitoring and analyzing equipments, should be clearly described in the Ic/R.
 - The title of Chapter 2 of the Ic/R is "Activities" but this Chapter only described project activities for Outputs 2, 3 and 4, and does not mention about Outputs 1 and 5. Therefore, the title of the chapter should be changed or activities of Output 1 and 5 should be added.

- 5) Local Experts and sub-contractors
 - During the implementation, the project should consult and discuss with VEA and DONREs in selecting the local experts and sub-contractors and follow the regulations of JICA.
- 6) Information sharing among Stakeholders
 - Lessons and outputs of the Project must be shared among counterparts and other stakeholders.

7) Equipment

- In accordance with the Minutes of the First JCC Meeting on November 1st, 2010, JICA will provide Thua Thien Hue DONRE a set of equipment as indicated in the Ic/R. The procurement of these items should be started.
- In response to the request from the Vietnamese side for procurement of additional equipment, JICA responded that JICA would consider, in consultation with MONRE and DONREs, the necessity of equipment, with careful examination in the course of the Project if the procurement of such equipment is critical for the purpose of the Project and is within the limit and constraint of its budget.
- JET should carry out a survey of each DONRE and units under VEA for equipment need, and then report the results to VEA and JICA Vietnam for consideration.

6.2.2 Other issues

1) Project design matrix (PDM)

Some of the Objectively Verifiable Indicators in the Project Design Matrix (PDM) should be revised and/or replaced with more suitable ones so that project participants could easily understand what the Project should achieve within the framework of the Project.

2) Plan of operation (PO)

Most of the JCC members agreed with the revision of the Plan of Operation (PO) proposed by JET (Annex II). The PO in the Ic/R should be replaced with the revised PO. The reason for the revision as well as the fact that the PO was revised at the second JCC meeting on 10th June 2011 should be stated in the Ic/R.

3) Project financial mechanism and project implementation

The project implementing mechanism, financial mechanism and counterpart fund must be explained in project documents or in written instruction by MONRE. These documents should describe who is responsible for the expenses including expense to hire local experts, expense for project office operation...etc.

- 4) Working space
 - The Vietnamese side is facing with difficulty in preparing the working space

for JICA short-term experts. The Vietnamese side asked the Japanese side to share the difficulty with the Vietnamese side and suggested JICA considers allocating some project budget to hire the working space for JET.

6.3. Conclusions

Dr. Nguyen The Dong thanked all participants for their hard work and positive comments during the meeting, and summarized and concluded the meeting as follows:

- JCC agreed with the general contents of the Ic/R. JCC entrusted VEA and JET with the task of finalizing the Ic/R by the end of July 2011 considering the comments raised at the JCC meeting as well as other requirements of both the Vietnamese and the Japanese sides.
- JCC assigned VEA to cooperate with the Japanese side in finalizing the roles, functions, operation mechanism and components of JCC and PMU before the end of July 2011.
- VEA, JET and DONREs are responsible for developing detailed capacity development plans in each province considering the capacity development need of each DONRE, availability of detailed information to design activities, assignment schedule of JET members, and other aspects. These plans should be developed in steps; first set of plans by the middle of September 2011 to cover activities to be carried out in 2011, and the second set of plans by the middle of October 2011 for the activities in 2012.
- Local experts and sub-contractors will be decided by VEA, DONREs and JET by following the regulations of JICA.
- Procurement of equipment for Thua Thien Hue DONRE should be started based on the list of equipment approved at the first JCC meeting on 1st November, 2010. JCC assigned VEA and JET to investigate the needs for additional procurement of equipment for the Project activities, and develop and submit lists of necessary equipment to JCC and JICA for consideration by early September, 2011. Procurement is considered only if the equipment is critical for the purpose of the Project and if it is within the limit and constraint of JICA's budget.
- The revision of the PDM would be discussed in the subsequent JCC meetings.
- JCC officially agreed with the revision of the Plan of Operation (PO) (see Annex II).
- Japanese side and Vietnamese side should discuss further about the JET office.

7.4. M/M signing procedure

The meeting ended with signing procedure of the M/M between the Vietnamese and Japanese sides, represented by Prof. Dr. Bui Cach Tuyen, Deputy Minister of MONRE / Director General of VEA, and Mr. Akira Shimizu, Senior Representative of JICA Vietnam office.

Annex 1: Program of JCC meeting



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PROGRAM FOR THE 2nd JCC MEETING – PROJECT FOR STRENTHENING CAPACITY OF WATER ENVIRONMENTAL MANAGEMENT IN VIETNAM

Content	Person in charge	Time	Note
Registration		13:30-14:00	VEA and JICA
1. Opening remark	Mr. Bui Cach Tuyen Deputy Minister, MONRE	14:00-14:05	1
2. Opening remark	Mr. Akira Shimizu Senior Representative, ЛСА Viet Nam Office	14:05-14:10	
3. Presentation of Inception Report	Mr. Shigenobu Obayashi Project leader Long-term Expert Mr. Itaru Okuda Deputy Chief Advisor Short- term Expert	14:10-14:40	
Comments and discussions		14:40-15:10	All participant
	Break	15:10-15:30	
 Presentation of Project Progress 	Mr. Nguyen Viet Thang Officer, ISD/VEA	15:30-15:40	
6.	Comments and discussions	15:40-16:00	All participants
7. Conclusion	Dr. Nguyen The Dong Deputy Director General, VEA Mr. Akira Shimizu Senior Representative, ЛСА Viet Nam Office	16:00-16:15	
 Signing of Minutes of Meeting 	VEA leader Mr. Akira Shimizu Senior Representative, JICA Viet Nam Office	16:15-16:25	
9. Closing	Dr. Nguyen The Dong Deputy Director General, VEA	16:25-16:30	

June 10th, 2011, Cong Doan Hotel, Hanoi

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Project Name The Project for Siteroghening Capacity of Water Environmental Management in Vietnam Duration of Project: June, 2010 – June, 2013 (3 years)			Lat Year 2nd Year 2nd Year 6 7 2 2 0 10(1) 10(1)	Brd Year
tics) Menoral River - Alexand (Annual Menoral Menoral Menoral Menoral Annual Annual Annual Annual Annual Annual		and the second se		0 + 0 7 1 7 1 1 0 A A A A
roject riaget area , hano, kai Prono, itua interhue, ho chi Mirai, ba ka-Vung rau Tanget Group : Ministry of Natural Resources and Environment : (MONRE) and tanget Departments of	Josh Coordinaung Committee	ng committee		
Natural Resources and Environment (DONREs)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 Monthe		
Output & Activity Contents	Counterpart Personnels in charge	Japanese side input		
Ourpurt. MONRE's capacity of making policy and management tools that are more effective and enforceable is strengthened.				
1.1 Collect basic information on water environmental management policy and tools at notional level, and familyas as well as organize the necessary issues to improve.	CPs of VEA	Long term expert-Local consultant		
1-2 Study issues that target DONREs are faced, regarding implementation of water environmental managementeolicy and bools.	CPs of VEA	Long term expert-Local consultant		
Based on the results of 1-1 and 1-2, review water environmental management policy and look, and 1-3 conduct evolution regarding the deciveress and enforceability of these water environmental policy and CPs of body with focus on policons from industries.	CPs of VEA	Long ferm expert-Local consultant		
1-4 Train staff of MONRE and DONREs on studying, developing, reviewing, and revelop policy and managementations.	GPs of VEA	Long term expert		
1-5 Prepare the draft amendment on water environmental management policy and tools for their moreosented.	CPs of YEA	Long term expert		
kshops for sharing and collecting comments and opinions based on implimenting thru? and Output3.	CPs of VEA	Long term expert		
1-7 Review the draft amendment prepared in 1-5.	CPs of VEA	Long ferm expert		
1-8 Propose the amendment on water environmental management policy and tools.	CP3 of VEA			
Output2. Enforcement capacity of target DONREs on basic water pollution control (environmenta) monitoring, pollution sources inventory, pollution sources (rapection) is strengthened.				
[Determination of activities in each DONRE on the basis of capacity assessment]				
2-1 Conduct capacity assessment of target DCNREs regarding enforcement of basic water pollution control.	CPs of DONRES	Short term expert		
2-2 Select main component(s) from the list below and also select activities under the selected component(s) for each DONRE, and prepare activities plans for each DONRE.	CPs of DONRES	Short term expert		
2:3 Conduct actuaties selected in 2:2 in each DONRE	CPs of DONREs	Japanese expert team		
[Component 1 Monitoring]				
C1:1 Review worker guality monitoring guidelines imprudis	CPs of monitoring division of DONRE	Jopanese expert team		
C1-2 Based on above guidelines/manuals (revised if necessary), preparerimprove a monitoring plan, taking into consideration of regional characters at target DONREs.	CPs of monitoring division of DONRE	Japanese expert team		
CI-3 Implement regular monitoring in accordance with the plan above.	CPs of monitoring division of DONRE	Japanese expert team		
Conduct training on water guality monitoring including guality control for improving reliability of CLL4 monitoring. (nois: champe training contents based on situations of target DCNREs)	CPs of monitoring division of DONRE	Japanese expertitean.		
CI-5 Interpret and evaluate results of monitoring and feedback to the monitoring plan.	CPs of monitoring division of DONRE	Japanese expert team		
[Component 2 inventory]				
02-1 Conduct capacity assessment of target DONREs regarding pollution sources memory	CPs of EPA of DCNRE	Japanese expert team		
C2.2 Review and modifyeds ing wentory formats based on the current conditions of target DONREs.	CPs of EPA of DONRE	mean hear example		
C2-3 Conduct inventory survey with the revised inventory formats	CPs of EPA of DONRE	Lapanese expert team		
C2-4 Organize collected information on main pollution sources.	CPs of EPA of DONRE	urabauese expert team		
C2.5 Regularly conduct intention surreveal addinged to information on main politition sources	CDe of EDA of DONDE	lacanae a amart team		

2	[Component 3 Inspection]				
37	Conduct capacity assessment of target DONREs regarding inspection for water pollution control.	CPs of DONREs	Japanese expertisam		
C32	Review existing guidelines on inspection.	CPs of DONREs	Japanese expertisam		
Cire	Prepare the inspection plan, based on the above guidelines (revised if necessary) and results of inventory survey.	CPs of inspection division	Japanese expertieam		
CSF	Conduct training on more effective inspection.	CPs of inspection division (Environmental police, monitoring division)	Japanese expert team		
C3.5	Clarify criteria for taking administrative guidance and orders in accordance with the inspection results.	CPs of DONREs	Japanese expertieam		-
C3.6	Conduct inspection tased on activities C3-1 to C3-5	CPs of inspection division (Environmental police, monitoring division)	uspanese expertieam		1
C3-7	Issue improvement order or administrative guidance based on activity C3-6 by larget DCNREs.	CPs of DONREs	Jopanese expert team		
Output3, Targ strengthened.	Outputs. Target DONRE's capacity of making effective water pollution control measures is strengthened.				The Party of the
3		CPs of DONRE of Hanoi	Japanese expertisam		
32	Select the target province(s) where the activities 3-3 and 3-4 would be conducted after reviewing the feasibility of application of the draft amendment prepared in 1-5.	CPs of DONRE of Hanoi	Japanese expert learn		
88	Specify the target regions and/or industries for application of the effective water pollution control measures.	CPs of DONRE of Hanoi	Japanese expertisam		
34	Draft an outline for effective water pollution control measures.	CPs of DONRE of Hanoi	Japanese expertieam		
vironme	Outpuck.Target DONRE's capacity of promoting awareness of public and industrial sectors on water environment is greengthened.				
4-1	Review the current system and situation of environmental avareness activities at larget provinces.	CPs of DONREs	Japanese expert team		
4.2	Make awareness raising plans for water environment to be conducted by larget DONREs.	CPs of DONREs	under expert that in the second se		
43	Conduct awareness raising activities in accordance with the plan set at 4-2.	CPs of DONREs	Japanese expert team		
4.4	Review and improve awareness raising activities based on the result of 4-3.	CPs of DONREs	Japanese expertieam		
Output5. Cap: strengthened.	Outputs. Capacity of MONRE and DONREs on information management and utilization is strengthened.				
5	Review the current situation of information collection and management regarding water environment and organize issues for improvement	CP a of MONRE	-ong term expert-Local sonsultant		
53	Prioritize information necessary for MONRE and DONREs to come up with administrative measures and their implementation.	CPs of MONRE and DONRE	Lang term experts hort term expert		
53		CPs of MONRE	Long term expert.		
t.	Conduct trials to collect information from target DONREs by use of the ways and means developed in 5-3, and utilize information at MONRE.	OPs of MONRE and DONRE	(Long term expert)		
55	Conduct workshops to share the results of 5-4.	CPs of MONRE and DONRE	(Long term expert)		
44	Prepare a proposal of actual application of the ways and means at MONRE	CPa of MONRE	ri cini fami axiari		

MINUTES OF MEETING

ON

THE JOINT COORDINATING COMMITTEE

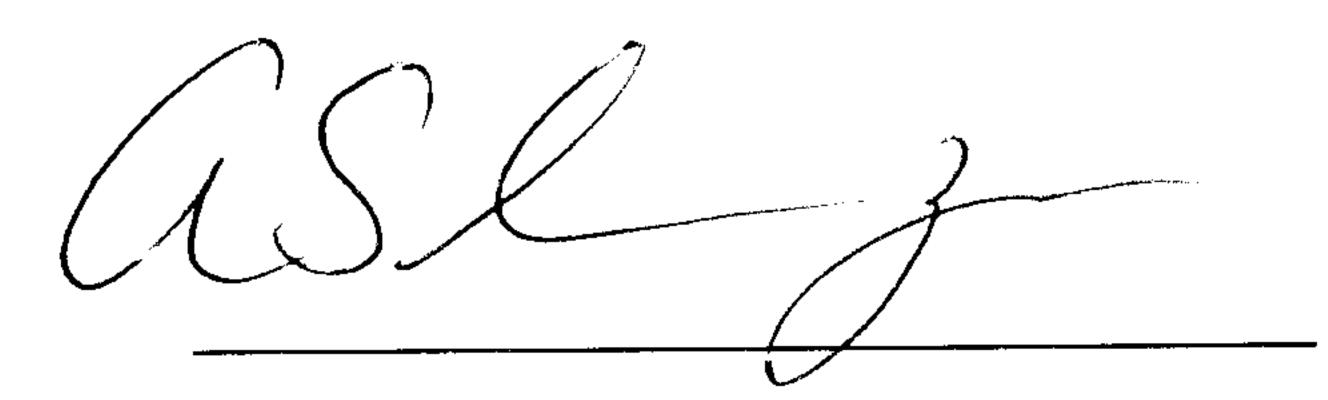
FOR

THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVIRONMENTAL MANAGEMETN IN VIET NAM

In line with the Record of Discussions (hereinafter referred to as "R/D") signed between the Government of the Socialist Republic of Viet Nam (hereinafter referred to as "the Government of Viet Nam") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on January 8th, 2010, the Vietnamese side and the Japanese side held the third Joint Coordinating Committee (hereinafter referred to as "JCC") meeting in Hanoi on December 22nd, 2011.

In the course of the meeting, both Vietnamese side and Japanese side discussed the progress and issues of the Project as attached hereto.

Hanoi, December 22nd, 2011



Mr. Shimizu Akira Senior Representative JICA Vietnam Office

Dr. Nguyen The Dong Deputy Director General of Viet Nam Environment Administration Ministry of Natural Resources and Environment

MINUTES OF MEETING

THE THIRD MEETING OF THE JOINT COORDINATING COMMITTEE FOR THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVRIONMENTAL MANAGEMETNT IN VIETNAM



To confirm the result of the 1st PMB meeting held on 25th November 2011

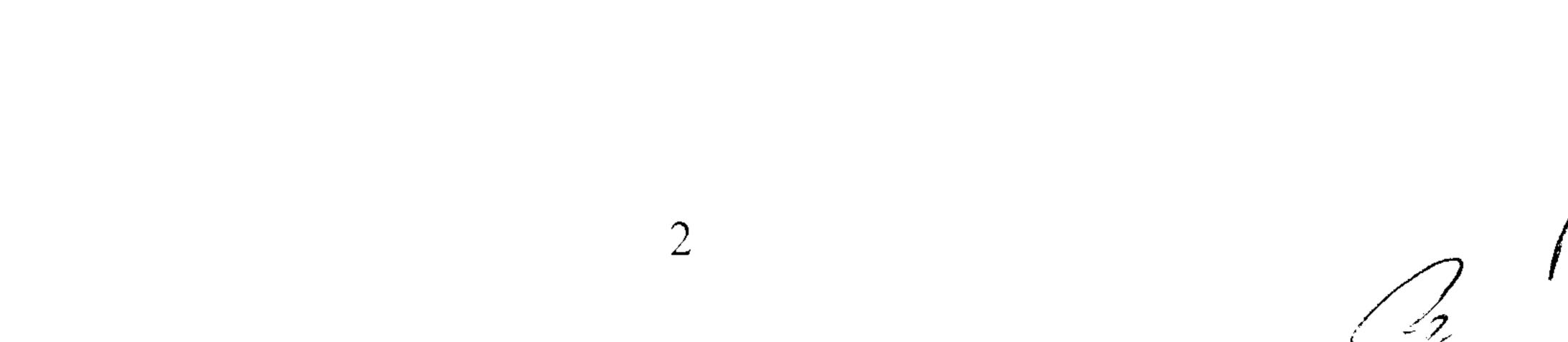
To confirm the result of the mid-term review

To discuss the activity plans for 2012

2. Date and Venue

Date: Thursday, 22nd December 2011 Time: 14:00-16:10

Venue: Bao Son Hotel, Hanoi, Vietnam



3. Participants

L. 7 7 17	JCC members	•	
I. I. V I 1	etnam side		Donuty Director Conoral of VEA
	Dr. Nguyen The Dong		Deputy Director General of VEA
$\frac{2}{2}$	Mr Hoang Danh Son	ISD VEA	Director of ISD, VEA
3	Mr. Nguyen Viet Thang	ISD, VEA	Officer
_4	Mr. Nguyen Huu Quyet	TT-Hue DONRE	Deputy Director
<u>)</u>	Mr Le Van Sam	BRVT DONRE	Director
. 2. JI	CA side		
/	Mr. Shigenobu Obayashi	JICA Expert Team	Leader
8	Ms. Saori Ushimi	JICA Expert Team	Project Coordinator
9	Mr. Yoichi Iwai	JICA Expert Team	Chief Advisor
10	Mr. Akira Shimizu	JICA Vietnam Office	Senior Representative
.	Participants		
<u>I.1. V</u>	'ietnam side	<u></u>	
11	Mr. Duong Xuan Diep	ISEM/VEA	Officer
12	Mr. Chu Ngoc Kien	ISD/ VEA	Officer
13	Mr. Vu The Hung	DEAIA/ VEA	Officer
14	Mr. Nguyen Trung Thuan	PCD/ VEA	Officer
15	Ms. Tran Thi Thu Huong	ID/MONRE	Officer
16	Mr. Nguyen Viet Hung	Thua Thien Hue EPA	Director
17	Mr. Le Tan Cuong	Ba Ria Vung Tau EPA	Director
18	Ms. Dao Thi Anh Diep	Hanoi EPA	Deputy Director
19	Ms Le Thi Kim Oanh	Inspection Division/HCMC DONRE	Deputy Chief Inspector
20	Ms. Le Thi Thanh Dung	Environmental Management Division/ HCMC DONRE	Officer
21	Ms. Nguyen Thi Tuyet Lan	CEM - Hai Phong DONRE	Director
22	Ms. Le Thi Thanh Huong	VEA Office	Officer
23	Ms. Le Thi Hoa	GHG Project	Officer
24	Mr. Pham Minh Tien	GHG Project	Officer
I.2. J	ICA officers and experts		
25	Mr. Tadashi Suzuki	JICA Vietnam office	Representative
26	Mr. Nguyen Vu Tiep	JICA Vietnam office	Program officer
27	Ms. Ruri Hidano	JICA Headquarter	Officer/ Mid-term review team member
28	Mr. Senro Imai	JICA	Advisory Committee member/ Mid-term review team leader
29	Mr. Koji Nishimiya	JICA	Advisory Committee member/ Mid-term review team member
30	Ms. Rie Fusamae	FASID	Consultant/Mid-term review member
31	Mr. Hiroshi Tsujihara	JICA Policy Advisor	MONRE
32	Mr. Yoshiharu Shirane	JICA Expert Team	Member
33	Mr. Tomoyuki Hosono	JICA Expert Team	Member
34	Mr. Tadashi Shoji	JICA Expert Team	Member
35	Mr. Shunsuke Hieda	JICA Expert Team	Member
36	Mr. Hiroshi Nakano	JICA Expert Team	Member
<u>37</u>	Ms. Dinh Thu Binh	JICA Expert Team	Secretary
38	Ms. Nguyen Thanh Lan	JICA Expert Team	Staff
39	Mr. Vu Dinh Thai	JICA Expert Team	Staff

- **CEID:** Centre for Environmental Information and Data
- **CEM:** Centre for Environmental Monitoring
- **CETAC:** Center for Environment Training and Communication
- **DEAIA:** Department of Environmental Appraisal and Impact Assessment

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DONRE:	Department of Natural Resources and Environment
DWMEP:	Department of Waste Management and Environment Promotion
DWRM:	Department of Water Resources Management
EPA:	Environmental Protection Agency
FASID:	Foundation for Advanced Studies on International Development
GHG:	Green House Gas
ID:	Inspection Department
ICD:	International Cooperation Department
ISD:	International Cooperation and Science, Technology Department
ISEM:	Institute of Science for Environmental Management
PCD:	Pollution Control Department
MONRE:	Ministry of Natural Resources and Environment
VEA:	Vietnam Environment Administration

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4. **Program**:

No.	Time	Item	Presentation
1	14:00 - 14:05	Introduction of Participants	Mr. Nguyen Viet Thang, VEA
2	14:05 - 14:10	Opening Remarks	Dr. Nguyen The Dong, Deputy Director General, VEA
3	14:10 - 14:20	Opening Speech	Mr. Akira Shimizu, Senior Representative, JICA Vietnam Office
4	14:20 - 14:40	Results of the 1 st PMB Meeting	Dr. Nguyen The Dong, Deputy Director General, VEA
5	14:40 - 15:00	Results of the Mid- term Review	Mr. Senro Imai, (Advisory Committee/ JICA Mid-term Review Team Leader)
6	15:00 - 15:20	Activity Plans for 2012	 Mr. Shigenobu Obayashi, Leader of JICA Expert Team Mr. Yoichi Iwai, Chief Advisor, Short-term Expert Team
7	15:30 - 16:00	Questions and Discussions	All participants
8	16:00 - 16:10	Closing	Dr. Nguyen The Dong, Deputy Director General, VEA

5. Discussions and Summary

5.1. Introduction and Presentations

The third JCC meeting was started by opening remarks of Dr. Nguyen The Dong, Deputy Director General, VEA and Mr. Akira Shimizu, Senior Representative of JICA Vietnam office. At first, Dr. Nguyen The Dong presented the result of the 1st PMB meeting held on 25th November 2011. Secondly, Mr. Senro Imai presented the result of the Mid-term Review. Finally the activity plans for 2012 were presented by Mr. Shigenobu Obayashi, Leader of the JICA Expert Team (JET), for Outputs 1 and 5, and Mr. Yoichi Iwai, Chief Advisor of JET, for Outputs 2, 3, and 4.

5.2. Discussions

The discussion was chaired by Dr. Nguyen The Dong with the participation of all meeting members. The comments on the 1st Progress Report (Pr/R) and the project implementation raised by VEA and DONREs in both written and oral forms are summarized as follows:

5.2.1. The 1st Progress Report (Pr/R):

Since the 1st PMB was already held on 25th November 2011 to discuss contents of the 1st Pr/R, there were no particular comments for the Pr/R in JCC. Therefore, the information and contents of the 1st Pr/R were agreed by both Vietnamese side and Japanese side. The members of JCC have highly appreciated the efforts of JET and VEA in working closely with DONREs and units under VEA for the preparation of Pr/R and active contribution to PMB.

5.2.2. The result of the Mid-term Review:

The result of the Mid-term Review was presented by Mr. Senro Imai, JICA Mid-term Review Team Leader, and the JCC members approved the result of the review. Mr. Imai expressed his

sincere gratitude to all DONREs and the relevant departments in MONRE who cooperated with the Review team for smooth implementation.

For the final evaluation, both Vietnamese and Japanese side agreed to make the sufficient preparation in advance for the joint evaluation of the Project.

5.2.3. Activity plans for 2012:

The activity plans for 2012 have been explained by Mr. Shigenobu Obayashi and Mr. Yoichi lwai.

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5.2.4. Other Issues

(1) National Target Program (NTP) on Environmental Pollution Control Dr. Nguyen The Dong asked for support of the Project and the Japanese side for NTP as follows:

a) The Vietnamese National Assembly has just approved NTP on environmental pollution control facing difficulties of water environmental pollution in Vietnam. The approval of this NTP confirms the concern of Vietnamese Government on water environment issues. The main targets of NTP include:

- Urban wastewater treatment for all cities from grade 2,
- Wastewater treatment in Cau river basin, Nhue Day river basin, and Sai Gon-Dong Nai river basin,
- Pollution treatment for 5 craft villages in Vietnam, and
- Pollution control for 100 residual pollution points from the past including 50 70 points for solid wastes.

b) In order to implement this NTP, the Vietnamese Government needs supports of international donors in many aspects such as budget (NTP needs 10,000 billion VND in the 1st three years of the Program), technology, etc. Therefore, the Vietnamese side would like to request the Project to assist NTP.

Mr. Akira Shimizu, Senior Representative of JICA Vietnam Office, answered that the Japanese side could not express immediate answer in this meeting since this Project has already started since 2009 with its own goal, and NTP was not focused at that time. This issue could be further discussed between VEA and JICA (JICA MONRE advisor) if necessary.

(2) Revision of Law of Environmental Protection (LEP) Dr. Nguyen The Dong commented on the Output 1 as follows:

- The Vietnam National Assembly approved the revision of LEP including wastewater treatment and water environment protection. The Vietnamese side would like to request JET to support the LEP revision under scope of Output 1. The action plan of Output 1 should focus on revising water environment related to the contents in LEP. It is suggested that JICA consider to send more JICA experts on environmental law/regulation making to support the project activities which related to LEP revision (for example, organizing workshops/seminar to share Japanese experiences on environmental law making and discuss about LEP revision). Also, the Project should consider the way to integrate and utilize the results of Output 3 for Output 1.

Mr. Akira Shimizu replied as follows:

- Mr. Shigenobu Obayashi and the relevant departments in MONRE has been working together to review the contents of LEP and found out some overlapping and conflicting points. When final review is done, JET will provide its feedback to VEA. However, the

revision of LEP should be handled by the Vietnamese side. JICA will re-consider the efficient way to achieve the purpose of this Output.

(3) Request from DONREs

The participants of concerned DONREs highly appreciated the supports of the Project, and commented as follows:

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- Ms. Nguyen Thi Tuyet Lan, Hai Phong DONRE, requested JET to prepare detailed action plan of Hai Phong city in 2012 soon, especially for the 1st quarter of 2012.
- Mr. Dao Thi Anh Diep, Hanoi DONRE, committed to arrange time and staff to participate in all project activities in the next year.
- Mr. Nguyen Viet Hung, TT-Hue DONRE, commented that VEA should issue the documents guiding DONRE to prepare the project activity plan in 2012 and to allocate counterpart fund, and he requested to change description from "revision of monitoring plan" to "supplementation and finalization of monitoring plan" related to the plan for Output 2-4, because the monitoring plan in 2012 has already approved and it cannot be revised anymore. He also commented that the capacity on environmental check should be focused on the Project as well as inspection.
- Mr. Le Tan Cuong, BRVT DONRE, requested a clear instruction on the Project implementation by MONRE because the Project has just been approved.
- Dr. Nguyen The Dong replied DONRE's comments as follows: + As JET's presentation, the monitoring plan revision of TT-Hue DONRE should be for 2013, not for 2012.
 - + For counterpart fund and project activities: The M/M of this JCC meeting will be signed by both sides and sent to all relevant DONREs and Agencies. And, Vietnamese side would like JICA to inform the total project budget in each province so that DONREs can base to allocate theirs counterpart fund.
- Mr. Nguyen Viet Thang, ISD, VEA supplemented that base on JET's plan and needs of each DONRE, each DONRE should prepare and submit the annual allocation budget plan (counterpart fund) to PPC.

(4) Additional Equipment

Mr. Akira Shimizu explained the situation of additional equipment under the Project as follows:

- At first, JICA allocated a budget for equipment only for TT-Hue DONRE. However, considering the Vietnamese request on additional equipment and the project purpose, JICA accepted to provide the additional budget within FY2011 for necessary equipment in other DONREs to achieve the project purpose. Its procurement procedures are going on. In order to complete the procedure, the Vietnamese side is kindly requested to prepare the A4 form and send it to JICA.
 - Considering the remaining Project period and the budget constraint, JICA cannot further support on equipment and would like to request the Project to focus on the activities for the capacity development of Vietnamese side utilizing the provided equipment and maximizing its effects.

(5) Revision of Verifiable Indicators of PDM

Mr. Shigenobu Obayashi proposed to discuss a revision of PDM further with VEA and DONREs after the 3rd JCC meeting.

5.3. Conclusions

Thanking with sincere discussions by participants, Dr. Nguyen The Dong summarized and concluded the 3rd JCC meeting as follows:

- JCC officially approved the contents of the 1st Pr/R,
- JCC approved the result of the mid-term review,
- Both Vietnamese and Japanese side agreed to make the sufficient preparation in advance for the final joint evaluation of the Project,

- JCC agreed with the general contents of the activity plans in 2012 and requested JET and VEA to finalize the detail working plan

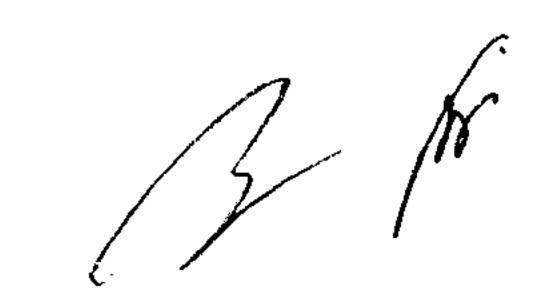
- The revision of PDM will be discussed after the JCC meeting,
- VEA agreed to conduct necessary procedures for the budget distribution to the target DONRES,

- Activities of the Project in 2012 are crucial. Therefore, VEA, DONRES, and JET should cooperate closely in developing the work plan of 2012,

- Conclusions of the 3rd JCC meeting should be informed to all DONREs as the feedback from the JCC members, and

- The Vietnamese side requested the Japanese side to integrate the revision of LEP in the results of Output 1 in the 1st PMB meeting. The Vietnamese side requests the Japanese side again to keep considering and finding some proper ways to support on this matter.

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MINUTES OF MEETING ON THE JOINT COORDINATING COMMITTEE FOR THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVIRONMENTAL MANAGEMETN IN VIET NAM

In line with the Record of Discussions (hereinafter referred to as "R/D") signed between the Government of the Socialist Republic of Viet Nam (hereinafter referred to as "the Government of Viet Nam") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on 8th January, 2010, the Vietnamese side and the Japanese side held the fourth Joint Coordinating Committee (hereinafter referred to as "JCC") meeting in Vung Tau on 29th June, 2012.

In the course of the meeting, both Vietnamese side and Japanese side discussed progress of the Project as attached hereto.

Vung Tau, 29th June, 2012

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Mr. Fumihiko OKIURA Senior Representative JICA Vietnam Office

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Dr. Nguyen The Dong Deputy Director General of Viet Nam Environment Administration Ministry of Natural Resources and Environment

MINUTES OF MEETING

THE FOURTH MEETING OF THE JOINT COORDINATING COMMITTEE FOR THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVRIONMENTAL MANAGEMETNT IN VIETNAM

1. Objective

To evaluate the achievements of 2011-2012's activities To approve the activities in the next term (May, 2012 – May, 2013) To adjust and approve the revised PDM To approve the Progress Report No.2 **2. Date and Venue** Date: Friday, 29th June 2012 Time: 13:30-17:10 Venue: Intourco Hotel, Vung Tau, Vietnam

3. Participants

l.	Participants		
No.	Name	Organization	Current Position
I.	JCC members		
	etnam side		
1	Dr. Nguyen The Dong	VEA	Deputy Director General of VEA
2	Mr Hoang Danh Son	ISD/VEA	Director of ISD, VEA
3	Mr. Nguyen Minh Cuong	ISD/ VEA	Deputy Director of ISD, VEA
4	Mr. Pham Quoc Ka	Haiphong DONRE	Deputy Director
5	Mr Le Van Sam	BRVT DONRE	Director
I.2. JI	CA side	and the second s	
7	Mr. Fumihiko Okiura	JICA Vietnam Office	Senior Representative
8	Mr. Shigenobu Obayashi	JICA Expert Team	Leader
9	Ms. Saori Ushimi	JICA Expert Team	Project Coordinator
10	Mr. Itaru Okuda	JICA Expert Team	Deputy Chief Advisor
II.	Participants		
II.1. V	ietnam side		
11	Mr. Nguyen Viet Thang	ISD/VEA	Officer
12	Mr. Do Nam Thang	ISEM/VEA	Director
13	Mr. Nguyen Hai Yen	ISEM/ VEA	Officer
14	Mr. Nghiem Viet Hai	DEAIA/ VEA	Officer
15	Ms. Tran Thi Thu Hien	DWMEP/ VEA	Officer
16	Ms. Luong Duy Hanh	ID/VEA	Chief Inspector
17	Mr. Pham Hong Son	ID/VEA	Deputy Chief Inspector
18	Mr. Le Duc Manh	CEM/VEA	Director
19	Mr, Nguyen Quoc Khanh	CEID/VEA	Director
20	Ms. Vu Thi Thu Thuy	CEID/VEA	Officier
21	Ms. Nguyen Thanh Thao	DWRRM/MONRE	Officier
22	Mr. Nguyen Phung	DWRM/Hue DONRE	Director
23	Mr. Nguyen Viet Hung	Hue EPA	Director
24	Ms. Nguyen Thi Tuyet Lan	CEM - Hai Phong DONRE	Director
25	Mr. Ta Ngoc Son	Hanoi DONRE	Officer
26	Mr Nguyen Trong Truong	Hanoi DONRE	Officer
27	Mr. Le Tan Cuong	BRVT EPA	Director
28	Mr Tran Anh Duc	PCD/BRVT EPA	Head
29	Mr. Luong Hung Phi	PCD/BRVT EPA	Officer
30	Mr. Nguyen Xuan Son	CEM/BRVT DONRE	Officer
31	Ms. Nguyen Thi Luyen	DWRM/BRVT DONRE	Officer
	ICA officers and experts		L. S. MARTIN
32	Mr. Tadashi Suzuki	JICA Vietnam office	Representative
33	Mr. Nguyen Vu Tiep	JICA Vietnam office	Program officer
34	Mr. Yoshiki Yamamoto	JICA Expert Team	Member
35	Mr. Shinsuke Sato	JICA Expert Team	Member
36	Ms. Tomoe Takeda	JICA Expert Team	Member
37	Mr. Chu Ngoc Kien	JICA Expert Team	Staff
38	Ms. Dinh Thu Binh	JICA Expert Team	Staff
39	Ms. Dang Dinh Giang	JICA Expert Team	Staff
40	Ms. Nguyen Thanh Lan	JICA Expert Team	Staff
40	Mr. Vu Dinh Thai		
41		JICA Expert Team	Staff

Centre for Environmental Information and Data
Centre for Environmental Monitoring
Department of Environmental Appraisal and Impact Assessment
Department of Natural Resources and Environment
Department of Waste Management and Environment Promotion
Department of Water Resources Management
Environmental Protection Agency
Inspection Department

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ISD:	International Cooperation and Science, Technology Department
ISEM:	Institute of Science for Environmental Management
PCD:	Pollution Control Department
MONRE:	Ministry of Natural Resources and Environment
VEA:	Vietnam Environment Administration

4. Program:

Time	Content	Person in charge	Note
13:00-13:30	Registration	ā	VEA and JET
13:30-13:35	Introduction	Mr. Nguyen Viet Thang	
13:35-13:40	Opening remark	Mr. Nguyen The Dong, Deputy Director General of VEA	Introduction by VEA
13:40-13:45	Opening remark	Mr. Okiura Fumihiko, Senior Representative, JICA VN Office	ditto
13:45-14:15	Achievement of 2011-2012's activities and Activity Plans for 2012-2013	MONRE's component by Mr. Shigenobu Obayashi (Project Leader, Long-term Expert); DONRE's component by Mr. Itaru Okuda (Deputy Chief Advisor, Short-term Expert);	ditto
14:15-14:45	Questions and discussions	All participants	ditto
14:45-15:00	Coffee Break		
15:00-15:20	Revision of PDM and PO	MONRE's component by Mr. Shigenobu Obayashi (Project Leader, Long-term Expert); DONRE's component by Mr. Itaru Okuda (Deputy Chief Advisor, Short-term Expert)	ditto
15:20-15:50	Discussion	All participants	
15:50-16:10	Progress Report II (Comments and Response)	MONRE's component by Mr. Shigenobu Obayashi (Project Leader, Long-term Expert); DONRE's component by Mr. Itaru Okuda (Deputy Chief Advisor, Short-term Expert);	ditto
16:10-16:30	Discussion	All participants	
16:30-17:00	Other Issues	 Project management issues: Project office; Project budget; Equipment procurement By JICA Office DONRE's Components: Training courses in Japan Terminal evaluation plan By Mr. Itaru Okuda, (Deputy Chief Advisor, Short term Freed) 	ditto
17:00-17:10	Conclusion and Closing	Short-term Expert) Mr. Nguyen The Dong, Deputy Director General of VEA	ditto

5. Discussions and Summary

5.1. Introduction and Presentations

Mr. Nguyen Viet Thang, officer of Department of International Cooperation and Science, Technology (ISD/ VEA) introduced the meeting participants and briefed the members on the meeting agenda. The opening remark was delivered by Dr. Nguyen The Dong, Deputy Director General of Vietnam Environment Administration (VEA) on behalf of Dr. Bui Cach Tuyen, Deputy Minister of MONRE and Director General of VEA, and also by MR. Fumihiko Okiura, Senior Representative of JICA Vietnam Office.

Presentations on three main topics including (1) the achievements of 2011-2012's activities and Activity Plans for 2012-2013, (2) the revised PDM and PO, and (3) JET's responses to DONRE's comments on Progress Report No.2, were introduced by Mr. Shigenobu Obayashi, Leader, Long-term expert team (LET) with respect to Outputs 1 & 5 and Dr. Itaru Okuda, Deputy Chief Advisor, Short-term expert team (SET) with respect to Outputs 2, 3 and 4. Dr. Okuda also explained the training courses in Japan and the plan for termination evaluation.

5.2. Discussions

After each presentation, discussions were carried out under the chairmanship of Dr. Nguyen The Dong, Deputy Director General of VEA. The JCC members also discussed the project management issues including office, budget, and equipment procurement. The main contents of discussions are summarized below.

5.2.1. Activities of Outputs:

JCC confirmed the progress of the activities, and agreed in general with the plan of activities in 2012- 2013. The comments about project activities are presented bellows:

1) Output 1/ Policy:

- The results of Output 1 are drafts of revised policies and regulations. JICA recommended that the results should be built into policy making processes of the Vietnamese Government and legalized somehow.
- VEA replied that policy making process has to follow the procedure of Vietnam. And, the results of Output 1 will be very important materials for revising water environmental policies/regulations and Law of Environmental Protection 2005.

2) Output 2:

- BRVT DONRE would like the Project to support monitoring in Da Den reservoir, Ray River and Quang Trung reservoir (Con Dao island) because these are important sources of domestic water for the whole province. Also, BRVT DONRE wants the pollution source map to be developed and DONRE's staff to be trained so that they become capable of extracting data in PSI.
- Japanese side replied that the target area has already been agreed with BRVT DONRE during the course of the Project. With the limited resources and time, project cannot cover all water areas in the province. Instead, the working group is focusing on one water area and JET trains DONRE's staff to develop, implement and evaluate a monitoring plan. For inventory, the pollution sources map has been prepared and is being updated.
- Law on Inspection and Law on Administrative Sanction have been approved recently. Besides, existing regulations related to inspection activities, in particular Decree No.117/2009/ND-CP, are being revised with respect to administrative sanction, competent authority to decide sanction and information disclosure. The Project shall pay attention to these laws/ policies when implementing inspection activities and support to the revisions of these policies, if possible. (Commented by Mr. Hanh, Chief Inspector's

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3) Output 3 and Output 4:

- According to the activity plan of Outputs 3 and 4, some enterprises with good environmental performance will be selected and awarded based on the results of the site surveys. It would be more meaningful if the enterprises are awarded by Hanoi PPC or Hanoi DONRE rather than by a JICA project. Hanoi DONRE should discuss with JICA experts again about the appropriateness of this activity. However, in Vietnam, awarding for enterprises usually follows some specific regulations; therefore, it should need to be carefully considered first. At any rate, this is also a capacity development project. So, it is necessary to focus on technical aspect (skill and knowledge), and not on organizing events.
- The activities of Output 4 shall be made more active in the second year.

4) Output 5:

- Output 5 is behind the planned schedule. In order to achieve the expected results by the end of the Project, smooth cooperation among VEA units and DONREs is crucial.

5) Necessity to prioritize activities:

Mr. Okiura Fumihiko, Senior Representative of JICA Vietnam Office emphasized that this
is a technical assistant project, and JICA contributes to technical aspects of capacity
development. The Project has limited budget, and it is impossible to respond to all the
requests. Hence, the Vietnamese side should carefully prioritize and select the activities
where Japanese experiences can be utilized in the most effective and efficient ways.
Sustainability of outputs/ activities is also an important aspect to take into consideration.

5.2.2. Revision of PDM and PO:

- In principle, JCC agreed with the contents of PDM and the PO. For the final version, JCC requests ISD and JET to finalize the revision in consultation with JICA. Should the counterpart organizations have further comments, they shall send them in writing. Upon finalization PMB will report the results to MONRE to confirm the revision.
- Mr. Okiura Fumihiko, Senior Representative of JICA Vietnam Office emphasized that the PDM & PO should be considered within the budget constrain. This is a technical assistant project, JICA contributes on technical side.

5.2.3. Feedbacks on Comments on Progress Report No.2:

JCC agreed with the JET's responses to comments by DONREs and units under MONRE about Progress Report No.2. Considering the limited time and resources, the Project should focus on producing good Progress Report No.3 rather than spending more time and resources to revise the Progress Report No.2.

5.2.4. Terminal Evaluation:

JCC agreed with the plan of terminal evaluation in principle. Details should be discussed further by PMB members in consultation with JICA in the future.

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5.2.5. Project Management Issues:

1) Offices for JET:

JICA requested the Vietnamese side to clarify its plan to provide offices for JET until the end of the Project and also informed the current office for SET will be terminated since 1st October, 2012. It was confirmed that MONRE continues to provide the office for LET. With respect to SET's office, the JCC assigned Hanoi DONRE to be responsible for providing its main office in Hanoi, and requested HNI DONRE to resolve this problem. For the office in HCMC, the JCC assigned the responsibility to HCMC DONRE.

2) Counterpart Fund:

- JICA pointed out the importance of resolving the issue of the counterpart fund. As discussed at the second PMB in the morning of the same day, relevant organizations should submit comments on the draft regulation on operation and organization of PMB by 10th July, and make counterpart fund available for project activities.

3) Equipment Procurement:

 A4 form is necessary for tax exemption of equipment procurement. Because A4 form has not been issued, the equipment procurement for BRVT DONRE has been suspended and training in BRVT DONRE is behind the schedule. ISD/ VEA promised to obtain the A4 form before 10th July 2012.

5.3. Conclusions

Dr. Nguyen The Dong summarized and concluded the fourth JCC meeting as follows:

- JCC highly appreciates the efforts of JET and Vietnamese counterparts in overcoming difficulties to achieve practical results, and in ensuring that the Project achieves the required progresses.
- JCC agrees with the activity plans to the end of Project.
- JCC agrees with the proposed revision of the PDM and the PO in principle. JCC requests to finalize PDM and PO The finalized version will be reported to MONRE.
- For Output 2, indicators of pollution source map should be clarified. Techniques of monitoring, sampling and chemical analysis, which are being transferred to staff of each DONRE within the scope of the Project, should be documented as "guideline set" so that the staff can check or take reference after the Project.
- Intensive training of DONREs' staff is very necessary. For example, a GIS training course shall be provided, and each DONRE shall send some staff to attend the course. After the course, those who attended the training course shall receive some certificates by JICA experts, if it is appropriate.
- Output 3 shall be pushed further so that its results can be shared and learned by other DONREs.
- Output 4 is clear enough and shall be continued vigorously.
- Output 5 is behind the schedule and shall be facilitated further to achieve concrete results.
- JCC agrees with JET's responses to comments on Progress Report No.2. There is no need to revise and reprint the report. The Project shall focus on producing good Progress Report No.3 considering the comments on Progress Report No.2.
- For the comments and difficulties raised by DONREs, JCC will discuss with JICA to work out the solutions, which should be in line with the Record of Discussions signed by both sides on 8th January 2010.
- A4 form shall be obtained before 10th July 2012.
- The offices for JET shall be discussed and be decided with DONREs before 10th July

2012.

Mr. Okiura Fumihiko also summarized and concluded as follows:

- The project has its limited budget; therefore, in the scope of this project, it is impossible to response to all requests, so the Vietnamese side should select the activities to implement that Japanese experience can be utilized in the most effective and efficient way. The sustainability of outputs/ activities shall also be concerned.

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MINUTES OF MEETING

ON

THE JOINT COORDINATING COMMITTEE

FOR

THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVIRONMENTAL MANAGEMETN IN VIET NAM

In line with the Record of Discussions (hereinafter referred to as "R/D") signed between the Government of the Socialist Republic of Viet Nam (hereinafter referred to as "the Government of Viet Nam") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on January 8th, 2010, the Vietnamese side and the Japanese side held the fifth Joint Coordinating Committee (hereinafter referred to as "JCC") meeting in Hanoi on March 20th, 2013

In the course of the meeting, both Vietnamese side and Japanese side discussed the progress and issues of the Project as attached hereto.

Hanoi, March 20th, 2013

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Mr. Fumihiko Okiura

Senior Representative JICA Vietnam Office

Dr. Nguyen The Dong

Deputy Director General of Viet Nam Environment Administration, Ministry of Natural Resources and Environment

witnessed by

Mr. Hideo Noda

Director of Environmental Management Division I, Global Environment Department, JICA

MINUTES OF MEETING

THE FIFTH MEETING OF THE JOINT COORDINATING COMMITTEE

FOR THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVRIONMENTAL MANAGEMETNT IN VIETNAM

1. Objective and Agenda

- 1) Confirmation of the current initiatives and achievements, and further activities of the Project
- 2) Confirmation on the results of the Terminal Evaluation
- 3) Discussion of planned activities by the end of the project

2. Date, Venue and Participant

Date: Wednesday, 20th March, 2013

Time: 13:30 – 17:30

Venue: Crowne Plaza, 36 Le Duc Tho, My Dinh, Tu Lien, Hanoi

Participant: Attached as Annex I

3. Discussion Summary

- 1) Dr. Nguyen The Dong, made an opening remark mentioning the 3R Asia Pacific forum, successfully held in Hanoi this week. Appreciation was extended to all the Project members who have been working hard for almost three years, contributing to achieve the Project purpose. Mentioning about the Joint terminal evaluation, he emphasized that JCC needs to confirm the progress and achievement responding the recommendation made by the Joint mid-term review in 2011.
- 2) Mr. Hideo Noda, as a Team leader of Joint terminal evaluation, expressed his sincere thanks to Project members for their strong support to evaluation activities. He explained that the team found the prospects for achieving Project purpose is high, and would like to confirm the remaining activities through this JCC.
- 3) Mr. Nguyen Minh Cuong made a presentation summarizing the progress and achievements, explaining five outputs made by the Project activities in MONRE and five DONREs. Recommendations were also made for each output.
- 4) The result of the Joint Terminal Evaluation was presented by Mr. Hideo Noda concluding that the almost all activities have been conducted at the time of evaluation,

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and that the Project purpose and five outputs are likely to be achieved by the end of the Project. Evaluation result according to five evaluation criteria was presented and recommendations and lesson learnt were given to encourage Project members for the sustainability and further expansion of the Project outcome. JCC members approved the result of the evaluation as shown in Annex II.

- 5) JCC confirmed that the activities remaining until the end of the Project are to;
 - discuss on the way to implement "Actions" and "Way Forward" presented at the Workshop in Hue on 14th March 2013,
 - review project activities, conduct follow-up activities if needed, and draw lessons learnt for future activities,
 - finalize Project Completion Report,
 - finalize other deliverables (handbooks, guidelines, outlines) and make them available through VEA, if appropriate,
 - and prepare for the final seminar which will take place in mid-May 2013.

(end)

Annex I Participant List

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Annex II Joint Terminal Evaluation Report on The Project for Strengthening Capacity of Water Environmental Management in Vietnam

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Annex I

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Participant List

Ño.	Name	Organization	Cument Rostfon
I.	JCC members		
	etnam side		
1	Dr. Nguyen The Dong	VEA	Deputy Director General of VEA
2	Mr. Nguyen Minh Cuong	ISD/VEA	Deputy Director of ISD, VEA
3	Mr. Nguyen Viet Thang	ISD, VEA	Officer
4	Mr. Nguyen Van Phuoc	HCMC DONRE	Deputy Director
	CA side		
5	Mr. Shigenobu Obayashi	JICA Expert Team	Leader
6	Ms. Saori Ushimi	JICA Expert Team	Project Coordinator
7	Mr. Yoichi Iwai	JICA Expert Team	Chief Advisor
8	Mr. Itaru Okuda	JICA Expert Team	Deputy Chief Advisor
9	Mr. Fumihiko Okiura	JICA Vietnam Office	Senior Representative
<u>.</u>	Participants		Somor representative
	ietnam side		· · · ·
10	Ms. Nguyen Thanh Nga	ISD/VEA	Officer
11	Mr. Nguyen Pham Ha	ISD/VEA	Officer
12	Ms. Pham Thanh Tu	ISD/VEA	Officer
13	Ms. Phan Nhung	CEM/VEA	Officer
15	Mr. Bui Van Nhung	ID/VEA	Officer
15	Ms. Tran Thi Thu Huong	ID/VEA	Officer
16	Mr. Pham Quoc Khanh	CEID/VEA	Director
10	Mr. Nguyen Trung Thuan	PCD/VEA	Officer
18	Ms. Nguyen Thi Tuyet Lan	CEM/Haiphong DONRE	Director
10	Mr. Le Tan Cuong	EPA/BRVT DONRE	Director
20	Mr. Ta Ngoc Son	EPA/Hanoi DONRE	Officer
20	Mr. Pham Hung Cuong	EPA/Hanoi DONRE	Officer
22	Mr. Nguyen Son Tung	EPA/Hanoi DONRE	Officer
23	Mr. Cao Tung Son	EPA/Hallor DONRE	Deputy Director
23	Ms. Le Thi Thanh Dung	EPA/HCM DONRE	Officer
24	Mr. Nguyen Viet Hung	EPA/TT-Hue DONRE	Director
25	Mr. Duong Van Thanh	ID/TT-Hue DONRE	Officer
	Ms. Le Thi Thanh Huong	Office/VEA	Officer
27		VEA Magazine	Officer
28	Mr. Pham Dinh Tung Ms. Tran Thi Le Anh	WENID/VEA	Officer
29		WENID/VEA	Oncer
1. <i>2</i> , J	ICA officers and experts	JICA Global Environment	Director, Terminal Evaluation
30	Mr. Hideo Noda		team leader
		Department	Deputy Assistant Director,
31	Ms. Ruri Hidano	JICA Global Environment	Terminal Evaluation team
51		Department	member
			Advisory Committee member,
32	Mr. Senro Imai	JICA	Terminal Evaluation team
32	Wit. Seino Iniai	JICA	member
33	Mr. Tadashi Suzuki	JICA Vietnam office	Representative
34	Mr. Nguyen Vu Tiep	JICA Vietnam office	Program officer
J4			Consultant, Terminal Evaluation
35	Mr. Jiro Iguchi	Padeco	team member
			MONRE, Terminal Evaluation
36	Mr. Ryuji Tomisaka	JICA Policy Advisor	team member
27	Mr. Yoshiharu Shirane	IICA Expert Team	Member
37	Mr. Derek Johnson	JICA Expert Team JICA Expert Team	Member
38			

NO.	Name a	Organization	Current Position
40	Mr. Kengo Naganuma	JICA Expert Team	Member
41	Mr. Naoki Hosotani	JICA Expert Team	Member
42	Mr. Hiroshi Nakano	JICA Expert Team	Member
43	Ms. Dinh Thu Binh	JICA Expert Team	Secretary
44	Mr. Chu Ngoc Kien	JICA Expert Team	Staff
45	Mr. Dang Dinh Giang	JICA Expert Team	Staff
46	Ms. Nguyen Thanh Lan	JICA Expert Team	Staff
47	Mr. Vu Dinh Thai	JICA Expert Team	Staff
48	Ms. Quan Thi Quynh Dao	JICA Expert Team	Staff
49	Ms. Le Thi Phuong Hong	JICA Expert Team	Staff
50	Ms. Nguyen Thi Hong Ly	JICA Expert Team	Staff
51	Mr. Nguyen Thanh Phuong	JICA Expert Team	Staff
52	Mr. Bui Xuan Tung	JICA Expert Team	Staff

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Joint Terminal Evaluation Report on The Project for Strengthening Capacity of Water Environmental Management in Vietnam

Mar. 20, 2013

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1 Outline of the Terminal Evaluation

1-1 Background

Rapid economic growth in Vietnam promoted industrialization and urbanization and the pollution of water resources such as rivers, lakes and canals due to untreated industrial effluent and domestic wastewater has become a serious issue in major cities.

The Government of Vietnam (GOV) has enacted the Law of Environmental Protection (LEP) in 1994 (amended in 2006), which sets environmental standards with regard to water, air, waste, etc. and established in 2002 the Ministry of Natural Resources and Environment (MONRE) to enhance environmental management at the national level. Following the creation of MONRE, the "National Strategy on Environmental Protection till 2010 and Orientations towards 2020" was formulated. The GOV also pursued institution building for enforcement of pollution control measures by devising legal instruments such as Decree No. 67/2003/ND-CP prescribing environmental protection charges for wastewater, Decision No.64/2003/QD-TTg on pollution control by crucial pollution sources and Decision No.328/2005/QD-TTg on national plan of pollution control from 2005 to 2010. In order to finance environmental management, the GOV decided in 2006 to allocate a minimum of 1% of national expenditure for environmental protection of the water environment and management of water resources. Under the circumstances, MONRE and Departments of Natural Resource and Environment (DONREs) of provincial governments assume increased responsibilities in management of water environment.

However, these laws and regulations have not been effectively enforced. It is often the case that local contexts behind environmental problems and the enforcement capacity of local governments are not well examined in developing the legal frameworks. In addition, rules and instructions required to enforce the environmental laws and regulations are not sufficiently developed. There are problems at the provincial level as well. DONREs are not sufficiently equipped for proper environmental management in terms of human resources, finance, experience and skills, whilst environmental awareness of high-rank officials of provincial governments as well as business owners is still not developed.

Under these circumstances, upon the request from the GOV for technical cooperation to strengthen their environmental management capacity, JICA is providing cooperation for the period of three-years from June 2010 up to June 2013. The Project aims to enhance the capacity of both MONRE and DONRE to manage the water environment. JICA Experts of various expertise have been dispatched under the Project.

In the Record of Discussion (R/D) on 8^{th} Jan. 2010 between JICA and GOV on the Project, it is stipulated that mid-term review and terminal evaluation of the Project would be conducted jointly by the Vietnamese authorities and JICA, at the middle and during the last six months of the term of the Project in order to examine the level of achievement of the objective. The mid-term review was conducted in December 2011. Now, the remaining cooperation period is about three months, so terminal evaluation was conducted in accordance with R/D.

1-2 Objectives

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The joint terminal evaluation on the Project was conducted with the following objectives:

- i) To verify accomplishment of the planned activities and objectives of the Project in R/D and the latest Project Design Matrix (PDM);
- ii) To review how the Project responded to the recommendations given by the Mid-term review mission in December 2011;
- iii) To analyze the Project in terms of the five evaluation criteria (i.e. Relevance, Effectiveness,

Efficiency, Impact and Sustainability) with particular focus on Impact and Sustainability; and

iv) To draw concrete recommendations and lessons leaned from evaluation findings¹

1-3 Members of the Joint Evaluation Team

The Terminal Evaluation was carried out by the Joint Evaluation Team (hereinafter referred to as "the Team") consisting of the following members from the Vietnamese government (the Vietnam Environmental Agency, Ministry of Natural Resources and Environment) and JICA.

(1) Vietnamese side

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Name	Position in the Team	Position in Current Organization and the Project
Mr. Nguyen The Dong	Team leader	- Deputy General Director of VEA
		- Project Director
Mr. Nguyen Minh		- Deputy Director of ISD, VEA
Cuong		- Project Manager
Mr. Nguyen Viet Thang		- Expert of ISD, VEA
		- Member of JCC and PMB
Ms. Nguyen Thanh Nga,		- Expert of ISD, VEA

(2) Japanese side (JICA)

Name	Role in the Team	Position
Mr. Hideo Noda	Team Leader	Director, Environmental Management Division 1, Global Environmental Department, JICA
Mr. Senro Imai	Environmental Policy	Senior Advisor of Environmental Management, JICA
Ms. Ruri Hidano	Environmental Management	Deputy Assistant Director, Environmental Management Division 1, Global Environment Department, JICA
Mr. Ryuji Tomisaka	Water Environmental Policy	Policy Advisor to MONRE, JICA Expert
Mr. Jiro Iguchi	Evaluation Analysis	Consultant, PADECO Co., Ltd.

1-4 Schedule for the Study

The schedule of the terminal evaluation study is shown as Annex 1. Field study in Vietnam was conducted from 24th Feb. to 20th Mar. 2013 in which a series of interviews, meetings and discussions were held between Vietnamese authorities and institutions relevant to the Project, the JICA experts and the joint evaluation team.

1-5 Outline of the Project

According to the Minutes of Meeting on between JICA and GOV on the Project, and the latest *Project Design Matrix* (hereinafter referred to as "PDM") which was authorized in December 2012 (Annex 2), the outline of the Project is as follows.

(1) Project Purpose

Capacity of making policy and management system of MONRE and enforcement capacity of target

¹*Recommendations* are proposals that can be used for improvement of the project concerned for the future, while *lessons learned* are recommendations for future or ongoing projects of similar nature.

DONREs regarding water environmental management is strengthened.

- (2) Outputs
 - 1) MONRE's capacity of making policy and management tools that are more effective and enforceable is strengthened.

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- 2) Enforcement capacity of target DONREs on basic water pollution control (environmental monitoring, pollution sources inventory, pollution sources inspection) is strengthened.
- 3) Target DONRE's capacity of making effective water pollution control measures is strengthened.
- 4) Target DONRE's capacity of promoting awareness of public and industrial sectors on water environment is strengthened.
- 5) Capacity of MONRE and DONREs on information management and utilization is strengthened.
- (3) Overall goal

Enforcement capacity of MONRE and DONREs on water environmental management is strengthened.

- (4) Implementation period Three (3) years from 2010 to 2013
- (5) Target areas

Hanoi city, Hai Phong city, Thua Thien-Hue province, Ho Chi Minh city and Ba Ria-Vung Tau province

(6) Target Group

Ministry of Natural Resources and Environment (MONRE) and target Departments of Natural Resources and Environment (DONREs)

2 Method of the Terminal Evaluation

2-1 Items, criteria and outcome of the evaluation

The evaluation was conducted following the *JICA Guidelines for Project Evaluation (revised in 2010)*. The evaluation was based on the Project Design Matrix (PDM), which is a summary table describing the outline of the Project. The Project was evaluated jointly both by Vietnamese and Japanese evaluation team members that are listed in Section 1-3. The Team examined the following points.

(1) Verification of the Accomplishment

The degree of accomplishment of the Inputs (both from Vietnamese and Japanese sides) as well as achievement of the objectives (i.e. the Project Purpose, Outputs and Overall Goal) was assessed with reference to Objectively Verifiable Indicators stated in the PDM. The result of accomplishment was utilized for the evaluation analysis applying the five criteria stated below, especially Effectiveness, Efficiency and Impact.

(2) Examination of the Implementation Process

The process of the project implementation was assessed from the degree of completion of the planned Activities and the viewpoints of project management.

(3) Application of the Five Evaluation Criteria

The following five evaluation criteria were applied to the project evaluation.

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Criteria	Description
Relevance	Degree of compatibility between the development assistance and priority of policy of the target group, the recipient, and the donor. The criteria includes questions, such as whether the Project responds to needs of the local communities, whether the Project is consistent
	with policies of the Vietnamese and provincial government, whether project strategies and approaches are relevant, etc.
Effectiveness	A measure of the extent to which an aid activity attains its objectives.
Efficiency	Efficiency measures the outputs qualitative and quantitative in relation to the inputs. It is an economic term which is used to assess the extent to which aid uses the least costly resources possible in order to achieve the desired results. This generally requires comparing alternative approaches to achieving the same outputs, to see whether the most efficient process has been adopted.
Impacts	The positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators.
Sustainability	Sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Projects need to be environmentally as well as financially sustainable.

Source: New JICA Guidelines for Project Evaluation First Edition (2010)

(4) Recommendations and lessons learned

The Team drew recommendations on the remaining period of the Project, as well as lessons learned for future or ongoing projects of similar nature, then shared them with relevant personnel and other stakeholders.

2-2 Data collection methods

Before commencing data collection and field study, the Team designed various questions to assess the Project according to the above mentioned performance, process and the five evaluation criteria. Then the Team determined appropriate data collection method(s) to answer each of the questions. Such design of the evaluation study was summarized as the document named the Evaluation Grid. The Team collected necessary data and information based on the Evaluation Grid, using the following methods.

- i) Review and analysis of available documents, such as the plan of the Project, the mid-term evaluation report, progress reports, etc. (literature analysis)
- ii) Questionnaire survey and interviews with the JICA experts, Vietnamese Counterpart personnel and other stakeholders of the Project
- iii) Direct observation of some of the inputs to the Project from the Japanese and Vietnamese sides, such as offices, equipment, facilities, etc.
- iv) Direct observation of some activities of the Project, e.g. workshops and other events organized under the Project
- v) Observation of some of the outcomes of the Project, such as policies, manuals, education materials, etc.

2-3 PDM used for the evaluation

The first official PDM of the Project was attached to R/D and Minutes of Meeting on the Project signed between JICA and GOV on 8th Jan., 2010. However, it was agreed in the Minutes that the PDM would "be reviewed and revised if necessity arises. Especially, Objectively Verifiable Indicators and Means of Verification of the PDM will be determined within one year after starting the Project."

Following the agreement, two years after the commencement of the Project, the revised PDM (Annex 2) was drafted with changes mainly in the Objectively Verifiable Indicators on 27th August, 2012, then it was

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officially approved by the Project Director and JICA in December, 2012. This revised PDM was the latest version at the point of the terminal evaluation (Feb., 2013), then the evaluation was conducted based on it.

3 Accomplishment of the Project

3-1 Inputs to the Project

3-1-1 Inputs from the Vietnamese side

(1) Assignment of counterpart personnel

1) JCC members

In order for proper management of the Project, Joint Coordinating Committee (JCC), were established at the beginning of the Project based on R/D signed between MONRE and JICA on 8 Jan., 2010. Following the composition of JCC determined in R/D, actual committee members assigned from the relevant organizations and agencies are shown in the table below.

Name	Position in JCC	Position and Organization				
Vietnamese Side						
(1) Assoc. Prof. Dr. Bui Cach Tuyen	Chairperson	Deputy Minister of MONRE, Director General of VEA				
(2) Dr. Nguyen The Dong	Project Director	Deputy General Director of VEA				
(3) Dr. Hoan Danh Son (- Aug. 2012)	Project Manager	Director of ISD, VEA				
(3) Mr. Nguyễn Minh Cường (Aug. 2012 -)		Vice Director of ISD, VEA				
(4) Mr. Nguyen Viet Thang	Member	Officer of ISD, VEA				
(5) Mr. Pham Van Khanh	Member	Deputy Director, Hanoi				
(6)Mr. Phung Van Thanh (- Apr. 2012)	Member	Deputy Director, Hai Phong				
(6) Mr. Pham Quoc Ka (May. 2012 -)						
(7) Mr. Nguyen Huu Quyet	Member	Deputy Director, TT-Hue				
(8) Mr. Le Van Sam	Member	Director, Ba Ria Vung Tau				
(9) Mr. Nguyen Van Phuoc	Member	Deputy Director of HCMC				
Japanese Side						
(10) Mr. Shigenobu Obayashi	Member	JICA Expert Team (Long-term Expert: LET)				
(11) Ms. Saori Ushimi	Member	ditto				
(12) Mr. Yoichi Iwai	Member	JICA Expert Team (Short-term Expert: SET)				
(13) Mr. Itaru Okuda	Member	ditto				
(14) Mr. Akira Shimizu (- May. 2012)	Member	Senior Representative, JICA VN Office				
(15) Mr. Fumihiko Okiura (Jun 2012 -)	Member	ditto				
(16) Mr. Shigeru Kishida	Member	Official of the Embassy of Japan in Vietnam				
Total: 16 persons						

Note: Other official(s) appointed by the Project Director and Leader attend the Joint Coordination Committee (JCC) Meeting as observer(s). At the second JCC meeting on 10th June, 2011, representatives of MPI and ICD/MONRE have been relieved of the duties of the JCC member. Itaru Okuda was newly added to JCC.

2) Project Management Board

Under the JCC, the Project Management Board (PMB) was established to manage project activities, and to report progresses to JCC. The members of PMB are shown in the table below.

Name	Position in PMB	Position and Organization	
Vietnamese Side			
(1)Dr. Nguyen The Dong	Project Director	Deputy General Director of VEA	
(2) Dr. Hoan Danh Son (- Aug. 2012)	Project Manager	Director of ISD, VEA	
(2) Mr. Nguyễn Minh Cường (Aug. 2012 -)		Vice Director of ISD, VEA	
(3) Mr. Nguyen Viet Thang	Member	Representative of ICST	
(4) Mr. Pham Van Khanh	Member	Deputy Director of HNI	
(5)Mr. Phung Van Thanh (- Apr. 2012)	Member	Deputy Director, Hai Phong	
(5) Mr, Pham Quoc Ka (May. 2012 -)			
(6) Mr. Nguyen Huu Quyet	Member	Deputy Director, TT-Hue	
(7) Mr. Le Van Sam	Member	Director of BRVT	
(8) Mr. Nguyen Van Phuoc	Member	Deputy Director of HCMC	
*Other official(s) invited by Project Director may atten	d the JCC as member(s)		
Japanese Side			
(9) Mr. Shigenobu Obayashi	Member	JICA Expert Team	
(10) Ms. Saori Ushimi	Member	JICA Expert Team	
(11) Mr. Yoichi Iwai	Member	JICA Expert Team	
(12) Mr. Itaru Okuda	Member	JICA Expert Team	
*Other personnel concerned to be decided and/or dispa	tched by JICA, if necessary		

3) Working Group members

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The project activities were carried out by the working groups (WGs) for each output of the Project. The members of PMB and WGs are shown in the tables below.

Name	Position in WG	Position and Organization				
1. Environmental Policy (Worki						
1) Ms. Nguyễn Hoàng Ánh	Member	Head of division, Pollution Control Department				
2) Mr. Nguyễn Trung Thuận	Member	Officer, ditto				
3) Mr. Luong Duy Hanh	Member	Chief inspector, Inspection Department				
4) Ms. Trần thị thu Hưởng	Member	Officer, ditto				
5) Mr. Mai Thế Toàn	Member	Deputy director, Department of Appraisal and Environmental Impact Assessment				
6) Ms. Trần Thị Lệ Anh	Member	Deputy head of division, Department of Waste Management and Environmental				
		Promotion				
7) Ms. Nguyễn Thị Nguyệt Ánh	Member	Head of division, Center for Environmental Monitoring				
8) Mr. Nguyễn Hữu Thăng	Member	Deputy head of division, ditto				
9) Mr. Đỗ Nam Thắng	Member	Deputy director, Institute of Environmental Management Science				
10) Ms. Nguyễn Phạm Hà	Member	Officer, Department of International Cooperation and Science Technology				
11) Ms. Nguyễn Thanh Thảo	Member	Officer, Department of Water Resource Management				
2. Monitoring (Working Group	2-1: WG 2-1)					
HNI DONRE						
1) Mr./Ms. Nguyen Phuong Lien	Head of WG 2-1	Officer, Information and International Relation department, CENMA				
2) Mr./Ms.Le Thi Nhi	Member	ditto				
3) Mr./Ms. Nguyen Thi Nghia	Member	ditto				
4) Mr./Ms.Hoang Duy Huan	Member	Officer, HNI Analysis section, Monitoring and Analysis of natural resources and				
		environment Division of CENMA				
HPG DONRE						
1) Ms. Nguyen Thi Tuyet Lan	Head of WG 2-1	Director, HACEM				
2) Mr. Dao Duc Thien	Member	Vice Director, Analysis and monitoring division of HACEM				
3) Mr. Khong Minh Tien	Member	Vice Head, Analysis and monitoring division of HACEM				
4) Mr. Le Tien Thanh	Member	Officer, Analysis and monitoring division of HACEM				
5) Ms. Tran Thi Minh Huyen	Member	ditto				
TT-HUE DONRE						
1) Mr. Nguyen Hoang Phuoc	Head of WG 2-1	Deputy Head, EPA				
2) Mr. Dang Phuoc Binh	Member	Deputy Head of the Section, Environmental Monitoring Section of EPA				
2) Mr. Nguyen Dinh Phuoc	Member	Staff, Environmental Monitoring Section of EPA				
3) Mr. Tran Canh Hung	Member	ditto				
4) Mr. Nguyen Van Chung	Member	ditto				
5) Ms. Le Thi Thuy Tien	Member	ditto				
6) Ms. Nguyen Thi Thuy Linh	Member	ditto				
HCMC DONRE						
1) Mr. Huynh Thanh Nha	Head of WG 2-1	Vice Director, HEPA				
2) Mr. Nguyen Thanh Huy	Member	Head, Division of Environmental. Quality Monitoring and Assessment of HEPA				
3) Ms. Dang Thi Tuyet Loan	Member	Vice Head, Division of Environmental. Quality Monitoring and Assessment of HEPA				
4) Ms, Tran Minh Ngọc	Member	ditto				
5) Mr. Nguyen Vo Qui Chau	Member	Specialist, Division of Environmental. Quality Monitoring and Assessment of HEPA				
6) Ms. Truong Hong Ha	Member	ditto				
7) Ms. Do Thị Thu Hang	Member	ditto				
BRVT DONRE						
1) Mr. Le Tuan Kiet	Head of WG 2-1	Vice Director, CEMA				
2) Ms. Nguyen Thi Hang	Member	Deputy Manager, Environmental Monitoring Division of CEMA				
3) Mr. Nguyen Xuan Son	Member	Deputy Manager, Environmental Monitoring Division of CEMA				
4) Ms. Mai Thi Hanh Dung	Member	Staff, Environmental Monitoring Division of CEMA				
5) Mr. Trinh Dinh Loi	Member	ditto				
6) Mr. Le Van Cuong	Member	ditto				
7) Mr. Bui Van Thanh	Member	Staff, Environmental Monitoring Division of CEMA, in charge of Con Dao island				
		monitoring station				
3. Water Quality Analysis (Wor	King Group 2-2: WC	<u>z 2-2)</u>				
	HNI DONRE					
1) Mr.Hoang Duy Huan	Head of WG 2-2	CENMA, Vice head of Analysis department				
2) Mr.Le Van Duc	Member	CENMA, Staff				
3) Ms.Dang Thi Lien	Member	ditto				
HPG	Head of WG 2-2	(TEM Director				
1) Ms. Nguyen Thi Tuyet Lan 2) Mr. Dao Duc Thien		CEM, Director				
	Member					

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Name	Position in WG	Position and Organization					
3) Mr. Khong Minh Tien	Member	Position and Organization CEM, Vice-Head of Analysis and monitoring division					
4) Mr. Dam Van Quynh	Member	CEM, Vice-Head of Consultant and Training division					
5) Mr. Dao Van Vuong	Member	CEM, Officer					
6) Ms. Nguyen Thu Huyen	Member	ditto					
7) Mr. Le Tien Thanh	Member	ditto					
8) Ms. Nguyen Thi Nhu Quynh	Member	ditto					
9) Ms. Tran Thi Minh Huyen	Member	ditto					
TT-HUE DONRE							
1) Mr. Nguyen Hoang Phuoc	Head of WG 2-2	EPA, Deputy Chief					
2) Mr. Nguyen Dinh Phuoc	Member	Environmental Monitoring Section, EPA, Technical Staff					
3) Mr. Tran Cank Hung	Member	ditto					
4) Nguyen Van Chung	Member	ditto					
5) Nguyen Thi Thuy Linh	Member	ditto					
6) Le Thi Thuy Tien HCMC DONRE	Member	ditto					
i) Mr. Huỳnh Thanh Nhã	Head of WG 2-2	HEPA, Vice Head					
2) Mr. Nguyễn Thanh Huy	Member	Monitoring Env. Quality Assessment Div., HEPA, Vice Head					
3) Ms. Đặng Thị Tuyết Loan	Member	Monitoring Env. Quality Assessment Div., HEPA, Specialist					
4) Ms, Trân Minh Ngọc	Member	ditto					
5) Ms. Nguyễn Võ Quí Châu	Member	ditto					
6) Mr. Nguyễn Ngọc Hoàng	Member	ditto					
Trung							
7) Ms. Trương Hồng Hà	Member	Monitoring Env. Quality Assessment Div., HEPA, Specialist					
8) Ms. Đỗ Thị Thu Hằng	Member	ditto					
BRVT DONRE	· · · ·						
1) Mr. Le Tuan Kiet	Head of WG 2-2	Vice Director, CEMAB					
2) Ms. Le Thi Thanh Lieu	Member	Division of Environmental Monitoring, Deputy Chief					
3) Mr.Phạm Bá Thiện	Member	Division of Environmental Monitoring, Expert					
4) Mr.Đoàn Thanh Hải	Member	ditto					
4. Inventory (Working Group 2-	3: WG 2-3)						
HNI	The Letter of State						
1) Ms. Dao Thi Anh Diep	Head of WG 2-3	Environment Protect Agency - EPA, Deputy Director					
2) Mr. Ngo Thai Nam 3) Mr. Pham Hung Cuong	Member Member	Environment Protect Agency - EPA, Deputy Director, Water resource management and meteorology and hydrology division, Manager,					
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4) Mr. Nguyen Tien Hung 5) Mr. Nguyen Trong Dung	Member Member	Water resource management and meteorology and hydrology division, Officer,					
5) Mr. Nguyen Trong Dung	Member	ditto					
5) Mr. Nguyen Trong Dung 6) Mr. Nguyen Trong Truong	Member Member	ditto Pollution control division, EPA, Officer,					
5) Mr. Nguyen Trong Dung 6) Mr. Nguyen Trong Truong 7) Mr. Ta Ngoc Son	Member	ditto					
5) Mr. Nguyen Trong Dung 6) Mr. Nguyen Trong Truong 7) Mr. Ta Ngoc Son	Member Member	ditto Pollution control division, EPA, Officer,					
5) Mr. Nguyen Trong Dung 6) Mr. Nguyen Trong Truong 7) Mr. Ta Ngoc Son HPG DONRE 1) Mr. Lê Son	Member Member Member	ditto Pollution control division, EPA, Officer, Project management and communication division, EPA, Officer,					
5) Mr. Nguyen Trong Dung 6) Mr. Nguyen Trong Truong 7) Mr. Ta Ngoc Son HPG DONRE	Member Member Member Head of WG 2-3	ditto Pollution control division, EPA, Officer, Project management and communication division, EPA, Officer, HPG Environmental Protection Agency - EPA, Deputy head					
5) Mr. Nguyen Trong Dung 6) Mr. Nguyen Trong Truong 7) Mr. Ta Ngoc Son HPG DONRE 1) Mr. Lê Son 2) Ms. Nguyễn Thị Tuyết Lan	Member Member Head of WG 2-3 Member	ditto Pollution control division, EPA, Officer, Project management and communication division, EPA, Officer, HPG Environmental Protection Agency - EPA, Deputy head HPG Centre for Environmental Monitoring - HPG CEM, Director					
5) Mr. Nguyen Trong Dung 6) Mr. Nguyen Trong Truong 7) Mr. Ta Ngoc Son HPG DONRE 1) Mr. Lé Son 2) Ms. Nguyễn Thị Tuyết Lan 3) Ms. Vũ Thị Thu Hường 4) Mr. Mai Đức Long TT-HUE DONRE	Member Member Head of WG 2-3 Member Member	ditto Pollution control division, EPA, Officer, Project management and communication division, EPA, Officer, HPG Environmental Protection Agency - EPA, Deputy head HPG Centre for Environmental Monitoring - HPG CEM, Director EIA appraisal, HPG EPA, Specialist Inspection Department, Inspector					
5) Mr. Nguyen Trong Dung 6) Mr. Nguyen Trong Truong 7) Mr. Ta Ngoc Son HPG DONRE 1) Mr. Lê Son 2) Ms. Nguyễn Thị Tuyết Lan 3) Ms. Vũ Thị Thu Hường 4) Mr. Mai Đức Long TT-HUE DONRE 1) Mr. Nguyễn Việt Hùng	Member Member Head of WG 2-3 Member Member Member Head of WG 2-3	ditto Pollution control division, EPA, Officer, Project management and communication division, EPA, Officer, HPG Environmental Protection Agency - EPA, Deputy head HPG Centre for Environmental Monitoring - HPG CEM, Director EIA appraisal, HPG EPA, Specialist Inspection Department, Inspector Environmental Protection Agency- EPA, Head					
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 5) Mr. Nguyen Trong Dung 6) Mr. Nguyen Trong Truong 7) Mr. Ta Ngoc Son HPG DONRE 1) Mr. Lê Son 2) Ms. Nguyễn Thị Tuyết Lan 3) Ms. Vũ Thị Thu Hường 4) Mr. Mai Đức Long TT-HUE DONRE 1) Mr. Nguyễn Việt Hùng 2) Ms. Nguyễn Trần Thế Anh 3) Ms. Trần Thi Ngọc Điệp 4) Mr. Nguyễn Ngh Đại Lân 5) Mr. Nguyễn Bình Phước 6) Mr. Trần Mạnh Quỳnh HCMC DONRE 1) Ms. Nguyen Thi Tuyet Hoa 3) Mr. Dang Le Hien 4) Ms. Nguyen Thi Tuyet Hoa 3) Mr. Dang Le Hien 4) Ms. Nguyen Thi Tuyet Hoa 3) Mr. Dang Le Hien 4) Ms. Nguyen Thi Tuyet Hoa 3) Mr. Le Tan Cuong 2) Ms. Tang Thi Dum My 3) Mr. Le Thanh Tam 4) Mr. Luong Hung Phi 5. Inspection (Working Group 2 HNI DONRE 1) Ms. Dao Thi Anh Diep 2) Mr. Nguyen Tien Hung 	Member Member Member Head of WG 2-3 Member Member Head of WG 2-3 Member Member Member Member Head of WG 2-3 Member Member Member Member Head of WG 2-3 Member Member Head of WG 2-3 Member 4: WG 2-4) Head of WG 2-4	ditto Pollution control division, EPA, Officer, Project management and communication division, EPA, Officer, HPG Environmental Protection Agency - EPA, Deputy head HPG Centre for Environmental Monitoring - HPG CEM, Director EIA appraisal, HPG EPA, Specialist Inspection Department, Inspector Environmental Protection Agency- EPA, Head Inspection division, Inspector ditto Water Resources division, Specialist Environment Management Division - EMD, Expert ditto Inspection Division, Expert Water Resources Department & minerals Management Division, Expert Environmental pollution Inspection and Supervision - EPA, Vice Head EPA, Head Expert of Inspector Water Resources Management, Expert Pollution Control Division under EPA, Expert					
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Nama	Position in WG	Position and Organization					
Name 1) Ms. Nguyen thi Vinh	Head of WG 2-4	Chief Inspector, Inspection Department					
2) Ms. Nguyen Thi Tuyet Lan	Member	Director, EMC					
3) Mr. Le Son	Member	Deputy head, EPA					
4) Mr. Mai Duc Long	Member	Inspector, Inspection Department					
TT-HUE DONRE							
1) Mr. Duong Van Thanh	Vice-chief inspector, Inspection Department						
2) Ms. Nguyen Tran The Anh	Member	Inspector, Inspection Department					
3) Ms. Tran Thi Ngoc Diep	Member	ditto					
4) Mir. Ly Thanh Trung	Member	Officer, Pollution Control Division, EPA					
HCMC DONRE							
Ms. Le Thi Kim Oanh	Head of WG 2-4	Deputy Chief of inspection department, Inspection Department					
2) Ms Le Thi Thanh Dung	Member	Expert, EMD					
3) Ms. Nguyen Thi Tuyet Hoa	Member	ditto					
4) Mr, Dang Le Hien	Member	Expert, Inspection Division					
5) Ms. Nguyen Thi Thu Hang	Member	Expert, Water Resources Department & minerals Management Division					
6) Ms. Nguyen Minh Hang	Member	Vice Head, EPA					
BRVT DONRE	Head of WG 14	Deputy Chief of Inspection Department, Inspection Department					
Mr. Duong Van Thanh 1) Mr. Le Tan Cuong	Head of WG 2-4 Member	Head, EPA					
2) Ms. Tang Thi Dum My	Member	Officer, Inspection Department					
3) Mr. Le Thanh Tam	Member	Officer, Water Resource Management Department					
4) Mr. Luong Hung Phi	Member	Officer, Pollution Control Division, EPA					
6. Water Pollution Control Meas							
HNI DONRE							
Ms. Dao Thi Diep	WG-3 Leader	Deputy Director, EPA					
1) Mr. Nguyen Trong Truong	Member	Officer, EPA					
2) Mr. Ta Ngoc Son	Member	ditto					
3) Mr. Pham Hung Cuong	Member	Head, DWRMH					
4) Mr. Nguyen Trong Dung	Member	Officer, DWRMH					
5) Mr. Nguyen Tien Hung	Member	Deputy Chief Inspector, Inspectorate					
6) Mr. The Anh	Member	Head, Ha Dong District,					
7) Ms. Quan Thi Nam	Member	Officer, Ha Dong District					
8) Ms. Dao Thi Hong Le	Member	Officer, Tu Liem District					
7. Environmental Awareness (W	orking Group 4: W	G 4)					
HNI DONRE							
1) Ms. Le Thanh Thuy	Head of WG 4	Vice Head, Project Management and Communication Division, EPA					
2) Mir. Ta Ngoc Son	Member	Expert, Project Management and Communication Division, EPA					
HPG DONRE							
1) Ms. Nguyen Thi Tuyet Lan	Head of WG 4	Director, HACEM					
2) Mr. Le Son	Member	Vice Director, EPA					
3) Ms. Nguyen Thi Hong	Member	Expert, EPA					
Phuong	Manhar	Vice Head Contactor for Information of Despinance & Environment EDA					
4) Mr. Pham Khac Thanh	Member	Vice Head, Center for Information of Resources & Environment, EPA					
TT-HUE DONRE 1) Mr. Nguyen Viet Hung	Hand of WC 4						
2) Mr. Nguyen Viet Hung 2) Mr. Nguyen Xuan Khuong	Head of WG 4 Member	Director, EPA Head, EIA Appraisal Division, EPA					
3) Ms. Le Thi Hanh	Member	Vice Head, General Division, EPA					
4) Ms. Pham Thi Nguyet	Member	Specialist, EIA Division, EPA					
HCMC DONRE	trictition .	Growing Dirigion, Dirigion					
1) Ms. Tran Thi Lien	Head of WG4	Vice Head, Environmental Communication and Information Division, EPA					
2) Ms. Le Thanh Dung	Head of WG4	Vice Head, EIA Division, EPA					
3) Mr. Huynh Thanh Nha	Member	Vice Director, EPA					
4) Ms. Huynhh Thu Van	Member	Head, Environmental Information and Training Division, EPA					
5) Ms. Nguyen Thi Tu Uyen	Member	Vice Head, Environmental Information and Training Division, EPA					
6) Ms. Nguyen Thi Tuyet Hoa	Head of WG 4	Expert, EMD					
BRVT DONRE							
1) Mr. Le Tan Cuong	Head of WG 4	Director, EPA					
2) Mr. Tran Anh Duc	Member	Vice Head, Pollution Control Div., EPA					
3) Mr. Luong Hung Phi	Member	Expert, Pollution Control Div., EPA					
4							
8. Environmental Information M	lanagement and Uti	lization (Working Group 5: WG-5)					
1) Mr. Nguyễn Quốc Khánh	Head	Acting Director, Center for Environmental Information and Data					
2) Ms. Vũ Thị Thu Thủy	Member	Officer, ditto					
	Total: 136 members						

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(2) Operational Expenses borne by the Vietnamese side

The following counterpart budget for the Project has been provided by MONRE for, etc. As for DONRE, TT Hue DONRE has received 887 million VND from PPC for monitoring activity from 2011-2012. PPCs of the other four provinces didn't allocate project budget.

			Year			
	2010	2011	2012	2013	Total	Major Expense Item
	(Actual)	(Actual)	(Actual)	(Budget)	(Budget)	
MONRE	In-kind	In-kind	150 (cash) + in kind	370 (cash) (not yet allocated) + in kind	520 In-kind	 Office rent for the Long-term Expert Team Expense for official trips to DONREs Administrative expenses (including office equipment) Allowance for the PMB member from MONRE

(million VND)

Note: Counterpart fund includes expenses that borne by the Vietnamese side for implementation of the Project activities, honorarium/allowance for personnel involved, and for office space & required facilities as well.

(3) Office space

According to R/D on the Project signed in Jan. 2010, it is stipulated that the Vietnamese side would provide the office spaces and facilities

- 1. The office and meeting space for the performance of duties by the Experts in VEA and each DONRE.
- 2. Facilities such as desks, chairs, book shelves, internet access and telephones, etc. necessary for the Project activities.
- 3. Other facilities mutually agreed upon as necessary.

The office space with appropriate facilities to the Long-term Expert Team (LET) assisting Output 1 and 5 was provided by the Vietnamese side in October 2010. On the other hand, JICA provided an office space to the Short-term Expert Team (SET) in Hanoi, as office spaces offered by the Vietnamese side in Hanoi were too small for SET to implement activities not only for Hanoi DONRE but also for the other DONRE and MONRE in Hanoi as the capital city of Vietnam. The office spaces with facilities provided the four DONREs (Ho Chi Minh City, Hai Phong, Thua Thien-Hue and Ba Ria-Vung Tau) were all appropriate.

3-1-2 Inputs from the Japanese side

(1) Dispatch of Experts

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The table shown below is the name, expertise and duration of assignment since the Project was commenced until now.

Name	Name						
(Field in char	ge)	2011	2012- 2013 (planned)	Total			
1) Shigenobu Obayashi (Leader/Water Environmental Policy)	Before change contract After change contract	12	15	27			
2) Saori Ushimi (Coordinator/Water Environment Management)	Before change contract After change contract	12	15	27			
3) Iwai Yoichi (Chief Advisor)	Before change contract After change contract	4.20	4.40	8.60			
 Itaru Okuda (Deputy CA/Water Environmental Management) 	Before change contract After change contract	8,50	8.60	17.10			
5) Derek Johnson (Water Environmental Monitoring (1))	Before change contract After change contract	4.50	4.50	9.00			
6) Yoshiharu Shirane	Before change contract	3.50	4.00	7.50			

(Water Quality Analysis/QAQC (1))	After change contract			
7) Shinsuke Sato	Before change contract	5.00	3.50	8.50
(Pollution Source Inventory (1))	After change contract	5.00	5.00	10.00
8) Hiroyuki Oi	Before change contract	4.00	4.00	8.00
(Pollution Source Inspection (1))	After change contract	4.00	4.00	8.00
9) Tomoyuki Hosono	Before change contract	4.23	3.50	7.73
(Environmental Awareness (1))	After change contract	4.23	5.50	1.15
10) Tadashi Shoji	Before change contract	4.20	5.00	9.20
(Water Pollution Measure (1))	After change contract	4.20	5.00	7.20
11) Shunsuke Hieda	Before change contract	7.00	6.00	13.00
(Water Environmental Monitoring (2))	After change contract	7.00	0.00	15.00
12) Yoshiki Yamamoto	Before change contract	4.03	4.00	8.03
(Water Quality Analysis/QAQC (2))	After change contract	4.05		
13) Naoki Hosotani	Before change contract	5.33	3.50	8.83
(Pollution Source Inventory (2))	After change contract	5.55	4.50	9.83
14) Kengo Naganuma	Before change contract	3.17	3.50	6.67
(Pollution Source Inspection (2))	After change contract	5,17	5.50	0.07
15) Shinichi Fukasawa /Masahiro Ibayashi	Before change contract	4.00	3.00	7.00
(Environmental Awareness (2))	After change contract	4.00	4.00	8.00
16) Yasuharu Matayoshi	Before change contract	2.77	3.50	6.27
(Water Pollution Measure (2))	After change contract	2.11	3.30	0.27
17) Tomoe Takeda	Before change contract	1.30	0.00	1.30
(Coordinator (1)/Water Quality Analysis/QAQC Assistant)	After change contract	1.30	1.50	2.80
	Non-contractual assignment in	4,43	2.83	7.26
	Vietnam	4,43	2.85	7.20
18) Hiroshi Nakano	Before change contract	0.00	0.00	0.00
(Pollution Source Inventory (3))	After change contract	0,00	2.70	2.70
19) Hiroshi Nakano	Before change contract	0.30	0.00	0.30
(Coordinator (2)/Workshop Assistance)	After change contract	0.30	0.30	0.60
	Non-contractual assignment in	6.47	4.23	10.70
	Vietnam	0.47	4,23	10.70
Total	Before change contract	90.03	91.00	181.03
	After change contract	90.03	99.00	189.03
	Non-contractual assignment in	10.90	7.06	17.96
	Vietnam	10.90	1.00	17.90

(note) Contract has been changed according to the request of Vietnamese side for the training of additional equipment.

(2) Training program in Japan

Three training courses in Japan were tailored and two of them have been conducted for the counterpart personnel of the Project. By the end of the Project, it is expected that a total of thirty-eight (38) personnel participate in the training courses (totally 369 man/days).

Course Name	Period	Participants
Administrative capacity enhancement for water pollution control	19/2-3/3/2012	13 trainees (3 trainees from MONRE and 10 trainees from target DONRE)
Enforcement of Administrative Measure for Water Environmental Management	21-28/8/2012	10 trainees (2 trainees from MONRE and 2 trainees from target DONRE except for HCMC [•])
Water environmental management for sustainable development (tentative)	18-25/4/2013	15 trainees (tentative)

*: The second training course also targeted to counterpart personnel in MONRE and the five DONRE. JICA sent invitation requesting the Vietnamese side to submit application three months in advance of the training. However, HCMC DONRE missed the deadline of submitting the application because of the delay of selecting participants.

(3) Equipment procured

The total amount of USD339,966 is allocated for the equipment for the Project. Most of the equipment has been procured and the remaining will be procured by the end of the Project.

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14,490 2,230 USD 49,747

7 5 Total ŧ

Japanese Fiscal Year (JFY)	Item	Q'ty.	Cost (USD)
	(1) Desk top computer	I	1,640
	(2) Desk top computer	6	11,700
	(3) Lap top computer	1	1,590
	(4) Lap top computer	3	7,110
	(5) Phone /FAX	1	360
	(6) Phone /FAX	1	217
	(7) Photo copier	1	3,750
2011	(8) Photo copier	1	3,226
2011	(9) Laser printer	1	1,250
	(10) Laser printer	1	929
	(11) Portable scanner	1	300
	(12) Portable scanner	1	295
	(13) UPS	1	110
	(14) UPS	5	550
	(15) GIS software	7	14,490
	(16) simplified GPS	5	2,230
			TICD 40 - 4-

List of procured equipment brought in during dispatches of the short-term experts

List of equipment procured by SET

Japanese Fiscal Year (JFY)	Item	Q'ty.	Cost (USD)
	(1) Water purifier	1	8,300
	(2) COD digester	1	2,100
	(3) pH meter	1	1,700
	(4) EC meter	1 1	1,400
	(5) Portable multi analyzer	1	6,700
	(6) UV-VIS	1	12,300
	(7) Analytical balance	1	5,000
2011	(8) Balance	1	500
2011	(9) Magnetic stirrer	1	800
	(10) Vacuum pump	1	700
	(11) Incubator	1	3,000
	(12) BOD (DO) meter	1	1,400
	(13) Dry oven	1	2,000
	(14) Fume hood	1	38,000
	(15) Glassware	1	26,400
	(16) Reagents	1	8,500
		Total	USD 119,100

List of equipment procured by the JICA Vietnam office

Year (JFY)	Lot	No	Name of equipment	Q'ty	Unit	Unit Cost(USD)	Amount (USD)	Unit Cost(VND)	Amount (VND)	Site Installed (DONRE)
2012	Lot 1	1	Extraction apparatus	1	Set	7,201.40	7,201.40	-	-	HNI
		2	Cartridge for solid-phase extraction	10	Box	102.30	1,023.00	-	-	HNI
		3 Micro syringe I Set 236.60						-	-	HNI
		4	GC columns DB-5ms	1	Set	1,088.50	1,088.50	-	-	HNI
		5	Mixing machine	1	Set	300.00	300.00	-	-	HNI
		6	Draft chamber	1	Set	6,500.00	6,500.00	-	-	HPG
		7	COD Digester	1	Set	1,560.00	1,560.00	-	•	HPG
		8	Decomposition analysis kit for Kjeldahl nitrogen	1	Set	22,670.00	22,670.00	-	-	HPG
		9	Water distilling machine	1	Set	3,625.00	3,625.00	-	-	HPG
		10	Refrigerator with Freezer	3	Piece	756.00	2,268.00	-	-	HPG (1) and TT-HUE (2)
		11	Hot plate with stirrer	1	Piece	776.00	776.00			TT-HUE
		12	Dehumidifier	2	Piece	244.00	488.00	-	-	TT-HUE
		13	Water Bath	1	Piece	946.00	946.00	-	-	TT-HUE
		14	Flow meter	4	Set	1,548.00	6,192.00			Each (1) for HPG, TT-HUE, HCMC, & BRVT
		15	Van dorn sampler	2	Set	1,050.00	2,100.00	-	-	HCMC

'ear IFY)	Lot	No	Name of equipment	Q'ty	Unit	Unit Cost(USD)	Amount (USD)	Unit Cost(VND)	Amount (VND)	Site Installed (DONRE)
		16	Multi-parameter water quality analyzer	5	Set	5,000.00	25,000.00	-	-	HPG (2),HCM0 (2) & BRVT (1)
		17	Micro-pipet for 1000 µL	1	Set	196.50	196.50	-	-	TT-HUE
		18	Micro-pipet for 5000 µL	1	Set	210.30	210.30	-	-	TT-HUE
		19	Micro-pipet for 10mL	1	Set	196.70	196.70	-	-	TT-HUE
		20	Micro-pipet for 50 µL	1	Set	196.50	196.50	-	-	BRVT
		21	Micro-pipet for 1000 µL	1	Set	196.50	196.50	-	-	BRVT
		22	Micro-pipet for 5000 µL	1	Set	210.30	210.30	-	-	BRVT
		23	Pippet holder	2	Piece	65.40	130.80	•	-	TT-HUE (1) an BRVT (1)
		24	POPs standard solution	3	Piece	1,720.00	5,160.00	-	•	HNI
		25	Reagents for analysis	1	Set	2,028.80	2,028.80	-	-	HPG
		26	Reagents and glassware for analysis	1	Set	17,743.10	17,743.10	-		BRVT
				Su	b Total	-	108,244.00	-	-	
	Lot 2* ³	1.AAS AAS	*1 instrument and parts of							BRVT
	~	1-1	HGA-850, AS-800 with cooling system	1	Piece	(36,127)	(36,127)	753,239,300	753,239,300	
		1-2	Grooved Pyrocoated Tubes BX/20	1	20/bo x	(1,321)	(1,321)	27,537,555	27,537,555	
		1-3	Graphite Contacte F.HGI Long/S	1	Box	(159)	(159)	3,318,790	3,318,790	
		1-4	Acetylene Filter Assy	1	Piece	(479)	(479)	9,977,375	9,977,375	
		1-5	Impact Bead	1	Piece	(101)	(101)	2,100,500	2,100,500	
		1-6	Modifier 1% Magnes. Complete	l	Bottl e	(153)	(153)	3,192,760	3,192,760	
		1-7	Modifier 1% Pallad. Complete	1	Botti e	(356)	(356)	7,414,765	7,414,765	
		1-8	Modifier - NH4H2PO4 Matrix	1	Bottl e	(100)	(100)	2,079,495	2,079,495	
		1-9	Fias System Board	1	Piece	(4,918)	(4,918)	102,546,410	102,546,410	
		1-10	PTFE Membrane PK/50	1	50/pk	(455)	(455)	9,494,260	9,494,260	
		1-11	Red/Red Pump Tubing PK/12	1	12/pk	(95)	(95)	1,974,470	1,974,470	
		1-12	Yellow/Blue Pump Tubing PK/12^^	1	12/pk	(95)	(95)	1,974,470	1,974,470	
		1-13	Tubing per Pump 3.18 MM BL/WH 40cm PK/12	1	12/pk	(102)	(102)	2,121,505	2,121,505	
		1-14	CU LUMINA HCL^	1	Piece	(599)	(599)	12,497,975	12,497,975	
		1-15	ZN LUMINA HCL^	1	Piece	(811)	(811)	16,909,025	16,909,025	
		1-16	CD LUMINA HCL^	1	Piece	(776)	(776)	16,173,850	16,173,850	1
		1-17	PB LUMINA HCL^	1	Piece	(911)	(911)	18,988,520	18,988,520	1
		1-18	CR LUMINA HCL^	1	Piece	(686)	(686)	14,304,405	14,304,405	
		1-19	NI LUMINA HCL^	1	Piece	(599)	(599)	12,497,975	12,497,975	1
		1-20	MN LUMINA HCL^	1	Piece	(722)	(722)	15,060,585	15,060,585	
		2. Part	s of GC-ECD*2							BRVT
		2-1	Detector-GC9000 ECD 230V	1	Piece	(6,294)	(6,294)	131,239,240	131,239,240	
		2-2	ECD Amplifier Add-On Kit For ECD	1	Piece	(1,546)	(1,546)	32,242,675	32,242,675	
		2-3	Oxygen/Moisture/Hydroc arbon Trap Clickton	1	Piece	(229)	(229)	4,768,135	4,768,135	
		2-4	11mm Crimp Top Vial, 2ml PK/100	5	100/ Pk	(26)	(131)	546,130	2,730,650	
		2-5	Graphite Ferrule 1/16 x 0.5mm PK/10	5	10/pk	(70)	(348)	1,449,345	7,246,725	
		2-6	Graphite Ferrule 1/8 x 0.5mm PK/10	5	10/pk	(70)	(348)	1,449,345	7,246,725	
		2-7	SEPTA-11mm Mold GRN INJ Port (50PK)	1	50/pk	(126)	(126)	2,625,625	2,625,625	
		2-8	COL-ELITE CLP 30M 0.32mm 0.50UM	1	Piece	(1,067)	(1,067)	22,244,295	22,244,295	
	1	2-9	COL-ELITE-608-30M5	2	Piece	(858)	(1,717)	17,896,260	35,792,520	

ear 'FY)	Lot	No	Name of equipment	Q'ty	Unit	Unit Cost(USD)	Amount (USD)	Unit Cost(VND)	Amount (VND)	Site Installed (DONRE)
			0UM32MM						·	
		2-10	Syringe-10UL 701SRN Point ST-2	2	Piece	(100)	(199)	2,079,495	4,158,990	
		2-11	CAP-11MM Crimp Red Rubber/PTFE PK/100	5	100/p k	(16)	(81)	336,080	1,680,400	
		2-12	2MM Quartz PSS Liner	2	Piece	(29)	(58)	609,145	1,218,290	
		2-13	2MM Quartz SP/SPL Liner	2	Piece	(34)	(69)	714,170	1,428,340	
		2-14	Dell PC with LCD 17 inch, Windows license	1	1 Piece (1,099) (1,099) 22,916,455	22,916,455				
		Sub T	otal		- -	(62,875.00)	-	1,310,943,055		
	Total(Lot 1 + Lot 2)						171,119.00	-		

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*I: Atomic Absorption Spectrophotometer
*2: Gas Chromatography - Electron Capture Detector
*3: Exchange Rate (As of 28 February, 2013) State Bank of Vietnam USD 1.00 = VND 20,850

(4) **Operational Expenses borne by JICA**

The operational expenses borne by Japanese side was shown in the table below. The total amount of USD 1,172,510 was allocated as operational expenses for the Project by JICA. Most of them have been mobilized, while the remaining will be mobilized by the end of the Project.

		JFY 2011	Actual ^{*1}	JFY 2012 Budget*2		
Output	Subjects	Expense (million VND)	(Expense) (USD)	Expense (million VND)	(Expense) (USD)	
Output 1	Hiring local experts	2,257	110,452	1,780	85,494	
Output 1.1	Hiring local experts	410	20,060	713	34,054	
Output 2-1	Sub-contract	0	0	0	0	
Output 2.2	Hiring local experts	173	8,454	410	19,574	
Output 2-2	Sub-contract	0	0	0	0	
Output 2.2	Hiring local experts	561	27,462	426	20,358	
Output 2-3	Sub-contract	1,472	72,054	2,126	101,600	
Output 2.4	Hiring local experts	84	4,110	356	16,998	
Output 2-4	Sub-contract	0	0	0	0	
Output 2	Hiring local experts	317	15,497	356	16,998	
Output 3	Sub-contract	0	0	0	0	
0	Hiring local experts	245	12,011	388	18,534	
Output 4	Sub-contract	668	32,705	1,358	64,862	
Output 5	Hiring local experts	379	18,200	249	11,945	
	xpenses for SET Project Operation)	4,219	206,461	5,076	254,627	
	Total	10,785	527,466	13,238	645,044	
	Grand Tota		24,023	1,172,510		

*1 This item is calculated by JICA's exchange rate of March 2012 *2 This item is calculated by JICA's exchange rate of January 2013



3-2 Achievement of the Objectives

The achievement level of each objectives (the Project Purpose, Outputs and Overall Goal) at the point of the evaluation is described as follows. The basis of the evaluation of achievement is stated in more detail in the information collected by the Team following the evaluation grid prepared, the table of achievement of the objectives prepared by JET and the internal evaluation report prepared by JET.

3-2-1 Prospects of achieving the Project Purpose

The prospect for achievement of the Project Purpose by the end of the Project referring to its Objectively Verifiable Indicator (OVI) is summarized below. <u>The Project Purpose is likely to be achieved by the end of the Project.</u>

of target DONREs regarding water environmental management is strengthened.								
OVI and means of verification (in PDM)	Achievement level and basis of evaluation							
	Project in Dec. improvement of th MONRE strengthe Respondents Project Director Project Manager CEM DWRM ID PCD	bee int 201 neir sner 5	$rac{1}{2}$	bse al e Jar pac val <u>3</u> O X X X	rvec evaluation e Pro- x X X X	1. uati 2013 ansv ojec	on (capacity assessment) conducted under the 3, all the respondents in MONRE indicated wering to the question "How much capacity of ct?" as shown in the below table. Reasons of the Result Evaluated - Though the Project made significant assistance in the development of environmental management policy, due to the restricted technical and financial resources, and the very broad objectives and scope of the Project, the capacity strengthening result was limited (Project Director). - Functional units under VEA have grasped the methodology for the development of policy of water environment control; have developed several legal documents, technical documents related to water environment pollution control (Project Manager). - Through the project, the relevant agencies have an overview of the development and implementation of policies and regulations on water environmental protection (PCD) - By participating in the project Tm more aware of the policy framework and the skills to contribute to building up a feasible policy (ID) oject while "O" indicates expected capacity after the Project.	
	2)Evaluation ranks are	5; \	/егу	Goo	od, 4:	Go	od, 3: Satisfactory, 2: Little, 1: Nothing.	

Project Purpose: Capacity o f making policy and management system of MONRE and enforcement capacity of target DONREs regarding water environmental management is strengthened.

2) target DONREs conduct self-evaluation on their	This indicator has been	en o	bse	rve	d.					
own enforcement capacity of water environmental management. (Means of Verification) ditto	According to the internal evaluation (capacity assessment) conducted under the Project in Dec. 2012- Jan. 2013, and the interview conducted by the Terminal Evaluation Team, all the respondents in MONRE and DONRE indicated improvement of DONRE's capacity answering to the question "How much capacity of DONRE strengthened by the Project?" as shown in the below table.									
	Respondents	Sc	elf E	lvalı	uati	оп				
		5	4	3	2	1	Reasons of the Result Evaluated			
	Project Manager			X			- Capacity of concerned DONREs officers in			
	CEM	·		X			management and execution of water			
	DWRM			X		ļ	environment protection law were			
	Hanoi DONRE			x		ļ	significantly improved, particularly in terms of awareness, skills on environmental			
	Hai Phong DONRE		0		X	<u> </u>	check, monitoring, recording, using			
	Hue DONRE		0 0	x			equipment, team work skill, planning,			
		city	befo				 decision making through training courses of Outputs 2, 3 and 4 (Project Manager). In 2011 and 2012, the divisions were awarded by PPC many times because of their outcome under the Project and other effort (Hanoi DONRE). The concerned officers of DONRE have gained basic skills and knowledge regarding respective areas during the Project implementation and learnt a great deal of experiences from JICA experts, Japan's water environment management activities (Ba Ria-Vung Tau DONRE). while "O" indicates expected capacity after the Project. satisfactory, 2: Little, 1: Nothing. 			

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3-2-2 Prospects of achieving the Outputs

The achievement level of each Output at the point of the evaluation is as follows:

(1) Output 1

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Output 1 is likely to be achieved by the end of the Project based on the observation shown in the table below.

Out			y of making policy and management tools that are more effective and
		enforceable is stren nd Means of	Achievement level and basis of evaluation
		tion (in PDM)	Aunevement level and dasis of evaluation
1-1	Throug		The indicator is likely to be observed by the end of the Project.
	basic s how to water policy (Means	kills on making and o evaluate existing environmental are mastered. s of Verification) g from MONRE	In total, 4 training courses are planned within the framework of the Project. Up to now, 3 trainings have been organized; and 1 training is now in preparation. According to the self-evaluation conducted under the Project in in Dec. 2012- Jan. 2013, most of the respondents in MONRE indicated improvement of their capacity to evaluate existing water environmental policy as shown in the table below.
1-2	Based	on the evaluation	The indicator is likely to be observed by the end of the Project.
	results through describ skills the an environ master (Mean	of existing policy h the training bed in 1-1, basic on how to propose mendment of water numental policy are	According to the internal evaluation (capacity assessment) conducted under the Project in in Dec. 2012- Jan. 2013, most of the respondents in MONRE indicated improvement of their capacity to propose amendment of water environmental policy as shown in the table below.
1-3		han three (03) draft	The indicator has been observed.
	amend new environ manag develo betwee VEA/N	ments and/or draft policies of water nmental gement are ped and agreed en JICA and MONRE as a result	The Project has supported VEA/MONRE to amend the 1) Circular No. 26/2011/TT-BTNMT of Strategy Environmental Assessment (SEA), Environmental Impact Assessment (EIA) and Environmental Protection Commitment (EPC) and 2) Decree No. 117/2009/ND-CP issued on 31 December 2009 by the government of handling of law violations in the domain of environmental protection.
	(Mean	Project. s of verification) ng from MONRE	With the support from the Project, CEM/VEA is now finalizing (at the stage of getting public opinion for the final draft version) the Circular for specification and the basic requirements for water automatic monitoring station.
		ne number of draft ments and/or new es	Besides the above-mentioned achievement, 5 other departments of MONRE have also prepared the draft amendment for environmental policy and tools.
1-4		rocess and methods	The indicator is likely to be observed by the end of the Project.
	policie	aking more effective es and system opment are	Up to now, a series of technology transfer related to problem finding, problem setting, problem analyzing and policy formulating have been conducted.
	improv initial	ved, compared with stage of the Project. s of Verification)	Through the activities of policy review and training course, the process and methods of making policy have been introduced to Vietnamese side. The capacities of MONRE in making more effective policies are enhanced.
	Worki 1-3 an	ng products from d follow up survey	
Issu	tes and p	planned actions for t	he remaining period for Output 1:

• One more training is planned in May of 2013. It is expected that the target will be achieved.

• By the end of March 2013, all of the policy review will be completed.

(Result of the internal evaluation of Output 1) According to the self-evaluation conducted under the Project in in Dec. 2012- Jan. 2013, the respondents from the concerning departments in MONRE indicated improvement of their capacity to evaluate existing water environmental policy as follows: -

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Questions	Respon	S	elf E	lvalı	uati	on	
	dents	5	4	3	2	1	Reasons of the Result Evaluated
Do you	ISD	0	1	X			- The project has provided the approach from macro to micro in the general
recognize the	CEM	0	X				policy framework on water environmental management; therefore key areas
mportance of	DWRM		0		x		and specific issues are mentioned. This is an important approach in water
overall	ID		0	X	[management in Vietnam and also shows the importance of the general policy
policy-framewo	ISEM		ويتركب والمراجر المراجر	X			framework. (PCD)
rk (of water	PCD	o	X				- Through the training on capacity building policies, I'm more aware of the
environment		-			ļ		importance of the general policy framework especially for the policy
management)	PCD	0	X				framework for water environmental management. (ID)
more than	WEPA		o	x	<u> </u>		- Through the training on capacity building, development of common policies
before?			¦⊻	-			on water management, I have better awareness on this issue. (ISEM)
				ł]		- Through the training on capacity building policies, I'm more aware of the
				1	1		importance of the general policy framework for environmental management as
							well as the methodology to develop a policy framework (WEPA)
The ability to	ISD		0		x		- Ability to review and evaluate the current policy has been improved through
integrate and	CEM		0	Х			the "application of the contents of the Japanese law system", which I've
evaluate all of	DWRM	1	0	X X			learned in the training policy course, through reviewing-revising policy
the existing	ID		ō	X	1		activities", amending and supplementing Decree No. 117/2009/ND-CP dated
policies from	ISEM		ŏ	<u> </u>	x		31/12/2009" in the framework of 1 results (ID)
the viewpoint of	PCD	0	X	·	<u> </u> -		- Ability to be improved through the application of the content of the Japanese
the		<u> </u>	<u>^</u>	x			legal system that I learned through training. (ISEM)
establishment of	PCD	-		<u> </u>	×7		- Ability to review and evaluate the current policy has been improved through
overall policy	WEPA		0		X		the "application of the contents of the Japanese law system" within the
framework has							framework of activities of 1 Results (WEPA)
progressed than							
before?							
Do you	ISD	0		X			- With the above approach, the relationship between the general policy
understand the	CEM		0	X	1		framework and specific policies has become clear. (PCD)
co-relation	DWRM		0		†		- By participating in the project, I had a deeper understanding of the relationship
between overall			x				between policy and regulation. Specially the coherence in general managemen
policy-framewo	ID		0	x	t		"Evaluating the environmental impact assessment report-EIA" before the
rk and each	ISEM	o	+	X	<u>†</u>	·	project started and "environmental inspection" when the project is put into
specific policy	PCD		0	x			operation. (ID)
more than	PCD	б	<u> </u>	X			- I've got a deeper understanding of the relationship between policy and
before?		μ.	<u> </u>	X			regulation. In particular, I understand the importance of coherence in the
	WEPA		0	X			general management of water management tools for environmental protection
							(WEPA)
The ability to	ISD	0		Х			- General Policy Framework provides the overall approach and to achieve this
evaluate all of	CEM		0	X	1		goal, specific policies should be implemented. Thus, we can better evaluate
the policies	DWRM		0		1		these policies. (PCD)
from the	·		x				- Through the review and amendment of policies, I know how to appraise the
viewpoint of	ID		0	x	1		position and role of regulations / policies in the overall system of
coordination	ISEM		ō	X	1	†	environmental policy, in order to solve these problems that regulation / policy
between	PCD	-		v			towards. (ID)
policy-framewo		<u>o</u>	5	X X			- Through the review and amendment of policies I have taken a number of
rk and each	PCD		0		+	·	possibilities when building some specific policies (ISEM)
specific policy,	WEPA		0	X			- Through the review and amendment of policies, I have learned some ability to
has progresses				1			evaluate policies; between the general policy framework and specific policies.
more than			1	1			For example: when the planned construction of a specific policy / regulation, 1
before?			1	1			can visualize the position and role of regulations / policies in the overall
							system of environmental policy, in order to solve problems that regulations /
					1		policies towards. (WEPA)
Do you think	ISD		0	X	<u> </u>	I	- The assessment of individual policies would be done better in the direction
the ability to	CEM		Ō	X	1		consistent with the general policy framework. (PCD)
	line in the second s		-		· [t	
evaluate each	DWRM		0				- With the general policy framework provide specific policies, the assessment of

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viewpoint of the	ID		0	X		- Each individual policy was evaluated, modified, supplemented, however, to
unification of	ISEM	0		X		achieve the best results need to improve the feasibility of the process of
effectiveness	PCD		0	X	 	practical application. (ID)
and	PCD		0	X		- Through the review and amendment of policies, I can understand that even
enforceability	WEPA		0	X		though the content of the policy / regulations is perfect, the water problems still not resolved if the agencies of law enforcement or other businesses not put
more than						
before?		<u> </u>				these policies into practice. (WEPA)

1)Mark "X" indicates capacity before the Project while "O" indicates expected capacity after the Project. 2)Evaluation ranks are 5: Very Good, 4: Good, 3: Satisfactory, 2: Little, 1: Nothing.

They also indicated improvement of their capacity to propose amendment of water environmental policy as follows: -	They also indicated imp	provement of their capacit	y to propose amendmen	<u>it of water environmental</u>	<u>policy</u> as follows: -
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Questions	Respon	Se	elf E	valuation			
	dents	5	4	3	2	1	Reasons of the Result Evaluated
The shility to	ISD	-	0	-	X		- Environmental policy framework is the overall approach in water
The ability to make	CEM	<u> </u>	0	x	<u>^</u>	*****	environmental protection including main issues to focus on. Corresponding to
grand-design for	DWRM	o	x	<u>^</u>			each problem is the single policy. Thus, with this approach, the design of more
overall		<u> </u>	<u>n</u>	x			effective policy framework. (PCD)
framework of		The approach to build policy framework for water management is very					
water	PCD	ō		x			important. The project has provided this approach and therefore the ability to
environmental	PCD	o					design the policy framework for improved water environment. (PCD)
policy has	WEPA	0		X X			- Through the training, I understand the importance of the design of a general
progressed than	WEFA	<u> </u>		<u>^</u>			policy framework. In addition, I also have learned the content of the policies /
before.							regulations / laws of Japan's system of environmental law. So I think capacity
							building overall policies (of water) has been enhanced than before. (ID) - Through the training, I found the capacity to build the overall policies (of
			1				water) has been enhanced than before. I understand the importance of the
					ĺ		design of a general policy framework; understand the content of the policies /
					1		regulations / laws of Japan's system of environmental law. (WEPA)
The ability to	ISD		0	x			- Coordination between the general policy framework and specific policies
make	CEM		ō	X		******	based on the relationship between them, this relationship is clearly
coordination DWRM O X contributing to better coordination. (PCD) between overall ID O X - As mentioned above, the relationship between and specific policies so the ability to be between and specific policies so the	contributing to better coordination. (PCD)						
	ID		0	X			- As mentioned above, the relationship between the general policy framework
	ISEM	1	0	X	1		and specific policies so the ability to be better coordination and more effective.
policy and each	PCD		o	x			(PCD)
specific policy	PCD		0	X			- Through the activities of the project have to understand the relationship between the overall policy framework for each separate policy should be able
has progressed than before.	WEPA		0		X		to connect between the ability to connect the overall policy framework with
man before.			1				separate policies have improved than before. (ID)
		l.					- Through the review and amendment of policies, I understand the relationship
			1	ļ			between the overall policy framework for each separate policy; same time, I
				İ			also understand the method / way to connect these two issues together.
							(WEPA)
The ability to	ISD	0		X			- Every micro Policy at the built will be based on the relationship with
make	CEM		0	X	_		macroeconomic policies and hence the construction, design better. (PCD)
micro-design	DWRM		0	X	<u> </u>	<u> </u>	
for each specific	ID		0	X		<u> </u>	
policy has progressed than	ISEM		0	X		 	
before.	PCD		0	X		 	
	PCD		0	X			
	WEPA		0	x			
[Ļ	l	<u></u>	<u> </u>	l	hile WOW indicates expected especity ofter the Project

1)Mark "X" indicates capacity before the Project while "O" indicates expected capacity after the Project. 2)Evaluation ranks are 5: Very Good, 4: Good, 3: Satisfactory, 2: Little, 1: Nothing.

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(2) **Output 2**

Output 2 is likely to be achieved by the end of the Project based on the observation shown in the table below.

Output 2	Enforcement capacity monitoring, pollution	nforcement capacity of target DONREs on basic water pollution control (environmental onitoring, pollution sources inventory, pollution sources inspection) is strengthened.							
Output 2-1	(Monitoring)								
	Means of Verification (in	Achievement level and basis of evaluation							
<u> </u>	ns of key rivers are pared. eans of verification) aft revised monitoring	 The indicator has been observed in all the 5 DONRE. All target DONREs have prepared the draft revised monitoring plans of the following key rivers by Jan. 2013. Several DONREs are ready to start the new monitoring based on the revised plans. Red River (Hanoi) Re River (Hai Phong) Huong River (Thua Thien – Hue) 							
by con (M	orts in 2012 are prepared DONREs, and shared with accrned organizations. eans of verification)	 Fluong River (Thua Thien – Hue) Saigon River (Ho Chi Minh City) Dinh River (Ba Ria-Vung Tau) The indicator is likely to be observed by the end of the Project. All DONRE has worked on improvement of monitoring report in 2012, and target DONREs except Thua Thien – Hue are scheduled to submit the improved monitoring report in 2012 and share them with concerned organizations. 							
Dra	aft monitoring reports	Hue DONRE has not completed improving the monitoring report of Huong River in 2012. Hue DONRE decided to continue to improve monitoring report of Huong River of 2012 to get skill and know-how of preparing monitoring report for water quality management. Draft of improved monitoring report will be prepared by April 2013.							
imp (M Res ass	curacy of monitoring is proved. eans of verification) sults of capacity essment	The indicator is likely to be observed by the end of the Project. The results of the internal evaluation (capacity assessment) conducted in Dec. 2012 to Jan. 2013 indicate improvement of accuracy (See the figure below). maining period for Output 2-1(Monitoring):							

DONREs and JET will organize discussion meetings in Feb. and Mar. 2013 regarding activities on reviewing and revising monitoring plans of other rivers by themselves during the remaining period and after completion of the Project.

(Results of the internal evaluations of Output 2-1)

Figure 1 below shows result of the self-evaluation for Output 2-1 by all the 5 DONREs (conducted in Dec. 2012 - Jan. 2013). In total 23 staff of monitoring centers in the target DONREs (5 from Hanoi, 5 from Hai Phong, 4 from Thua Thien- Hue, 3 from Ho Chi Minh City and 6 from Ba Ria-Vung Tau). The overall results of the five-level, semi-quantitative self-evaluation for monitoring component (Output 2-1) marked by all DONREs. The scores represent the average scores of all respondents. Before starting the Project, all of the capacities were evaluated as between "little" and "satisfactory". As of January 2013, all of these capacities were evaluated as around "good", indicating that the Project has contributed to improving DONREs' capacities in all areas.

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pia	1-1: Draft revised monitoring		On a scale of 1 to 5, please rate the clarity of the objectives of the monitoring plan of the key				
pia	1-1: Draft revised monitoring		river before and after revision.		2		1
1	ans of key rivers are epared.	CA 2-1-1 (2)	Can you explain and train other staff how to prepare a monitoring plan? Please rate your capacity before and after the Project.			•	,
	Piepuleu	CA 2-1-1 (3)	Do you think the activities of revising the monitoring plan have contributed to improving DONREs capacity to implement effective and efficient monitoring? Please rate the change in DONREs capacity before and after the activities?				>
Enforcement 2-1	2-1-2: Draft revised monitoring reports in 2012 are prepared by DONRES, and shared with concerned organizations.	CA 2-1-2 (1)	Do you think the contents of the monitoring report include enough information for environmental officers of other departments/sections to understand overall situation of water quality in the province? Please rate the contents of the report before and after the Project.			1	, ,
capacity of pre arget DONREs		CA 2-1-2 (2)	Please rate your capacity, before and after the Project, to develop a monitoring report that includes enough levels of monitoring data analysis, such as analysis of historical brend and comparison of upstream and downstream data.			-	
environmentai ^{org} monitoring is		CA 2-1-2 (3)	Do you think the activities of revising the monitoring report have contributed to improving effectiveness and efficiency of DONRE's monitoring? Please rate change in DONRE's capacity before and after the Project.		Ì		}
strengthened.	2-1-3: Accuracy of monitoring Is improved.	CA 2-1-3 (1)	Can you explain the concrete method of QC to other staff?				4
2-1			Do you think the technique of water quality analysis in your laboratory have improved through the Project?	4			+
			Do you think that accuracy of water quality monitoring in your DONRE has improved through the Project?	 ļ			+
		CA 2-1-3 (4)	Please rate the improvement in DONRE's capacity to analyze water quality before and after the procurement of the equipment by the Project.				•

Note: 5: Very Good, 4: Good, 3: Satisfactory, 2: Little, 1: Nothing Source: Internal Evaluation Report (Draft) prepared by the Project

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Figure 1 Overall Results of Questionnaire for Output 2-1 (Average of all DONREs)

Figure 2 shows the average scores of self-evaluation for monitoring component (Output 2-1) marked by each DONRE. WG members of all DONREs felt that the capacities of DONREs to develop monitoring plan (CA2-1-1), draft monitoring report (CA2-2-2), and water quality analysis (CA2-2-3) have improved significantly.

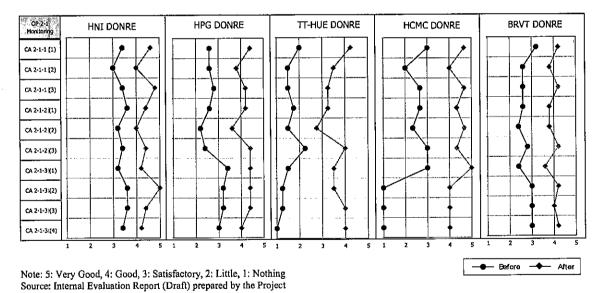


Figure 2 Results of Questionnaire for Output 2-1 (each DONRE)

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	t 2-2 (Inventory)	
OVI	and Means of Verification (in PDM)	Achievement level and basis of evaluation
2-2-1	Primary water pollution sources are duly filled in the revised inventory formats. (Means of verification) Inventory	The indicator has been observed in all the 5 DONRE. Each DONRE has almost completed development of PSI on primary pollution sources. All DONREs prepared the draft short report on situation of information management of pollution sources. Number of enterprises and target areas of the PSI in the 5 DONREs are shown as follows.
		 HNI: 48 enterprises in Long Bien District HPG: 109 enterprises in Re River basin, and 148 enterprises in Da Do River basin TT-HUE: 217 enterprises in whole TT- HUE province. HCMC: 20 enterprises in Tan Quy Industrial Cluster, and 25 enterprises in Phuoc Long Industrial Cluster BRVT: 188 enterprises in whole of BRVT province (83 enterprises in 7 IZs and 1 IC, 105 enterprises outside of IZs and ICs)
2-2-2	Information in the inventory is adequately added and the following information becomes available for DONREs' pollution control activities: (i) information on compliance with respect to EIA, industrial wastewater fee, water discharge license, wastewater quality standard, sanction based on inspection; (ii) information on pollution load of COD. (Means of verification)	The indicator has been observed in all the 5 DONRE. PSI has covered all of the information/parameters specified in the indicators on the left column. All DONRE have prepared and submitted a short report on situation of pollution sources.
. <u></u>	(Means of verification) Inventory	

<u>Issues and planned actions for the remaining period for Output 2-2 (Inventory):</u>
In Mar. 2013, it is planned to revise the short report and to hold general discussion meeting with all DONRE concerning to information sharing within DONRE.

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	<u>it 2-3 (Inspection)</u>	A THE PROPERTY AND A LAST OF ANTIPACTURE
. OVI	and Means of Verification	Achievement level and basis of evaluation
2-3-1	(in PDM) The results of the capacity assessment on preparation work, on-site inspection, and follow-up work of inspection show improvement, compared with the initial stage of the Project. (Means of verification) Results of capacity assessment Criteria for selecting primary/crucial pollution	The indicator is likely to be observed by the end of the Project. The results of the internal evaluation (capacity assessment) conducted in Dec. 2012 to Jan. 2013 indicate improvement of the preparation work, on-side inspection and follow-up (See the figure below). The indicator has been observed in all the 5 DONRES.
	sources in each DONRE's inspection plan are clarified. (Means of verification) Document explaining the criteria for selecting industries to be inspected/checked.	 All DONREs have identified criteria to select primary/crucial pollution sources through preparation of the inspection plan for 2012. Each DONRE is examining what action is needed to select primary/crucial pollution sources in post-project phase using the criteria developed. Hai Phong, Thua Thien-Hue, and Ba Ria-Vung Tau DONREs prepared the inspection plan in 2013. Hanoi DONRE is preparing detail plan for inspection in environmental field. Ho Chi Minh City DONRE prepared draft plan, and is waiting for approval.
2-3-3	Number of officers who have capacities for on-site inspection, such as field measurement and wastewater treatment facility checking, is increased. (Means of verification) Training records	 The indicator has been observed in all the 5 DONREs. (1) The number of participants and period of the OJT for checking wastewater treatment facilities, water flow measurement and field analysis are as follows: -HNI: 5 persons (Sep 2012) -Hai Phong: 14 persons (August and Sep 2012) -TT-HUE: 16 persons (Sep 2012) -HCMC: 8 persons (Jun, Aug, and Sep 2012) -BRVT: 4 persons (Jun 2012) (2) HCMC DONRE requested to conduct trainings on wastewater sampling and quality control on sample analysis by sub-contractor. The training was carried out in November 2012. (3) BRVT DONRE requested a lecture on using weir for wastewater flow measurement. The training was carried out in Nov 2012.
2-3-4	Number of officers who have capacities to assess situation of wastewater management of polluting industries and make recommendations for improvement from perspectives of giving administrative order and administrative guidance, is increased. (Means of verification) Training records	The indicator has been observed in all the 5 DONREs. (1) For all DONRE, the workshops on how to assess wastewater treatment facility were held. The record of the workshops shows that the participants' knowledge on wastewater treatment facility has improved through the workshop. The numbers of participants and the months the workshops were held are as follows: -HNI: 9 persons (Dec 2011) -HPG: 22 persons (Nov 2011) -TT-HUE: 14 persons (Dec 2011) -HCMC: 13 persons (Jan 2012) -BRVT: 24 persons (Feb 2012) (3) In October and November 2012, and January 2013, a series of training or wastewater treatment and cleaner production technique were implemented or seafood processing industry, textile and dying industry, and paper industry Total numbers of the participants are as follows: -HNI: 11 persons, -HPG: 13 persons, -TT-HUE: 6 persons

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-HCMC: 30 persons, -BRVT: 18 persons The answers to the questionnaire distributed after the training showed improvement of participants' knowledge on wastewater treatment (WWT) and cleaner production (CP) technique in out-of-five scores as follows:
-WWT & CP on seafood processing industry: From 2.7 to 3.7 -WWT & CP on textile and dying industry: From 2.8 to 4.0 -WWT & CP on paper industry: From 2.7 to 4.1

Issues and planned actions for the remaining period for Output 2-3 (Inspection):

- In Mar 2013, the Inspection Performance Improvement Handbook will be distributed to DONREs to share the knowledge and experience.
- In March 2013, JET will provide examples of training programs in post-project phase, and items to be covered in such training.

(Results of the internal evaluation of Output 2-3)

Figure 3 shows result of the self-evaluation for Output 2-3 by all the 5 DONREs (conducted in Dec. 2012 – Jan. 2013). In total 16 officers of the target DONREs, including chief level personnel in charge of inspection or environment check activities, answered the questionnaires for interval evaluation. (3 from Hanoi, 3 from Hai Phong, 4 from Thua Thien- Hue, 3 from Ho Chi Minh City and 3 from Ba Ria-Vung Tau). The scores represent the average scores of all respondents. Before starting the Project, all of these capacities were evaluated as between "little" and "good". As of January 2013, they were evaluated as between "satisfactory" and "very good", indicating that the Project has contributed to improving DONREs' capacities for inspection and environmental check.

Objectively Verifable Indicator (quoted from modified 11 July, 2012)	OP 2-3 Inspection	Questions	ALL DONRE
2-3-1: The results of the capacity		check to identify key issues to be checked for improving enterprise's	
	CA 2-3-1 (2)	Can you explain key points to be mentioned in the minutes of inspection handed to the target industry at the end of on-site work for Improving enterprise's wastewater management?	
. ,	CA 2-3-1 (3)	Has the Project contributed to improving effectiveness of DONRE's inspection activities for improving enterprise's wastewater management?	
2-3-2: Criteria for selecting primary/crucial pollution sources in each DONRE's Inspection plan are clarified.	CA 2-3-2 (1):	Can you explain what kind of information is necessary for selecting primary and crudal pollution sources? Please rate the change in your knowledge before and after the Project?	
	CA 2-3-2 (2):	Do you think your organization has dear document to explain criteria for selecting primary/crudal pollution sources? Please compare the situation before and after the Project?	
2-3-3: Number of officers who have capacities for on-site inspection, such as field measurement and wastewater treatment facility checking, is increased.	CA 2-3-3 (1):	Please rate your skill, before and after the Project, to measure wastewater discharge flow from enterprise.	
	CA 2-3-3 (2):	Please rate the change in your knowledge, before and after the Project, on how to check environmental aspects of manufacturing processes and/or operation conditions of wastewater treatment facility at site.	
2-3-4: Number of officers who have capacities to assess situation of wastewater management of polluting Industries and make	CA 2-3-4 (1)	Do you think your capacity to explain required wastewater treatment process flow diagram on industrial sectors to be controlled carefully in your region has increased through the Project?	
recommendations for Improvement from perspectives of giving administrative order and administrative guidance, is increased.	CA 2-3-4 (2)	Please rate the change in your knowledge, before and after the Project, to explain key points for improvement of manufacturing processes and/or operation conditions of wastewater facilities.	
	 (quoted from modified 11 July, 2012) 2-3-1: The results of the capacity assessment on preparation work, on- site inspection, and follow-up work of inspection show improvement, compared with the initial stage of the project. 2-3-2: Criteria for selecting primary/orucial pollution sources in each DONRE's inspection plan are darified. 2-3-3: Number of officers who have capacities for on-site inspection, such as field measurement and wastewater treatment facility checking, is increased. 2-3-4: Number of officers who have capacities to assess situation of watewater management of polluting industries management of polluting industries management of guing administrative order and 	cqueted from modified 11 July, 2012) Inspection 2-3-1: The results of the capacity assessment on preparation work, on-istic inspection, and follow-up work of inspection show improvement, compared with the initial stage of the project. CA 2-3-1 (1) 2-3-2: Criteria for salecting primary/crucial pollution sources in each DONRE's inspection plan are darified. CA 2-3-2 (1): 2-3-3: Number of officers who have capacities for on-site inspection, such as field measurement and wastewater treatment facility checking, is increased. CA 2-3-2 (2): 2-3-4: Number of officers who have capacities to assess situation of wastewater treatment facility checking, is increased. CA 2-3-3 (2): 2-3-4: Number of officers who have capacities to assess situation of wastewater treatment facility checking, is increased. CA 2-3-3 (2): 2-3-4: Number of officers who have capacities to assess situation of wastewater treatment facility checking, is increased. CA 2-3-4 (1) CA 2-3-4 (1) CA 2-3-4 (2)	Can be explained on the control of the contrel of the control of the control of the contrel of the contrel of

Note: 5: Very Good, 4: Good, 3: Satisfactory, 2: Little, 1: Nothing Source: Internal Evaluation Report (Draft) prepared by the Project

Figure 3 Overall Results of Questionnaire for Output 2-3 (Average of all DONREs)

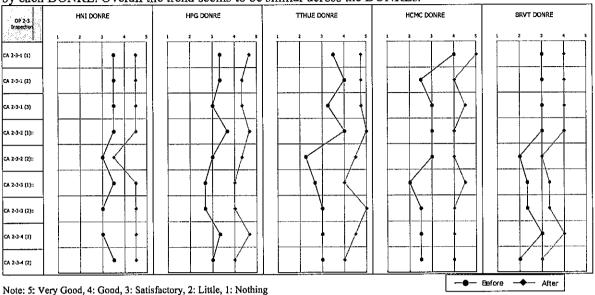


Figure 4 shows the results of self-evaluation for pollution source inspection component (Output 2-3) marked by each DONRE. Overall the trend seems to be similar across the DONREs.

Note: 5: Very Good, 4: Good, 3: Satisfactory, 2: Little, 1: Nothing Source: Internal Evaluation Report (Draft) prepared by the Project

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Figure 4 Results of Questionnaire for Output 2-3 (each DONRE)

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(3) Output 3

Output 3 is targeted only to Hanoi DONRE, and it is <u>likely to be achieved</u> by the end of the Project based on the observation shown in the table below.

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Out	put 3 Target DONRE's capacity of making	effective water pollution control measures is strengthened.
3-1	OVI and Means of Verification (in PDM) A working group that work specifically on studying and making water pollution control measures are established and continues its activities, holding 10 times periodical meeting during the project period with more than 70% attendance rate. (Means of verification) Hearing from target DONREs	Achievement level and basis of evaluation The indicator has been observed. From April 2011 to January 2013, the discussion meetings had been held 16 times in total and, among them, the discussion meetings with more than 70 % attendance rate were 10 times.
3-2	Progress status of Output 3 is reported to the Director of DONRE every 6 months. (Means of verification) Reports to PPC and/or project activity report	The indicator is likely to be observed by the end of the Project. EPA (Hanoi) has reported the progress status of Output 3 to the Director of DONRE almost every 6 months. On 12 Mar. 2013, the Sector Seminar on Industrial Wastewater Management was held in Hanoi to share Outcome 3 and 4 to stakeholders concerned (industrial entities)
3-3	The draft outline for effective water pollution control measure is submitted to PPC through Director of DONRE. (Means of verification) Outline of draft countermeasure and hearing	The indicator is likely to be observed by the end of the Project. The capacity development is ongoing in group discussions on results of data analysis and actions for improvement of industrial wastewater measures. Based on results of the group discussions, draft Outline of Improvement Plan for Water Pollution Control has been prepared, as of January 2013.

Issues and planned actions for the remaining period for Output 3:

• The Outline of Improvement Plan for Water Pollution Control will be finalized after the discussion meeting to be held in March.

• The finalized Outline of the improvement Plan will be submitted to PPC through the Director of DONRE.

(4) Output 4

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Output 4 is likely to be achieved by the end of the Project based on the observation shown in the table below.

Outp		promoting awareness of public and industrial sectors on water
OVI	environment is strengthened. and Means of Verification (in PDM)	Achievement level and basis of evaluation
4-1	The results of questionnaire survey to	The indicator is likely to be observed by the end of the Project.
	target groups such as industries, district/commune/ward officers and social organizations, on environmental awareness show improvement, compared with the initial stage of the Project (consider the environmental awareness events as opportunities to conduct surveys) (Means of verification) Questionnaire survey (report showing the results)	In the first year, 98% of the target groups showed improvement in environmental awareness after the workshops in the target provinces, according to the results of questionnaire survey. For the events in the second year, WG4 is now analyzing the results of the questionnaire survey conducted after the events.
4-2	Tools (e.g., film for the public and	The indicator has been observed in all the 5 DONREs.
	introductory guidance for industries) to promote environmental awareness targeting public and industries are	WS materials for enterprises, government officers and/or residents were developed in each DONRE in the 1st year.
	developed.	The following tools were/are being developed in the 2nd year:
	(Means of verification) Tools to promote environmental awareness	 HNI: Introductory guidebook on environmental laws and regulations for enterprises and materials for sector seminar is being developed. HPG: Signboard and TV reportages for publics and enterprises were developed. Materials of awareness WS for enterprises were prepared. TT-HUE: Materials and goods for simple water quality test and clean-up events and awareness WS for enterprises were prepared HCMC: Goods for a clean-up event was developed. Introductory guidebook on environmental laws and regulations for enterprises is being developed. BRVT: Environmental film for publics and enterprises is being developed.
4-3	Environmental awareness events with target groups are conducted, making use of newly developed tools. (Means of verification)	The indicator has been observed in all the 5 DONRES. In the 1st year environmental workshops for enterprises were organized in HNI and HCMC. Environmental workshops for the public and stakeholders were organized in HPG, TT-HUE and BRVT.
	Record of event implementation	In the 2nd year the following activities were carried out using the tools developed: the awareness WSs for enterprises in HPG and TT-HUE, the events for residents in TT-HUE and HCMC, and production of signboard and TV reportage in HPG.
4-4	The results of the capacity assessment targeting DONRE officers show improvement, compared with the initial stage of the Project. (Means of verification) Results of capacity assessment es and planned actions for the remaining	The indicator is likely to be observed by the end of the Project. The results of capacity assessment (the internal evaluation) conducted in Dec. 2012 to Jan. 2013 indicate improvement in DONRE's capacity of promoting awareness of public and industrial sectors on water environment (See the figure below).

JET will continue to support and ensure that DONREs prepare and conduct questionnaire surveys in the events in

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order to check if target groups' awareness on water environment has improved.

- JET and DONREs will continue to evaluate effectiveness of each activity based on results of questionnaire survey and discuss lessons learned and how to improve activities.
- JET will provide further advises to DONREs about how to improve environmental awareness activities continuously by Plan-Do-See cycle.
- JET will continue to support and ensure that DONREs complete development of tools for environmental awareness, organize events and making use of the tools to be developed.
- Each DONRE will hold a review discussion on actual usage and effectiveness of the developed tools, and will discuss ad share of future direction of environmental awareness activities.

(Results of the internal evaluation of Output 4)

Figure 5 shows result of the self-evaluation for Output 4 by all the 5 DONREs (conducted in Dec. 2012 – Jan. 2013). In total 10 staff, mainly officers in charge of environmental awareness in the target DONREs answered the questionnaires for interval evaluation (2 from Hanoi, 2 from Hai Phong, 3 from Thua Thien-Hue, 1 from Ho Chi Minh City and 2 from Ba Ria-Vung Tau). The average scores of the five-level, semi-quantitative self-evaluation for environmental awareness component (Output 4) marked by all DONREs. Before starting the Project, most capacities were evaluated as between "little" and "satisfactory". As of January 2013, they were evaluated as between "satisfactory" and "good", indicating general improvement of DONREs' capacities for awareness building through the Project. Especially a question on skills and knowledge in CA 4-4 (1) regarding indicator 4-4 was highly evaluated as above "good". The details are explained as follows.

Output of PDM quoted from modified 11 July, 2012)	Objectively Verifiable Indicator (quoted from modified 11 July, 2012)	OP 4 Awareness	Questions	ALL DONRE
Target DONRE's capacity of promoting awareness of public and Industrial sectors on water environment Is strengthened.	4-1: The results of questionnare survey to public and industries to target groups such as industries, district (commune/ward officers and social organizations, on environmental awareness shows improvement, compared with the initial stage of the project (consider the environmental awareness events as opportunities to conduct surveys)	CA 4-1 (1):	Can you prepare a questionnaire for obtaining feedback to the environmental activities from the target groups?	• •
		CA 4-1 (2):	Can you evaluate effectiveness of awareness raising activities based on results of a questionnaire survey to target groups?	• •
		CA 4-1 (3):	Do you think that the environmental awareness activities conducted by DONRE have contributed to Improving environmental awareness of the target groups?	4 4
	4-2: Tools (e.g., film for the public and Introductory guidance for industries) to promote environmental awareness targeting public and industries are developed.	CA 4-2 (1):	Can you specify larget groups, appropriate tools and key messages in developed tools?	
		CA 4-2 (2):	Can you evaluate the effectiveness of the tools developed for environmental awareness activities?	
		CA 4-2 (3):	Have the developed tools and materials been shared in your organization as reference for futere activities?	
	4-3: Environmental awareness events with target groups are conducted, making use of newly developed tools.	CA 4-3 (1):	Can you prepare programs of environmental awareness events considering messages to be delivered to the target group?	
		CA 4-3 (2):	Can your organization get cooperation from relevant officers and departments within and outside the DONRE for Implementing awareness raising events?	▶ ♦
		CA 4-3 (3):	Can your organization prepare a report on result of an event and share it in your organization?	
	4-4: The results of the capacity assessment targeting DONRE officers show improvement, compared with the initial stage of the Project.	CA 4-4 (1):	Please rate your skills and knowledge on environmental awareness.	
		CA 4-4 (2):	Can your organization formulate a future plan/direction on environmental awareness activities of your organization based on the lessons learnt?	
		CA 4-4 (3):	Can staff of your organization share the skills on environmental awareness activity with other staff in your organization and train them?	

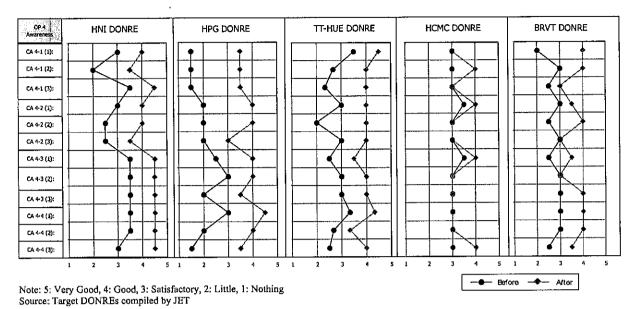
Note: 5: Very Good, 4: Good, 3: Satisfactory, 2: Little, 1: Nothing Source: Target DONREs compiled by JET

Figure 5 Overall Results of Questionnaire for Output 4 (Average of all DONREs)

- Before

After

Figure 6 shows the results of self-evaluation for environmental awareness component (Output 4) marked by each DONRE. The capacity of HPG DONRE tends to be improved through the project the most among the five DONREs. The detailed results are described as follows:





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(5) Output 5

Output 5 is likely to be achieved by the end of the Project based on the observation shown in the table below.

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Output 5 Capacity of MONRE and DONREs on information management and utilization is strengthened.											
and the second	and Means of Verification (in PDM)	Achievement level and basis of evaluation									
5-1	MONRE and the target	The indicator is likely to be observed by the end of the Project.									
	DONRES realize more The survey to understand the current status of water environmental information										
	smooth communication	collection, management and utilization has been done by the end of 2012.									
	between the both than	Throughout the current survey and the expert meeting with MONRE and									
	before in terms of frequency and contents	DONRE, it became clear for the relevant departments in MONRE and DONRE									
	(Means of verification)	that current communication is neither sufficient nor smooth.									
	Questionnaire survey	According to the results of capacity assessment (the internal evaluation) conducted in Dec. 2012 to Jan. 2013, the concerning MONRE officers indicated improvement in DONRE's capacity in recognize the importance of utilization of									
	Queenonnane survey										
		environmental information for policy-making as follows.									
		Questions	Respon dents	Self Evaluatio			Reasons of the Result				
		Do both MONRE	ISD	5		3 X	2	1	Evaluated - MONRE and 5 DONREs		
		and 5 DONRES	CEM	0	X	<u> </u>			understood more about the		
		recognize the	CEM		X				importance of the use of		
		importance of	DWRM	o	-		X		environmental information		
		utilization of	ID		0	X			in policy-making than		
		environmental	CEID		0				before the project. (CEID)		
		information for			X				- The use of the information		
		policy-making							environment is important		
		more than before?							in building up a policy		
				-					framework feasible (ID)		
		Do the awareness	ISD CEM		<u>0</u>	X O	x		- The units of the MONRE		
		toward more utilization of	CEM	******		0 0	A X		and 5 DONREs understood more about		
		water	DWRM		ō	Ť	X		how to use environmental		
		environmental	ID		0 0	x		J	information to policy		
		information for	PCD		0	Х			makers than before the		
		policy-making	PCD		0	X			project. (CEID)		
		have been	CEID		0				- Through the operation of		
		enhanced among			x				the project, I already know		
		MONRE and 5							how to use environmental		
		DONREs than							information to serve the		
		before?	anity hofers	the	Proi		while		policy-making (ID)		
		1)Mark "X" indicates capacity before the Project while "O" indicates expected capacity after the Project.									
		2)Evaluation ranks are 5: Very Good, 4: Good, 3: Satisfactory, 2: Little, 1: Nothing.									
5-2	The draft of "water	The indicator is likely	to be obs	erve	ed b	y th	ie er	id o	of the Project.		
environmental information procedure in terms of collection, management and utilization (including) Based on the survey results above, the draft procedure in te management and utilization was made. The comments for the draft procedure were gathered by the									ocedure in terms of collection,		
									hered by the expert meeting in		
dissemination)" is prepared which MONRE and DONRE participated.								neree of the expert mooting in			
	(Means of verification)	The trial of the information collection, management and utilization is planned in									
Dran water environmental Hai Phong DONRE was conducted											
	information procedure Hai Phong DONRE was conducted from the middle of February 2013.										
Issu	Issues and planned actions for the remaining period for Output 5:										

Issues and planned actions for the remaining period for Output 5:
For making the relevant people realizing necessity of more smooth communication between MONRE and the DONREs, it is expected to disseminate through workshops the better way of collecting, managing and utilizing

the water environmental information.

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• The core part of the draft procedure has been made, so the results of the trial should be fed-back to make it more reasonable and feasible.

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3-2-3 Prospects of achieving the Overall Goal

The prospects for achievement of the Overall Goal after the Project referring to its Objectively Verifiable Indicator (OVI) are discussed in the table below. While prospect for achievement of the Overall Goal will be assessed once necessary data will be available, a lot of unintended positive impacts are observed as stated below.

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Overall Goal: En strengthened.	forcement c	apacity of MONRE a	nd DON	REs on w	vater envir	onmental r	nanagement i
OVI and Means of Verification (in PDM)	Achieveme	nt level and basis of eva	luation				
1. The rate of levying environmental protection charge for waste water	The indicate present, base not available	on from the PSI of the s or should be the rate = eline data for the rate of e. However, current statu- the Table below based of	entity ne levying ex us of rate	os. paying nvironmen of busines	tal protections entities participations and the second sec	n charge for aying the lev	wastewater an
increases.	Item		HNI	HPG	TT-HUE	HCMC	BRVT
(Means of Verification)	a)Total bus	siness entity nos.	59,938	6,112	3,030	96,000	3,282
The rate of levying	b)Target e in the Proje	entities of investigation ect	48	257	217	45	196
environmental protection charge	c)Entities J	paying levy in b)	18	24	18	25	112
for waste water	d)Rate= c)	/b) (%)	38	9	8	56	57
increases.	Source: data	collected by JET	I				I
	collected an DONRE to I rate of the le Here is som data for obs	estions of the better info nount of the wastewater MONRE. When this is be evy. e information collected to revation of the indicator	discharg rought int under the	ing fee is o practice,	included in it could con	the inform tribute the h	ation sent from
	l environmen			le below s	hows status	of discharg	ing permits an
		tal protection (dischargin environmental informati	ng) fee in ion procec	le below s Hai Phong lure in Hai	hows status , The data v Phong in Fe	of discharg vas acquired eb. 2013.	ing permits an during the tri
	of the water No. Control of district 1 (have been regist No. discharginger 2 appled Toal Fee collected 5 cource: The tr Another table Phong and V	tal protection (dischargir environmental informati m rgingiallus ed) arritnewly t Potectioniee rial of the water environme le below shows total amo Vung Tau, which was pre	ng) fee in ion proceed 2000 1 1 	le below s Hai Phong lure in Hai	hows status 5. The data v Phong in Fo 547 1 4 581,750,970 dure in Hai P al protection	of discharg vas acquired eb. 2013. 555 2 1,100,082,018 1,555 hong in Feb. 2 1 fee collected	ing permits an during the tria 329 334 11 5 1204.778 1,549.265,339 2013 ed in Hanoi, Ha
	of the water No. Of the of distance 1 (have been regist No. discharging per 2 applied Toal Fee colleded Bivromenta 3 (colleded Source: The tot Another tab	tal protection (dischargir environmental informati m rgingiallus ed) arritnewly t Potectioniee rial of the water environme le below shows total amo Vung Tau, which was pre	ng) fee in ion proceed 2000 1 1 	le below s Hai Phong lure in Hai	hows status 5. The data v Phong in Fo 547 1 4 581,750,970 dure in Hai P al protection	of discharg vas acquired eb. 2013. 555 2 1,100,082,018 1,555 hong in Feb. 2 1 fee collected	ing permits an during the tria 329 334 11 5 1204.778 1,549.265,339 2013 ed in Hanoi, Ha
	of the water No. Control of district 1 (have been regist No. discharginger 2 appled Toal Fee collected 5 cource: The tr Another table Phong and V	tal protection (dischargir environmental informati m rgingiallus ed) arritnewly t Potectioniee rial of the water environme le below shows total amo Vung Tau, which was pre	ng) fee in ion proceed 2000 1 1 	le below s Hai Phong lure in Hai	hows status 5. The data v Phong in Fe 8. 2009 547 1 4 591,750,970 dure in Hai P al protection dy conducter tion fee for	of discharg vas acquired eb. 2013. 565 2 1,100,082,018 1,555 hong in Feb. 2 the collecte ed by the loc	ing permits an during the tria 329 384 11 5 1204.778 1.549.265,339 2013 2013 2013 2013 2013 2013

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	2009	about 2.4 billions VND		· · · · · · · · · · · · · · · · · · ·
	2009	(from 2008 until now)	581.000.000	
	2010		1.100.000.000	
	2011		1.150.000.000	1.170.393.462 VND
	6 months		in 2012 estimated 2	6.153.595.100 VND
	of 2012	380 millions VND	billions VND	(from 2004 - now)
		survey conducted by local consu- ronmental information collection		2 to understand the current status ion
	In addition members fr	om three DONREs responde	and interview survey ed to the question "Is it	conducted by the Team, JCC t likely that the rate of levying as a result of the Project?" as
				Project, PSI was produced and e charge."(Hai Phong DONRE)
	"Likely. It v	vill perhaps increase, but I ca	nnot be sure." (Thua Th	ien-Hue DONRE)
		cause DONRE staff's capaci ject."(Ba Ria-Vung Tau DOI		d their experiences will be used
		of observation of the indica		
	legal docum of the revis	ents of the levy on wastewat	er discharge (Decree 67 d give positive effects o	tly preparing the revision of the). According to the current draft on the collection rate of the levy an the current one.
2. The rate for	(Informati	on of the 5 target DONREs	from SET)	
industries to follow orders/ administrative guidance increases.	and nos. of may not be	entities receiving orders are	available annually, but : IRE has not conducted t	6). Currently, nos. of inspection nos. of entities following order the follow-up activities to check available at present.
(Means of Verification) The rate for	DONREs.		and continue inspec	r-up activities to C/Ps in targe tion capacity further throug NREs.
industries to follow orders/ administrative guidance	check after			ONREs to carry out complianc der to seek more effective an
increases.	(Informati	on from the survey and test	ing under Output 5)	
	baseline da environmer	ta for observation of the ind:	icator. The table below Hai Phong. The data wa	hich will probably be useful a shows results of inspection an s acquired during the trial of th 2013

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a)Target entities of investigation in the Project	48	257	217	45	196
b)Entities submit self- monitoring report in a) (%)	36(75)	84(33)	69(32)	17(38)	146(74)
c)Entity nos. sampled in a)	34	98	40	45	144
d)Compliance cases of c)					
-BOD(d)/c) = %	23(68)	71(72)	24(60)	27(60)	85(59)
-COD (d) / c) = %)	28(82)	77(79)	26(65)	33(73)	90(63)
-SS $(d)/c) = \%$	29(85)	85(87)	28(70)	28(62)	120(83)
-T-N (d) / c) = %	31(88)	80(82)	26(65)	43(96)	124(86)
-T-P (d) / c) = %	31(88)	91(93)	36(90)	37(82)	119(83)

Source: data collected by JET

Figures of the rate described above vary widely because it fully depends on type of target industries. Another survey data on environmental check and inspection in HNI DONRE from 2008 to 2010 shows around 38 % of BOD compliance rate, for example.

(Result of the questionnaire and interview to the DONREs)

In addition, during the questionnaire and interview survey conducted by the Team, JCC members from three DONREs responded to the question "Is it likely that the rate for industries to comply with the effluent standards will increase as a result of the Project?" as follows: -

"Very likely." (Hai Phong DONRE)

"Very likely." (Thua Thien-Hue DONRE)

"Likely. By implementing output 2 (inspection, pollution source inventory) and output 4 (propagation) and experiences gained from JICA experts, DONRE staff have gained good experience in implementation, resulting in highly efficient activities, making the enterprises more strictly comply with regulations on waste discharge." (Ba Ria-Vung Tau DONRE)

(Prospect of observation of the indicator in future)

SET trained C/Ps related to pollution source control in line with preparation of PSI. DONRE should continue to obtain necessary data for further promotion of pollution source control.

ID is now preparing the revision of Decree 117 as an activity of Output 1. According to the current draft, the enhancement of the penalty in case of violation is expected. This would give positive effects on the rate of the industries' compliance with effluent standards

Legal documents (Decree 29, Circular 26) on SEA/EIA/EPC were newly established to revise current legal documents as the activity for Output 1. This revision includes the expansion of EIA and stricter checking of EIA /EPC report. So this revision would give positive effect on the increase of the rate of industries comply with the effluent standards

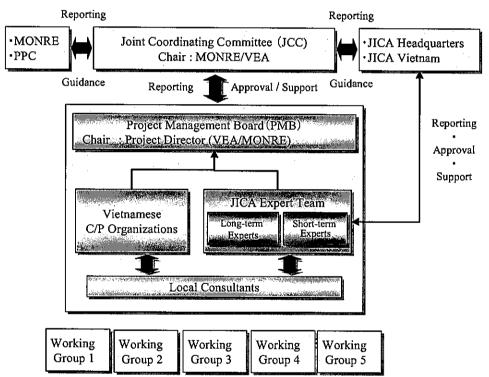
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3-3 Implementation Process of the Project

3-3-1 The management structure of the project

The organizational structure for implementation of the Project is shown in Figure 7. As the highest decision making body of the Project, JCC has held meetings four times so far on 1 Nov. 2010, 10 Jun. 2011, 22 Dec. 2011 and 29 Jun. 2012 (approximately once six months). In the meetings, they made appropriate and timely decisions on overall management of the Project.

Under the JCC, the Project Management Board (PMB) was established to manage project activities, and to report progresses to JCC. So far PMB has held two meetings on 25 Nov. 2011 and 29 Jun. 2012. The project activities are carried out by the Vietnamese counterpart organizations whose environmental management capacities are to be strengthened through the Project. The organizations are expected to establish working groups (WGs) for each output of the Project to clarify the activities and responsibilities of participating officers and experts. The JICA Expert Team (JET) provides technical support and guidance to the organizations.



Source: Review of Mid-term Review on the Project.

Figure 7 Organization for implementation of the Project

Most of the counterpart personnel and the JICA experts consider that the organization of the project (JCC, PMB and WGs) functioned to some extent for monitoring and management of the Project. In addition, with the agreement between MONRE and PPCs, the DONREs have participated in PMB meetings representing PPC and the results of PMB meeting were reported to PPC by DONREs. Thus, the indirect involvement of PPC has been ensured.

Most of them also considered the frequency of meetings of the JCC (once six month) appropriate to monitor and making decisions on the Project. On the other hand, many of them commented that PMB should have had more frequent meetings to materialize general directions given by JCC.

3-3-2 Delay in implementation of Activities

The Project started in June 2010 as stipulated in the R/D, however, official approval of the Project document by MONRE delayed until December 2011. It caused delayed disbursement of the budget from the Vietnamese side. As a result, some of the component of the budget was not fully utilized. It has been difficult for DONREs to fully commit to the Project activities without the official approval of the Project document.

Procurement of some of the equipment seriously delayed. Procurement of equipment required for the training for BRVT DONRE, namely GC-ECD and furnace-AAS delayed as much as 10 months until Jan. 2013 due to the delay of the release of Form A4 by the Vietnamese side. Thus, for the Output 2-1-3 in BRVT DONRE, the completion of their work plan (WP) has delayed.

3-3-3 Response to the recommendations in the mid-term review

The joint mid-term review of the Project was conducted from 8 to 22, Dec. 2011. At the end of the review, they gave the suggestions responding to the issues they detected during the review with consideration of the remaining project duration. To each of the suggestions, status of response is as follows

(1) General suggestions

It is suggested that linkages between DONREs and related departments of VEA be ensured in enhancing water environmental management level of DONREs.

Linkages between related departments of VEA and DONREs were strengthened with more frequent workshops after the mid-term review. The target DONREs provided with equipment by JICA also consulted CEM's opinions on configurations. The implementation of activities regarding inspection, examination, training, awareness enhancing has all been advised through PMB and functional units.

- It is important to make detailed work plan as early as possible to ensure the sufficient inputs of ideas, opinions of staffs in MONRE and DONREs and to come up with practical work plans while maintaining some flexibilities to respond to the changes of needs and so forth.

Until the mid-term review, DONREs had an opinion that the Project activities were not informed early enough for the preparation on their side. After the mid-term review, both JET and VEA made an effort to provide work plans in timely manner.

- It is desirable to make arrangement early enough to streamline meetings and other activities.

The exchange and advice to the Departments in MONRE through meeting, telephoning, email were carried out more thoroughly and frequently. Regular meetings with LET, SET were carried out fully and timely.

- It is advisable to consider study visits among DONREs with support form VEA in order to share experiences and findings among DONREs.

Organization of study visits of DONREs to exchange experience of the Project was not fully implemented. However, VEA made efforts to organize the workshops, training courses to exchange the Project results in the provinces with the participation of all the 5 provinces to create opportunities for field visits and experience sharing on water environment management.

(2) Specific Suggestions

i) Output 1 (Formulation of policy and management tools)

- With rather short duration left in the Project and its limited budget, it is desirable to set clear image of outputs in work plans in particular laws and regulations to which the results of the study would be reflected and incorporated.

The topics taken up as Output 1 diversified in contents as well as in the stage toward making-policy. They included topics which may directly connected with particular laws and regulation as well as matured enough to make concrete laws and regulations.

- It is desirable to have opportunities to exchange and share the results of each study in order to create harmony, consistency and synergy among outputs of policy review activities.

To exchange information and opinions, meetings, workshops and seminars were held among the various branches in MONRE. However, some of the counterpart personnel in MONRE consider more systematic information sharing among different departments was required.

- Several issues at the DONRE level might be taken up in Output 1 activities. The linkage between Output 1 and Output 2 and 3 needs to be ensured and a substantial level of intervention of VEA is recommended under the appropriate supervision of the PMB.

Linkage between Outputs 1, 2 and 3 were ensured and PMB requested JICA to organize mixed activities among WGs. Project Director requested the concerning departments of MONRE to utilize, associate, and achieve the sustainability of Output 2 and 3's results when implementing Output 1's activities.

- ii) Output 2 (Enforcement of basic water pollution control measures)
- It is advisable to have such opportunities that officials in charge of inspections and environmental check can participate in training under the Project for monitoring staff.

In some DONREs inspectors and officers in charge of environmental check attended training courses for monitoring.

- With respect to PSI, if good collaboration is ensured in developing and utilizing PSI, this will contribute much to the enhancement of the institutional capacity for environmental management of DONREs.

In all DONREs, for preparation of PSI, various agencies worked together.

<u>iii) Output 3 (Development of water pollution control measures)</u> Since the successful implementation of activities of Output 3 is crucial for the entire Project in view of the integration of results of all relative activities, active participation of Hanoi DONRE is strongly required.

Since April 2011, the discussion meetings have been held 13 times in total and average attendance has been around 70%. Hanoi EPA has reported quarterly the progress status of Output 3 in its periodical working report.

iv) Output 4 (Promotion of awareness of public and industrial sectors on water environment) It is advisable to make in-depth analyses of the results of the first workshops and share them among DONREs and VEA to consider effective ways and means to enhance environmental awareness of industrial sectors, social organizations and so forth.

Analyses of the results of the workshop in the progress report 3, the province's socio-economic characteristics were taken into account when carrying out WG4's activities.

v) Output 5 (information management and utilization)

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It is planned to undertake a study to identify issues regarding information management and utilization in VEA considering relations between VEA and DONREs. It is advisable to analyze the results of the study to come up with appropriate actions forward.

VEA assigned CEID as the focal point of Output 5. The current information management was analyzed. Based on the analysis, JET in cooperation with CEID prepared the information management procedure and tested it in Hai Phong.

4 Results of the Evaluation

4-1 Evaluation based on the Five Evaluation Criteria

Analyzing the information collected through the evaluation study and sorted in the evaluation grid, the Team concluded evaluation applying the five evaluation criteria as follows.

4-1-1 Relevance

The relevance of the Project at present is regarded still high and even higher than that when the Project was formulated, mainly because of some positive changes in policies, socio-economic and institutional environment as discussed below.

(1) Relevance to the policies and socio-economic environment in Vietnam and the 5 provinces

As discussed 4-1-5(1) below, during the Project period, there were a lot of laws, regulations, policies, strategies and plans supporting water environmental management drafted, revised and/or approved at national and provincial level. Thus, relevance of the Project in the policy aspect has become even higher.

(2) Implementation structure

ISD/VEA was selected as a main counterpart because several departments under VEA were involved in the Project together with 5 DONREs, and it was expected to make administrative coordination. However this structure has not always worked well to ensure the smooth communication among those departments and DONREs.

(3) Relevance of the selection of the 5 target DONREs

The project design imply that the 5 DONRE targeted in the Project should be eligible as "models" of other DONREs nationwide for water environmental management. As stated in the PDM, the target group of the Project is MONRE and the target 5 DONREs. On the other hand, to achieve the Overall Goal after the Project, the condition "The results of activities and lessons are properly extended and applied to other DONREs nationwide." is required as the Important Assumption.

The Project Director and Project Manager consider selection of the 5 target provinces of the Project (Hanoi, Hai Phong, Thua Thien-Hue, Ho Chi Minh and Ba Ria-Vung Tau) appropriately covers the critical issues on water environmental management in Vietnam to develop models for capacity development nationwide.

In the report of the Japanese Detailed Planning Survey Team on the Project dispatched in Mar. 2009, reasons of the selection of the 5 DONREs are discussed. They classified current capacity of various DONREs into three levels and selected target DONRE from each level, such as "advanced" (Hanoi DONRE and Ho Chi Minh City DONRE), "intermediate" (Hai Phong DONRE and Ba Ria-Vung Tau DONRE) and "under development" (Thua Thien-Hue DONRE). They were also considered appropriate for extension of the impact of the Project to the neighboring areas, as they are big cities and centers of regions in Vietnam. In all the Provinces, the urban environmental problems and industrial pollution started realizing, thus their needs of capacity building of environmental management was high.

(4) Cooperation of other donors to MONRE on water environmental management

There is no similar project implemented between MONRE and other donor in the field of water environmental management at present.

4-1-2 Effectiveness

Effectiveness of the Project is judged as high. The Project Purpose is likely to be attained by the end of the Project as stated in Section 3-2-1. Factors affecting the achievement are as follows.

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(1) Contribution of each Output to the achievement of the Project Purpose

It was observed that all 5 Outputs contributed to the achievement of the Project Purpose as stated below.

Specific results which show the achievement of the Project purpose can be seen in various deliverables of the Project's Output 1 such as preparation of framework of the chapter on water environmental management in the draft revised Law on Environmental Protection (LEP), draft revised Decree 117 on fining of administrative violations in the field of environmental protection, the Operational Manuals and Standardization of an automatic water monitoring station, manuals on evaluation of appropriate technologies for the environment, etc. The Decree and Manuals etc. above will contribute to the improvement of water environmental management at DONREs. Many opportunities to receive views and opinions from DONREs were provided during the course of development of these deliverables.

Output 2 contributed the most to achievement of the Project Purpose especially to the capacity development of DONREs. Under Output 2, the individual staff members of all the 5 DONREs improved their capacity for the monitoring, preparation and updating PSI and inspection. Toward institutionalization of such capacity in their organization, all the target DONREs are producing draft revised monitoring plans of the key rivers, improved monitoring reports (draft), Pollution Source Inventory (PSI), Inspection Performance Improvement Handbook, etc. Most of the officers in charge of Output 2 in the 5 DONREs evaluated that Output 2 contributed to the Project Purpose very much. Many of them also commented that their individual capacity, as well as organizational capacity of their sections and DONREs were strengthened based on their experience in the Project. However, the Team cannot currently evaluate whether Output 2 significantly contributed to the development of the capacity of MONRE to make policy and management system.

Under Output 3, the individual staff members of Hanoi DONRE improved their capacity of making effective water pollution control measures. To institutionalize the strengthened capacity, the Outline of Improvement Plan for Water Pollution Control has been drafted and will be finalized and submitted to PPC Hanoi by the end of the Project. The Output 3 has surely contributed to strengthen Hanoi DONREs' enforcement capacity regarding water environmental management (the latter half of the statement of the Project Purpose). On the other hand, the Team cannot currently evaluate whether Output 3 directly contributed to the strengthening MONRE's capacity of making policy and management system (the first half of the statement of the Project Purpose).

Under Output 4, the individual staff members and the organizations in charge in all the 5 DONREs improved their capacity of promoting awareness of public and industrial sectors on water environment through implementation of awareness activities using the newly introduced methodologies and tools. All the officers in charge of Output 4 in the 5 DONREs evaluated that Output 4 contributed to the Project Purpose. With the evaluation, some of the gave comments from them such as "Output 4 doesn't contribute as much as Output 2 does" (Hai Phong), "The awareness activities under the Project were only production of the video and one workshop" (Ba Ria-Vung Tau).

Under Output 5, it became clear for the relevant departments in MONRE and DONRE that current communication is neither sufficient nor smooth. The internal evaluation indicated that MONRE and the 5 DONREs recognized more the importance of utilization of environmental information through the Project. MONRE also produced the new water environmental information procedure and tested the procedure in Hai Phong. Through the trial practice of the new procedure, Hai Phong DONRE raised their awareness further of the importance of utilization of environmental information. The Project Manager considers that Output 5 would help preparing new policies, providing new techniques in supplying, receiving, processing, and utilizing environmental information.

(2) Synergy among the Outputs from the 5 DONREs

(Synergy among Output 2, 3 and 4 in each DONRE)

A lot of synergy effects of the activities under Output 2, 3 and 4 in each DONRE have been reported. For example, attitude of the companies in Tan Quy area was improved after the public awareness activities under Output 4. They were also listed in the PSI and targeted by the inspection under Output 2. During correction of information for PSI and inspection of the targeted factories, DONRE conducted awareness activities. When DONRE visited the factories for the 2nd inspection after the activities, they prepared necessary information and fulfilled effluent standard. Other DONREs also conducted awareness activities to the companies targeted under Output 4. As planned, the draft plan of water pollution control measures prepared under Output 3 in Hanoi is based on the PSI and other outcome from Output 2.

(Synergy between Outputs at DONRE and MONRE levels)

During the mid-term review, the specific suggestion concerning Output 1 was given to have several issues at the DONRE level taken up in Output 1 activities. The linkage between Output 1 and Output 2 & 3 needs to be ensured and a substantial level of intervention of VEA was recommended under the appropriate supervision of the PMB. Being asked implementation of the suggestion in the questionnaire survey by the Team, 4 among 8 respondents from of the concerning departments in MONRE answered "not sure," 3 answered "Yes, to some extent," and 1 answered "Not yet implemented." According to Inspection Department, MONRE, during the reviewing of Decree 117's feasibility, several local suggestion under Output 2 and 3 were incorporated. Another respondent commented that seminars under the Project were main opportunities to have information exchange between MONRE and DONRE, though we did not have so many seminars.

Synergy between the improvement of information management and utilization under Output 5 and Output 2 is also observed. During the trial of the water environmental information procedure drafted under Output 5 in Hai Phong, DONRE utilized information collected through the monitoring and preparation of PSI under Output 2.

(3) External factors promoting or hindering the achievement of the Project Purpose

In the PDM, the following condition is indicated as Important Assumption to achieve the Project Purpose: -

PPCs at target provinces make commitments to cooperate with the Project.

Fulfillment of this Important Assumption is in question. According to the agreement between MONRE and PPCs, all PPCs nominated DONREs participating in JCC and PMB on their behalf. At the same time, there was no clear description on the role of PPC in R/D, PDM, and PO. Therefore, specific actions following the commitment of PPC were different from PPC to PPC.

It was expected more support from PPC might have helped JICA experts conduct activities on site more effectively and might have promoted more active participation of the Working Group members. TT-Hue PPC allocated counterpart budget for the Project.

4-1-3 Efficiency

Efficiency of the Project is estimated satisfactory. All the activities have been implemented though there have been some delay as stated in Section 3-3-2, and five Outputs are expected to be produced by the end of the Project as stated in Section 3-2-2. Inputs from both the Vietnamese and Japanese sides were in general appropriately provided and utilized for the intended purposes.

(1) Delay of approval of the Project document

As discussed in Section 3-3-2, some necessary arrangement by VEA, MONRE for the Project such as approval of the Project document and preparation of Form A4 for the additional equipment delayed. Thereby it caused delay in disbursement of the Project budget and procurement of the equipment.

(2) **Production of Outputs**

As stated in Section 3-2-2, all the five Outputs of the Project are likely to be produced by the end of the Project, as all indicators for the Outputs have been observed or are likely to be observed by the end of the Project.

(3) Appropriateness of Inputs from the Vietnamese side

As stated in Section 3-1-1, the members of JCC, PMB and WGs were assigned from the relevant organizations and agencies. The number, position and timing and length of assignment of the counterpart personnel were appropriate in general. In Hanoi DONRE, the completion of Working Plan for the laboratory has delayed a little due to change of the main counterpart personnel. The delay will be solved by the end of March 2013.

The office space that the Vietnamese side provided to LET in Hanoi and timing of provision are appropriate. However, they were not able to provide an appropriate office space for SET. They did offer a space in Hai Phong and a small space in Hanoi, but SET had to turn them down because they were either too small or inconvenient as their main office for the overall project activities. Currently SET is hiring their main office in Hanoi with JICA's budget.

Disbursement of the budget from MONRE to the Project delayed until 2012 due to the delay the official approval of the Project by the Vietnamese government as stated in Section 3-3-2. TT-Hue PPC and Ho Chi Minh City PPC allocated and disbursed their own Project budget.

(4) Appropriateness of Inputs from JICA

The JICA experts assisted to enhance the capacity of CPs with the various types of means such as OJT, training courses, workshops, etc. They also worked as a catalyst among the various agencies and organizations forming WGs. As stated in Section 3-1-2, the 19 experts with the total of 189.03 Man/Months (M/M) are assigned to the Project. In general, the number, technical field, and timing and period of dispatch of the JICA experts were appropriate.

The two training courses in Japan were highly valuable opportunities in enhancing the capacity of CPs. CPs digested and refined what they have learnt in Japan, then the knowledge of CPs seems to be fit to and deep-rooted in the conditions in the five provinces. The timing, duration and curriculum of the training courses were appropriate. Some representatives from DONREs and MONRE commented that they wanted more training courses to send more counterpart personnel to Japan. However, for the second training course, HCMC DONRE failed to send participants missing the deadline of submitting the application, though JICA had sent invitation them too early enough. The third training course is scheduled to take place in April 2013, for studying environmental management for sustainable development. DONRE and PPC leaders will be

invited for the training to supplement the lack of PPC involvement so far and also to enhance sustainability of the Project.

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Concerning the equipment provided by JICA, the quantity and specification were definitely appropriate, including the equipment that was not listed in the original plan and additionally requested during the Project for better implementation of the Activities. However, procurement of some of the additional equipment seriously delayed. Procurement of equipment required for the training for BRVT DONRE, namely GC-ECD and furnace-AAS delayed as much as 10 months until Jan. 2013 due to the delay of the submission of Form A4 from MONRE after its approval by the Vietnamese Government. Thus, for the Output 2-1-3 in BRVT DONRE, the completion of their work plan (WP) has delayed.

Other inputs such as the operational expenses borne by JICA including employment of the local consultants for the studies and proposals were in general appropriate for its amount, uses and timing of disbursement.

4-1-4 Impacts

A lot of unintended positive impacts are observed, while prospect for achievement of the Overall Goal will be assessed once necessary data will be available.

(1) Conditions for achievement of the Overall Goal

As discussed in Section 3-2-3, the Team didn't find sufficient information to observe indicators of the Overall Goal then it's hard enough just assessing prospect of achievement of the Overall Goal, much less assessing the Project contribution to the Overall Goal.

On the other hand, as stated in the PDM, there are one Important Assumptions to achieve the Overall Goal after successful completion of the Project, such as: -

- The results of activities and lessons are properly extended and applied to other DONREs nationwide.

In addition, the Team also recognizes some additional assumptions to achieve the Overall Goal such as: -

- (1) To strengthen overall capacities of DONREs to manage water environment, they need, in addition to technical capacity, good leadership, good strategies, proper management of tasks, proper management of resources, etc. Some of these factors have been addressed in the Project (e.g., strategies in Output 3), but DONREs needs more comprehensive improvement of management.
- (2) DONREs also need as their enabling environment, namely budget, human resources, laws and regulations by MONRE and the provincial governments. In addition, society and public eyes on responsibilities and accountability of governmental organizations are also important enabling environment for them. The Project has addressed some of them (e.g., environmental policies in Output 1 and awareness building in Output 4).

(2) Unintended positive impacts

The stakeholders at the Vietnamese side and JET recognized unintended positive impacts of the Project including: -

(At the MONRE level)

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- In preparation of the section of water environmental management in the revised LEP, some of the tools, approaches and ideas are applicable to environmental management in general and can be referred to in other parts of LEP.
- The improvement of the communication between the DONREs and MONRE under the Project also improved communication among them not only on the water environmental management.

- In the Project, capacity for water environmental management at the central and the local level has been improved with the appropriate two-way approach of both top-down and bottom-up.

(At the DONRE level)

- The way of work and methodology DONREs learned through the Project can be usable not only to water environmental management but also to other issues such as air pollution control and solid waste management.
- Through the Project activities, relationship among the sections in DONRE, as well as relationship between DONRE and other departments in the province improved. Collaboration between DONRE and companies was also strengthened.
- The provinces participating in the project had more chance to exchange and learn experiences from each other.
- Community awareness strengthening activities in accordance with Output 4 at the provinces have helped the communities, industries and socio-political organizations aware of environmental management.
- Hai Phong DONRE gave presentation of their PSI to the 10 provinces in the Hong river delta in the explanatory meeting recently held outside of the Project. Among them the three provinces (Quang Ninh, Hai Duong, Ha Nam) showed strong interest in PSI.
- Hai Phong DONRE is trying to utilize PSI for planning of pollution control measures (similar to those Hanoi DONRE planned under Output 3).

The Team didn't observe any possible major negative impact by the Project.

4-1-5 Sustainability

Sustainability of the Project is from moderate to high as shown below.

(1) Sustainability in policy aspect

Sustainability of the Project in policy aspect is quite high. During the Project period, there were a lot of laws, regulations, policies, strategies and plans supporting water environmental management drafted, revised and/or approved at national level as listed below. MONRE is required to respond to the requirement of the above laws and regulations, etc., therefore, MONRE might continuously examine and develop the Project outcomes.

- Law on Water Resources (approved by the National Assembly)
- National Strategy on Green Growth towards 2020 and vision to 2050
- National Target Program (NTP) on pollution treatment and environmental improvement in the period of 2012 2015 (Prime Minister's decision)
- National Strategy on Environmental Protection towards 2020 and orientation to 2030 (Prime Minister's decision)
 - National Strategy for Integrated Management of Solid Waste up to 2025 and vision towards 2050 (Decision No.2149/QD-TTg)
- Revision of Law on Environmental Protection 2005 (ongoing)

At the target province level, some positive changes in the political and socio-economic environment have been observed since the beginning of the Project. Hanoi PPC made decisions such as:

- Decision No. 35 in 2010 concerning water environment
- Instruction No.24 in 2011
- Application of the 10 years project for protect the three major river basins in Vietnam

According to Hai Phong DONRE, they now have the Green Growth Policy as the direction of Hai Phong city. Since the Project started, control of industry has been getting more strict in Hai Phong city. In addition, soon the yen loan project for development of Lach Huyen port in Hai Phong will start. The port is neighboring to

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Cat Ba Island, which is declared as a national park, marine protected area and UNESCO Biosphere Reserve, and in nomination process for UNESCO World Heritage List at present, as well as limited water resource, then strict water environmental management in Hai Phong is further required.

TT-Hue province is planning another study for water resources management.

(2) Sustainability in institutional and organizational aspects

In accordance with Vietnam's regulations on ODA project management, after completing the Projects, the organizational structure (JCC, PMB and WGs) will be dissolved. However, the organizational functions to monitor and implement planned activities to achieve the objectives acquired through the Project are expected to sustain in the concerning departments in MONRE and the target DONREs for fulfillment of their responsibilities and routine work. The handbook and manuals prepared during the Project enhance sustainability of the technologies transferred not only at the individual level but also the organizational level.

(3) Sustainability in technological aspect

The technologies introduced under Output 1 for making better policy and management tools are likely to be sustained. Various project contents and activities serve as premises and basis. Drafts of future policies and management tools of MONRE in the field of water environmental management are appropriate and feasible to be considered and completed to be submitted for promulgation by competent authorities. The policy making officers of MONRE (VEA and DWRM) improved their capacity for preparing laws and regulations and other legal document, which can sustain even after the Project ends.

The technologies introduced under Output 2 for basic monitoring, PSI and inspection are likely to be sustained, because they are strongly required for water environmental management and now in use in daily activities by DONRE. Particularly, usefulness of PSI is strongly recognized by various sections in the DONREs. Hai Phong DONRE plans to introduce the handy reference card and PSI to other rivers. Utilizing the PSI, Hai Phong DONRE also plans some pollution control measures, such as publication of result of inspection, preparation of financial and technical assistance to water treatment facilities and cleaner production by industries, etc. which are similar to what Hanoi DONRE is doing for Output 3 under the Project.

The technologies introduced under Output 3 to Hanoi DONRE for making effective water pollution control measures are likely to be sustained. They will make the proposed water pollution control measures to be authorized by Hanoi PPC.

Concerning Output 4, the technologies for promoting awareness of public and industrial sectors on water environment are likely to be sustained. EPA of each DONRE has applied methodology and results of Output 4 into their daily activities, such as public awareness for environmental management of other rivers in the province.

Concerning Output 5, sustainability of the newly introduced "water environmental information procedure" is still unknown. The officers in charge in MONRE raised awareness on necessity of smoother communication between MONRE and DONRE and it is expected they will maintain such awareness. However, the Team has not confirmed that their needs and intention to introduce recognition the new procedure nationwide recognizing its effectiveness.

4-2 Conclusion

From the findings of the joint evaluation study as shown in the previous chapters, the Team concludes that the almost all activities have been done at the time of evaluation and that the Project Purpose as well as five (5) Outputs are likely to be achieved by the end of the Project. The Team also concludes that the Project is to be terminated in June, 2013 as planned.

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Judging from the view point of the five evaluation criteria, relevance and effectiveness are high, while efficiency is satisfactory. The team observed a lot of unintended positive impacts of the Project, and sustainability is moderate to high. Sustainability of the Project would be secured and Overall Goal of the Project would be achieved through continuous and cooperative efforts by both MONRE and 5 DONREs.

4-3 Recommendations

For securing achievement of the Project Purpose and Overall Goal, the Team recommends the followings to the Director General and Deputy Director General of VEA/MONRE.

1. In the Workshop of the Terminal Evaluation held in Hue city on 14 March 2013, DONRES put forward "Challenges and Actions" and "Way Forward" based on the results of activities under Output 2, 3, and 4. The actions proposed are very important in developing further the tools and capacities for water environmental management. Therefore, it is recommended for DONRES to implement those that can be implemented in the remaining period and can be implemented by themselves.

2. "Challenges and Actions" and "Way Forward" contained suggestions and hints for the improvement of water environmental management at central government level. Also they contained issues that need proper assistance of VEA. Therefore it is recommended that VEA analyze "Challenges and Actions" and "Way Forward" in an integrated manner and provide proper assistance to DONREs.

3. Strong tools for water environmental management have been developed, namely water quality database (WQD) and pollution source inventory (PSI). Although PSI was an advanced tool for Vietnam, PSI has been developed successfully thanks to strong collaboration between 5 DONREs and JET. Further, pollution source map (PSM) utilizing PSI has also been developed. These tools are still at basic stage in terms of areas and enterprises covered, they are demonstrating that they are indeed strong administrative tools. Through expanding the areas and enterprises according to the necessity and priority, it is expected that DONREs can plan and conduct environmental management tasks in a more rational manner. Therefore, it is recommended that DONREs continue to update and improve databases and that VEA examine the possibility to apply those tools to other DONREs.

4. Under Output 3, HNI DONRE developed "Improvement Plan for Water Pollution Control in Hanoi". 4 Challenges in this Plan reveal very effective course of actions to deal with difficult problems taking place in big cities like HNI. In particular Challenge 2 will contribute to enhance the motivation of enterprises for pollution control. Challenge 4 is an appropriate tactic in view of limited number of staff and budget in environmental administration and will contribute to efficient enforcement of management tasks since this places importance to those pollution sources with higher impacts. However, Action 2-1 under Challenge 2, publication of compliance situations, will need a sort of test before implementation and Action 4-1, minimum scale of management tasks, will need a time to find the appropriate minimum scale utilizing PSI for instance. These Challenges are indeed worth trying to implement and will have, if implemented successfully, considerable effect over other big cities and MONRE as well in improving the efficiency of environmental management tasks. In this regard, it is recommended that HNI, as a top runner, make efforts to actually take Actions under 4 Challenges and that VEA provide due assistance.

5. Various type of well considered awareness tools such as guidebook, TV reportage, environmental film, handbook etc. have been developed by active participations of WG members and strong support of DONRE' management. WG members demonstrated their creativity and presented ideas. Among those tools, there are such tools to assist enterprises to introduce Cleaner Production (CP) technologies that contribute for the reduction of pollutants through rational production. In particular the "Handbook on Guiding Environmental Management Work (water environment)" prepared by collaboration of HNI DONRE and JET presents a practical CP introduction process (6 steps and 18 tasks) with detailed explanations that will be very helpful for enterprises to actually examine and introduce CP technologies. These valuable and effective tools that help enterprises abide by environmental regulations and introduce CP technologies will have to be

utilized not only by enterprises and other stakeholders in 5 DONREs but by other DONREs. Therefore it is recommended that VEA in cooperation with 5 DONREs examine and improve these tools and introduce them to other DONREs and line ministries.

6. The new water environmental information procedure including specific formats for data collection has been developed. With tremendous support by Hai Phong DONRE, this procedure was tested and improved. Through these works, the basis for actual utilization of the information procedure is being formed and it is expected that the procedure will help grasping the trend of environmental quality, status of enforcement of relevant laws and regulations, preparing new policies and so forth. With these in mind, it is recommended that VEA continue the works for full scale utilization of procedure in close collaboration with DONREs.

7. Under the Project, policy review has been made in a comprehensive manner and several important specific outputs have been generated such as a draft of a new chapter on water environmental management in the draft revised Law on Environmental Protection (LEP), a draft revised Decree 117 on fining of administrative violations in the field of environmental protection, the Operational Manuals and Standardization of an automatic water monitoring station, manuals on evaluation of appropriate technologies for the environment. On top of these, several important studies have been undertaken generating good bases for the review of the relevant laws and policies. Based on these development and considering the need for their implementation, it is recommended that VEA elaborate them further utilizing the enhanced policy review capacity gained through the Project.

4-4 Lessons learned

It was observed that the approval of the Project document by the Vietnamese government was delayed than expected due to much internal procedure in Vietnamese side, and which caused a few delayed inputs such as providing equipment. Vietnamese side is encouraged to complete such procedure before commencement of future projects.

This Project targets both central government and local governments together aiming better coordination in terms of creating more practical measures with relevant policies in water environmental management. For example, a series of workshops, seminars and other related occasions inviting the both governments were observed to promote their coordination. Both JICA and Vietnamese sides are encouraged to provide proper mechanism in case of future projects targeting both governments.

For future comprehensive cooperation between JICA and Vietnamese side in water environmental management sector in Vietnam, the outcome and lessons of the Project which is considered as one of the core projects in the sector, must be taken into consideration.

List of Annexes

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Annex 1: Schedule of the Terminal Evaluation Study

Annex 2: The latest Project Design Matrix (PDM)

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Annex 1

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Date	Time	Activity	Content	Persons accompany the mission	Contact persons and Interpreters
From 25/	Feb Al Z/Mar: J	CA evaluation consultant conducts interviews with re	levant departments of VEA, MONRE, 5 target DON	REs and JICA expert team	同語の影響を行うこと
25/Feb (Мол)	09:00 - 10:00	Meeting with ISD/VEA at ISD office, No. 10 Ton That Thuyet	Brief on the evaluation process, including purposes, contents, methods, and confirm the evaluation schedule	With attendance of LET, SET (Oku, Hie, Lan), JICA VN	Kien-san (cell: 0934- 868-969) in charge of contact with
	10:00 - 11:30	Interview with DRWM	Confirm results and progress on relevant activities;	With attendance of LET	MONRE, VEA
	13:30 - 15:00	Interview with PCD/VEA	ditto	ditto	departments
	15:15 - 16:45	Interview with ISD/VEA	ditto	ditto	
26/ Feb	08:30 - 10:00	Interview with EIA Department	ditto	ditto	JPN-VN Interpreter:
(Tue)	10:15 - 11:45	Interview with Dept of Waste Management and Env Improvement	ditto	ditto	Huy-san (cell-phone: 0907-411-355)
	13.30 - 15.00	Interview with Inspection of VEA	ditto	ditto	1 [']
	15:15 - 16:45	Interview with Center for Information and Data	ditto	ditto	Meeting venue: at
27 Feb (Wed)	9.00 - 10.30	Interview with Centre for Env*tal Monitoring at No. 7 Dao Duy Anh	ditto	ditto	VEA building @ 10 Ton That Thuyet (except for CEM)
	13.30 - 17.00	Interview with HNI DONRE at DONRE office	Confirm the Project's results and progress on OP 2 (Meet with each concerned divisions)	SET (Iwai, Oku, Hie, Lan)	Lan-san (cell-phone: 0904-178577) in charge of contact with DONREs Interpreter: Huy-san
28/ Feb (Thu)	08:30 - 15:00	Interview with HNI DONRE at DONRE office	Confirm the Project's results and progress on OP 3 and 4	SET (Iwai, Oku, Hie, Lan)	Lan-san (cell-phone: 0904-178577) in
	15:30-18:00	Move to Hai Phong (HPG) DONRE (about 2.5 hours by car)	Stay HPG		charge of contact with DONREs
1/Mar (Fri)	8.00 - 17.00	Interview with HGP DONRE	Confirm the Project's results and progress on OP 2 and 4	SET (Iwai, Oku, Hie, Lan)	JPN-VN Interpreter:
	17.30 - 20.00	Back to Hanoi after the meeting	Stay HNI]	Hue-san (cell-phone: 0912-000800)
2/ Mar	09:00 - 11:30	Interview with LET	at LET office		N/A
(Sat)	13:00-18:30	Interview with SET (Iwa, Oku, DJ, Sato, Hsno, Shoji, Hie, Naga, Fuka, Mata, Naka)	at SET office (Rest of SET (Hosotani: Mar 8 th & Sirane: Mar 10 th arr) in another time)	SET members of Oi, Takeda, and Yamamoto are not possible	
3/ Mar (Sun)		ll to TT-HUE 1543 HUE 12:30 =Iwai, Oku, Hic, Thai 1545 DNG 17:35)	Stay TT-HUE	SET (Iwai, Oku, Hie, Thai)	1
4/ Mar (Mon)		Interview with TT-HUE DONRE	Confirm the Project's results and progress on OP 2 and 4	ditto	Lan-san (cell-phone: 0904-178577) in
	HUE 19:05 VN	HUE to HCMC 11375 HCMC 20:25 =lwai, Oku, Hie, Thai 11377 HCMC 22:50)	Stay HCMC		charge of contact with DONREs

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Annex 1

Date	Time	Activity	Content	Persons accompany the mission	Contact persons and Interpreters
5/ Mar (Tue)	08:00 - 16:30	Interview with HCMC DONRE	Confirm the Project's results and progress on OP 2 and 4	ditto	Interpreter: Huy-san
	17:00 - 20:30	Move to BRVT (about 3hours by car/ 2hours by boat)	Stay BRVT		
6/ Mar (Wed)	08:00 - 16:00	Interview with BRVT DONRE	Confirm the Project's results and progress on OP 2 and 4	diuo	
	16.30 - 19.30 21:55 - 23:55	Move to HCMC by car or by boat Move to HN1 or Stay HCMC (to be confirmed) (HCMC 21:55 VN1178 HN123:55 =)	Stay HNI or HCMC (to be confirmed)	ditto	
7/ Mar (Thu)	AM-PM	(Move to HNI, if any) Preparatory day, in case	Additional interview, if any		N/A
8/ Mar (Fri)	AM-PM	ditto	ditto		
9/ Mar (Sat)	10:00-11:00	Interview with SET (Hosotani, and if any)	At SET office	SET (Hosotani)	
10/ Mar (Sun)	14:30 (VN310)	JICA Mr. Imai arrive at HN1			
) 1/ Mar (Mon)	09:00-11:00 13:30-16:00 16:30-17:30	Inner meeting (Mr. Imai, Dr. Iguchi, JICA VN) Specific meeting with LET Interview with SET (Shirane, and if any)	AL JICA VN office At LET office At SET office	JICA VN LET SET (Shirane)	
12/ Mar (Thr)	08:00-17:00	Joint WS of WG3 and WG4 (agenda and venue to be fixed)	Participation (Mr. Imai, Mr. Iguchi)	SET (Iwa, Oku,Shoji, Hic, Hsono, Lan, others)	
13/ Mar	8.30 - 9.30	Internal work			
(Wed)	10.00 - 12.00	Meeting with VEA (Dr. Dong, DDG of VEA):	Discuss draft evaluation report; and Interview with Dr. Dong	LET, and SET (Iwa, Oku, Lan)	Contact person: Mr. Thang (ccil-phone: 0987-790909)
					Interpreter: Hue-san
		1 to TT-HUE 1643 HUE 12:30 =Hie, Thai, and others 1545 HUE 17:35 =JICA mission, JICA VN, Iwa, Oku,	-Preparatory works -JICA HQ (Mr. Noda, Ms. Hidano) arr at HNI 14:45, and directly move to HUE w/JICA mission	JICA mission, JICA VN LET SET	
	19:00 - 21:00:	Working dinner (to be confirmed)	All JICA evaluation members discuss with Dr. Dong (if needed)		
14/ Mar (Thu)	8:00 17:00	Workshop at TT-HUE	Presentation on Project activities by each DONRE and VEA representative (20 minutes for each) Q&A by the Evaluation team	ditto	Simultaneous interpretation (JPN- VN)
	18:00	Dinner (to be confirmed) (HUE 18:25 VN1544 HNI 19:35, if any)	Suy TT-HUE	Prepared by LET and SET	
15/ Mar	Move from HU	E to HNI	Internal work: Complete and translate the final draft	JICA mission, JICA VN	NA

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Annex 1

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Date	Time	Activity	Content	Persons accompany the mission	Contact persons and interpreters
(Fri)		1540 HNI 09:50 =SET +?? 1542 HNI 14:30 =??	of the report	LET SET	
16/ Mar (Sat)	AM-PM	Report preparation	ditto	-	
17/ Mar (Sun)	AM-PM	ditto	ditto	•	
18/ Mar (Mon)	АМ	Distribute the final draft report to the Vietnamese side for comments	ditto	•	
	PM	Preparatory works	ditto	-	1
19/ Mar (Tue)	08:30 - 12:00	Meeting with concerned MONRE, VEA Departments (one meeting) at MONRE office	Explanation and discussion draft Evaluation report before finalization with MONRE	Dept. of MONRE and Dr. Dong to attend	Contact person: Mr. Thang (ceil-phone:
	13:30 - 17:00	Meeting with 5 DONREs (one meeting) at MONRE office	ditto with 5 DONREs	5 DONREs and Dr. Dong to attend	0987-790909) Interpreter: Hue-san
					Meeting venue: @ VEA office, 10 Fon That Thuyet
20/ Mar (Wed)	13:00 - 17.00	The 5 th JCC meeting	-Discuss progress & coming activities planned, as well as sustainability of outcomes -Report the Terminal Evaluation results & recommendations -Sign M/M for the Terminal Evaluation Report (En)	VEA, MONRE, and DONREs LET and SET Signers are Dr. Dong and JICA mission Leader (Mr. Nada)	Simultaneous interpretation (JPN- VN)
21/ Mar (Thu)	09:00-12:00	Last meeting with LET and SET Leave HNI (JICA HQ: 23:30) and (Dr. Iguchi: 13:10 MH753)	•	LET and SET	

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Annex 2

Project Design Matrix

Project Name : The Project for Strengthening Capacity of Water Environmental Management in Viet Nam Duration of Project : 2010 – 2013 (3 years) Project Target Area : Hanoi, Hai Phong, Thua Thien-Hue, Ho Chi Minh and Ba Ria-Vung Tau Target Group : Ministry of Natural Resources and Environment (MONRE) and target Departments of Natural Resources and Environment(DONREs)

			Version : 2012/08/27
Narrative Summary	Objectively Veriflable Indicators	Means of Verification	Important Assumptions
Overall Goal Enforcement capacity of MONRE and DONREs on water environmental management is strengthened.	 The rate of levying environmental protection charge for waste water increases. The rate for industries to follow orders / administrative guidance increases. The rate for industries to comply with the effluent standards increases. 	Data at MONRI; and DONREs	Drafted amendments that would be developed in the Project are officially issued.
Project Purpose Capacity of making policy and management system of MONRE and enforcement capacity of target DONREs regarding water environmental management is strengthened.	Evaluation results show improvement, compared with the initial stage of the Project as follows: 1) MONRE conducts self-evaluation on their own capacity of policy and system making regarding water environmental management; and 2) target DONREs conduct self-evaluation on their own enforcement capacity of water environmental management.	Questionnaire survey for MONRE and target DONREs in order to evaluate capacity at the initial, mid-term, and final stage of the Project	The results of activities and lessons are properly extended and applied to other DONREs nationwide.
Outputs t) MONRE's capacity of making policy and management tools that are more effective and enforceable is strengthened. 2) Enforcement capacity of target DONREs on basic water pollution control (environmental monitoring, pollution sources inventory,	I-I Through the training, basic skills on making and how to evaluate existing water environmental policy are mastered.	1-1 Hearing from MONRE	PPCs at target provinces make commitments to cooperate with the Project.
pollution sources inspection) is strengthened. 3) Target DONRE's capacity of making effective water pollution control measures is strengthened. 4) Target DONRE's capacity of promoting awareness of public and	1-2 Based on the evaluation results of existing policy through the training described in 1-1, basic skills on how to propose the amendment of water environmental policy are mastered.	1-2 Hearing from MONRE	Related organizations such as environmental police, DOIT and etc., cooperate with the Project.
industrial sectors on water environment is strengthened. 5) Capacity of MONRE and DONREs on information management and	1-3 More than three (03) draft amendments and/or draft	1-3 Hearing from	<u> </u>

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1	Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
	utilization is strengthened.	new policies of water environmental management are developed and agreed between JICA and VEA/MONRE as a result of the Project.	MONRE and the number of draft amendments and/or new policies	1999
		1-4 The process and methods for making more effective policies and system development are improved, compared with initial stage of the Project	1-4 Working products from 1-3 and follow up survey	
		(Monitoring) 2-1-1 Draft revised monitoring plans of key rivers are prepared.	2-I-I Draft revised monitoring plans	
		2-1-2 Draft revised monitoring reports in 2012 are prepared by DONREs, and shared with concerned organizations.	2-1-2 Draft Monitoring reports	
		2-1-3 Accuracy of monitoring is improved.	2-1-3 Results of capacity assessment	
		(Inventory) 2-2-1 Primary water pollution sources are duly filled in the revised inventory formats.	2-2-1 Inventory	
		2-2-2 Information on the inventory is adequately added and the following information becomes available for DONREs' pollution control activities: (i) information on compliance with respect to EIA, industrial wastewater fee, water discharge license, wastewater quality standard, sanction based on inspection; (ii) information on pollution load of COD.	2-2-2 Inventory	
		(Inspection) 2-3-1 The results of the capacity assessment on preparation work, on-site inspection, and follow-up work of inspection show improvement, compared with the initial stage of the Project.	2-3-1 Results of capacity assessment	

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Narrative Summary	Objectively Veriflable Indicators	Means of Verification	Important Assumptions
	2-3-2 Criteria for selecting primary/crucial pollution sources in each DONRF's inspection plan are clarified.	2-3-2 Document explaining the criteria for selecting industries to be inspected/checked.	
	2-3-3 Number of officers who have capacities for on-site inspection, such as field measurement and wastewater treatment facility checking, is increased.	2-3-3 Training records	
	2-3-4 Number of officers who have capacities to assess situation of wastewater management of polluting industries and make recommendations for improvement from perspectives of giving administrative order and administrative guidance, is increased.	2-3-4 Training records	
	3-1 A working group that works specifically on studying and making water pollution control measures are established and continued its activities, holding 10 times periodical meetings during the project period with more than 70% attendance rate.	3-1 Hearing from target DONREs	
	3-2 Progress status of Output 3 is reported to the Director of DONRE every 6 months.	3-2 Reports to PPC and/or project activity report	
	3-3 The draft outline for effective water pollution control measures is submitted to PPC through Director of DONRE.	3-3 Outline of draft countermeasure and hearing	
	4-1 The results of questionnaire survey to target groups such as industries, district/commune/ward officers and social organizations, on environmental awareness show improvement, compared with the initial stage of the Project (consider the environmental awareness events as opportunities to conduct surveys)	4-1 Questionnaire survey (report showing the results)	
	4-2 Tools (e.g., film for the public and introductory guidance for industries) to promote environmental awareness targeting public and industries are developed.	4-2 Tools to promote environmental awareness	

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Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
	4-3 Environmental awareness events with target groups are conducted, making use of newly developed tools.	4-3 Record of event implementation	
	4-4 The results of the capacity assessment targeting DONRE officers show improvement, compared with the initial stage of the Project.	4-4 Results of capacity assessment	
	5-1 MONRE and the target DONREs realize more smooth communication between the both than before in terms of frequency and contents.	S-1 Questionnaire survey	
	S-2 The draft of "water environmental information procedure in terms of collection, management and utilization (including dissemination)" is prepared.	5-2 Draft water environmental information procedure	
 MONRE's capacity of making policy and management tools that are more effective and enforceable is strengthead. Collect basic information on water environmental management policy and tools at national level, and analyze as well as organize the necessary issues to improve. Study issues that target DONREs are faced, regarding implementation of water environmential management policy and tools. Based on the results of 1-1 and 1-2, review water environmental management policy and tools and conduct evaluation regarding effectiveness and enforceability of these water environmental policy and tools with focus on pollutions from industries. Strain staff of MONRE and DONRE's on studying, developing, reviewing, and revising policy and management tools. Strain evokshops for staring and collecting comments and opinions based on implementing activities in Output 2 and Output 3. Review the draft amendment prepared in 1-5. Review the draft amendment prepared in 1-5. Bronse the amendment on water environmental management policy and tools. Enforcement capacity of target DONREs on basic water pollution 	Inputs Japanese side) Long term experts - Project Lesder/Water Environmental Policy - Water Environment Management / Project Coordinator 2) Short term experts - Water Environmental Policy at provincial level - Environmental Awareness - Information Management 3) Short term expert team(s) - Leader - Water Environmental Management /Sub-Leader - Water Environmental Monitoring (1, 2) - Water Caulity Analysis/QAQC (1, 2) - Pollution Sources Inspection (1, 2) - Pollution Sources Inspection (1, 2) - Burinonmental Education (1, 2) - Burinonmental Education (1, 2) Workshops 5) Training in Japan : 3 times during the course of the Project (Gr DONRE & MONRE) 6) Equipment : minimum equipment necessary for project activities 7) Local Consultants		

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Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
pollution sources inspection) is strengthened. 2-1 Conduct capacity assessment of larged DONREs regarding enforcement of basic water pollution control. 2-2 Select main component(s) from the list below and also select activities under the selected component(s) for each DONRE, and prepare activities plans for each DONRE. 2-3 Conduct activities selected in 2-2 in each DONRE. [Component 1 Monitoring] CI-1 Review water quality monitoring guidelines/manuals ⁽¹⁾ . CI-2 Based on above guidelines/manuals (revised if necessary), laws and regulations in Vietnam, and international guidance, prepare/improve a monitoring plan, taking into consideration of regional characters at target DONRES. CI-3 Dised on the selected in monitoring in accordance with laws and regulations in Vietnam. CI-4 Conduct training on water quality monitoring including quality control for improving reliability of monitoring. CI-4 Conduct training on water quality monitoring and feedback to the annual/biannual monitoring proots. CI-5 Literpret and evaluate results of monitoring and feedback to the annual/biannual monitoring reports. "Origoidelines/manuals grepared by the Study for Water Environment Management on River Basins und the Project for Enhancing Capacity of Vietnames Caedemy of Science and Technology in Water Environment Protection Phase II are also included.	Vietnamese side 1) Counterpart MONRE : Output 1, 3 & 5 DONRE : Output 2, 3, 4 & 5 2) Project Office Space at MONRE and each DONRE 3) Necessary operation costs		
[Component 2 Inventory] C2-1 Conduct capacity assessment of target DONRES regarding pollution sources inventory. C2-2 Review and modify existing inventory formats based on the current conditions of target DONRES. ⁽¹⁾ C2-3 Conduct inventory survey with the revised inventory formats. C2-4 Organize collected information on main pollution sources. C2-5 Regularly conduct inventory survey and add/update information on main pollution sources. ⁽¹⁾ Inventory format prepared by the Study for Water Environment Management on River Basins is also included. [Component 3 Inspection] C3-1 Conduct capacity assessment of target DONREs regarding inspection for water pollution control.			

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Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
C3-2 Review existing guidelines on inspection.	· · · · · · · · · · · · · · · · · · ·	-	
C3-3 Clurify criteria for selecting primary/crucial pollution sources to be			
inspected as part of DONRES' inspection plans.			
C3-4 Based on the prepared plan, conduct environmental inspection and/or			
environmental check.			
C3-5 Conduct joint analysis on the results of environmental inspection.		1	
and/or environmental check in order to improve the related capacity of			
DONREs through the training.]	
C3-6 Conduct training on wastewater management to improve DONREs* administrative order and/or administrative guidance.			
C3-7 Conduct training on on-site inspection.		1	
CO-7 Conduct daming on on-site inspection,			
3) Target DONRE's capacity of making effective water pollution			
control measures is strengthened.			1
3-1 Evaluate the enforcement performances of target DONREs on water			
pollution control, including the various systems implemented in the past,			
and organize issues for improvement.			
3-2 Select target province(s) where the activities 3-3 and 3-4 would be			
conducted, after reviewing the feasibility of application of the draft			
amendment prepared in 1-5.			
3-3 Specify target regions and/or industries for application of the effective water pollution control measures.			
3-4 Draft an outline for effective water pollution control measures.			
3-4 Lyan an outline for effective water politicion control measures.			
4) Target DONRE's capacity of promoting awareness of public and			
industrial sectors on water environment is strengthened.			<u> </u>
4-1 Review the current system and situation of environmental awareness			
activities at target provinces.			
4-2 Make awareness raising plans for water environment to be conducted			
by target DONRES.			
4-3 Conduct awareness raising activities in accordance with the plan set at			
4-2.			
4-4 Review and improve awareness raising activities based on the result of			
4-3.			
5) Capacity of MONRE and DONREs on information management			
and utilization is strengthened.			
5-1 Review the current situation of information collection and management			
regarding water environment, and organize issues for improvement.			[
5-2 Prioritize information necessary for MONRE and DONREs to come up			
with administrative measures and their implementation.			1

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Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
 5-3 Develop more effective ways and means (formats, reporting modes, frequencies, etc.) to collect information from all the DONREs. 5-4 Conduct trials to collect information from target DONREs by use of the ways and means developed in 5-3, and utilize information at MONRE. 5-5 Conduct workshops to share the results of 5-4. 5-6 Propare a proposal of actual application of the ways and means at MONRE. 			

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MINUTES OF MEETING

ON

THE JOINT COORDINATING COMMITTEE

FOR

THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVIRONMENTAL MANAGEMETN IN VIET NAM

In line with the Record of Discussions (hereinafter referred to as "R/D") signed between the Government of the Socialist Republic of Viet Nam (hereinafter referred to as "the Government of Viet Nam") and the Japan International Cooperation Agency (hereinafter referred to as "JICA") on January 8th, 2010, the Vietnamese side and the Japanese side held the sixth Joint Coordinating Committee (hereinafter referred to as "JCC") meeting in Hanoi on 21st May, 2013.

In the course of the meeting, both Vietnamese side and Japanese side discussed the achievements and the ways forward of the Project as attached hereto.

Hanoi, 21st May, 2013

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Mr. Fumihiko Okiura

Senior Representative JICA Vietnam Office

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Dr. Nguyen The Dong

Deputy Director General of Vietnam Environment Administration

MINUTES OF MEETING

THE SIXTH MEETING OF THE JOINT COORDINATING COMMITTEE

FOR THE PROJECT FOR STRENGTHNING CAPACITY OF WATER ENVRIONMENTAL MANAGEMETNT IN VIETNAM

1. Objectives of the JCC meeting

The objectives of the sixth JCC meeting are to discuss:

a) Achievements of the Project

b) Approval of Project Completion Report

c) Distribution of project outputs

d) Handover of equipment

e) Utilization of outputs of the Project for improvement of water environmental management

2. Date, Time, Venue, Participants and Program

Date: Tuesday, 21st May, 2013

Time: 09:30 - 11:45

Venue: Melia Hotel, 44B Ly Thuong Kiet Street, Hoan Kiem Dístrict, Hanoi

Participants: Attached as Annex I

Program:

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Time	Content	Person in charge	Note
09:00-09:30	Registration	-	VEA and JET
09:30-09:35	Introduction		Introduction by VEA
09:35-09:40	Opening remark	Dr. Nguyen The Dong, Deputy Director General, VEA	ditto
09:40-09:45	Opening remark	Mr. Fumihiko Okiura, Senior Representative, JICA VN Office	ditto
09:45-10:15	Achievements of the Project	Mr. Nguyen Minh Cuong, Deputy Director, ISD/VEA	ditto
10:15-10:30	Coffee Break		
10:30-10:45	Project Completion Report, other outputs of the Project, handover of equipment	Mr. Shigenobu Obayashi, LET/JET Mr. Yoichi Iwai, SET/JET	ditto
10:45-11:20	Discussions	All participants	ditto
11:20-11:30	Conclusions and Closing	Dr. Nguyen The Dong, Deputy Director General, VEA	ditto
11:30-11:45	Signing of MM, and Signing of Receipt of Equipment/Assets	Dr. Nguyen The Dong, Deputy Director General, VEA, and Mr. Fumihiko Okiura, Senior Representative, JICA VN Office	ditto
11:45	Lunch	-	-

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3. **Presentations and Discussions**

3.1 Introductions and Presentations

- 1) Representing the Vietnamese side and the Japanese side, Dr. Nguyen The Dong, Deputy Director General of Vietnam Environment Administration (VEA), and Mr. Fumihiko Okiura, Senior Representative of JICA Vietnam, made the opening remarks.
- 2) Mr. Nguyen Minh Cuong, Deputy Director of Department of International Cooperation, Science and Technology (ISD) of VEA, summarized the achievements of the Project based on the results of the Terminal Evaluation in February-March 2013, activities carried out after the Terminal Evaluation, and the contents of Project Completion Report (PC/R).
- 3) Mr. Shigenobu Obayashi, Leader of JET, and Mr. Yoichi Iwai, Chief Advisor, explained finalization/distribution of the PC/R and other outputs of the Project, handover of the equipment procured by the Project, and remaining activities of the Project.

3.2 Discussions

Under the chairmanship of Dr. Nguyen The Dong, Deputy Director General of VEA, the participants discussed the achievements of the Project and the ways forward.

- The participants agreed that this Project had produced various useful outputs, such as policy reviews and draft policies in different areas of water environmental management, revised monitoring plans and monitoring reports of DONRES, PSIs and pollution source maps, improved inspectors' knowledge in wastewater treatment, an improvement plan for water pollution control, various tools for awareness building, and templates to collect information from DONREs to MONRE for environmental management and policy making.
- 2) As the Project has come to the end, the participants agreed that it is time to make best use of these outputs and make the efforts of the Project sustainable. The organizations involved in the Project have already identified ways forward, and they should follow these directions. The units under MONRE should continue the development of policy framework for water environmental management, including revision of Law on Environmental Protection and related sub-laws and other legal instruments. DONREs should improve their water environmental management by utilizing the outcomes of the Project and should also extend the project activities to district and commune levels as well as to neighboring provinces.
- 3) The participants expressed their desires for further supports by JICA to improve environmental management at the local and the central levels. JICA mentioned that a donor should take the role of a facilitator, and this Project was able to facilitate various activities as well as communication among various units under MONRE and the target DONRES. JICA is willing to extend further support to the Vietnamese side as long as relevant organizations continue their efforts to improve their environmental management with their own initiatives and ownership.
- 4) JICA pointed out that there had been some procedural problems during the course of the Project, such as delay in the official project approval, delay in issue of the A4 form related to tax exemption of the procured equipment, and limited availability of

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counterpart funds especially for DONREs. The participants agreed that such problems made implementation of the Project difficult, and in the future, such problems should be avoided.

5) The participants confirmed that the remaining activities until the end of the Project are (i) training on policy making and tools No.4, and (ii) distribution of PC/R and other outputs of the Project.

4. Conclusions

Dr. Nguyen The Dong, Deputy Director of VEA, summarized the results of the discussion. The conclusions of the meeting are:

- 1) Overall, the Project has made significant contributions to water environmental management in Vietnam, and is considered a success. The JCC highly appreciated the efforts made by both the Vietnamese side and the Japanese side.
- 2) The JCC agreed with the contents of the PC/R. The JCC requested the Japanese side to print the report in Japan and deliver them to VEA. It is the responsibility of VEA to distribute them to all relevant sections and departments of MONRE and DONREs, and to ensure that the outputs of the Project are used in most efficient ways possible.
- 3) The JCC also agreed with the contents of other technical outputs of the Project. SET has already distributed all of its technical outputs in electronic format at the Final Seminars in HCMC and Hanoi. SET shall send the printed copies of technical cooperation materials (six volumes) to VEA, and VEA shall distribute them to all relevant sections and departments of participating organizations. LET shall prepare electronic copies of their outputs on the activities of output 1 and output 5. VEA is responsible for distributing these materials to all relevant sections and departments of MONRE and the target DONREs.
- 4) The JCC requested LET to complete the 4th training on "policy making and tools" scheduled in June 2013, which is the only main activity of the Project remaining.
- 5) Relevant organizations of MONRE and DONREs shall review both tangible (e.g., reports, handbooks, documents) and intangible (e.g., capacities of officers developed, suggestions to improve institutional and organizational issues) outputs of the Project, and incorporate them into their activities for water environmental management. Also, relevant organizations shall assume the leading roles in extending and propagating positive effects of the Project to other organizations, such as other provincial DONREs, district DONREs and MONRE units involved in other aspects of environmental management.
- 6) Even though the Project has achieved significant successes, counterparts should review difficulties in implementing this Project and consider to avoid them in future cooperation projects.
- 7) Official handover of all equipment and assets has been completed by signing of the minutes of receipt of equipment/assets by Mr. Fumihiko Okiura, Senior Representative of JICA Vietnam and Dr. Nguyen The Dong, Deputy Director General of VEA. Once the procedure for aid certification of those equipment and assets is completed by VEA/MONRE, VEA will provide JICA with the copy of the aid certification papers.

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- 8) This Project shall officially end upon the completion of the 4th training on policy making and tools and distribution of the PC/R and other outputs of the Project to relevant organizations.
- 9) This is the last JCC meeting of the Project unless required by the situation. In such case, both the Japanese side and the Vietnamese side shall discuss and organize the JCC.

Annex I Participant List

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Participant List

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No,	Name	Organization	Current Position
I.	JCC members		
I.1. Vie	etnam side		
1	Dr. Nguyen The Dong	VEA	Deputy Director General of VEA
2	Mr. Nguyen Minh Cuong	ISD/VEA	Deputy Director of ISD, VEA
3	Mr. Nguyen Viet Thang	ISD/VEA	Officer
4	Mr. Phạm Quốc Ka	Hai Phong DONRE	Deputy Director
I.2. JI	CA side		
5	Mr. Shigenobu Obayashi	JICA Expert Team	Leader
6	Ms. Saori Ushimi	JICA Expert Team	Project Coordinator
7	Mr. Yoichi Iwai	JICA Expert Team	Chief Advisor
8	Mr. Itaru Okuda	JICA Expert Team	Deputy Chief Advisor
9	Mr. Fumihiko Okiura	JICA Vietnam Office	Senior Representative
10	Mr. Shigeru Kishida	Embassy of Japan	First Secretary
II.	Participants		
	ietnam side		
10	Ms. Nguyen Thanh Nga	ISD/VEA	Officer
11	Ms. Pham Thanh Tu	ISD/VEA	Officer
12	Mr. Nguyen Huu Thang	CEM/VEA	Officer
13	Mr. Bui Van Nhung	ID/VEA	Officer
14	Ms. Nguyen Hoang Anh	PCD/ VEA	Officer
15	Ms. Tran Thi Le Anh	WENID/VEA	Officer
16	Mr. Pham Quoc Khanh	CEID/VEA	Director
17	Mr. Bui Nang Kha	DEAIA/VEA	Officer
18	Ms. Dương Thị Nga	ISEM/ VEA	Officer
19	Mr. Ta Ngoc Son	EPA/Hanoi DONRE	Officer
20	Ms. Nguyen Phuong Dung	DWRM/ Hanoi DONRE	Officer
21	Ms. Nguyen Thi Tuyet Lan	HACEM/Haiphong DONRE	Director
22	Mr. Nguyen Viet Hung	EPA/TT-Hue DONRE	Director
23	Ms. Le Thi Hanh	EPA/ TT – Hue DONRE	Officer
24	Mr. Cao Tung Son	EPA/HCMC DONRE	Deputy Director
25	Ms. Le Thi Thanh Dung	EPA/HCMC DONRE	Officer
26	Mr. Nguyen Dung	EPA/BRVT DONRE	Deputy Director
27	Mr. Tran Anh Duc	PCD/EPA/BRVT DONRE	Manager
28	Mr. Luong Hung Phi	EPA/BRVT DONRE	Officer
29	Mr. Phi Quoc Ha	DWRM/ MONRE	Officer
II.2. JI	CA officers and experts		
30	Mr. Tadashi Suzuki	JICA Vietnam office	Representative
31	Mr. Nguyen Vu Tiep	JICA Vietnam office	Program officer
32	Mr. Ryuji Tomisaka	JICA Policy Advisor	MONRE
33	Mr. Shunsuke Hieda	JICA Expert Team	Member
34	Mr. Hiroshi Nakano	JICA Expert Team	Member
35	Ms. Dinh Thu Binh	JICA Expert Team	Secretary
36	Mr. Chu Ngoc Kien	JICA Expert Team	Staff
37	Mr. Dang Dinh Giang	JICA Expert Team	Staff
38	Ms. Nguyen Thanh Lan	JICA Expert Team	Staff
39	Mr. Vu Dinh Thai	JICA Expert Team	Staff
40	Ms. Quan Thi Quynh Dao	JICA Expert Team	Staff

CEID: Centre for Environmental Information and Data

CEM: Centre for Environmental Monitoring

DEAIA: Department of Environmental Appraisal and Impact Assessment

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DONRE: Department of Natural Resources and Environment DWRM: Department of Water Resources Management EPA: Environmental Protection Agency HACEM: Haiphong Center for Environmental Monitoring ID: Inspection Department

ISD: International Cooperation and Science, Technology Department

ISEM: Institute of Science for Environmental Management

PCD: Pollution Control Department

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MONRE: Ministry of Natural Resources and Environment

VEA: Vietnam Environment Administration

WENID: Waste Management and Environment Improvement Department

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