

# Environmental Monitoring Report

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# Semi-Annual Report  
June 2011

## **Viet Nam: Integrated Rural Development Project for the Central Provinces**

Prepared by MWH International Consultant for the Central Project Office of Ministry of  
Agriculture and Rural Development and the Asian Development Bank.

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**Submitted by**

**Central Project Management Unit**

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**ABBREVIATION**

ADB	Asian Development Bank
AFD	Agence Française de Développement
CPMU	Central Project Management Unit
CSC	Construction Supervision Consultant
DONRE	Department of Natural Resources and Environment (provincial)
EMP	Environmental Management Plan
IRDSPCP	Integrated Rural Development Sector Project in the Central Provinces
IEE	Initial Environmental Examination
LIC	Loan Implementation Consultants
MONRE	Ministry of Natural Resources and Environment
PPMU	Provincial Project Management Unit
UXO	Unexploded Ordinance

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## I. ACTIVE PROJECTS AND STATUS

There are 149 subproject construction packages currently active or already completed under the IRDSPCP. The status of subproject construction packages by province is shown in Table 1 (Subproject Status by Province).

Table 1: Subproject Status by Province

No	Province	No. of Packages Started	No. of Packages Completed	No. of Packages Ongoing
1	Thanh Hoa	20	0	11
2	Nghe An	16	0	16
3	Ha Tinh	18	0	18
4	Quang Binh	20	0	20
5	Quang Tri	11	0	11
6	TT Hue	11	0	11
7	Quang Nam	20	0	17
8	Quang Ngai	13	0	13
9	Binh Dinh	14	0	12
10	Phu Yen	3	0	3
11	Kom Tum	18	0	14
12	Ninh Thuan	4	1	0
13	Binh Thuan	7	0	3
Total	Whole the sub projects	168	1	149

Remark:

- The number completed and the number currently active at the end of the reporting period. is derived from the most recent provincial quarterly reports and all provincial quarterly reports are reviewed & approved by CPMU with supported by LIC
- 149 subproject construction packages included : Repairing and upgrading inter commune & commune road, Upgrading & lining Irrigation canal scheme/ flood protection dike system, building rural domestic water supply system, building commune market

## II. PROJECT PERFORMANCE (ENVIRONMENT)

Inspection of environmental performance is undertaken by construction supervision consultants alongside other quality control activities, and is a continuous activity conducted by field inspection teams. Monitoring and reporting related to environmental performance is done using a checklist and reporting format, which is completed quarterly, with results forwarded to PPMUs, who then submit the results to the CPMU. Subproject environmental performance is measured against 50 variables and summarized into 7 performance indicators. Of these seven indicators, two are based on quarterly performance, whereas the remaining five are derived on a one-time-only basis, at the beginning and end of construction activity (see Annex 1) Since the results contained in quarterly reports are cumulative, data for the semi-annual report are obtained from the most recent quarter.

The averages of the indicators for all active subproject packages within the province for the semi-annual reporting period are shown in Table 2 (Performance Indicator

Results by Province).. Instructions for filling out the table can be found in the Annex  
2: Reporting Procedures and Templates

Table 2: Performance Indicator Results by Province Unit %

<i>Province</i>		<i>Performance Indicator</i>							Overall Performa nce To- Date (Average )
Name	No. of Active Contracts	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	
		Design and Preparations	Worker Provisions	Biodiversity	Public Consultation/ Grievance	Community Values / Safety	Hydrology/ Water Pollution	Project Completion	
Thanh Hoa	11	89	83	100	100	86.6	91.2	Not completed	91.6
Nghe An	16	90	100	98.4	100	100	100	Not completed	98.1
Ha Tinh	18	100	90	100	100	100	100	Not completed	98.3
Quang Binh	20	78.3	67.8	57.4	66.7	87.6	96.0	Not completed	75.6
Quang Tri	11	95	32	100	54	85.5	85.0	Not completed	75.3
TT Hue	11	99.5	83	100	100	100	100	Not completed	97.1
Quang Nam	17	82.9	100	97.6	100	95.1	100	Not completed	95.9
Quang Ngai	13	90	73	100	50	95.9	100	Not completed	84.8
Binh Dinh	12	90	75	100	79.2	93.8	96.9	Not completed	89.0
Phu Yen	3	73.3	83.3	100	100	100	87.5	Not completed	90.7
Kon Tum	14	95.0	83.4	98.8	89.6	94.1	95.6	Not completed	92.7
Ninh Thuan	1	90	100	60	100	90	100	100	90.0
Binh Thuan	3	90.0	94.43	100	100	100	100	Not completed	97.41



**Remarks:**

*Performance Indicator 1: Design and Preparations:* to be completed in two parts (see checklist) at the time the design is being finalized and project tendered (by the PPMU), and at the time construction begins (by the Construction Supervision Consultant (CSC) in conjunction with the PPMU).

*Performance Indicator 2: Worker Provisions:* to be completed at the time construction gets underway by the CSC.

*Performance Indicator 3: Biodiversity:* to be completed at the time construction gets underway by the PPMU in conjunction with the CSC.

*Performance Indicator 4: Community Based Monitoring:* to be completed at the time construction gets underway by the PPMU in conjunction with the CSC.

*Performance Indicator 5: Community Values and Safety:* results entered into this section of the checklist should be based on visual monitoring of affected areas and discussions with community members and affected people.

*Performance Indicator 6: Hydrology/Water Pollution:* results entered into this section of the checklist should be based on visual monitoring of the construction area and surrounding water bodies (rivers, streams, canals and lakes).

*Performance Indicator 7: Project Completion* section of the checklist should be filled out when construction is over. The results are based on field monitoring of the site and surrounding community areas. Issues should be resolved before final payment is made to the contractor.

*Performance Indicator Results* is expressed by percentage (%) & based on the average value, with “good” > 75%; “average” 25—75%; poor < 25%.)

**Comments:**

Most of Performance indicators of 149 packages of 13 Project Provinces reach 70.0 -100 % with average value is 75.3- 97.1%. It means the contractors mostly complied with proposed mitigation measures were described Environmental Performance Specifications that Standardized mitigation measures were distilled from the IEE documentation. Environmental performance indicator results by province is evaluated as below:

*Design & Preparation 's indicator:* only all packages in Ha Tinh Province reached 100 %. It shows that subproject design meet applicable engineering safety and public health standards, Site EMP is prepared by contractors, use of land for worker camps and construction yards are agreed with owner, spoil/ waste material disposal sites have been selected in consultation with local authorities, and contractors has official permits on record for quarry sites and borrow pits. Value of this indicators of remain 12 provinces reached 73-99% due to the contracts did not comply completely mitigation measures described in Design & Preparation indicator

*Worker provision's indicator* All packages in Thanh Hoa and Quang Nam Province reached 100%, it shows that Contractors implemented a safety and accident prevention program involving provision, training and use of safety equipment; minimum skills qualifications for operators and drivers; have onsite first aid kits along with instructions for use, and personnel trained in basic first aid emergency response measures, provided safety equipment to workers, camps equipped with adequate water supply, sanitary toilets, washing facilities and facilities for waste collection and storage and carried out an awareness program for communicable diseases/HIV-AIDS. However, this indicator reached only 32 % for packages in

Quang Tri due to the contractors did not implemented completely worker provisions as described above

*Biodiversity indicator.* All packages in Thanh Hoa, Ha Tinh, Quang Tri, Hue, Quang Ngai, Binh Dinh, Phu Yen, Binh Thuan Provinces reached 100%, it show that project avoid encroaching on natural forests or wetlands, avoid adverse effects on flow of natural streams and water quality, worker camps located outside of forested areas and has the contractor restricted access of workers to forests, fishing and hunting. However this indicator reached only 57.4 % for packages in Quang Binh due to contractors did not implemented some mitigation measures described in Biodiversity indicator

*Public Consultation/Grievance's indicator:* all packaged in most of project provinces such as Thanh Hoa, Nghe An, Ha Tinh, Quang Nam, Quang Ngai, Phu Yen, Ninh Thuan, Binh Thuan reached 100%, it indicates that public consultation regarding construction, environmental impact, and the community complaints system are implemented by the contractors. However, value of this indicator reached only 50-54% for packages in Quang Tri & Quang Ngai due to the contractors did not implemented some mitigation measures described in Public Consultation/Grievance indicators

*Community Value/Safety's indicator:* :all packages in Nghe An, Ha Tinh, Hue, Phu Yen, Binh Thuan reach 100%. It indicates that Vehicles transporting materials for construction are covered when traveling through community areas or along roadways in use by the public and operated within the legal speed limits in populated areas; . The contractors were responsible for regular spraying of roadway surfaces and sites under construction in areas accessed by the public and removed excess debris during construction and after completion of the item of work ; installed signs and in the vicinity of works on public roads, and restrict access to the construction site to the public.

*Hydrology/Water Pollution's indicator:* all packages in Nghe An, Ha Tinh, Hue, Quang Nam, Quang Ngai, Ninh Thuan, Binh Thuan reached 100%. It shows that construction camps maintained regularly in a clean and hygienic condition, avoided discharge of wastewater into water bodies used for water supply; maintained existing drainage patterns during construction

*Project Completion's indicator:* .this indicator is assessed for only one package in Ninh Thuan due to during this 6 months period , only this package completed and this indicator reached 100%. It shows that all construction debris, tree cuttings, excess dirt, rubble and scrap been removed from the construction zone; all points of access (drives, walks) and utilities (water supply, power, communications) to public and private property been restored to original condition; and all complaints by the local community and individuals been resolved by the Contractor

### **Performance Indicator Results for the IRDSPCP**

The measure of environmental performance across all provinces in Table 2 reflects the ability of the CPMU to mitigate environmental effects on the IRDSPCP. The CPMU has achieved for the current reporting period a score of **90.50 %** across all indicators and provinces, as shown in Table 3 (Performance Indicator Results for the IRDSPCP).

Table 3: Performance Indicator Results for the IRDSPCP

<i><u>Performance Indicator</u></i>	<i><u>Score (all provinces)</u></i>
1. Design and Preparations	89.46
2. Worker Provisions	81.92
3. Biodiversity	93.25
4. Public Consultation/Grievance	87.65
5. Community Values / Safety	94.51
6. Hydrology/Water Pollution	96.32
7. Project Completion	Not completed
Average:	90.50

The overall environmental performance on IRDSPCP subprojects currently underway is **good**

### III. PERFORMANCE FOLLOW-UP

Of the 50 environmental variables that are monitored, the top 10 in rank order found to be most unattended are shown in Table 4 (Rank Order of 10 Most Common Performance Shortfalls). In addition to continuous inspection of and feedback on environmental performance, shortfalls noted in the checklist have been brought to the attention of construction contractors for review and follow-up.

Table 4: Rank Order of 10 Most Common Performance Shortfalls

<i><u>Monitoring Variable</u></i>	<i><u>Number of Occurrences</u></i>	<i><u>Remarks</u></i>
1. Contractor prepared a Site EMP	11 (Quang Ngai, Kon Tum)	
2. The contractor provided safety equipment (hard hats, ear plugs, dust masks, safety glasses) to workers and training in use?	9 (Kon Tum)	
3. The contractor posted a public notice regarding the grievance mechanism in the construction zone?	5 (Quang Ngai)	
4. There is an initial public consultation regarding construction activities, environmental protection, and the community complaints system	3 (Hue , Phu Yen)	
5. Contractor or Inspector from the Department of Health undertaken an awareness program for communicable diseases/HIV-AIDS	3 (Hue , Phu Yen)	
6. Construction camps equipped with sanitary toilets, washing facilities and facilities for waste collection and storage	3 (Quang Binh, Quang Ngai)	Only water for worker camps is not supplied

		sufficiently
7. First aid kits readily available to workers at the job site along with instructions for use	3 (Quang Ngai)	
8. Material loads traveling on public routes are not covered	2 (Quang Binh)	
9. The contractor obtain fill materials only from pre-existing quarries, or from borrow pits within the strict limits of the construction zone?	1 (Kon Tum)	
10.		

#### Remarks:

Rank Order of 9 Most Common Performance Shortfalls in table 4 are described as below:

1. There were 11 packages of Quang Ngai and Kon Tum not prepared Site EMP
2. There were 9 occurrences that safety equipment (hard hats, dust masks, safety clothes) are not equipped to workers by some contractors of Kon Tum PPMU
3. There are 5 contractors/ packages of Quang Ngai PPMU did not posted a public notice regarding the grievance mechanism in the construction zone
4. There are 3 contractors of Hue & Phu Yen PPMU not implemented an initial public consultation regarding construction activities, environmental protection, and the community complaints system
5. There are 3 contractors of Hue & Phu Yen PPMU not invited Department of Health or health Centre undertaken an awareness program for communicable diseases/HIV-AIDS
6. There are 3 contractors of Quang Binh & Quang Ngai PPMU not equipped fully sanitary toilets, washing facilities and facilities for waste collection and storage for their construction camps
7. There are 3 contractors of Quang Ngai PPMU not provided First aid kits to workers at the job site along
8. There are 2 occurrences that Material loads traveling on public routes are not covered by contractors of Quang Binh
9. There is one contractor of Kon Tum PPMU not obtain fill materials only from pre-existing quarries, or from borrow pits within the strict limits of the construction zone ( due to pre-existing quarries or borrow pits within the strict limits of the construction zone were not available)

#### IV. EXCLUSIONS

Exclusions are performance shortfalls that have gone uncorrected over two quarters. There are various reasons why this may be so: the mitigation measure may be too expensive or difficult to implement; or the construction contractor and/or host community may not see any justification in attending to the mitigation measure; or the impact on the environmental resource from failure to mitigate may be slight. Exclusions should be looked at analytically, either through engineering solutions, cost-effectiveness analysis, and/or via participatory methods (community perception of need). If it is determined by the CPMU that the mitigation measure is

unnecessary, the construction contractor (or other agent) should be informed and performance monitoring for the variable factored out of the indicator scores. Negligence on the part of the contractor is not a basis for excluding a mitigation measure from the monitoring list. Exclusions for the current reporting period are listed in Table 5 (Rank Order of 10 Most Common Exclusions).

Table 5: Rank Order of 10 Most Common Exclusions

None of Monitoring Variable is excluded in Monitoring checklist.

<u>Monitoring Variable</u>	<u>Number of Violations</u>
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Remark:

The table is based on data from tables of the same title found in the provincial quarterly reports. During this six month, there are no exclusions shown on any of the quarterly reports for the period. So, above table is blank

## V. COMMUNITY COMPLAINTS

Concerns of the community are monitored and attended to through the community based monitoring system. Proximity of construction to settlements requires more attention to environmental performance on community matters by a contractor. The incidence of complaints during the reporting period per province is shown in Table 6 (Incidence of Complaints by Province). The construction contractor is required to address all reasonable complaints voiced by the community.

Table 6: Incidence of Complaints by Province

<u>Province</u>	<u>Number of Complaints</u>
Thanh Hoa	None
Nghe An	None
Ha Tinh	None
Quang Binh	None
Quang Tri	None
TT Hue	None
Quang Nam	None
Quang Ngai	None
Binh Dinh	None
Phu Yen	None
Kom Tum	None
Ninh Thuan	None
Binh Thuan	None

## VI. CONCLUSION & RECOMMENDATION

### **Conclusion**

In general, all contractors of 149 construction packages of 13 Project Provinces complied with proposed mitigation measures were described Environmental Performance Specifications, which detailed in Monitoring Check list with 50 variables are grouped in 5 performance indicators (Annex 1). The overall environmental performance on IRDSPCP subprojects currently underway is good. In addition, package's daily environmental recording is filled by Environmental/ Construction Supervision Consultant and submitted to PPMU in every month

Aside from substantial compliance of mitigation measures, some main performance shortfalls of province' contractors during this 6 month period as below:

- Site/ package EMP is still not prepared
- Initial public consultation regarding construction activities, environmental protection, and the community complaints system is not implemented by some contractors
- Awareness raising of communicable diseases/HIV-AIDS for workers is not carried out as the contractors did not invite Department or Centre of Health to provide training for their workers
- Watering exposed surfaces to mitigate dust increase is not implement regularly

### **Recommendation**

- In addition to field monitoring, other quarterly field activities should include:
  - ❖ Record and review complaints from the community ( both by writing or in word), inform the PPMU and resolve issues with the construction contractor.
  - ❖ Review performance deficiencies noted during previous monitoring, update performance tracking forms and resolve issues with the construction contractor.
- Environmental Monitoring Result from Community Supervision Board should be collected and combined with Environmental Compliance Monitoring from Environmental /Construction Supervision Consultant to evaluate and prepare Quarterly Provincial Compliance Report

## **Annex 1- Checklist and Environmental Compliance Monitoring Form**

### Environmental Compliance Monitoring Form

#### **Instructions for use:**

- I. The monitoring form consists of three parts:
  - a. Part A: General Project Information
  - b. Part B: Monitoring checklist
  - c. Part C: Performance Tracking
- II. Part A is for recording general information on the subproject construction package as well as names, responsible persons and contact phone numbers for the design and construction supervision consultant, the construction contractor and the Environmental Management Officer (EMO) for the PPMU.
- III. Part B: The Monitoring Checklist, consists of three sections:
  - a. A section to be completed one-time-only during the period when the design is being finalized, the project tendered, and construction activities started. This section provides monitoring of four performance indicators: Design and Preparations, Worker Provisions, Biodiversity and Community Based Monitoring. The section also contains fields for entering information regarding the public consultation, comments and follow-up.
  - b. A section to be completed quarterly during the construction period. This section provides monitoring of two performance indicators: Community Values and Safety, and Hydrology/Water Pollution. A separate copy of this section (page 3 of the monitoring checklist) will be completed for each period quarter of the construction duration.
  - c. A section to be completed one-time-only during the period when construction work is nearing completion. This section provides monitoring of Project Completion indicators of performance.

Though the monitoring checklist is filled in one-time-only or quarterly, the variables are inspected continuously by the site supervisor along with other aspects of construction performance. The contractor is responsible for fulfilling the environmental mitigation requirements and is subject to notification concerning any deficiency on a continuous, ongoing basis.

- IV. Part C: Performance Tracking consists of three sections:
  - a. Performance Follow-up, where performance shortfalls noted in prior monitoring are listed and checked against current monitoring results.
  - b. Community Complaints, where issues raised by the affected community are registered, tracked and outcomes recorded.

- c. Performance Indicator Results, where environmental performance against indicators are recorded.
- V. Sections of the checklist to be completed initially, at or around the beginning of construction, include:
- a. Performance Indicator 1: Design and Preparations: to be completed in two parts (see checklist) at the time the design is being finalized and project tendered (by the PPMU), and at the time construction begins (by the Construction Supervision Consultant (CSC) in conjunction with the PPMU).
  - b. Performance Indicator 2: Worker Provisions: to be completed at the time construction gets underway by the CSC.
  - c. Performance Indicator 3: Biodiversity: to be completed at the time construction gets underway by the PPMU in conjunction with the CSC.
  - d. Performance Indicator 4: Community Based Monitoring: to be completed at the time construction gets underway by the PPMU in conjunction with the CSC.

While the parts of the checklist reflecting these performance indicators are in general completed one-time-only, the variables may require more frequent inspection to assure continued compliance over the life of the construction project.

- VI. Sections of the checklist to be completed quarterly by field monitoring at the construction site and surrounding affected area include:
- a. Performance Indicator 5: Community Values and Safety: results entered into this section of the checklist should be based on visual monitoring of affected areas and discussions with community members and affected people.
  - b. Performance Indicator 6: Hydrology/Water Pollution: results entered into this section of the checklist should be based on visual monitoring of the construction area and surrounding water bodies (rivers, streams, canals and lakes).
- VII. In addition to field monitoring, other quarterly field activities include:
- a. Record and review complaints from the community, inform the PPMU and resolve issues with the construction contractor.
  - b. Review performance deficiencies noted during previous monitoring, update performance tracking forms and resolve issues with the construction contractor.
- VIII. The Performance Indicator 7: Project Completion section of the checklist should be filled out when construction is over. The results are based on field monitoring of the site and surrounding community areas. Issues should be resolved before final payment is made to the contractor.



- IX. A “yes” answer to a question in the checklist indicates substantial compliance with the mitigation measure. “Substantial compliance” means that the mitigation measure is being implemented in most instances, with only a few isolated exceptions.
- X. In all cases (for all performance indicators), once monitoring is nearing completion and the appropriate section of the checklist has been completed, the inspector needs to tally the score and calculate the percent compliance, as provided for in the last row under each of the performance indicators, done by counting the total number of “yes” answers and dividing by the number of questions contributing to the score for the performance indicator (shown on the form), expressed as percent.
- XI. Performance Follow-up involves the following actions:
- a. As a final action of monitoring at the site or in an office (design consultant or PPMU) the inspector or monitoring officer must notify the agency responsible for implementing mitigation actions (usually the construction contractor) of any shortcoming in performance and discuss with its responsible individual means for correcting the deficiency.
  - b. Using the Performance Follow-up form (Part C, Section 1), the inspector or monitoring officer will enter the relevant information in Columns 1 – 3 concerning the performance shortfalls observed during monitoring: performance variable number (1-50) and date observed (column 1), reason behind negative rating (column 2), and whether or not the responsible agency was notified and date of notification (column 3).
  - c. During the next/follow-up monitoring tour, the inspector will indicate in column 4 of Part C, Section 1 whether the problem has been corrected by entering “Yes” or “No” as appropriate if “Substantial Compliance” (see Item IX above) is/is not achieved.
  - d. For Performance Indicators 1 – 4, Indicator scores (see Item XII below) should be adjusted accordingly if the performance shortfall has been corrected within the next three months (quarter). It should be noted in Column 5 of Part C Section 1 if the indicator score has been adjusted.
  - e. For Performance Indicators 5 and 6, there is no need to adjust indicator scores, since improved performance will be reflected in the results from the next quarterly monitoring.
  - f. For Performance Indicator 7, a post-completion monitoring tour will need to be conducted to determine whether performance shortfalls have been corrected. The indicator score should be adjusted accordingly. It should be noted in Column 5 of Part C Section 1 if the indicator score has been adjusted.
  - g. Performance shortfalls should be registered consecutively up through the end of the construction activity using the Performance Follow-up form. Additional copies of the blank form can be made and attached to the Environmental Compliance Monitoring Form file.

- XII. Community Complaints are recorded and resolved using the form in Part C, Section 2. This involves the following actions:
- a. The inspector or monitoring officer will receive any complaints from members of the affected community and work with the construction contractor to resolve the deficiency.
  - b. Using the Community Complaints form (Part C, Section 2), the inspector or monitoring officer will enter the relevant information in Columns 1 – 3 concerning the complaint: name of person bringing the complaint and date (column 1), summary of complaint (column 2), and whether or not the responsible agency was notified and date of notification (column 3).
  - c. The inspector will indicate in column 4 of Part C, Section 1 whether the problem has been corrected by entering “Yes” or “No” as appropriate.
  - d. The inspector will contact the person registering the complaint, explain the corrective actions taken, provide any other justifications, and determine whether the person is satisfied with the action taken. It should be noted in Column 5 of Part C Section 2 if the person is satisfied with the corrective action.
  - e. Community complaints should be registered consecutively up through the end of the construction activity using the Community Complaints form. Additional copies of the blank form can be made and attached to the Environmental Compliance Monitoring Form file.
- XIII. Performance Indicator Results are recorded using the form shown in Part C Section 3 using the following procedure:
- a. Complete the general information at the top of the form. This assures that the data in the form are identified and associated with the correct subproject and reporting period.
  - b. In respect to the form, cells that are darkened are not to be filled in; only those cells that are un-shaded receive data entries.
  - c. Enter the score as a percent taken from the checklist (see item X in the instructions) opposite the appropriate performance indicator. This will be done consecutively as the project progresses, from left to right in the form. Enter the date when the score is recorded.
  - d. Performance indicators 1 – 4 are evaluated only once, around the time of project startup, though performance follow-up may result in a revision of the score (see item XI in the instructions). The form accommodates both initial and revised scores for these indicators. This is the case with Indicator 7 as well, recorded near the end of the project.
  - e. Indicators 5 and 6 are recorded for each quarter of the project construction period. Four quarters are shown on the form; however the project may run for shorter or longer than four quarters. The form can be adjusted accordingly to accommodate the actual duration for a

given project. Regardless of how many quarters of data are taken, after the final round of monitoring the data are averaged across all quarters, and the value entered in the form.

- f. Following completion of the subproject, it is “closed out” from the standpoint of environmental monitoring by entering the final scores in the right hand column, consisting of the revised values for indicators 1 – 4 and 7, and the average scores for indicators 5 and 6.

XIV. Note on alignment of project quarters and calendar quarters: In order to support the need for reports timed to coincide with calendar quarters, the monitoring should be conducted and reports submitted to the PPMU near the end of a given calendar quarter.

Environmental Compliance Monitoring Form for Construction Package

Part A: General Project Information

Subproject Name: \_\_\_\_\_

SIR Code: \_\_\_\_\_ Subproject Package #: \_\_\_\_\_ Activity Sector: \_\_\_\_\_

Province: \_\_\_\_\_ Districts: \_\_\_\_\_

Design and Supervision Consultant Firm: \_\_\_\_\_

Construction Company Name: \_\_\_\_\_ Contract Date: \_\_\_\_\_

Contract Amount: \_\_\_\_\_ Contract Duration (days) \_\_\_\_\_

Person Responsible: \_\_\_\_\_ Phone \_\_\_\_\_

PPMU EMO: \_\_\_\_\_ Phone \_\_\_\_\_

Part B: Monitoring checklist

**Performance Indicator 1. Design and Preparations**

The PPMU to complete 1-4 in conjunction with the subproject design consultant at the time the project is tendered. Date of Monitoring:

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
1. Have all UXO been cleared prior to commencement of construction?			
2. Does the subproject design meet applicable engineering safety and public health standards?			
3. Have the resettlement provisions been disclosed to the affected communities and compensation made to affected persons or households?			
4. For the applicable subproject type:			
a. Roads, embankments, irrigation works and coastal protection: does the design provide cross drainage to prevent flooding?			
b. Markets: does the design provide washing facilities and toilets in the market area?			

The construction Supervision consultant (CSC) to complete 5-10 with the PPMU and construction contractor at the time of start-up. Date of Monitoring:

5. Has the contractor prepared a Site EMP?			
6. Has the contractor posted a public notice regarding the nature, extent and cost of the project?			
7. Are locations for mixing plants sufficiently distant from houses, schools and hospitals?			
8. Are agreements in place with owners for temporary use of land for worker camps and construction yards?			
9. Have spoil disposal sites been selected in consultation with local authorities?			
10. Are official permits on record for quarry sites and borrow pits?			
<b>Score (1-10; 10 total)</b>			(%)

**Performance Indicator 2. Worker Provisions**

The CSC to complete 11-16 in conjunction with the PPMU and construction contractor following commencement of construction. Date of Monitoring:

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
11. Were local authorities consulted in the planning for the location of construction worker housing?			
12. Are supervisors or other site personnel trained in basic first aid emergency response measures?			
13. Are first aid kits readily available to workers at the job site along with instructions for use?			
14. Has the contractor or Inspector from the Department of Health undertaken an awareness program for communicable diseases/HIV-AIDS?			
15. Has the contractor provided safety equipment (hard hats, ear plugs, dust masks, safety boots and glasses) to workers and training in use?			
16. Are construction camps equipped with adequate water supply, sanitary toilets, washing facilities and facilities for waste collection and storage?			
<b>Score (11-16; 6 total)</b>			(%)

### **Performance Indicator 3. Biodiversity**

The CSC should complete 17-21 in conjunction with the PPMU and construction contractor following commencement of construction. Date of Monitoring:

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
17. Does the project avoid encroaching on natural forests or wetlands?			
18. Does the project avoid adverse effects on flow of natural streams and water quality?			
19. Are worker camps located outside of forested areas and has the contractor restricted access of workers to forests, fishing and hunting?			
20. Does the contractor obtain fill materials only from pre-existing quarries, or from borrow pits within the strict limits of the construction zone?			
21. For irrigation sector projects, are effects on agricultural biodiversity limited through use of integrated pest management?			
<b>Score (17-21; 5 total)</b>			(%)

#### **Performance Indicator 4. Community Based Monitoring**

The CSC to complete 22 and 23 in conjunction with the PPMU and construction contractor following commencement of construction. Date of Monitoring:

	Yes	No	Remarks
22. Has the contractor posted a public notice regarding complaints from the community?			
23. Has there been a public consultation regarding construction, environmental impact, and the community complaints system?			
<b>Score (22-23; 2 total)</b>			(%)

### Outcome of Public Consultation:

Date: \_\_\_\_\_ Location: \_\_\_\_\_

Topics covered in presentation: \_\_\_\_\_

[illegible]

**Performance Indicator 5. Community Values and Safety**

Items 24 – 35 should be inspected quarterly. Date of Monitoring:

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
24. Is temporary access provided to adjacent properties as needed?			
25. Is permanent access to adjacent properties reinstated on completion of a segment of work?			
26. Are construction hours adjusted around houses, hospitals and schools to minimize disturbance?			
27. Does the contractor limit the scope of construction in progress to minimize community impacts?			
28. Are physical impacts on public infrastructure and service disruption minimized?			
29. Are materials transported on approved haul routes?			
30. Are construction equipments maintained in good condition?			
31. Do vehicles operate within legal speed limits?			
32. Are material loads traveling on public routes covered?			
33. Is dust suppressed by watering exposed surfaces?			
34. Has the contractor installed signs and lighting in vicinity of works on public roads?			
35. Is access to the construction site restricted to the public?			
<b>Score (24-35; 12 total)</b>			(%)

**Performance Indicator 6. Hydrology/Water Pollution**

Items 36 – 43 should be inspected quarterly. Date of Monitoring:

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
36. Are construction camps maintained in a clean and hygienic condition?			
37. Are oil, fuel and chemicals stored in enclosed areas (dyked or covered)?			
38. Is discharge of wastewater into water bodies used for water supply avoided?			
39. Is clearing activity suspended during rains?			
40. Does the contractor prevent discharge of concrete trucks to waterways?			
41. Have existing drainage patterns been maintained during construction?			
42. Are areas of standing water in the construction area drained and backfilled?			
43. Are sediment controls installed upslope of waterways?			
<b>Score (36-43; 8 total)</b>			(%)

**Performance Indicator 7. Project Completion**

Items 44 – 50 should be inspected prior to finalizing the construction works.

Date of Monitoring: \_\_\_\_\_

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
44. Have drainage fixtures, curbs, road shoulders and ditch slopes been finished out to prevent hazard to the public during use?			
45. Are ground surfaces in the project area graded to prevent water from collecting?			
46. Have all construction debris, tree cuttings, excess dirt, rubble and scrap been removed from the construction zone?			
47. Have all pits been filled in and graded to drain, underground tanks (including septic tanks) removed and holes backfilled?			
48. Are all waste products removed from the construction site, equipment yards and worker camps, including oil waste, scrap materials and equipment, building materials and domestic waste?			
49. Have all points of access (drives, walks) and utilities (water supply, power, communications) to public and private property been restored to original condition?			
50. Have all complaints by the local community and individuals been resolved by the Contractor?			
<b>Score (44-50; 7 total)</b>			(%)



### Part C: Performance Tracking

Part C: Performance Tracking consists of three sections:

- a. Performance Follow-up, where performance shortfalls noted in prior monitoring are listed and checked against current monitoring results.
- b. Community Complaints, where issues raised by the affected community are registered, tracked and outcomes recorded.
- c. Performance Indicator Results, where environmental performance against indicators are recorded.

## Section 1: Performance Follow-up

[illegible]

## **Section 2: Community Complaints**

Column 1	Column 2	Column 3	Column 4	Column 5
Person Registering Complaint / Date	Summary of Complaint	Was agency responsible notified? / Date	Was problem corrected before next monitoring?	Was Person satisfied with Action?

## **Section 3: Performance Indicator Results**

Project Name: \_\_\_\_\_ SIR No.: \_\_\_\_\_

Package #: \_\_\_\_\_ Province: \_\_\_\_\_

Project Start Date: \_\_\_\_\_

	Startu p	Re v.	Q 1	Q 2	Q 3	Q 4	Averag e	Completi on	Re v.	Fin al
Recording Date:										
8. Design and Preparations										
9. Worker Provisions										
10. Biodiversity										
11. Community Based Monitoring										
12. Community Values / Safety										
13. Hydrology/Water Pollution										
14. Project Completion										

Submittal Date: \_\_\_\_\_ For Calendar Quarter: \_\_\_\_\_

Inspector: \_\_\_\_\_

(Signature)

## Annex 2- Reporting Procedures and Templates.

### Reporting Procedures and Templates

#### **Procedures**

1. A series of reports are needed for environmental reporting on the IRDPCP. These are summarized in the following table:

Type Of Report	Frequency	Responsibility	Submitted To Whom
<b>Quarterly Subproject Compliance Report</b>	Quarterly for each ongoing subproject construction package <sup>1</sup>	CSC	PPMU
<b>Quarterly Provincial Compliance Report</b>	Quarterly consolidating results for all subprojects underway in the province.	PPMU	CPMU/LIC
<b>Semi-annual Environmental Performance Review</b>	Every 6 months presenting results for all provinces	CPMU/LIC	ADB, AFD, DONRE, MONRE
<b>Subproject Completion Report</b>	At completion of subproject construction package	CSC	PPMU, forwarded to CPMU
<b>Project Completion Report</b>	At completion of Project	CPMU/LIC	ADB, AFD, DONRE, MONRE

2. Reporting is cumulative for subproject construction packages, provinces and in respect to elapsed time for subprojects and the overall project. For this reason, and because of the way the forms are set up, some data will be repeated in subsequent reports.
3. The Quarterly Subproject Compliance Report is prepared by the Construction Supervision Consultant (CSC). It consists of photocopies of Part C of the Environmental Compliance Monitoring Form once it is completed for the quarter: the Performance Follow-up Form, the Community Complaints Form, and the Performance Indicator Results. These are submitted by CSCs to the PPMU for every active subproject package within the province. A transmittal letter that itemizes the contents of the transmittal should accompany the photocopied forms. Electronic copies of the forms should also be sent by email attachment; the electronic versions should faithfully reproduce the contents of the forms completed in hard copy (ink). The hard copy is the official version and should be filed accordingly among the project records in the PPMU.
4. The Quarterly Provincial Compliance Report is prepared by the PPMU to summarize the Subproject Quarterly Compliance Reports. The report template is shown in the file <Quarterly Provincial Compliance

<sup>1</sup> A subproject construction package refers to an individual, stand-alone construction contract. The subprojects are commonly divided into multiple construction contract packages; each package, or contract, has to be inspected, monitored and reported on separately. The distinction between "subproject" and "subproject construction package" is sometimes not made in the following description, but the latter is referred to whenever the construction phase of the subproject is underway.

Report.doc>. Use of the forms/tables found in the report template is described below.

- a. Table 1: Subproject Status is mostly self-explanatory. Enter the subproject name, its SIR number, the construction package number, the total contract duration, elapsed time to the end of the quarter, and percent complete, calculated as  

$$(\text{elapsed time}/\text{total time}) \times 100 = \text{percent complete}$$
- b. Table 2: Quarterly Subproject Performance Indicator Results: For each subproject construction packages, the date and SIR # / package # for the contract is entered on the form. Subproject packages are entered chronologically from top to bottom on the form (columns 1 and 2). Quarterly data for a particular subproject package from the Quarterly Subproject Compliance Report, Section 3 Part C of the Environmental Compliance Monitoring Form, are entered into the form in accordance with the following:
  1. If any of the five indicators that may undergo revision (1—4 and 7) has been revised during the quarter (see instructions for this form), the revised value is entered in the form. Otherwise use the original value.
  2. The values for indicators 5 and 6 for the current quarter are entered into the form.
  3. The average of all indicators for which there are recorded values is entered in the right hand column (in other words, do not include blank fields in calculating the average).
- c. Table 3: Quarterly Provincial Performance Indicator Results: For each of the seven indicators, e.g. the columns containing indicators 1—7 in Table 2, the average of all subprojects for which there are recorded values is calculated and entered into the appropriate field. An overall average is calculated, as indicated by the table. (This number is used in the template text, preceding paragraph. Also, the text requires selection of good/ average/bad to describe provincial performance in environmental mitigation: this is based on the average value, bottom right, Table 3, with “good” > 75%; “average” 25—75%; poor < 25%.)
- d. Table 4: Rank Order of 10 Most Common Performance Shortfalls: The table is based on data found in the Environmental Compliance Monitoring Form Part 3 Section 1. The instances of negative ratings for performance variables during the quarter need to be counted. The top 10 variables in terms of frequency are entered into the form and the number of instances recorded. As a check, this number cannot exceed the number of active subprojects underway during the quarter.
- e. Table 5: Rank Order of 10 Most Common Exclusions: An “exclusion” is a performance shortfall that is carried over from one quarter to the next. The system allows for correcting a shortfall within one quarter; otherwise the failure to mitigate comes under scrutiny as explained in the report template text. Following evaluation, the CPMU, in conjunction with PPMU, may decide the measure should be “excluded” from the list of mitigation requirements, hence the name.

This table is intended to flag what might be considered a “persistent problem” in implementing a mitigation measure. The information is determined by reviewing the Environmental Compliance Inspection Form Part 3 Section 1 for repeated instances of a mitigation measure not being complied with. These are tallied (counted) across all active subprojects and the top 10 variables in terms of frequency are entered into the form and the number of instances recorded.

Note there can be no instance of an exclusion until a subproject has been underway for at least six months, in time for two reporting periods to elapse.

If there are no exclusions on any subproject for the period, the sentence in the previous paragraph “*Exclusions for the current quarter (e.g. performance shortfalls from the previous quarter that have gone uncorrected) are listed in Table 5 (Rank Order of 10 Most Common Exclusions)*” should be deleted from the text along with the table itself and the following statement entered in its place:

“There are no exclusions for the current quarter.”

- f. Table 6: Incidence of Complaints on Subprojects: This table tallies for each active subproject package the number of complaints recorded during the quarter on the Environmental Compliance Inspection Form Part 3 Section 2. No further analysis of data is expected.
5. The Semi annual Environmental Performance Review may be either a section of the overall semi-annual report or a separate (stand-alone) document. The template is set up as a separate document; if treated as a section in a larger report, cover and contents list should be omitted. The report is prepared by the CPMU/LIC to summarize the Quarterly Provincial Compliance Reports. The report template is shown in the file <Semi annual Environmental Performance Review.doc>. Use of the forms/tables found in the report template is described below.
- a. Table 1: Subproject Status by Province is mostly self-explanatory. Enter for each province the number construction packages started, the number completed and the number currently active at the end of the reporting period. The information is derived from the most recent provincial quarterly reports, Table 1, Subproject Status.
  - b. Table 2: Performance Indicator Results by Province: For each province, enter the number of active subproject construction packages and the averages for each performance indicator across all active subprojects. These data are taken from the most recent provincial quarterly reports, Table 3, Quarterly Provincial Performance Indicator Results. Calculate and enter overall performance to date (average of all indicators for a particular province).
  - c. Table 3: Performance Indicator Results for the IRDSPCP: For each of the seven indicators, e.g. the columns containing indicators 1—7 in Table 2, the average of all provinces is calculated and entered into the appropriate field. An overall average is calculated, as indicated by the table. (This number is used in the template text, preceding paragraph. Also, the text requires selection of good/ average/bad to describe

performance in mitigation: this is based on the average value, bottom right, Table 3, with “good” > 75%; “average” 25—75%; poor < 25%.)

- d. Table 4: Rank Order of 10 Most Common Performance Shortfalls: The table is based on data from tables of the same title found in the provincial quarterly reports. The number of negative ratings for specific performance variables for both quarters making up the semi-annual period need to be determined from these tables. The top 10 variables in terms of frequency are entered into the form and the number of instances recorded.
- e. Table 5: Rank Order of 10 Most Common Exclusions: The table is based on data from tables of the same title found in the provincial quarterly reports. The number of exclusions for specific performance variables for both quarters making up the semi-annual period need to be determined from these tables. The top 10 exclusions in terms of frequency are entered into the form and the instances recorded.

If there are no exclusions shown on any of the quarterly reports for the period, the sentence in the previous paragraph “*Exclusions for the current reporting period are listed in Table 5 (Rank Order of 10 Most Common Exclusions)*” should be deleted from the text along with the table itself and the following statement entered in its place:

“There are no exclusions for the current reporting period.”

- f. Table 6: Incidence of Complaints by Province: The table is based on data from tables found in the provincial quarterly reports. The number of complaints per province for both quarters making up the semi-annual period need to be determined from these tables.
- 6. Subproject Completion Report is prepared by the Construction Supervision Consultant (CSC). It consists of Part C of the Environmental Compliance Monitoring Form once the subproject package has been completed: the Performance Follow-up Form, the Community Complaints Form, and the Performance Indicator Results. These are submitted by CSCs to the PPMU for every active subproject package within the province. The PPMU will approve, certify and forward these reports to the CPMU.
  - 7. Project Completion Report: It will likely be based on a synopsis of the semi-annual reports, perhaps with some trend analysis of data from tables therein.

### Annex 3- SOME PICTURES DURING FIELD TRIP



Upgrading of Hung Trung – Nghi Kieu road, Nghe An Province 12, May 2010



Water tank for cooking & washing in worker camp of Upgrading of Hung Trung – Nghi Kieu road's Subproject-12, May 2010



Repairing and upgrading 4B inter commune road- Thanh Hoa Province- 13, May 2010



Worker camp of subproject Repairing and upgrading 4B inter commune road- Thanh Hoa Province- 13, May 2010



### Annex 3- SOME PICTURES DURING FIELD TRIP (Cont)



Reinforce Southern main canal, section K32+823 to K36+690 and N5/8 canal, section K1+500 to K6+826, Nong Cong district Thanh Hoa Province- the subproject completed-13, May 2010



Upgrading of saline protection dike combine with road, Quang Cong-Quang Ngan section, Quang Dien district- Thua Thien-Hue Province- 27 July 2011



East-West Hoi Tom flood protection dike system, Phong Dien district- Thua Thien-Hue Province- 27 July 2011



Su Lo pumping station, Phu Vang district- Thua Thien-Hue Province- 27 July 2011