

Environmental Monitoring Report

#2 Semestral Report
Project Number: 46391-001
February 2017

VIE: Ha Noi and Ho Chi Minh City Power Grid
Development Sector Project

SEMI-ANNUAL ENVIRONMENTAL MONITORING REPORT

Period January – June 2016

Project Number: 46391-001

Loans 3161/8286-VIE: Ha Noi and Ho Chi Minh City Power Grid Development Sector Project

Executing Agency: EVN Hanoi City

CURRENCIES

(Rate of exchange of 28 March. 2016)

Currency Unit – VND
\$1.00 = 22,355 VND

ABBREVIATIONS

ADB	Asian Development Bank
AH	Affected households
B&C documents	Bidding and Contract documents
CEMP	Contractor Environmental Management Plan
CSC	Contractor Safeguard Consultant
CPC	Commune People Committee
DARD	Department of Agriculture and Rural Development
DoNRE	Department of Natural Resources and Environment
DoCST	Department of Culture, Sports and Tourism
DoLISA	Department of Labour, War Invalids and Social Affairs
DPMB	Development Project Management Board
EA	Executing Agency
EIA	Environmental Impact Assessment
EMoP	Environmental Monitoring Plan
EMP	Environmental Management Plan
EO	Environmental Officer of NPT
ES	Environmental Safeguard
ESHO	Environmental Safety Health Officer
HCMC	Ho Chi Minh City
EVNHANOI	Ha Noi Power Corporation
EVNHCMC	Ho Chi Minh City Power Corporation
IEC	Electricity Installation & Construction JSC.
IEE	Initial Environmental Examination
IES	International Environment Specialist
NES	National Safeguard Specialist for Environment
MoLISA	Ministry of Labour, War Invalids and Social Affairs
MoNRE	Ministry of Natural Resources and Environment
NPA	National Protected Area
OHTL	Overhead transmission line
PCB	Polychlorinated biphenyls
PCR	Physical Cultural Resources
PIC	Project Implementation Consultant
PPC	Provincial People's Committee
RoW	Rights of Way
S/S	Substation
T/L	Transmission line
UGC	Underground cable
UXO	Unexploded Ordnance
USD	United State Dollars
JV	Joint Venture
OHL	Over Head Line
PCC	Power Construction Company
UGC	Under Ground Cable

WEIGHTS AND MEASURES

dB(A)	–	Decibel (weighted average)
ha	–	hectare
km	–	kilometer
km ²	–	square kilometer
m	–	meter
m ²	–	square meter
m ³	–	cubic meter

NOTE

In this report, "\$" refers to US dollars unless otherwise stated.

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1. INTRODUCTION

1.1 Project Background

The Asian Development Bank (ADB) has approved Loan 3161/8286-VIE:¹ Ha Noi and Ho Chi Minh City Power Grid Development Sector Project to strengthen the capacity and reliability of the power infrastructure in Ha Noi and Ho Chi Minh City through the rehabilitation and development of the 220 kilovolt (kV) and 110 kV grid. Hanoi Power Corporation (EVN HANOI) and Ho Chi Minh City Power Corporation (EVN HCMC), which are respectively responsible for the power supply in Ha Noi and Ho Chi Minh City, are the executing agencies. The project's impact will be that growth in national electricity demand is met in a sustainable manner, and the outcome will be improved reliability and efficiency of electricity supply in Ha Noi and Ho Chi Minh City.

The project's outputs, categorized into four distinct groups to enable more focused monitoring of project performance, are the development and/or rehabilitation of: (i) four core substation and transmission line subprojects in Ha Noi, (ii) four core substation and transmission line subprojects in Ho Chi Minh City, (iii) up to 192 noncore substation and transmission line subprojects in Ha Noi, and (iv) up to nine noncore substation and transmission line subprojects in Ho Chi Minh City.

1.2 Report Purpose

This report presents the results of the environmental management performance and internal monitoring activities for period of January-June 2016. The report covers the following:

- Status of compliance with ADB environmental loan covenants and with the environmental requirements of the Government of Vietnam during the report period.
- Status of implementation of the environmental mitigation measures during the report period of January-June 2016, under construction subprojects (Noi Bai, Mo Lao, Thanh Xuan, Son Tay) based on the EMP requirements included in disclosure IEEs
- Recommending measures to mitigate the negative impacts on the environment for the construction phase.

2. PROJECT IMPLEMENTATION PROGRESS

The Project proposes 23 subprojects (4 core subprojects and 19 non-core subprojects) for EVN HANOI. As of 30 June 2016, IEE reports have been prepared for 4 core subprojects and 7 non-core subprojects, and disclosed on ADB website, while IEEs for 3 subprojects are under preparation by EVN HANOI Power Management Board (PMB). (Table 1)

¹ The funds are from ADB's ordinary capital resources (OCR) and ASEAN Infrastructure Fund (AIF).

² During the loan preparation, twenty non-core subprojects were identified; however before the loan approval (23 September 2014), EVN Hanoi dropped the Thach That (E10.7) 110 kV Substation subproject (originally listed as subproject number 24) because it is urgent to install and energize Thach That S/S so EVNHANOI invests Thach That S/S by other financing resource.

Table 1: List of subprojects with IEE status

Project	IEE	Construction started	Construction completed	Package
A: Core Project				
Rehabilitation of 110kV Son Tay S/S	Disclosed in Jan 2014	May-16	Mar-17	ADB-HNPC-ST-W01
Rehabilitation and upgrade of 110 kV Phuong Liet S/S		2017 Q2	not yet	not yet
Rehabilitation and upgrade of 110 kV Tran Hung Dao S/S		2017 Q2	not yet	not yet
Build new 110kV Substation at Noi Bai airport	Disclosed in Dec 2013	May-15	Apr-16	ADB-HNPC-NB-W01; ADB-HNPC-NB-W02
B: Non-Core Project				
Chem - Tay Ho 220kV transmission lines	Disclosed in Jun 2014	Dec-15	June-15	ADB-HNPC-CTH-W01; ADB-HNPC-CTH-W02
Mo Lao 110kV Substation and 110kV Branches	Disclosed in Jun 2014	Dec-15	Jun-16	ADB-HNPC-MLAO-W01; ADB-HNPC-MLAO-W02
Newly installation of T3 transformer - Thanh Xuan 110kV substation - E1.20	Disclosed in Jun 2015	Dec-15	Jun-16	ADB-HNPC-TX-W01
Expansion of Thuong Dinh 110kV substation - E1.5	Disclosed in Jun 2015	2016 Q4	not yet	not yet
Thanh Cong - Thuong Dinh 110 kV underground cable	The first submission on 2 June 2016 Revised IEE submitted on 7 Nov	2017 Q2	not yet	not yet
Phu Nghia 110KV substation and 110KV line	Disclosed in Mar 2016	Aug-16	On going	ADB-HNPC-PN-W01
Increasing capacity of T2 transformer, rehabilitation of 110KV bay - Tia substation - E10.4	Disclosed in Aug 2016	2017 Q1	not yet	not yet
Construction of 110 kV Tay Ho - Yen Phu underground cable	The first submission on 11 July 2016 Revised IEE submitted on 7 Nov	2017 Q2	not yet	not yet
Construction of 110kV line from Thuong Tin 500 / 220kV substation supplying electricity to Thanh Oai 110kV	Disclosed in Apr 2016	Sep-16	On going	ADB-HNPC-TT-TO-W01
110kV line to Sai Dong Industrial combinations substation	To be submitted by May 2017	2017 Q3 (Sep)	not yet	not yet
New building 110kV Sai Dong Industrial combinations (Sai Dong 2)	To be submitted by Feb 2017	2017 Q2	not yet	not yet
New building 110kV Chuong My and line 110kV Thanh Oai - Chuong My	NOT YET	not yet	not yet	not yet
New building 110kV Ngoc Hoi and line	NOT YET	not yet	not yet	not yet
New building 110kV Tay Ho Tay Substation and line	NOT YET	not yet	not yet	not yet
110kV line to 220kV Son Tay Substation	Disclosed in Nov 2016	2016 Q4	not yet	not yet
New building 110kV Phung Town and line	NOT YET	not yet	not yet	not yet
110kV line from 500/220kV Thuong Tin substation - Quat Dong (E1.34) Substation - Tia (E10.4) Substation	NOT YET	not yet	not yet	not yet
110kV line from 500/220kV Thuong Tin substation - Quat Dong (E1.34) Substation - Tia (E10.4) Substation	NOT YET	not yet	not yet	not yet
New building 110kV Ba Vi Substation	To be submitted by 15 Dec 2016	2017 Q2	not yet	not yet

The construction progress during the reporting period and to-date for each of the sub-projects is described below.

Overall the actual construction progress is 29.9% compared with a projected progress of 28.9%, the project is slightly ahead schedule.

During the first semiannual period of 2016, the construction activities are taking place in 4 subprojects: i) Build new 110kV Substation at Noi Bai airport (with two civil work packages); ii) Rehabilitation of Son Tay 110KV substation-E1.7; iii) Mo Lao 110kV Substation and 110kV Branches (with two construction packages) and iv) Newly installation of T3 transformer - Thanh Xuan 110kV substation - E1.20.

As of 30 June, the construction works have been completed for 03 subprojects with 5 packages, including the NB-W01 (construction of substation), NB-W02 (construction of underground cable), MLAO-W01 (construction of substation), MLAO-W02 (construction of underground cable), TX-W01 (construction of substation). Only ST-W01 (construction of substation) is under construction. The scope of each contract package and its implementation period is summarized in Table 2.

Table 2: The Scope of 06 civil works packages

Subproject	Contract package	Scope	Contractor	Start Date	Completion date
1. Build new 110kV Substation at Noi Bai airport	ADB-HNPC-NB-W01: Civil work-Construction of substation and line	Construction of new Noi Bai 110kV substation in the area of more than 3,000 m ² agricultural land, which is located in Phu Cuong commune and construction of OHL which start from Van Tri 220kV substation to Noi Bai substation. The OHL cross over 3 commune including Nam Hong, Bac Hong, Phu Cuong and Quang Minh town.	PCC1	April, 2015	April, 2016, 100% completed
	ADB-HNPC-NB-W02: Supply and Install 110kV underground cable	Construction of more than 5km 110kV UGC which cross over Phu Cuong commune.	PCC5	Oct, 2015	March, 2016, 100% completed
2. Rehabilitation of 110kV Son Tay S/S	ADB-HNPC-ST-W01: Civil work for rehabilitees Son Tay substation	Rehabilitation of 110kV Son Tay substation, all the civil work will carry out inside the substation only.	JV Pico- o. Hanoi development investment and electricity services Company	March, 2016	July, 2016, 80% completed
3. Mo Lao 110kV Substation and 110kV Branches	ADB-HNPC-MLAO-W01: Construction of Underground cable	Construction of more than 800 m 110kV UGC which start from electrical pole No.28 to the Mo Lao substation, all the underground cable laydown inside Mo Lao Urban area.	PCC1	Dec, 2015	June, 2016, 100% completed
	ADB-HNPC-MLAO-W02:	Construction of new Mo Lao 110kV substation in	PCC1	Dec, 2015	June, 2016,

Subproject	Contract package	Scope	Contractor	Start Date	Completion date
	Construction of substation	the area of more than 3000 m ² inside Mo Lao urban area.			100% completed
4. Newly installation of T3 transformer - Thanh Xuan 110kV substation - E1.20	ADB-HNPC-TX-W01: Construction of substation	Enlarge the existing Thanh Xuan substation, installation of new T3 110kV transformer inside the substation	PCC1	Dec, 2015	June, 2016 100% completed

JV = Joint Venture, OHL = Over Head Line, PCC = Power Construction Company, UGC = Under Ground Cable

Works on packages NB-W01 and NB-W02 were completed in April 2016 with total construction progress of 100%. It is following the time schedule for this subproject. Works on packages MLAO-W01 and MLAO-W02 are now moving forward and both have been started since Dec 2015 but until June 2016, 100% construction value were completed and the substation went into operation on 25 June 2016. Works on package TX-W01 also completed and the final acceptance certificate was signed on 29 June 2016. Ground breaking ceremony for ST-W01 package was organized on 15 March 2016 and this subproject was proposed to be completed on 30 July 2016.

The monthly construction progress of four ongoing subprojects (Noi Bai, Mo Lao, Thanh Xuan, Son Tay) is summarized in Table 3:

Table 3: Construction Progress of subprojects

Contract package	Physical progress
Noi Bai	<u>January, 2016</u> + Excavated around 92% of the Under Ground Cable (UGC) trench + Laid down the UGC to the cable trench around 50% + Excavated the soil of around 40% inside the substation area;
	<u>February, 2016</u> + Excavated around 92% of the UGC trench and the humus of around 40% inside the substation area; + Laid down the UGC to the cable trench around 90%
	<u>March, 2016</u> + Excavated around 100% of the UGC trench + Laid down the UGC to the cable trench account for 100% + Complete the skeleton of the substation
	<u>April, 2016</u> + Do the Partial Discharge (PD) test for the UGC system + Test the transformer and equipment system of the substation
MO LAO	<u>January, 2016</u> + Excavated around 30% the soil area inside the substation + Levelling ground of the substation account for 20%
	<u>February, 2016</u> + Excavated around 65% the soil area inside the substation + Levelling ground of the substation account for 50%
	<u>March, 2016</u> + Excavated around 85% the soil area inside the substation + Levelling ground of the substation account for 70%
	<u>April, 2016</u> + Excavated around 92% the soil area inside the substation + Levelling ground of the substation account for 90% + Finished erecting the support pillar for the electrical equipment inside the substation

Contract package	Physical progress
	<ul style="list-style-type: none"> + Finish casting the transformer's foundation of the substation + Completed construction of around 90% UGC trench, around 80% of earth wire and earth resistance system, around 90% of surrounding fence of the substation, erection of 90% of equipment support pillar and construction of 90% control centre. <p><u>May, 2016</u></p> <ul style="list-style-type: none"> + Completed excavation of 100% the humus area inside the substation + Levelling ground of the substation account for 100% + Finished erecting the support pillar for the electrical equipment inside the substation + Finish casting the transformer's foundation of the substation + Completed construction of UGC trench, around 90% of earth wire and earth resistance system and around 90% of surrounding fence of the substation + Erection of 90% of equipment support pillar + Erection 10% of electrical equipment + Completed 100% of control centre + Construction 5% of primary electrical equipments <p><u>June, 2016</u></p> <ul style="list-style-type: none"> + Completed excavation of 100% the soil area inside the substation + Levelling ground of the substation account for 100% + Finished erecting the support pillar for the electrical equipment inside the substation + Finish casting the transformer's foundation of the substation + Completed construction of UGC trench + Completed around 100% of earth wire and earth resistance system + Completed around 100% of surrounding fence of the substation + Erection of 100% of equipment support pillar + Erection 100% of electrical equipment + Completed 100% of control centre + Completed installation of all primary and secondary electrical equipments for the substation
Thanh Xuan	<p><u>January, 2016</u></p> <ul style="list-style-type: none"> + Excavated and transferred 20% of the trash area inside the substation <p><u>February, 2016</u></p> <ul style="list-style-type: none"> + Excavated and transferred 80% of the trash area inside the substation + To pile 80% of total position + Completed transferring the auxiliary transformer <p><u>March, 2016</u></p> <ul style="list-style-type: none"> + Completed excavating and levelling the ground of the substation + Complete piling for the electrical equipment's self + Completed 50% of control centre + Completed casting of 10% equipment's support pillars foundation <p><u>April, 2016</u></p> <ul style="list-style-type: none"> + Completed excavating and levelling the ground of the substation + Complete piling + Completed 90% of control centre + Completed levelling the substation + Completed casting of 90% equipment's support pillars foundation + Complete 40% of surrounding fence of the substation + Completed 90% of control centre + Completed 95% of the fault oil resouvar + Completed casting of 90% equipment's support pillars foundation + Completed 90% casting of transformer + Completed 90% of electrical tower + Completed installation of bus bar and wire connection between the electrical equipment. <p><u>May, 2016</u></p> <ul style="list-style-type: none"> + Completed excavating and levelling the ground of the substation + Complete piling

Contract package	Physical progress
	<ul style="list-style-type: none"> + Completed 100% of control centre + Completed levelling the substation + Completed casting of 100% equipment's support pillars foundation + Complete 100% of surrounding fence of the substation + Completed 100% of control centre + Completed 100% of the fault oil resouvar + Completed casting of 100% equipment's support pillars foundation + Completed 80% of road inside the substation + Completed 100% casting of transformer + Completed 100% of electrical tower + Completed installation of bus bar and wire connection between the electrical equipment. <p><u>June, 2016</u></p> <ul style="list-style-type: none"> + Completed excavating and levelling the ground of the substation + Complete piling + Completed 100% of control centre + Completed levelling the substation + Completed casting of 100% equipment's support pillars foundation + Complete 100% of surrounding fence of the substation + Completed 100% of control centre + Completed 100% of the fault oil resouvar + Completed casting of 100% equipment's support pillars foundation + Completed 100% of road inside the substation + Completed 100% casting of transformer + Completed 100% of electrical tower
Son Tay	<p><u>March, 2016</u></p> <ul style="list-style-type: none"> + Complete moving the T1 Transformer in order to land aquisition to rehabilitation of 110kV circuit breaker and disconnector; + Construction around 90% of new equipments foundation self on the swich yard. + Installation of 90% Scada system + Installation of 60% fire protection system inside the substation <p><u>April, 2016</u></p> <ul style="list-style-type: none"> + Evicted two auxirary transformer 100kVA-10/0.4kV + To construct the control and distribution centre which the ground floor intend for installation of UGC and control cable, first floor for setting up the 22kV control cubicle and second floor intend for setting up the control chamber, accu chamber and protection system, completed work load is aproximatelly 5%. + Installed two new carpacitor bank of which capacity is 200kVAR each; + Installed earth swich systems inside the substation area; + Improved the ligh system in the substation; + Construction around 30% of new equipments foundation self on the swich yard. + Installation of 25% Scada system + Installation of 30% fire protection system inside the substation <p><u>May, 2016</u></p> <ul style="list-style-type: none"> + Construction of the control and distribution centre, completed work load is aproximatelly 8%. + Installed earth swich systems inside the substation area; + Improved the ligh system in the substation; + Construction around 50% of new equipments foundation self on the swich yard. + Installation of 50% Scada system + Installation of 50% fire protection system inside the substation <p><u>June, 2016</u></p> <ul style="list-style-type: none"> + To construct the control and distribution centre, completed work load is aproximatelly 10%. + Installed earth swich systems inside the substation area; + Improved the ligh system in the substation;

Contract package	Physical progress
	+ Construction around 90% of new equipments foundation self on the swich yard. + Installation of 90% Scada system + Installation of 60% fire protection system inside the substation

3. MONITORING MANAGEMENT SYSTEM AND MONITORING METHODOLOGY

3.1 Monitoring Management System

As stated in the approval IEE, the independence environmental monitoring consultant will not be mobilised to conduct environmental monitoring. Thus, the monitoring tasks have been assigned for Construction supervision consultant, Project Management Board of Hanoi Power Development, with supported by PIC, which focus on monitoring implementation of environmental protection measures of the construction contractors. The status of internal environmental monitoring system could be summarized in Figure 1:

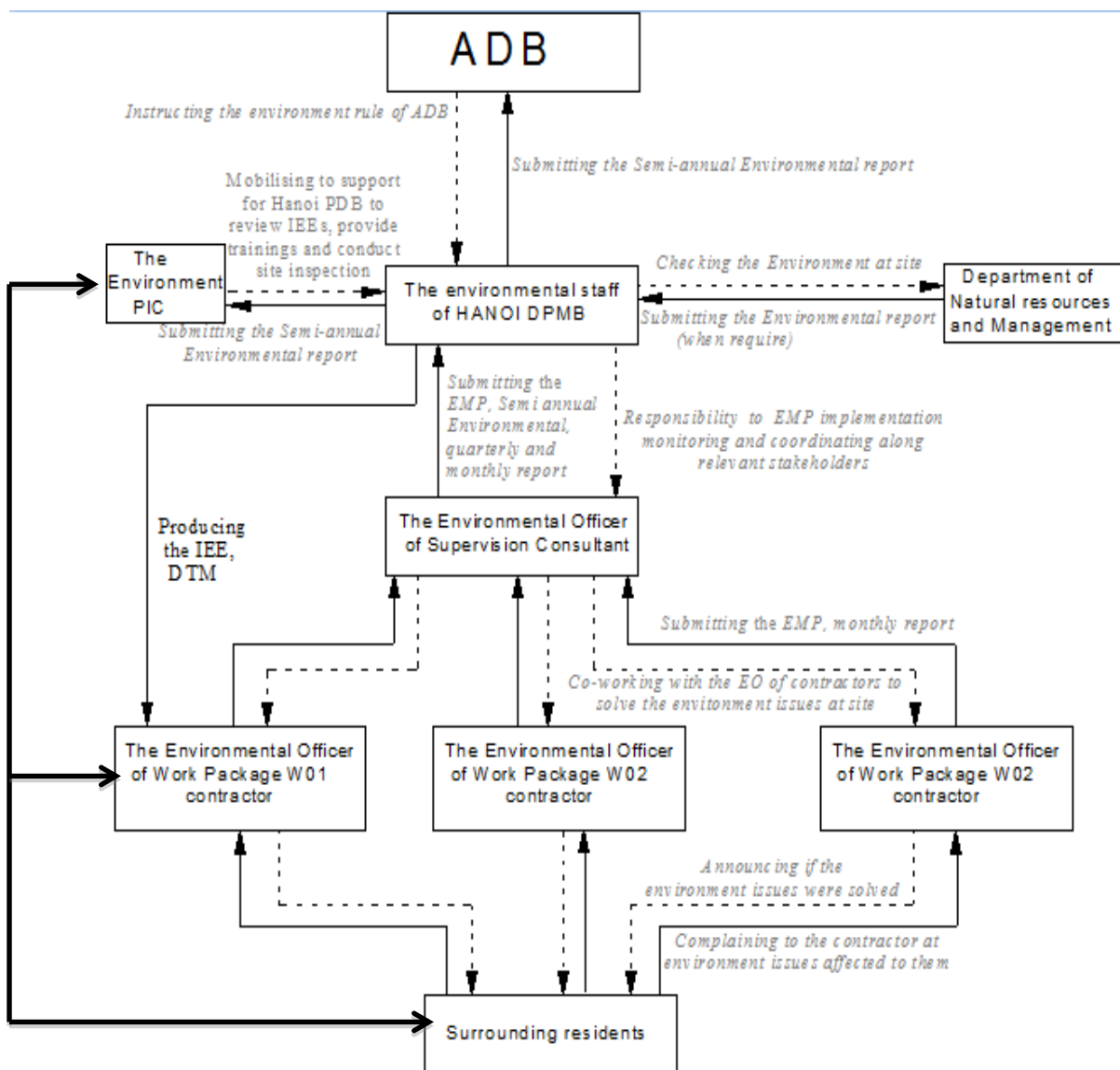


Figure 1: Environmental management system

The detail description of Environmental monitoring responsibilities of each stakeholder is presented in Table 4.

Table 4: Environmental monitoring Stakeholder’s responsibilities

Stakeholder	Responsibilities	Status of compliance
Hanoi Power Management Board	<ul style="list-style-type: none"> • Establish an Environment Unit led by an Environmental Staff to implement EMP tasks • Manage, implement and supervise the compliance of the EMP and any conditions for approval, including the supervision of construction and operation of all Board staff and Contractor • Evaluate the performance of EMP and conduct revisions, or suspension of operations in cases of violating the conditions of the EMP, which can cause serious impacts on the local community. • Ensure the effective communication and dissemination of content and requirements in EMP to the Contractor. • Assist the Contractor in implementing sub-plans • Supervise EMP performance • Report EMP performance to EVN, ADB by semi-annual environmental monitoring report • Prepare summary reports on Project’s environmental activities upon request • Brief the Project’s information in community meetings • Ensure continuing communication with local communities and fulfil commitments to facilitate for community consultations during project life. 	Yes, Hanoi Power Management Board have assigned two responsibility staffs to be in charge of EMP implementation monitoring and coordinate along relevant stakeholders
Construction Supervision Consultant	<ul style="list-style-type: none"> • Prepare and implement Environmental Supervision Plan during construction phase • Prepare and implement Environmental Monitoring Plan during construction phase • Report on any incidents or non-compliances of EMP to DPMB • Ensure adequate education and training to all staff related to environmental supervision • Provide recommendations on EMP performance to DPMB 	Yes, construction supervision consultants for 6 ongoing civil work packages assigned a consultants to be in charge of EMP compliance monitoring
Project Implementation Consultant (PIC)	<ul style="list-style-type: none"> • Assist EVN/DPMB in reviewing detailed design for the subproject to ensure mitigation measures being incorporated. • Assist EVN/DPMB for monitoring and evaluation of safeguards compliance • Maintain close coordination with the safeguard team throughout the project life. • Work with HANOI DPMB to provide education and training for awareness building on safeguards issues 	Yes PIC has been mobilised to support IEE reparation consultant firms, provide trainings and conduct periodic site inspections
Contractor	<ul style="list-style-type: none"> • Prepare and keep records and necessary data as required in EMP and submit to Supervision Consultant • Ensure that workers are informed of purposes of EMP and aware of necessary measures to implement EMP 	Yes, 6 contractors of ongoing civil work packages have assigned 6 environmental officers to be in charge of environmental management

Stakeholder	Responsibilities	Status of compliance
Local authority and community	<ul style="list-style-type: none"> Participate in monitoring EMP implementation 	Yes, as per state's administration and supervision activities

Monitoring system has been established among relevant stakeholders of ongoing subprojects to ensure internal monitoring of EMP compliance; the detail could be summarized in Table 5.

Table 5: Established Monitoring system among relevant stakeholders

Environmental officer	Agency	Package No.
Ha Tuan Minh	Project Management Board of Hanoi Power Development	
Tran Kieu Ngoc		
Nguyen Thi Loan	Project Implementation consultant	
Mo Lao s/s		
Nguyen Van Trung	Contractor - Power construction JSC No.1	ADB-HNPC-ML-W01
Duong Van Nguyen	Contractor - Power construction JSC No.1	ADB-HNPC-ML-W02
Ho Van Nghiem	CSC - Vietnam electrical construction consultant service JSC.	HANOI DPMB-ML-TVGS
Thanh Xuan s/s		
Nguyen Van Ky	Contractor - Power construction JSC No.1	ADB-HNPC-TX-W01
Ho Van Nghiem	CSC - Vietnam electrical construction consultant service JSC.	HANOI DPMB-TX-TVGS
Noi Bai s/s		
Nguyen Van Trung	Contractor - Power construction JSC No.1	ADB-HNPC-NB-W01-L01
Tran Van Thuy	Contractor - JV Power Industrial construction JSC and INCO ICS JSC	ADB-HNPC-NB-W01-L02
Nguyen Hong Quan	Contractor - Corporation Investment Consulting Electrical Construction And Number Five	ADB-HNPC-NB-W02
Le Anh Duc	CSC - Joint venture Infrastructure Technical & Electricity construction Investment consultancy JSC and Electric power design survey JSC	HANOI DPMB-NB-TVGS

3.2 Monitoring methodology

The EMP compliance monitoring has been conducted through: i) reviewing the completed EMP compliance forms of CSCs for each civil work packages (please refer to Annex C); ii) periodic site inspection of Project Management Board of Hanoi Power Development (weekly); iii) random site inspection of PIC, twice per year.

a) Document review of Monitoring Compliance with EMPs by CSC

All documents related to environmental management of the project are collected and reviewed to understand the performance of mitigation measures through its documentation. The reviewed documents include: internal monitoring reports of contractors of ongoing civil work packages, site inspection of CSC for every ongoing civil work packages, bidding and contract documents.

Monthly reports on EMP compliance of contractors are done through site inspection of CSC for every ongoing civil work packages. Monitoring form aided by the monitoring checklist were prepared based on detail described mitigation measures, as per stated in EMPs, proposed in Annex C. The effectiveness of a contractor's environmental management of a particular impact item is evaluated subjectively using the following rating criteria:

- 1 – Very good: all required measures are conducted
- 2 – Good: main measures are conducted
- 3 – Medium: some measures conducted

- 4 – Weak: few measures conducted
- 5 – Very weak: few measures conducted

b) Site visit

Site visit has been conducted by Project Management Board of Hanoi Power Development (weekly). The PIC visits construction site one or two times every year. During this report period, PIC has conducted site visit in 7 April 2016 to random check performance of contractors on the site, check the location of worker camps, interview workers.

4. STATUS of EMP IMPLEMENTATION

4.1 Compliance with ADB loan covenants

As required, all safeguard environmental schedules stated on Loan Covenant need to strictly complied with, the list of environmental loan covenants and the level of compliance of Loan 3161/8286 is presented in Table 6.

Table 6: Status of Loan Covenant Compliance

ADB Environmental loan covenants	Status of compliance
<p>Schedule 4, Para. No. 7</p> <p>The Borrower shall ensure that the Executing Agencies do not award any Works contract which involves environmental impacts until:(a) The Ministry (or its Department, as the case may be) of Environment and Natural Resources has issued an environmental certificate approving the IEE relevant to the Subproject; and (b) the Executing Agencies have incorporated the relevant provisions from the EMP into the Works contract related to the Subproject.</p>	<p>Being complied with</p> <p>EMP reports prepared and approved as requirements of both Vietnam and ADB Requirements and EMP included in bidding documents of issued civil packages (namely: NB-W01, NB-W02, MLAO-W01, MLAO-W02, TX-W01, ST-W01).</p>
<p>Schedule 4, Para. 10</p> <p>The Executing Agencies shall recruit the individual consultants for preparation of safeguard documents, financial and economic analyses, technical specifications, bidding documents and bid evaluation reports in accordance with procedures acceptable to ADB for recruiting individual consultants.</p>	<p>Being complied with</p> <p>The Hanoi EVN has recruited consultancy firms to prepare of safeguard documents, and individual consultant to support for reviewing the IEE. The bidding documents and bid evaluation reports in accordance with procedures acceptable to ADB for recruiting individual/firm consultants.</p>
<p>Schedule 5, Para. No. 3</p> <p>The Borrower shall cause the Executing Agencies to ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) the Borrower's applicable laws and regulations relating to environment, health and safety; (b) the Environmental Safeguards; and (c) all measures and requirements set forth in the IEE, the EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.</p>	<p>Being compliance with</p> <p>12 IEEs had been submitted to ADB for approval and disclosure and the first SEMR for period June to December 2015 was also submitted to ADB for disclose</p> <p>Daily monitoring at site are being conducted by construction supervisor consultants (CSC) and contractors, periodic site inspection by PIC and Hanoi PDMB.</p> <p>EMP included in biding documents of NB-W01, NB-W02, MLAO-W01, MLAO-W02, TX-W01, ST-W01) civil work packages. The compliance monitoring system has been taken place as noted in above</p>
<p>Schedule 5, Para. No 8</p> <p>(a) The Borrower shall cause the Executing Agencies to make available necessary budgetary and human resources to fully implement the EMP and the RP.</p>	<p>Being compliance with</p> <p>-The budget for EMP implementation will be available by project owner and contractors.</p> <p>-The environmental staff of CSC, contractor, project owner as well as PIC are assigned to support and inspect EMP implementation.</p>
<p>Schedule 5, Para. No 9</p>	<p>Being compliance with</p>

ADB Environmental loan covenants	Status of compliance
<p>(d)The Borrower shall cause the Executing Agencies to ensure that all bidding documents and contracts for Works contain provisions that require contractors to: (i) comply with the measures relevant to the contractor set forth in the IEE, the EMP and the RP and any corrective or prevent active actions set forth in a Safeguards Monitoring Report; (ii) make available a budget for all such environmental and social measures; and (iii) provide the Executing Agencies with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and the RP.</p>	<p>The bidding documents of NB-W01, NB-W02, MLAO-W01, MLAO-W02, TX-W01, ST-W01) civil constructs and contracts for Works contain provisions that require contractors to comply with mitigation measures stated in IEE and RP; make budget available and inform the Executing Agencies any unanticipated environmental, resettlement issues. And unanticipated environmental risks or impacts that arise during construction will be included in SEMR and send to relevant stakeholder for implementing.</p>
<p>Schedule 5, Para. No 10</p> <p>(e) The Borrower shall cause the Executing Agencies to do the following: (a) submit semimanual Safeguards Monitoring Reports to ADB until the Project completion and disclose relevant information from such reports to the affected persons and to ADB web site promptly upon submission; (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, and the RP, as applicable, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and (c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP, and the RP promptly after becoming aware of the breach.</p>	<p>Being complied with:</p> <ul style="list-style-type: none"> - The first SEMR (June to Dec. 2015) was submitted and disclosure on ADB Web's and the second SEMR (Jan to Jun 2016) is submitted to ADB for reviewing - Unanticipated environmental impacts and corresponding corrective actions will be a part of SEMR, but no unanticipated environmental impacts have been identified in the latest SEMR; - As confirm from Hanoi Development Project Management Board (DPMB), there are not large changes in projects which could create adverse impacts on environment; - Semi-annual Environmental Monitoring report is submitted to ADB(first monitoring period: July-December 2015). All ongoing civil works on the site are monitored to be complied with requirements set forth in EMP through internal environmental management system as stated in Figure 1, Table 4 and 5
<p>Schedule 5, Para. No 26</p> <p>(f) For any Works supported under the Project, the Borrower shall ensure that the Executing Agencies will not issue a notice to proceed with such Works, until it has been confirmed in writing that the related construction site is free and clear from any unexploded ordnance.</p>	<p>Being complied with</p> <p>The Project Owner has sent a letter to the Hanoi Capital Military Command to get recommendation for UXO clearance for every subproject. If the Hanoi Command request for UXO clearance, this is always done before subproject construction. For 4 subprojects monitored in this report, UXO was required by Hanoi Capital Military Command and the UXO clearance was conducted before construction starts.</p>

4.2 Incorporation of Environmental Requirements into Project Contractual Arrangements

The environmental consideration has been incorporated into the subproject documents such as the EMP/IEE and the bidding and contract (B&C) documents of NB-W01, NB-W02, MLAO-W01, MLAO-W02, TX-W01, ST-W01) as stated in Appendix A.

In these the bidding and contract (B&C) documents, the content of the potential environmental impact and proposed mitigation measures for construction period in the EMP section in the disclosed IEE and the emergency respond plan are included.

4.3 Capacity Building

The PIC has organized a training workshop to environmental staff of Hanoi Development Project Management Board (DPMB), CSC, and contractor during fourth quarter 2015 on environmental requirement of ADB, GOV as well as provides report forms and guidance to prepare environmental monitoring reports.

The contents of workshop are:

- Introduction of policies, laws and regulations of the government environmental policy in Vietnam and ADB environmental safety
- Preparation of IEE and EIA reports as stipulated by ADB and Vietnam
- Preparation of environmental reports to be included in the bidding documents
- Preparation of site environmental management plans of contractors
- Improving the skills of environmental monitoring for environment supervisors of contractors and DPMB
- Agreement on-site inspection, monthly and quarterly reporting forms for contractors (in Vietnamese) and semi-annual report (in English) for the project management unit

4.4 Summary of Environmental Mitigations and Compensation Measures Implemented

During this report period, 6 construction packages of 4 subprojects were started. The monthly site inspection was conducted by the environmental officer of the project owner. The Construction supervision consultant monitor at construction site every day.

For the Rehabilitation of 110kV Son Tay S/S (ST-W01) package. It is found the construction sites to be generally tidy and organized, safety signal and lighting were enhanced to keep absolutely safety during construction period. The workers were using proper protective equipment and were provided with satisfactory facilities. Disposal sites for excavation and hazardous materials had been allocated and approved by the relevant authorities have been transported to Nam Son Landfill, Soc Son district, Hanoi. The batching plant was complied with EMP by implementing mitigation measures to reduce noise and dust. The drinking water was provided for all three construction sites.

At Noi Bai, Thanh Xuan and Mo Lao subprojects, the mud (Bentonite) were generated from excavating the equipment shelf's foundation and excavating the underground cable trench activities. Mud is stored in special box and transferred into disposal site every night Vinh Quynh Landfill, Vinh Quynh commune, Thanh Tri district, Hanoi. To reduce the noise generated by project vehicles/trucks transporting the mud during the night, contractors have requested drivers made no horn and during the loading of materials or waste turn off the engine. All machines, equipment, and weight load of machine at the construction sites were technically tested and checked as requested by the government regulation. Thus, issues of safety and environment of contractors and subcontractors comply with requirements of the Environmental Management Plan and improved.

Incident: No Incident was occurred in the period of January-June 2016.

4.4.1. Main findings from site visit of PIC

During this report period, PIC conducted site visit on 7 April 2016 to random check performance of contractors on the site of all two subprojects under construction: i) Mo Lao 110 kV substation and transmission line subproject and ii) 110 kV Thanh Xuan substation, installing new transformers T3 110kV substation to check the location of worker camps, interview workers. The main findings from site visit could be summarized as below:

a) Mo Lao 110 kV substation and transmission line

The good points:

- Mo Lao station is built in a closed area with surrounding wall, a closest residential area is about 100m from construction site. The construction activities are conducted inside the substation area. Thus, the environmental impact, such as smoke, dust, noise to residential areas is negligible.
- Building materials are gathered in the substation area, therefore it does not create dust and do not make traffic obstructs
- All workers are using personal protective equipment while working
- No complaints from surrounding residents about the environmental problems caused by the project

Problems to overcome

On site

- The subproject information board should complement the phone number of the units involved or the hotline telephone number for people to contact if there are complaints, (Appendix B -Figure 1)
- The safety tape should be hang around the holes dug for installation of pipes need warning tape around to prevent people passing by at night can fall into a pit (Appendix B-Figure 2)
- Hole dug at the construction site need warning tape around to prevent workers from falling into the pit in the evening (Appendix B-Figure 3)
- Excavated soil should be stored far away from the excavation area to avoid collapse and landslide (Appendix B-Figure 4)

Worker camps

- Temporary accommodation of workers are messy and unhygienic. It needs to clean up more tidy
- Kitchen area did not meet the requirements on environmental sanitation, although drinking water is bottled water (Appendix B-Figure 6)
- Garbage is collected but disposed directly into the surrounding area (Appendix B-Figure 7)
- Temporary toilet is placed near the kitchen. Around the toilet generates wastewater from the kitchen because no wastewater drainage (Appendix B-Figure 8)

b) 110 kV Thanh Xuan substation, installing new transformers T3 110kV substation

The good points:

- The extension is built in a separate site of the existing 110kV substation Thanh Xuan. Around the construction site is an orchard of Trung Van commune, no houses are around. In front of the Thanh Xuan substation gate are small food shops but they are far away from the construction area (about 200 m). Thus, the environmental impact, such as smoke, dust, noise to residential areas is insignificant (Figure Appendix B-13, 15, 16)
- Building materials are gathered inside the construction area, therefore no dust and traffic obstructs are generated
- Are workers using personal protective equipment while working (Appendix B-Figure 12)
- Workers do not stay at the camp at construction site, but rent house at surrounding area. Therefore no sanitation problem regarding camp site is occurred
- No complaints were recored from surrounding residents about the environmental problems caused by the subproject

Points to overcome

On site

- Building materials along the way need to be stored orderly to prevent accident occurrence (Appendix B-Figure 9-10).
- Place the subproject information board outside the entrance to the construction site with the contractor's/project owner's telephone number or a hotline for people to contact if there are complaints (Appendix B-Figure 11).
- Install mobile toilets for workers
- Place a garbage collection bin and dispose solid waste at the regulated place.

4.4.2. EMP Performance Status

The EMP compliance monitoring results based on the reviewing of CSC site inspection forms (see annex C) and site inspection of Hanoi DPMB and PIC is summarized in Table 7.

Table 7: EMP Compliance Status of Ongoing Civil Work Packages

EMP Requirements	Compliance Attained			
	Build new 110kV Substation at Noi Bai airport	Mo Lao 110kV Substation and 110kV Branches	Newly installation of T3 transformer - Thanh Xuan 110kV substation - E1.20	Rehabilitation of 110kV Son Tay S/S
Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc.).	<p>1: very good</p> <p>The worker camp, offices, concrete batching areas etc. was closed after construction finished. The environment was recovered and clean up.</p>	<p>3: Medium</p> <ul style="list-style-type: none"> - Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities. - The subproject information board should complement the phone number of the units involved or the hotline telephone number for people to contact if there are complaints, - Kitchen area did not meet the requirements on environmental sanitation, although drinking water is bottled water. - Contractor's storage facilities have been surrounded by a security fence. 	<p>1: very good</p> <ul style="list-style-type: none"> - Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater is preliminary treated by settle chamber before discharging into to surface water bodies - Contractor's storage facilities have been surrounded by a security fence. - Concrete batching areas are provided with bunds to control movement of runoff to waterways. 	<p>1: very good</p> <ul style="list-style-type: none"> - Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater is preliminary treated by settle chamber before discharging into sewage systems
Demarcation and clearing of RoW and ancillary facilities	<p>Completed. The environment was recovered and clean up.</p>	<p>2: Good</p> <p>The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed.</p>	<p>1: very good</p> <p>Limit area was cleared. In the area were only agricultural crops (rice, vegetable) no significant vegetation.</p>	<p>1: very good</p> <p>The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed.</p>
Preparation of site: excavation, removal and disposal of	<p>Completed. The environment was recovered. Unusable materials were cleaned up</p>	<p>2: good</p> <ul style="list-style-type: none"> - The excavated area was limited to the area needed for construction only. - Excavated material to be 	<p>2: good</p> <ul style="list-style-type: none"> - The excavated area was limited to the area needed for construction only.. - Excavated material was disposed 	<p>1: very good</p> <ul style="list-style-type: none"> - The excavated area was limited to the area needed for construction only. - Excavated material was disposed

EMP Requirements	Compliance Attained			
	Build new 110kV Substation at Noi Bai airport	Mo Lao 110kV Substation and 110kV Branches	Newly installation of T3 transformer - Thanh Xuan 110kV substation - E1.20	Rehabilitation of 110kV Son Tay S/S
unusable (incompetent) materials		disposed of outside and away from the work area. - The safety tape should be hang around the holes dug for installation of pipes need warning tape around to prevent people passing by at night can fall into a pit	of outside and away from the work area.	of outside and away from the work area.
Dust management	1: Very good The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles etc.	1: Very good The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles etc.	1: Very good The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material and piles etc.	1: Very good The contractor has applied dust control measures: covered truck transporting construction material; covered construction material and piles etc.
Noise and vibration	1: very good -The work generating big noise is implemented at daylight hours only. -Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	1: Very good -The work generating big noise is implemented at daylight hours only. -Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	1: Very good -The work generating big noise is implemented at daylight hours only. -Noise was managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	1: Very good -The work generating big noise is implemented at daylight hours only. -Noise was managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;
Waste water from construction site	1: Very good -Preliminarily treated waste water was discharged to water body surrounding the site; - Oil and fuel from machinery	3: Medium -Temporary toilet is placed near the kitchen. Around the toilet generates wastewater from the kitchen because no wastewater drainage Oil and fuel	1: Very good -Preliminarily treated waste water was discharged to water body surrounding the site; -Oil and fuel from machinery was	2: Good Wastewater is not preliminary treated before disposed to surrounding water bodies. However, the wastewater quantity

EMP Requirements	Compliance Attained			
	Build new 110kV Substation at Noi Bai airport	Mo Lao 110kV Substation and 110kV Branches	Newly installation of T3 transformer - Thanh Xuan 110kV substation - E1.20	Rehabilitation of 110kV Son Tay S/S
	was collected and disposed to a regulated site;	from machinery was collected and disposed to a regulated site;	collected and disposed to a regulated site;	is small, the negative impact is negligible. -All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills -The contractor has trained refuelling personnel in these procedures. The contractor has developed an accidental spill handling action plan
Prevention of soil erosion on construction site.	1: very good No soil erosion occurred	1: Very good No soil erosion occurred	1: Very good No soil erosion occurred	1: Very good No soil erosion occurred
Disposal of site waste	The environment was recovered. Construction waste were disposed to regulated site	1: Very good - Domestic solid waste is collected but disposed directly into the surrounding area - Construction solid waste were disposed at Vinh Quynh Landfill, Vinh Quynh commune, Thanh Tri district, Hanoi.	3: Medium -No garbage bin for solid waste collection at the construction site. Construction solid wastes were disposed at Nam Son Landfill, Soc Son district, Hanoi.	3: Medium -No garbage bin for solid waste collection at the construction site; Construction solid wastes were gathered at construction site before being disposed to regulated site, which is Xuan Son Land field
Storage and handling of: fuel and lubricants	1: very good - All fuel storage areas were securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked.	1: Very good - All fuel storage areas were securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel was stored in properly	1: Very good - All fuel storage areas were securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked.	1: Very good - All fuel storage areas were securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked.

EMP Requirements	Compliance Attained			
	Build new 110kV Substation at Noi Bai airport	Mo Lao 110kV Substation and 110kV Branches	Newly installation of T3 transformer - Thanh Xuan 110kV substation - E1.20	Rehabilitation of 110kV Son Tay S/S
	<ul style="list-style-type: none"> - Fuel was stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan 	<ul style="list-style-type: none"> sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan 	<ul style="list-style-type: none"> - Fuel was stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan 	<ul style="list-style-type: none"> - Fuel was stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan
Community Safety from increased vehicle movements	<p>1: very good</p> <ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered. 	<p>1: Very good</p> <ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered. 	<p>1: Very good</p> <ul style="list-style-type: none"> -All vehicles were properly maintained and operated in accordance with transportation laws. -All loads were properly secured and fugitive loads to be covered. 	<p>1: Very good</p> <ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered.
Workplace health and safety	<p>1: very good</p> <ul style="list-style-type: none"> - Contractor has abided: Vietnamese Labor Code as amended 2002 as follow: - Provided workers be with safety working environment 	<p>2: Good</p> <ul style="list-style-type: none"> - Contractor has abided: Vietnamese Labor Code as amended 2002 as follow: - Provided workers be with safety working environment 	<p>2: Good</p> <ul style="list-style-type: none"> - Contractor has abided Vietnamese Labor Code as amended 2002 as follow: - Provided workers be with safety working environment 	<p>1: Very good</p> <ul style="list-style-type: none"> - Contractor has abided Vietnamese Labor Code as amended 2002 as follow: - Provided workers be with safety working environment

EMP Requirements	Compliance Attained			
	Build new 110kV Substation at Noi Bai airport	Mo Lao 110kV Substation and 110kV Branches	Newly installation of T3 transformer - Thanh Xuan 110kV substation - E1.20	Rehabilitation of 110kV Son Tay S/S
	<ul style="list-style-type: none"> - Erect warning signs and barriers around work areas - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid. 	<ul style="list-style-type: none"> - Erect warning signs and barriers around work areas - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid. 	<ul style="list-style-type: none"> - Erect warning signs and barriers around work areas - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid. 	<ul style="list-style-type: none"> - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid.
Chance discovery of archaeological and cultural sites	No chance of discovery of archaeological and cultural sites	No chance of discovery of archaeological and cultural sites.	No chance of discovery of archaeological and cultural sites.	No chance of discovery of archaeological and cultural sites of discoveries.
Public access to site	1: Very good - Warning signs and barriers around work areas were	1: Very good - Warning signs and barriers around work	1: Very good - Warning signs and barriers around	1: Very good - Erect warning signs and barriers

EMP Requirements	Compliance Attained			
	Build new 110kV Substation at Noi Bai airport	Mo Lao 110kV Substation and 110kV Branches	Newly installation of T3 transformer - Thanh Xuan 110kV substation - E1.20	Rehabilitation of 110kV Son Tay S/S
	erected. -Site could only be accessed with permission of contractor. -Visitors were warned against site hazards to avoid possible accident	areas were erected. -Site could only be accessed with permission of contractor. -Visitors were warned against site hazards to avoid possible accident	work areas were erected. -Site could only be accessed with permission of contractor. -Visitors were warned against site hazards to avoid possible accident	around work areas. -Site could only be accessed with permission of contractor. -Visitors were warned against site hazards to avoid possible accident
Community and worker health and safety	No issue with Community and worker health and safety	1: Very good -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; -Dust bins to collect wastes are provided in worker camps;	1: Very good -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; -	1: Very good -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; -Dust bins to collect wastes are provided in worker camps;

5. SUMMARY OF ENVIRONMENTAL MONITORING

The compliance with requirements during construction phase is generally very good. Almost all impact mitigation measures have been implemented. Only a hygienic condition of worker camp of Mo Lao substation need to paid more concern.

Ambient environmental monitoring task has been not required for all subprojects under this loan due to small scope of civil work activities. Therefore, the monitoring activities will focus on EMP compliance monitoring.

5.1 Key Issues Identified

There were some key issues identified, the kitchen of worker camp were not neat, wastewater from kitchen and bathroom was stagnant around at Mo Lao construction site. In Thanh Xuan construction site, although the workers camp is quite far from the site, but there were quiet few toilets at site, in addition the garbage collection was missing at site. The contractors should pay more attention to comply with the regulation of the Environmental of subproject.

5.2 Issues from previous report(s).

No special issue from previous report

6. COMPLAINTS

No complaints regarding environmental issue have been recorded during report period between January and June 2016.

7. CONCLUSION AND RECOMMENDATION

7.1 Conclusions

- The Contractors of all subprojects have generally complied with and implemented measures to mitigate the environmental impacts
- All subprojects have no complaints from residents living surrounding the subproject area on the environment issues.

7.2 Recommendation

- The contractor of Mo Lao subproject should clean up the kitchen and solve immediately wastewater drainage problems from kitchen and bathroom.
- The contractors of Mo Lao and Thanh Xuan subprojects should address the existing problems raised as above
- Construction supervision Consultants should monitor closely the remediation activities of contractors.
- The completed subprojects, such as: Mo Lao, Thanh Xuan, Noi Bai, Son Tay need to clean-up construction site and rehabilitate surrounding environment.

Summary of Identified Issue and action required is presented in Table 8

Table 8: Identified Issue and action required

Issues	Location	Targets/Solutions	Issue Closed (date)
Mo Lao s/s			
The phone number of the units involved or the hotline telephone number for people to contact if there are complaints was missing from the subproject information board	On site	The phone number of the contractors need to be provided in the subproject information board	Closed on April 10, 2016
No safety tape was hang around the holes dug for installation of pipes need warning tape around to prevent people passing by at night can fall into a pit	On site	The safety tape need to be provided around the holes dug for installation of pipes	Closed on April 10, 2016
Hole dug at the construction site was not warning tape around to prevent workers from falling into the pit in the evening	On site	The warning tape need to be located around the hole dug at the construction site	Closed on April 10, 2016
Excavated soil should be stored far away from the excavation area to avoid collapse	On site	Excavated soil need to be transported to a landfill	Closed on April 15, 2016
Temporary accommodations of workers are messy and unhygienic. It needs to clean up more tidy	Worker camps	Temporary accommodations of workers need to be clean up.	Closed on April 9, 2016
Kitchen area did not meet the requirements on environmental sanitation, although drinking water is bottled water	Worker camps	Kitchen area needs to be rearranged and clean up in more tidy.	Closed on April 13, 2016
Garbage is collected but disposed directly into the surrounding area	Worker camps	Garbage need to be collected and transported to a landfill	Closed on April 9, 2016
Temporary toilet is placed near the kitchen. Around the toilet generates wastewater from the kitchen because no wastewater drainage	Worker camps	Wastewater drainage need to collected	Closed on April 9, 2016
Thanh Xuan s/s			
Building materials along the way need to be stored orderly to prevent accident occurrence	On site	The fence which height 2.5m need to be set up around the building material	Closed on April 10
Place the subproject information board outside the entrance to the construction site with the contractor's/project owner's telephone number or a hotline for people to contact if there are complaints	On site	The subproject information board was moved to outside the entrance of site and the telephone number of subproject owner was complement to the board	Closed on April 9

Issues	Location	Targets/Solutions	Issue Closed (date)
Install mobile toilets for workers	On site	Toilet was need to be set up inside the construction site	Closed on April 9
Place a garbage collection bin and dispose solid waste at the regulated place.	On site	The garbage collection bin need to be placed inside the construction site and the solid waste need to be disposed at the regulated place.	Closed on April 10

APPENDIXES

Appendix A: Summary of the environmental requirements in EMP/IEE and in
B&C documents

Appendix B: PHOTOS OF SITE VISIT

Appendix C: SITE ENVIRONMENTAL COMPLIANCE INSPECTION
RECORD

Appendix A: Summary of the environmental requirements in EMP/IEE and in B&C documents

<i>Environmental issues</i>	<i>Environmental requirements in the EMP/IEE</i>	<i>In B&C documents</i>
Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc.).	<ul style="list-style-type: none"> - Sites are located so that they do not interfere with the welfare or social cohesion of surrounding communities - Site is limited to reduce unnecessary clearing of vegetation. - Sanitary soakage areas from offices and camps to be sited so that effluent is treated. - No discharge of grey water or sewage allowed to surface water systems. - Workshops to be provided with oil and water separators. - Fuel storage areas not to be located within 20m of watercourse. - Contractor's storage facilities may need to be surrounded by a security fence. - Concrete batching areas to be provided with bunds to control movement of runoff to waterways. 	<p>All environmental requirements in the EMP/IEE have been integrated into the B&C documents and the CEMP of NB-W01, NB-W02, MLAO-W01, MLAO-W02, TX-W01, ST-W01.</p>
Demarcation and clearing of RoW and ancillary facilities	<ul style="list-style-type: none"> - Define the 22m RoW width. - Identify trees to be removed within the RoW and arrange to get approval for remove. - Limit area to be cleared - Identify areas with any significant vegetation - Areas to be defined by a clear boundary. - Clearing boundaries need to be shown to machinery operators. - Cleared vegetative material to be offered to communities for use as fuel wood or - If an impediment to work may otherwise be disposed of by clean burning fires. 	
Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	<ul style="list-style-type: none"> - Limit area to be excavated. - Topsoil to be removed and stored for re-use. - Excavated material to be disposed of outside and away from the work area. - At completion of work dumping areas to be re-top soiled and re-vegetated. 	
Dust management	<ul style="list-style-type: none"> - When dust is carried towards residential areas or becomes problematic on-site, the contractor is to apply dust control measures; 	
Noise and vibration	<ul style="list-style-type: none"> - If particular noisy work is implemented, the work may need to be limited to daylight hours. - Noise not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00; 	
Waste water to construction site	<ul style="list-style-type: none"> - Not allow to discharge waste water directly to water body surrounding the site ; 	

	<ul style="list-style-type: none"> - Make a discharging canal surrounding the foundation holes to collect runoff water to reduce its turbidity before discharging it into water body surrounding the site ; - Not allow to drop oil and fuel from machinery to site; 	
Prevention of soil erosion on construction site.	<ul style="list-style-type: none"> - Apply soil conservation and erosion protection technologies. - Avoid operating machinery in adverse ground conditions. - Protect and vegetate newly excavated areas as soon as possible 	
Disposal of site waste	<ul style="list-style-type: none"> - All waste materials to be collected and sorted into two categories (i). those that can be recycled and - (ii) those that need to go to an approved landfill site for disposal; 	
Storage and handling of: fuel and lubricants	<ul style="list-style-type: none"> - All fuel storage areas should be securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel should be stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All refueling to be done at least 20 m away from waterways by trained personnel - All waste oil and oil filters to be collected and if possible recycled, otherwise to be disposed of to landfills - The contractor needs to train refueling personnel in these procedures. The contractor has to develop an accidental spill handling action plan 	
Community Safety from increased vehicle movements	<ul style="list-style-type: none"> - All vehicles need to be properly maintained and operated in accordance with transportation laws. - All loads should be properly secured and fugitive loads to be covered. - Drivers are fined if ignore safety requirements. 	
Workplace health and safety	<ul style="list-style-type: none"> - Contractor should abide: Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working environment - Erect warning signs and barriers around work areas - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be 	

	<p>introduced and explained site safety procedures.</p> <ul style="list-style-type: none"> - Provided medical and first aid facilities together with a person qualified in first aid. 	
Chance discovery of archaeological and cultural sites	<ul style="list-style-type: none"> - Chance discoveries should be notified to the SE who will report to the EO. EO would advise on procedure for dealing with chance discoveries. 	
Clearance and rehabilitation of Construction sites and removal of contractor's facilities.	<ul style="list-style-type: none"> - All solid waste should to be removed from sites and disposed in approved landfills. - All contaminated soil should be removed. - All sites must be rehabilitated and restored to original condition. - Drainage should be re-established. - Those activities should be included as part of final inspection before payment made. 	
Public access to site	<ul style="list-style-type: none"> - Erect warning signs and barriers around work areas. - Site can only be accessed with permission of contractor. - Visitors are to be warned against site hazards to avoid possible accident 	
Community and worker health and safety	<ul style="list-style-type: none"> - Promulgate, educate workers on the social problems. Implement measures of preventing HIV/AIDS; - Provide good daily life conditions for workers in camps in terms of sanitation, safe water and cooking; - Worker's camps shall be constructed in a high places and - Local workers should be hired for normal works; - Equip workers with labor protecting equipment and force them to wear during working time. - Provide means of first aid, medicines at site and camps for workers; - Ensure sanitation in worker's camps. Provide dust bin to collect wastes; - Prohibit hunting and trading wild animals; 	

Appendix B: Photos of Site Visit on 7 April 2016

Mo Lao 110 kV substation and transmission line



Figure 1. The telephone number project notice missing numbers



Figure 2. No warning tape/fence around

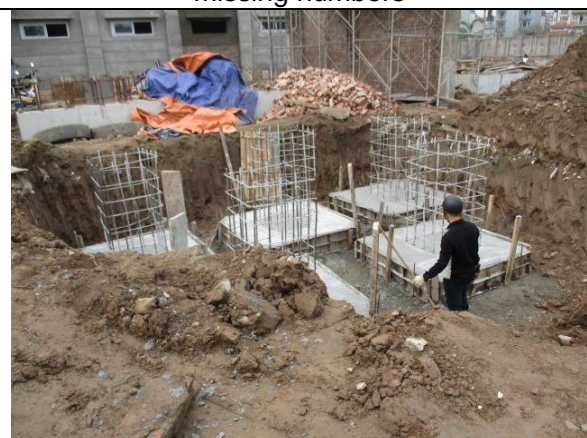


Figure 3. No warning tape/fence around the construction area



Figure 4. Excavated soil should be piled up further from construction areas



Figure 5. Kitchen area is not in order



Figure 6. Kitchen area did not meet the requirements on environmental sanitation



Figure 7 Indiscriminate garbage dump



Figure 8. Toilet near the kitchen area. Around the toilet with black water backlog

The subproject to expand the 110 kV Thanh Xuan, installing new transformers T3 110kV substation



Figure 9. Building materials are not gathered neatly



Figure 10. Building materials are not gathered neatly



Figure 11 The Project information board is placed inside the subproject area



Figure 12: Workers use the labor protection facilities



Figure 13. Construction site



Figure 14. Environmental monitoring team



Figure 15. Outside of the construction site



Figure 16. Outside of the construction site

Appendix C: Site Environmental Compliance Inspection Record

SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD AT CONSTRUCTION SITE –CONSTRUCTION OF NOI BAI SUBSTATION

PROJECT: New building 110kV Noi Bai Airport and 110kV line		Implementing agency:		HANOI DPMB		
Component: Package No. ADB-HNPC-NB-W01; No. ADB-HNPC-NB-W02		Supervising agency:		Joint venture Infrastructure technical & Electricity construction Investment Consultance JSC		
Location: Site Office and Work-camp, Construction sites of substation		Contractor:		Power Construction JSC No.1		
Date: 30/01/2016		Phase:		Construction (01/01/2016-30/01/2016)		
1. Contractor						
Contractor Environmental Awareness		Yes/No	Required actions		Contractor's responsibility/ Comments	
Contractor is aware of mitigation requirements?		Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well		Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB	
Contractor has a copy of EMP?		Yes	Keep copies of EMP, environment documents, permits in site offices.		Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.	
2. Compliance of inspection of mitigation measures						
Impact/Mitigation measures						Approved by: ADB and HANOI DPMB
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/ Comments	Implementing agency Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities	- Wastewater is preliminary treated by settle chamber before discharging into to surface water bodies. - Contractor's storage facilities have been surrounded by a security fence.	Well implemented	Contractor Supervision Consultant
2) Demarcation and clearing of RoW and ancillary facilities	Yes	1	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	No clearance of vegetation and other facilities is needed	Well implemented	Contractor Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable	Yes	1	-The excavated area was limited to the area needed for construction only.	Excavated material to be disposed of outside and away from the work area.	Well implemented	Contractor Supervision Consultant

(incompetent) materials							
4) Dust management	Yes	1	Truck transporting construction material; construction site	- The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	1	Truck transporting construction material; machine; construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	1	Construction site	Preliminarily treated waste water was discharged to water body surrounding the site; - Oil and fuel from machinery was collected and disposed to a regulated site;	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	1	- No soil erosion occurred - All waste materials were collected and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	All waste materials were collected and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	1	- Fuel for all machine work at site. - Fuel fills in transformer.	- All fuel storage areas were securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel were stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan	Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	1	- All vehicles and loads at site.	- All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered.	Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety		1		- Contractor has abided: Vietnamese Labor Code as amended 2002 as follow:	Well implemented	Contractor	Supervision Consultant

	Yes		- At site	<ul style="list-style-type: none"> - Provided workers be with safety working environment - Erect warning signs and barriers around work areas - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid. 						
11) Chance discovery of archaeological and cultural sites	Yes	1	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	Well implemented	Contractor	Supervision Consultant			
12) Public access to site	Yes	1	-At site	<ul style="list-style-type: none"> -Warning signs and barriers around work areas were erected. -Site could only be accessed with permission of contractor -Visitors were warned against site hazards to avoid possible accident 	Well implemented	Contractor	Supervision Consultant			
13) Community and worker health and safety	Yes	1	At site and camp	<ul style="list-style-type: none"> -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; -Dust bins to collect wastes are provided in worker camps; 	Well implemented	Contractor	Supervision Consultant			
3. Ambient Environment				Approved by:						
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
4. Environmental Incidents During Reporting Period (if any)				Approved by:						
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency			
No Environmental Incident										

5. Summary of Action required and observed (if any)			
Required actions	Timeframe (e.g in a week)	Responsible Party	Monitoring (to be completed if inspection/monitoring indicates actions are required)
			Actions implemented:
Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor	Supervision Consultant
			Follow-up action required:
			Prepared by:
Monitored by:	Le Anh Duc		Date:
Signature:			Date: 30 January 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

1. Very good (meet all requirements)
2. Good (take main measures))
3. Medium (take several measures)

4. Poor (take few measures)
5. Very poor (take very few measures)

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF NOI BAI SUBSTATION**

PROJECT: New building 110kV Noi Bai Airport and 110kV line		Implementing agency:		HANOI DPMB		
Component: Package No. ADB-HNPC-NB-W01; No. ADB-HNPC-NB-W02		Supervising agency:		Joint venture Infrastructure Technical & Electricity construction Investment consultancy JSC and Electric power design survey JSC		
Location: Site Office and Work-camp, Construction sites of substation		Contractor:		Power construction JSC No.1		
Date: 28/02/2016		Phase:		Construction (01/02/2016-28/02/2016)		
6. Contractor						
Contractor Environmental Awareness		Yes/No	Required actions		Contractor's responsibility/ Comments	
Contractor is aware of mitigation requirements?		Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well		Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB	
Contractor has a copy of EMP?		Yes	Keep copies of EMP, environment documents, permits in site offices.		Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.	
7. Compliance of inspection of mitigation measures						
Impact/Mitigation measures				Approved by: ADB and HANOI DPMB		
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/ Comments	Implementing agency Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities	-Wastewater is preliminary treated by settle chamber before discharging into to surface water bodies. - Contractor's storage facilities have been surrounded by a security fence.	Well implemented	Contractor Supervision Consultant
2) Demarcation and clearing of RoW and ancillary facilities	Yes	1	The subproject site is bounded by fence. No clearance of	No clearance of vegetation and other facilities is needed	Well implemented	Contractor Supervision Consultant

			vegetation and other facilities is needed				
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	1	-The excavated area was limited to the area needed for construction only.	Excavated material to be disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	1	Truck transporting construction material; construction site	-The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	1	Truck transporting construction material; machine; construction site	-The work generating big noise is implemented at daylight hours only. Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	1	Construction site	Preliminarily treated waste water was discharged to water body surrounding the site; - Oil and fuel from machinery was collected and disposed to a regulated site;	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	1	-No soil erosion occurred -All waste materials were collected and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	All waste materials were collected and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	1	-Fuel for all machine work at site. -Fuel fills in transformer.	-All fuel storage areas were securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked.	- Well implemented	Contractor	Supervision Consultant

				<ul style="list-style-type: none"> - Fuel were stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan 			
9) Community Safety from increased vehicle movements	Yes	1	- All vehicles and loads at site.	<p>All vehicles were properly maintained and operated in accordance with transportation laws.</p> <p>All loads were properly secured and fugitive loads to be covered.</p>	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety	Yes	1	- At site	<p>Contractor has abided: Vietnamese Labor Code as amended 2002 as follow:</p> <p>Provided workers be with safety working environment</p> <p>Erect warning signs and barriers around work areas</p> <p>Not allow drugs or alcohol on-site;</p> <p>Control noise and dust provided all workers with safety equipment appropriate for the task they are employed.</p> <p>The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities.</p> <p>Prepared work safety regulation for each activity</p> <p>Before execution, workers need to be introduced and explained site safety procedures.</p> <p>Provided medical and first aid facilities together with a person qualified in first aid.</p>	- Well implemented	Contractor	Supervision Consultant

11) Chance discovery of archaeological and cultural sites	Yes	1	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant			
12) Public access to site	Yes	1	-At site	Warning signs and barriers around work areas were erected. Site could only be accessed with permission of contractor. Visitors were warned against site hazards to avoid possible accident	- Well implemented	Contractor	Supervision Consultant			
13) Community and worker health and safety	Yes	1	At site and camp	Workers have been educated on the social problems, and measures of preventing HIV/AIDS; Workers in camps are provided, safe water and hygienic bathing and cooking; Workers have been equipped with labor protecting equipment and wear them during working time. First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;	- Well implemented	Contractor	Supervision Consultant			
8. Ambient Environment								Approved by:		
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
9. Environmental Incidents During Reporting Period (if any)								Approved by:		
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency			
No Environmental Incident										

10. Summary of Action required and observed (if any)			
Required actions	Timeframe (e.g in a week)	Responsible Party	Monitoring (to be completed if inspection/monitoring indicates actions are required)
			Actions implemented:
Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor	Supervision Consultant
			Follow-up action required:
			Prepared by:
Monitored by:	Le Anh Duc		Date:
Signature:			Date: 28 February 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

1. Very good (meet all requirements)
2. Good (take main measures))
3. Medium (take several measures)

4. Poor (take few measures)
5. Very poor (take very few measures)

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF NOI BAI SUBSTATION**

PROJECT: New building 110kV Noi Bai Airport and 110kV line				Implementing agency:	HANOI DPMB				
Component: Package No. ADB-HNPC-NB-W02 No. ADB-HNPC-NB-W01				Supervising agency:	Joint venture Infrastructure Technical & Electricity construction Investment consultancy JSC and Electric power design survey JSC				
Location: Site Office and Work-camp, Construction sites of UGC				Contractor:	Corporation Investment Consulting Electrical Construction & Number five, Power construction JSC No.1, Power Industry Construction JSC.				
Date: 31/03/2016				Phase:	Construction (01/03/201-31/03/2016)				
Report Period:									
11. Contractor									
Contractor Environmental Awareness		Yes/No	Required actions			Contractor's responsibility/ Comments			
Contractor is aware of mitigation requirements?		Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well			Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB			
Contractor has a copy of EMP?		Yes	Keep copies of EMP, environment documents, permits in site offices.			Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.			
12. Compliance of inspection of mitigation measures									
Impact/Mitigation measures						Approved by: ADB and HANOI DPMB			
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/ Comments	Implementing agency	Supervising agency		
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities	-Wastewater is preliminary treated by settle chamber before discharging into to surface water bodies -Contractor's storage facilities have been surrounded by a security fence. Concrete batching areas are provided with bunds to control movement of runoff to waterways.	Well implemented	Contractor	Supervision Consultant		
2) Demarcation and	Yes	2	The subproject	- Limit area was cleared. In the area	Well	Contractor	Supervision		

clearing of RoW and ancillary facilities			site is bounded by fence. No clearance of vegetation and other facilities is needed	were only agricultural crops (rice, vegetable) - No significant vegetation	implemented		Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	-The excavated area was limited to the area needed for construction only.. - Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material and piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	The work generating big noise is implemented at daylight hours only.	Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Preliminarily treated waste water was discharged to water body surrounding the site; - Oil and fuel from machinery was collected and disposed to a regulated site;	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- At the boundary of UGC route	All waste materials were collected and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work at site. - Fuel fills in	- All fuel storage areas were securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked.	- Well implemented	Contractor	Supervision Consultant

			transformer.	<ul style="list-style-type: none"> - Fuel were stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan 			
9) Community Safety from increased vehicle movements	Yes	2	- All vehicles and loads at site.	<ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered. 	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety	Yes	2	- At site	<ul style="list-style-type: none"> - Contractor has abided: Vietnamese Labor Code as amended 2002 as follow: - Provided workers be with safety working environment - Erect warning signs and barriers around work areas - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. 	- Well implemented	Contractor	Supervision Consultant

					Provided medical and first aid facilities together with a person qualified in first aid.					
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune		Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant		
12) Public access to site	Yes	2	-At site		-Warning signs and barriers around work areas were erected. -Site could only be accessed with permission of contractor. Visitors were warned against site hazards to avoid possible accident	- Well implemented	Contractor	Supervision Consultant		
13) Community and worker health and safety	Yes	2	At site and camp		-Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;	- Well implemented	Contractor	Supervision Consultant		
13. Ambient Environment								Approved by:		
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
14. Environmental Incidents During Reporting Period (if any)								Approved by:		
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency			

15. Summary of Action required and observed (if any)			
Required actions	Timeframe (e.g in a week)	Responsible Party	Monitoring (to be completed if inspection/monitoring indicates actions are required)
			Actions implemented:
Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor	Supervision Consultant
			Follow-up action required:
			Prepared by:
Monitored by:	Le Anh Duc		Date:
Signature:			Date: 31 March 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

1. Very good (meet all requirements)
2. Good (take main measures))
3. Medium (take several measures)

4. Poor (take few measures)
5. Very poor (take very few measures)

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF NOI BAI SUBSTATION**

PROJECT: «SUBPROJECT»				Implementing agency:	HANOI DPMB				
Component: Package No. ADB-HNPC-NB-W01 No. ADB-HNPC-NB-W02				Supervising agency:	Joint venture Infrastructure Technical & Electricity construction Investment consultancy JSC and Electric power design survey JSC				
Location: Site Office and Work-camp, Construction sites of substation				Contractor:	Corporation Investment Consulting Electrical Construction & Number five, Power construction JSC No.1, Power Industry Construction JSC				
Date: 29/04/2016				Phase:	Construction (01/04/2016-29/04/2016)				
Report Period:									
16. Contractor									
Contractor Environmental Awareness		Yes/No	Required actions			Contractor's responsibility/ Comments			
Contractor is aware of mitigation requirements?		Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well			Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB			
Contractor has a copy of EMP?		Yes	Keep copies of EMP, environment documents, permits in site offices.			Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.			
17. Compliance of inspection of mitigation measures									
Impact/Mitigation measures						Approved by: ADB and HANOI DPMB			
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency		
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities	-Wastewater is preliminary treated by settle chamber before discharging into to surface water bodies. - Contractor's storage facilities have been surrounded by a security fence.	Well implemented	Contractor	Supervision Consultant		
2) Demarcation and clearing of RoW and ancillary facilities	Yes	1	The subproject site is bounded by fence. No	No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant		

			clearance of vegetation and other facilities is needed				
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	1	-The excavated area was limited to the area needed for construction only.	Excavated material to be disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	1	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	1	The work generating big noise is implemented at daylight hours only.	Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	1	Construction site	Preliminarily treated waste water was discharged to water body surrounding the site; - Oil and fuel from machinery was collected and disposed to a regulated site;	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	1	-No soil erosion occurred -All waste materials were collected and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an	All waste materials were collected and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant

			approved landfill site for disposal;				
8) Storage and handling of: fuel and lubricants	Yes	1	<ul style="list-style-type: none"> - Fuel for all machine work at site. - Fuel fills in transformer. 	<ul style="list-style-type: none"> - All fuel storage areas were securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel were stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan 	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	1	<ul style="list-style-type: none"> - All vehicles and loads at site. 	<ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered. 	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety	Yes	1	<ul style="list-style-type: none"> - At site 	<ul style="list-style-type: none"> - Contractor has abided: Vietnamese Labor Code as amended 2002 as follow: - Provided workers be with safety working environment - Erect warning signs and barriers around work areas - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the 	- Well implemented	Contractor	Supervision Consultant

				<p>task they are employed.</p> <ul style="list-style-type: none"> - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. <p>Provided medical and first aid facilities together with a person qualified in first aid.</p>			
11) Chance discovery of archaeological and cultural sites	Yes	1	At site and local commune	<p>Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.</p>	- Well implemented	Contractor	Supervision Consultant
12) Public access to site	Yes	1	-At site	<ul style="list-style-type: none"> -Warning signs and barriers around work areas were erected. -Site could only be accessed with permission of contractor. <p>Visitors were warned against site hazards to avoid possible accident</p>	- Well implemented	Contractor	Supervision Consultant
13) Community and worker health and safety	Yes	1	At site and camp	<ul style="list-style-type: none"> -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; 	- Well implemented	Contractor	Supervision Consultant

				Dust bins to collect wastes are provided in worker camps;						
18. Ambient Environment								Approved by:		
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
19. Environmental Incidents During Reporting Period (if any)								Approved by:		
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency			
20. Summary of Action required and observed (if any)										
Required actions	Timeframe (e.g in a week)	Responsible Party	Monitoring (to be completed if inspection/monitoring indicates actions are required)							
			Actions implemented:							
			Follow-up action required:							
			Prepared by:							
Monitored by:	Le Anh Duc							Date:		
Signature:								Date: 29 April 2016		
Notes:										
Attachment: (pictures of construction site)										

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- | | |
|--------------------------------------|---------------------------------------|
| 1. Very good (meet all requirements) | 4. Poor (take few measures) |
| 2. Good (take main measures)) | 5. Very poor (take very few measures) |
| 3. Medium (take several measures) | |

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF MO LAO SUBSTATION**

PROJECT: New building 110kV Mo Lao and 110kV line				Implementing agency:	HANOI DPMB		
Component: Package No. ADB-HNPC-ML-W02 No. ADB-HNPC-ML-W01				Supervising agency:	Vietnam electrical construction consultant service JSC.		
Location: Site Office and Work-camp, Construction sites of substation				Contractor:	Power construction JSC No.1		
Date: 30/01/2016				Phase:	Construction (01/01/2016-30/01/2016)		
Report Period:				Phase:	Construction (01/01/2016-30/01/2016)		
21. Contractor							
Contractor Environmental Awareness		Yes/No	Required actions		Contractor's responsibility/ Comments		
Contractor is aware of mitigation requirements?		Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well		Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB		
Contractor has a copy of EMP?		Yes	Keep copies of EMP, environment documents, permits in site offices.		Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.		
22. Compliance of inspection of mitigation measures							
Impact/Mitigation measures				Approved by: ADB and HANOI DPMB			
(From EMP list all mitigation measures of environmental impacts which need to be completed)		Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/C omments	Implementing agency Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).		Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle chamber before discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.	Well implemented	Contractor Supervision Consultant
2) Demarcation and clearing of RoW and ancillary facilities		Yes	2	The subproject site is bounded by fence. No	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor Supervision Consultant

			clearance of vegetation and other facilities is needed				
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	- The excavated area was limited to the area needed for construction only.. - Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	- Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work at site. - Fuel fills in transformer.	All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running	- Well implemented	Contractor	Supervision Consultant

				<p>over to environment.</p> <ul style="list-style-type: none"> - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan 			
9) Community Safety from increased vehicle movements	Yes	2	- All vehicles and loads at site.	<ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered. 	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety	Yes	2	- At site	<ul style="list-style-type: none"> - Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working environment - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. Provided medical and first aid facilities together with a person qualified in first aid. 	- Well implemented	Contractor	Supervision Consultant
11) Chance discovery of		2	At site and local	Chance discoveries will be notified	- Well	Contractor	Supervision

archaeological and cultural sites	Yes		commune	to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	implemented		Consultant			
12) Public access to site	Yes	2	-At site	-Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. Visitors were warned against site hazards to avoid possible accident	- Well implemented	Contractor	Supervision Consultant			
13) Community and worker health and safety	Yes	2	At site and camp	-Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;	- Well implemented	Contractor	Supervision Consultant			
23. Ambient Environment								Approved by:		
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
24. Environmental Incidents During Reporting Period (if any)								Approved by:		
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency			
25. Summary of Action required and observed (if any)										
Required actions	Timeframe (e.g in a week)	Responsible Party	Monitoring (to be completed if inspection/monitoring indicates actions are required)							
			Actions implemented:							
Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant							
Provide dangerous warning signs at storage	Immediately implemented	Contractor	Supervision Consultant							

of fuel			
			Follow-up action required:
			Prepared by:
Monitored by:	Ho Van Nghiem		Date:
Signature:			Date: 30 January 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- 1. Very good (meet all requirements)
- 2. Good (take main measures))
- 3. Medium (take several measures)

- 4. Poor (take few measures)
- 5. Very poor (take very few measures)

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF MO LAO SUBSTATION**

PROJECT: New building 110kV Mo Lao and 110kV line			Implementing agency:		HANOI DPMB			
Component: Package No. ADB-HNPC-ML-W02 No. ADB-HNPC-ML-W01			Supervising agency:		Vietnam electrical construction consultant service JSC.			
Location: Site Office and Work-camp, Construction sites of substation			Contractor:		Power construction JSC No.1			
Date: 28/02/2016			Phase:		Construction (01/02/2016-28/02/2016)			
Report Period:								
26. Contractor								
Contractor Environmental Awareness		Yes/No	Required actions			Contractor's responsibility/ Comments		
Contractor is aware of mitigation requirements?		Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well			Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB		
Contractor has a copy of EMP?		Yes	Keep copies of EMP, environment documents, permits in site offices.			Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.		
27. Compliance of inspection of mitigation measures								
Impact/Mitigation measures						Approved by: ADB and HANOI DPMB		
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Location	Observed/	Required actions	Contractor's responsibility/ Comments	Implementing agency	Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities		-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle chamber before discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.	Well implemented	Contractor	Supervision Consultant
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed		The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site:	Yes	2	-The excavated area		- The excavated area was limited to the area	Well	Contractor	Supervision

excavation, removal and disposal of unusable (incompetent) materials			was limited to the area needed for construction only.	needed for construction only.. - Excavated material was disposed of outside and away from the work area.	implemented		Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	- Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work at site. - Fuel fills in transformer.	- All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	- All vehicles and loads at site.	- All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered.	- Well implemented	Contractor	Supervision Consultant

10) Workplace health and safety	Yes	2	- At site	<ul style="list-style-type: none"> - Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working environment - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. <p>Provided medical and first aid facilities together with a person qualified in first aid.</p>	- Well implemented	Contractor	Supervision Consultant
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	<p>Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.</p>	- Well implemented	Contractor	Supervision Consultant
12) Public access to site	Yes	2	-At site	<ul style="list-style-type: none"> -Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. <p>Visitors were warned against site hazards to avoid possible accident</p>	- Well implemented	Contractor	Supervision Consultant
13) Community and worker health and safety	Yes	2	At site and camp	<ul style="list-style-type: none"> -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker 	- Well implemented	Contractor	Supervision Consultant

camps;										
28. Ambient Environment										
								Approved by:		
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
29. Environmental Incidents During Reporting Period (if any)										
Approved by:										
Environmental Incidents (Accidents, spills... complaint)		Date/Location	Report by	Description/Location	Executed actions	Follow-up	Required actions	Implementing agency	Supervising agency	
30. Summary of Action required and observed (if any)										
Required actions		Timeframe (e.g in a week)		Responsible Party			Monitoring (to be completed if inspection/monitoring indicates actions are required)			
							Actions implemented:			
Provide suitable latrines as required by ADB		Immediately implemented		Contractor			Supervision Consultant			
Provide dangerous warning signs at storage of fuel		Immediately implemented		Contractor			Supervision Consultant			
							Follow-up action required:			
							Prepared by:			
Monitored by:		Ho Van Nghiem					Date:			
Signature:							Date: 28 Feb 2016			
Notes:										
Attachment: (pictures of construction site)										

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

1. Very good (meet all requirements)
2. Good (take main measures)
3. Medium (take several measures)

4. Poor (take few measures)
5. Very poor (take very few measures)

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF MO LAO SUBSTATION**

PROJECT: New building 110kV Mo Lao and 110kV line				Implementing agency: HANOI DPMB			
Component: Package No. ADB-HNPC-ML-W02 No. ADB-HNPC-ML-W01				Supervising agency: Vietnam electrical construction consultant service JSC.			
Location: Site Office and Work-camp, Construction sites of substation				Contractor: Power construction JSC No.1.			
Date: 31/03/2016				Phase: Construction (01/03/2016-31/03/2016)			
Report Period:				Phase: Construction (01/03/2016-31/03/2016)			
31. Contractor							
Contractor Environmental Awareness		Yes/No	Required actions		Contractor's responsibility/ Comments		
Contractor is aware of mitigation requirements?		Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well		Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB		
Contractor has a copy of EMP?		Yes	Keep copies of EMP, environment documents, permits in site offices.		Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.		
32. Compliance of inspection of mitigation measures							
Impact/Mitigation measures						Approved by: ADB and HANOI DPMB	
(From EMP list all mitigation measures of environmental impacts which need to be completed)		Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/ Comments	Implementing agency Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).		Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle chamber before discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.	Well implemented	Contractor Supervision Consultant
2) Demarcation and clearing of RoW and ancillary facilities		Yes	2	The subproject site is bounded by fence. No clearance of vegetation and	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor Supervision Consultant

			other facilities is needed				
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	-The excavated area was limited to the area needed for construction only.. -Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	- Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work at site. - Fuel fills in transformer.	- All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	- All vehicles and loads at site.	- All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered.	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety		2		- Contractor has abided Vietnamese Labor Code as amended 2002 as follow:.	- Well implemented	Contractor	Supervision Consultant

	Yes		- At site	<ul style="list-style-type: none"> - Provided workers be with safety working environment - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. Provided medical and first aid facilities together with a person qualified in first aid. 						
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant			
12) Public access to site	Yes	2	-At site	<ul style="list-style-type: none"> -Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. Visitors were warned against site hazards to avoid possible accident 	- Well implemented	Contractor	Supervision Consultant			
13) Community and worker health and safety	Yes	2	At site and camp	<ul style="list-style-type: none"> -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps; 	- Well implemented	Contractor	Supervision Consultant			
33. Ambient Environment								Approved by:		
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/ Comments	Implementing agency	Supervising agency

34. Environmental Incidents During Reporting Period (if any)							Approved by:	
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency	
35. Summary of Action required and observed (if any)								
Required actions	Timeframe (e.g in a week)	Responsible Party		Monitoring (to be completed if inspection/monitoring indicates actions are required)				
				Actions implemented:				
Provide suitable latrines as required by ADB	Immediately implemented	Contractor		Supervision Consultant				
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor		Supervision Consultant				
				Follow-up action required:				
				Prepared by:				
Monitored by:	Ho Van Nghiem				Date:			
Signature:					Date: 31 March 2016			
Notes:								
Attachment: (pictures of construction site)								

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

1. Very good (meet all requirements)
2. Good (take main measures)
3. Medium (take several measures)

4. Poor (take few measures)
5. Very poor (take very few measures)

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF MO LAO SUBSTATION**

PROJECT: New building 110kV Mo Lao and 110kV line		Implementing agency: HANOI DPMB	
Component: Package No. ADB-HNPC-ML-W02 No. ADB-HNPC-ML-W01		Supervising agency: Vietnam electrical construction consultant service JSC.	
Location: Site Office and Work-camp, Construction sites of substation		Contractor: Power construction JSC No.1	
Date: 29/04/2016			
Report Period:		Phase: Construction (01/04/2016-29/04/2016)	
36. Contractor			
Contractor Environmental Awareness	Yes/No	Required actions	Contractor's responsibility/ Comments
Contractor is aware of mitigation requirements?	Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well	Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB
Contractor has a copy of EMP?	Yes	Keep copies of EMP, environment documents, permits in site offices.	Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.
37. Compliance of inspection of mitigation measures			
Impact/Mitigation measures		Approved by: ADB and HANOI DPMB	
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location
			Required actions
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with -Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle chamber before
			Contractor's responsibility/ Comments
			Implementing agency
			Supervising agency
			Well implemented
			Contractor
			Supervision Consultant

			the welfare or social cohesion of surrounding communities	discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	-The excavated area was limited to the area needed for construction only.. -Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work	- All fuel storage areas are securely fenced and provided with oil and water	- Well implemented	Contractor	Supervision Consultant

			<ul style="list-style-type: none"> - Fuel fills in transformer. 	<ul style="list-style-type: none"> separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan 			
9) Community Safety from increased vehicle movements	Yes	2	<ul style="list-style-type: none"> - All vehicles and loads at site. 	<ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered. 	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety	Yes	2	<ul style="list-style-type: none"> - At site 	<ul style="list-style-type: none"> - Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working environment - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. Provided medical and first aid facilities together with a person qualified in first 	- Well implemented	Contractor	Supervision Consultant

				aid.						
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant			
12) Public access to site	Yes	2	-At site	-Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. Visitors were warned against site hazards to avoid possible accident	- Well implemented	Contractor	Supervision Consultant			
13) Community and worker health and safety	Yes	2	At site and camp	-Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;	- Well implemented	Contractor	Supervision Consultant			
38. Ambient Environment								Approved by:		
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
39. Environmental Incidents During Reporting Period (if any)								Approved by:		
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency			

40. Summary of Action required and observed (if any)			
Required actions	Timeframe (e.g in a week)	Responsible Party	Monitoring (to be completed if inspection/monitoring indicates actions are required)
			Actions implemented:
Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor	Supervision Consultant
			Follow-up action required:
			Prepared by:
Monitored by:	Ho Van Nghiem		Date:
Signature:			Date:29 April 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- | | |
|--------------------------------------|---------------------------------------|
| 1. Very good (meet all requirements) | 4. Poor (take few measures) |
| 2. Good (take main measures)) | 5. Very poor (take very few measures) |
| 3. Medium (take several measures) | |

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF MO LAO SUBSTATION**

PROJECT: New building 110kV Mo Lao and 110kV line				Implementing agency:	HANOI DPMB		
Component: Package No. ADB-HNPC-ML-W02 No. ADB-HNPC-ML-W01				Supervising agency:	Vietnam electrical construction consultant service JSC.		
Location: Site Office and Work-camp, Construction sites of substation				Contractor:	Power construction JSC No.1		
Date: 30/05/2016							
Report Period:				Phase:	Construction (01/05/2016-30/05/2016)		
41. Contractor							
Contractor Environmental Awareness		Yes/No	Required actions	Contractor's responsibility/ Comments			
Contractor is aware of mitigation requirements?		Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well	Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB			
Contractor has a copy of EMP?		Yes	Keep copies of EMP, environment documents, permits in site offices.	Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.			
42. Compliance of inspection of mitigation measures							
Impact/Mitigation measures				<u>Approved by:</u> ADB and HANOI DPMB			
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle chamber before	Well implemented	Contractor	Supervision Consultant

			the welfare or social cohesion of surrounding communities	discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	The excavated area was limited to the area needed for construction.	- The excavated area was limited to the area needed for construction only. - Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	Fuel for all machine work	-All fuel storage areas are securely fenced and provided with oil and water	- Well implemented	Contractor	Supervision Consultant

			at site. Fuel fills in transformer.	<p>separators. Fuel hoses and shut off valve to be locked.</p> <ul style="list-style-type: none"> - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan 			
9) Community Safety from increased vehicle movements	Yes	2	All vehicles and loads at site.	<ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered. 	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety	Yes	2	At site	<ul style="list-style-type: none"> - Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working environment - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid. 	- Well implemented	Contractor	Supervision Consultant

11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant			
12) Public access to site	Yes	2	At site	-Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. Visitors were warned against site hazards to avoid possible accident	- Well implemented	Contractor	Supervision Consultant			
13) Community and worker health and safety	Yes	2	At site and camp	-Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;	- Well implemented	Contractor	Supervision Consultant			
43. Ambient Environment					Approved by:					
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
44. Environmental Incidents During Reporting Period (if any)					Approved by:					
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency			

45. Summary of Action required and observed (if any)			
Required actions	Timeframe (e.g in a week)	Responsible Party	Monitoring (to be completed if inspection/monitoring indicates actions are required)
			Actions implemented:
Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor	Supervision Consultant
			Follow-up action required:
			Prepared by:
Monitored by:	Ho Van Nghiem		Date:
Signature:			Date:30 May 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- 1. Very good (meet all requirements)
- 2. Good (take main measures))
- 3. Medium (take several measures)

- 4. Poor (take few measures)
- 5. Very poor (take very few measures)

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF MO LAO SUBSTATION**

PROJECT: New building 110kV Mo Lao and 110kV line		Implementing agency:	HANOI DPMB				
Component: Package No. ADB-HNPC-ML-W02 No. ADB-HNPC-ML-W01		Supervising agency:	Vietnam electrical construction consultant service JSC.				
Location: Site Office and Work-camp, Construction sites of substation		Contractor:	Power construction JSC No.1				
Date: 30/06/2016							
Report Period:		Phase:	Construction (01/06/2016-30/06/2016)				
46. Contractor							
Contractor Environmental Awareness		Yes/No	Required actions		Contractor's responsibility/ Comments		
Contractor is aware of mitigation requirements?		Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well		Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB		
Contractor has a copy of EMP?		Yes	Keep copies of EMP, environment documents, permits in site offices.		Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.		
47. Compliance of inspection of mitigation measures							
Impact/Mitigation measures		<u>Approved by:</u> ADB and HANOI DPMB					
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/ Comments	Implementing agency	Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle chamber before discharging into to surface water bodies	Well implemented	Contractor	Supervision Consultant

			the welfare or social cohesion of surrounding communities	is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	-The excavated area was limited to the area needed for construction only.. -Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site;	Yes	2	- No soil erosion	All waste materials need to collect and	Well implemented	Contractor	Supervision Consultant

Disposal of site waste			occurred	sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;			
8) Storage and handling of: fuel and lubricants	Yes	2	<ul style="list-style-type: none"> - Fuel for all machine work at site. - Fuel fills in transformer. 	<ul style="list-style-type: none"> - All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action pla 	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	All vehicles and loads at site.	<ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered. 	Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety	Yes	2	- At site	<ul style="list-style-type: none"> - Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working environment - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation 	Well implemented	Contractor	Supervision Consultant

				for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid.						
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant			
12) Public access to site	Yes	2	-At site	-Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. Visitors were warned against site hazards to avoid possible accident	- Well implemented	Contractor	Supervision Consultant			
13) Community and worker health and safety	Yes	2	At site and camp	-Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;	- Well implemented	Contractor	Supervision Consultant			
48. Ambient Environment								Approved by:		
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
49. Environmental Incidents During Reporting Period (if any)								Approved by:		

Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency
50. Summary of Action required and observed (if any)							
Required actions	Timeframe (e.g in a week)	Responsible Party		Monitoring (to be completed if inspection/monitoring indicates actions are required)			
				Actions implemented:			
Provide suitable latrines as required by ADB	Immediately implemented	Contractor		Supervision Consultant			
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor		Supervision Consultant			
				Follow-up action required:			
				Prepared by:			
Monitored by:	Ho Van Nghiem			Date:			
Signature:				Date:30 June 2016			
Notes:							
Attachment: (pictures of construction site)							

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- | | |
|--------------------------------------|---------------------------------------|
| 1. Very good (meet all requirements) | 4. Poor (take few measures) |
| 2. Good (take main measures)) | 5. Very poor (take very few measures) |
| 3. Medium (take several measures) | |

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF THANH XUAN SUBSTATION**

PROJECT: Add new transformer T3, SS 110 kV Thanh Xuan -		Implementing agency:	HANOI DPMB				
Component: Package No. ADB-HNPC-TX-W01		Supervising agency:	Vietnam electrical construction consultant service JSC.				
Location: Site Office and Work-camp, Construction sites of substation		Contractor:	Power construction JSC No.1				
Date: 30/01/2016							
Report Period:		Phase:	Construction (01/01/2016-30/01/2016)				
51. Contractor							
Contractor Environmental Awareness	Yes/No	Required actions	Contractor's responsibility/ Comments				
Contractor is aware of mitigation requirements?	Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well	Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB				
Contractor has a copy of EMP?	Yes	Keep copies of EMP, environment documents, permits in site offices.	Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.				
52. Compliance of inspection of mitigation measures							
Impact/Mitigation measures		<u>Approved by:</u> ADB and HANOI DPMB					
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A	Well implemented	Contractor	Supervision Consultant

			social cohesion of surrounding communities	wastewater settle chamber before discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	-The excavated area was limited to the area needed for construction only.. -Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	- Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii)	Well implemented	Contractor	Supervision Consultant

				those that need to go to an approved landfill site for disposal;			
8) Storage and handling of: fuel and lubricants	Yes	2	<ul style="list-style-type: none"> - Fuel for all machine work at site. - Fuel fills in transformer. 	<ul style="list-style-type: none"> - All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan 	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	<ul style="list-style-type: none"> - All vehicles and loads at site. 	<ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered. 	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety	Yes	2	<ul style="list-style-type: none"> - At site 	<ul style="list-style-type: none"> - Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working environment - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. 	- Well implemented	Contractor	Supervision Consultant

				<ul style="list-style-type: none"> - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid. 						
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant			
12) Public access to site	Yes	2	-At site	<ul style="list-style-type: none"> -Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. Visitors were warned against site hazards to avoid possible accident 	- Well implemented	Contractor	Supervision Consultant			
13) Community and worker health and safety	Yes	2	At site and camp	<ul style="list-style-type: none"> -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps; 	- Well implemented	Contractor	Supervision Consultant			
53. Ambient Environment								Approved by:		
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency

54. Environmental Incidents During Reporting Period (if any)						Approved by:	
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency
55. Summary of Action required and observed (if any)							
Required actions	Timeframe (e.g in a week)	Responsible Party		Monitoring (to be completed if inspection/monitoring indicates actions are required)			
				Actions implemented:			
Provide suitable latrines as required by ADB	Immediately implemented	Contractor		Supervision Consultant			
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor		Supervision Consultant			
				Follow-up action required:			
				Prepared by:			
Monitored by:	Ho Van Nghiem				Date:		
Signature:					Date: 30 January 2016		
Notes:							
Attachment: (pictures of construction site)							

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- | | |
|--------------------------------------|---------------------------------------|
| 1. Very good (meet all requirements) | 4. Poor (take few measures) |
| 2. Good (take main measures) | 5. Very poor (take very few measures) |
| 3. Medium (take several measures) | |

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF THANH XUAN SUBSTATION**

PROJECT: Add new transformer T3, SS 110 kV Thanh Xuan -		Implementing agency:	HANOI DPMB				
Component: Package No. ADB-HNPC-TX-W01		Supervising agency:	Vietnam electrical construction consultant service JSC.				
Location: Site Office and Work-camp, Construction sites of substation		Contractor:	Power construction JSC No.1				
Date: 28/02/2016							
Report Period:		Phase:	Construction (01/02/2016-28/02/2016)				
56. Contractor							
Contractor Environmental Awareness		Yes/No	Required actions			Contractor's responsibility/ Comments	
Contractor is aware of mitigation requirements?		Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well			Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB	
Contractor has a copy of EMP?		Yes	Keep copies of EMP, environment documents, permits in site offices.			Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.	
57. Compliance of inspection of mitigation measures							
Impact/Mitigation measures						Approved by: ADB and HANOI DPMB	
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle chamber before	Well implemented	Contractor	Supervision Consultant

			of surrounding communities	discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	- The excavated area was limited to the area needed for construction only. -Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	- Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	-No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an	Well implemented	Contractor	Supervision Consultant

				approved landfill site for disposal;			
8) Storage and handling of: fuel and lubricants	Yes	2	<ul style="list-style-type: none"> - Fuel for all machine work at site. - Fuel fills in transformer. 	<ul style="list-style-type: none"> - All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refuelling personnel in these procedures. The contractor has developed an accidental spill handling action plan 	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	<ul style="list-style-type: none"> - All vehicles and loads at site. 	<ul style="list-style-type: none"> - All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered. 	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety	Yes	2	<ul style="list-style-type: none"> - At site 	<ul style="list-style-type: none"> - Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working environment - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and 	- Well implemented	Contractor	Supervision Consultant

				showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. Provided medical and first aid facilities together with a person qualified in first aid.							
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant				
12) Public access to site	Yes	2	-At site	-Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. Visitors were warned against site hazards to avoid possible accident	- Well implemented	Contractor	Supervision Consultant				
13) Community and worker health and safety	Yes	2	At site and camp	-Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;	- Well implemented	Contractor	Supervision Consultant				
58. Ambient Environment								Approved by:			
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency	

59. Environmental Incidents During Reporting Period (if any)						Approved by:	
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency
60. Summary of Action required and observed (if any)							
Required actions	Timeframe (e.g in a week)	Responsible Party		Monitoring (to be completed if inspection/monitoring indicates actions are required)			
				Actions implemented:			
Provide suitable latrines as required by ADB	Immediately implemented	Contractor		Supervision Consultant			
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor		Supervision Consultant			
				Follow-up action required:			
				Prepared by:			
Monitored by:	Ho Van Nghiem			Date:			
Signature:				Date: 28 Feb 2016			
Notes:							
Attachment: (pictures of construction site)							

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- | | |
|--------------------------------------|---------------------------------------|
| 1. Very good (meet all requirements) | 4. Poor (take few measures) |
| 2. Good (take main measures)) | 5. Very poor (take very few measures) |
| 3. Medium (take several measures) | |

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF THANH XUAN SUBSTATION**

PROJECT: Add new transformer T3, SS 110 kV Thanh Xuan -				Implementing agency:	HANOI DPMB			
Component: Package No. ADB-HNPC-TX-W01				Supervising agency:	Vietnam electrical construction consultant service JSC.			
Location: Site Office and Work-camp, Construction sites of substation				Contractor:	Power construction JSC No.1			
Date: 28/03/2016								
Report Period:				Phase:	Construction (01/03/2016-28/03/2016)			
61. Contractor								
Contractor Environmental Awareness			Yes/No	Required actions		Contractor's responsibility/ Comments		
Contractor is aware of mitigation requirements?			Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well		Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB		
Contractor has a copy of EMP?			Yes	Keep copies of EMP, environment documents, permits in site offices.		Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.		
62. Compliance of inspection of mitigation measures								
Impact/Mitigation measures				<u>Approved by:</u> ADB and HANOI DPMB				
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency	
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	Sites are located inside the subproject area so that they do not interfere with the welfare or	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle	Well implemented	Contractor	Supervision Consultant	

			social cohesion of surrounding communities	chamber before discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	-The excavated area was limited to the area needed for construction only.. -Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant

7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work at site. - Fuel fills in transformer.	- All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	All vehicles and loads at site.	- All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered.	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety		2		- Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working	- Well implemented	Contractor	Supervision Consultant

	Yes		At site	<p>environment</p> <ul style="list-style-type: none"> - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid. 			
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant
12) Public access to site	Yes	2	At site	<ul style="list-style-type: none"> -Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. Visitors were warned against site hazards to avoid possible accident 	- Well implemented	Contractor	Supervision Consultant
13) Community and worker health and safety	Yes	2	At site and camp	-Workers have been educated on the social problems. and measures of preventing	- Well implemented	Contractor	Supervision Consultant

											HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;
63. Ambient Environment								Approved by:			
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency	
64. Environmental Incidents During Reporting Period (if any)								Approved by:			
Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency				
65. Summary of Action required and observed (if any)											
Required actions	Timeframe (e.g in a week)	Responsible Party	Monitoring (to be completed if inspection/monitoring indicates actions are required)								
			Actions implemented:								

Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor	Supervision Consultant
			Follow-up action required:
			Prepared by:
Monitored by:	Ho Van Nghiem		Date:
Signature:			Date: 28 March 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- | | |
|--------------------------------------|---------------------------------------|
| 1. Very good (meet all requirements) | 4. Poor (take few measures) |
| 2. Good (take main measures)) | 5. Very poor (take very few measures) |
| 3. Medium (take several measures) | |

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF THANH XUAN SUBSTATION**

PROJECT: Add new transformer T3, SS 110 kV Thanh Xuan -				Implementing agency:	HANOI DPMB			
Component: Package No. ADB-HNPC-TX-W01				Supervising agency:	Vietnam electrical construction consultant service JSC.			
Location: Site Office and Work-camp, Construction sites of substation				Contractor:	Power Construction JSC No.1			
Date: 28/04/2016								
Report Period:				Phase:	Construction (01/04/2016-28/04/2016)			
66. Contractor								
Contractor Environmental Awareness			Yes/No	Required actions		Contractor's responsibility/ Comments		
Contractor is aware of mitigation requirements?			Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well		Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB		
Contractor has a copy of EMP?			Yes	Keep copies of EMP, environment documents, permits in site offices.		Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.		
67. Compliance of inspection of mitigation measures								
Impact/Mitigation measures				<u>Approved by:</u> ADB and HANOI DPMB				
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency	
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle	Well implemented	Contractor	Supervision Consultant	

			social cohesion of surrounding communities	chamber before discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	-The excavated area was limited to the area needed for construction only.. -Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant

7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work at site. - Fuel fills in transformer.	- All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	- All vehicles and loads at site.	- All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered.	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety		2		- Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be	- Well implemented	Contractor	Supervision Consultant

	Yes		- At site	<p>with safety working environment</p> <ul style="list-style-type: none"> - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid. 			
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant
12) Public access to site	Yes	2	-At site	<ul style="list-style-type: none"> -Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. <p>Visitors were warned against site hazards to avoid possible accident</p>	- Well implemented	Contractor	Supervision Consultant

13) Community and worker health and safety	Yes	2	At site and camp	<ul style="list-style-type: none"> -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps; 	- Well implemented	Contractor	Supervision Consultant
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68. Ambient Environment	Approved by:
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Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency

69. Environmental Incidents During Reporting Period (if any)	Approved by:
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Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency

70. Summary of Action required and observed (if any)			
Required actions	Timeframe (e.g in a week)	Responsible Party	Monitoring (to be completed if inspection/monitoring indicates actions are required)
			Actions implemented:
Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor	Supervision Consultant
			Follow-up action required:
			Prepared by:
Monitored by:	Ho Van Nghiem		Date:
Signature:			Date: 28 April 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- 1. Very good (meet all requirements)
- 2. Good (take main measures)
- 3. Medium (take several measures)

- 4. Poor (take few measures)
- 5. Very poor (take very few measures)

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF THANH XUAN SUBSTATION**

PROJECT: Add new transformer T3, SS 110 kV Thanh Xuan -				Implementing agency:	HANOI DPMB			
Component: Package No. ADB-HNPC-TX-W01				Supervising agency:	Vietnam electrical construction consultant service JSC.			
Location: Site Office and Work-camp, Construction sites of substation				Contractor:	Power construction JSC No.1			
Date: 28/05/2016								
Report Period:				Phase:	Construction (01/05/2016-28/05/2016)			
71. Contractor								
Contractor Environmental Awareness			Yes/No	Required actions		Contractor's responsibility/ Comments		
Contractor is aware of mitigation requirements?			Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well		Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB		
Contractor has a copy of EMP?			Yes	Keep copies of EMP, environment documents, permits in site offices.		Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.		
72. Compliance of inspection of mitigation measures								
Impact/Mitigation measures				<u>Approved by:</u> ADB and HANOI DPMB				
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency	
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle	Well implemented	Contractor	Supervision Consultant	

			the welfare or social cohesion of surrounding communities	chamber before discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	-The excavated area was limited to the area needed for construction only.. -Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA	Well implemented	Contractor	Supervision Consultant

				between 21h00 and 06h00;			
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work at site. - Fuel fills in transformer.	- All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	- All vehicles and loads at site.	- All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered.	- Well implemented	Contractor	Supervision Consultant

10) Workplace health and safety	Yes	2	- At site	<ul style="list-style-type: none"> - Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working environment - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. - Provided medical and first aid facilities together with a person qualified in first aid. 	- Well implemented	Contractor	Supervision Consultant
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant
12) Public access to site	Yes	2	-At site	<ul style="list-style-type: none"> -Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. <p>Visitors were warned against site hazards to avoid possible accident</p>	- Well implemented	Contractor	Supervision Consultant

13) Community and worker health and safety	Yes	2	At site and camp	<ul style="list-style-type: none"> -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps; 	- Well implemented	Contractor	Supervision Consultant
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73. Ambient Environment	Approved by:
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Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency

74. Environmental Incidents During Reporting Period (if any)	Approved by:
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Environmental Incidents (Accidents, spills... complaint)	Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency

75. Summary of Action required and observed (if any)

Required actions	Timeframe (e.g in a week)	Responsible Party	Monitoring (to be completed if inspection/monitoring indicates)

			actions are required)
			Actions implemented:
Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor	Supervision Consultant
			Follow-up action required:
			Prepared by:
Monitored by:	Ho Van Nghiem		Date:
Signature:			Date: 28 May 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

1. Very good (meet all requirements)
2. Good (take main measures))
3. Medium (take several measures)

4. Poor (take few measures)
5. Very poor (take very few measures)

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF THANH XUAN SUBSTATION**

PROJECT: Add new transformer T3, SS 110 kV Thanh Xuan -				Implementing agency:	HANOI DPMB			
Component: Package No. ADB-HNPC-TX-W01				Supervising agency:	Vietnam electrical construction consultant service JSC.			
Location: Site Office and Work-camp, Construction sites of substation				Contractor:	Power construction JSC No.1			
Date: 28/06/2016								
Report Period:				Phase:	Construction (01/06/2016-28/06/2016)			
76. Contractor								
Contractor Environmental Awareness			Yes/No	Required actions		Contractor's responsibility/ Comments		
Contractor is aware of mitigation requirements?			Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well		Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB		
Contractor has a copy of EMP?			Yes	Keep copies of EMP, environment documents, permits in site offices.		Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.		
77. Compliance of inspection of mitigation measures								
Impact/Mitigation measures				<u>Approved by:</u> ADB and HANOI DPMB				
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency	
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet area. A wastewater settle	Well implemented	Contractor	Supervision Consultant	

			the welfare or social cohesion of surrounding communities	chamber before discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	- The excavated area was limited to the area needed for construction only.. - Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	- Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA	Well implemented	Contractor	Supervision Consultant

				between 21h00 and 06h00;			
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant
7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work at site. - Fuel fills in transformer.	- All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	- All vehicles and loads at site.	- All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered.	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety		2		- Contractor has abided Vietnamese Labor Code as	- Well implemented	Contractor	Supervision Consultant

	Yes		- At site	<p>amended 2002 as follow:.</p> <ul style="list-style-type: none"> - Provided workers be with safety working environment - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. <p>Provided medical and first aid facilities together with a person qualified in first aid.</p>			
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	<p>Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.</p>	- Well implemented	Contractor	Supervision Consultant
12) Public access to site	Yes	2	-At site	<ul style="list-style-type: none"> -Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. <p>Visitors were warned against site hazards to avoid possible accident</p>	- Well implemented	Contractor	Supervision Consultant
13) Community and worker health and safety	Yes	2	At site and camp	<ul style="list-style-type: none"> -Workers have been educated on the social problems. and measures of preventing 	- Well implemented	Contractor	Supervision Consultant

								HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;			
78. Ambient Environment								Approved by:			
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency	
79. Environmental Incidents During Reporting Period (if any)								Approved by:			
Environmental Incidents (Accidents, spills... complaint)		Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency			
80. Summary of Action required and observed (if any)											
Required actions		Timeframe (e.g in a week)		Responsible Party			Monitoring (to be completed if inspection/monitoring indicates actions are required)				
							Actions implemented:				

Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor	Supervision Consultant
			Follow-up action required:
			Prepared by:
Monitored by:	Ho Van Nghiem		Date:
Signature:			Date: 28 June 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- | | |
|--------------------------------------|---------------------------------------|
| 1. Very good (meet all requirements) | 4. Poor (take few measures) |
| 2. Good (take main measures)) | 5. Very poor (take very few measures) |
| 3. Medium (take several measures) | |

**SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD
AT CONSTRUCTION SITE –CONSTRUCTION OF SON TAY SUBSTATION**

PROJECT: Rehabilitation of Son Tay 110KV substation-E1.7		Implementing agency: HANOI DPMB	
Component: Package No. ADB-HNPC-ST-W01		Supervising agency: Engineering Construction design investigate JSC	
Location: Site Office and Work-camp, Construction sites of substation		Contractor: Joint venture Hanoi Electric Power Service & Development Investment Ltd & Power Industry Construction JSC.	
Date: 28/05/2016		Phase: Construction (01/05/2016-28/05/2016)	
Report Period:			
81. Contractor			
Contractor Environmental Awareness	Yes/No	Required actions	Contractor's responsibility/ Comments
Contractor is aware of mitigation requirements?	Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well	Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB
Contractor has a copy of EMP?	Yes	Keep copies of EMP, environment documents, permits in site offices.	Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.
82. Compliance of inspection of mitigation measures			
Impact/Mitigation measures		Approved by: ADB and HANOI DPMB	
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location
			Required actions
			Contractor's responsibility/Comments
			Implementing agency
			Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with the welfare or -Sites are located inside the subproject area so that they do not interfere with the welfare or - Wastewater flows into toilet area. A wastewater settle
			Well implemented
			Contractor
			Supervision Consultant

			social cohesion of surrounding communities	chamber before discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	-The excavated area was limited to the area needed for construction only.. -Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant

7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work at site. - Fuel fills in transformer.	- All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	- All vehicles and loads at site.	- All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered.	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety		2		- Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working	- Well implemented	Contractor	Supervision Consultant

	Yes		- At site	<p>environment</p> <ul style="list-style-type: none"> - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. <p>Provided medical and first aid facilities together with a person qualified in first aid.</p>			
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	<p>Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.</p>	- Well implemented	Contractor	Supervision Consultant
12) Public access to site	Yes	2	-At site	<ul style="list-style-type: none"> -Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. <p>Visitors were warned against site hazards to avoid possible accident</p>	- Well implemented	Contractor	Supervision Consultant
13) Community and worker health and safety	Yes	2	At site and camp	<p>-Workers have been educated on the social problems. and measures of preventing</p>	- Well implemented	Contractor	Supervision Consultant

												HIV/AIDS; -Workers in camps are provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;							
83. Ambient Environment											Approved by:								
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency									
84. Environmental Incidents During Reporting Period (if any)											Approved by:								
Environmental Incidents (Accidents, spills... complaint)		Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency											
85. Summary of Action required and observed (if any)																			
Required actions		Timeframe (e.g in a week)	Responsible Party			Monitoring (to be completed if inspection/monitoring indicates actions are required)													
						Actions implemented:													

Provide suitable latrines as required by ADB	Immediately implemented	Contractor	Supervision Consultant
Provide dangerous warning signs at storage of fuel	Immediately implemented	Contractor	Supervision Consultant
			Follow-up action required:
			Prepared by:
Monitored by:	Phan Thi Kim Anh		Date:
Signature:			Date: 28 May 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- | | |
|--------------------------------------|---------------------------------------|
| 1. Very good (meet all requirements) | 4. Poor (take few measures) |
| 2. Good (take main measures)) | 5. Very poor (take very few measures) |
| 3. Medium (take several measures) | |

SITE ENVIRONMENTAL COMPLIANCE INSPECTION AND MONITORING RECORD AT CONSTRUCTION SITE –CONSTRUCTION OF SON TAY SUBSTATION

PROJECT: Rehabilitation of Son Tay 110KV substation-E1.7		Implementing agency: HANOI DPMB					
Component: Package No. ADB-HNPC-ST-W01		Supervising agency: Engineering Construction design investigate JSC					
Location: Site Office and Work-camp, Construction sites of substation		Contractor: Joint venture Hanoi Electric Power Service & Development Investment Ltd & Power Industry Construction JSC.					
Date: 28/06/2016		Phase: Construction (01/06/2016-28/06/2016)					
Report Period:							
86. Contractor							
Contractor Environmental Awareness	Yes/No	Required actions	Contractor's responsibility/ Comments				
Contractor is aware of mitigation requirements?	Yes	Complying the commitments stated in Bidding document and Contractor's EMP as well	Contractors are requested to prepare EMP and as requirement stated in contract signed with DPMB				
Contractor has a copy of EMP?	Yes	Keep copies of EMP, environment documents, permits in site offices.	Contractor has responsibility of consequences and measures applied by Employer due to the breach of the contract.				
87. Compliance of inspection of mitigation measures							
Impact/Mitigation measures		<u>Approved by:</u> ADB and HANOI DPMB					
(From EMP list all mitigation measures of environmental impacts which need to be completed)	Mitigation taken Yes/No	Mitigation effectiveness (1 to 5)	Impact Observed/ Location	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
1) Establishment of contractor's facilities (camps, offices, quarries, concrete batching areas etc).	Yes	1	-Sites are located inside the subproject area so that they do not interfere with	-Sites are located inside the subproject area so that they do not interfere with the welfare or social cohesion of surrounding communities - Wastewater flows into toilet	Well implemented	Contractor	Supervision Consultant

			the welfare or social cohesion of surrounding communities	area. A wastewater settle chamber before discharging into to surface water bodies is needed -Contractor's storage facilities have been surrounded by a security fence.			
2) Demarcation and clearing of RoW and ancillary facilities	Yes	2	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	The subproject site is bounded by fence. No clearance of vegetation and other facilities is needed	Well implemented	Contractor	Supervision Consultant
3) Preparation of site: excavation, removal and disposal of unusable (incompetent) materials	Yes	2	-The excavated area was limited to the area needed for construction only.	- The excavated area was limited to the area needed for construction only.. - Excavated material was disposed of outside and away from the work area.	Well implemented	Contractor	Supervision Consultant
4) Dust management	Yes	2	Truck transporting construction material; construction site	The contractor has applied dust control measures: covered truck transporting construction material; made fence surrounding construction site; covered construction material piles ect.	Well implemented	Contractor	Supervision Consultant
5) Noise and vibration	Yes	2	Construction site	- The work generating big noise is implemented at daylight hours only. - Noise is managed not to exceed 55dBA at boundary of any residential area between 6hr and 21h00 and 45 dBA between 21h00 and 06h00;	Well implemented	Contractor	Supervision Consultant
6) Waste water from construction site	Yes	2	Construction site	Oil and fuel from machinery was collected and disposed to a regulated site	Well implemented	Contractor	Supervision Consultant

7) Prevention of soil erosion on construction site; Disposal of site waste	Yes	2	- No soil erosion occurred	All waste materials need to collect and sorted into two categories (i). those that can be recycled and (ii) those that need to go to an approved landfill site for disposal;	Well implemented	Contractor	Supervision Consultant
8) Storage and handling of: fuel and lubricants	Yes	2	- Fuel for all machine work at site. - Fuel fills in transformer.	- All fuel storage areas are securely fenced and provided with oil and water separators. Fuel hoses and shut off valve to be locked. - Fuel is stored in properly sealed containers. Regularly check its locks to prevent fuel from running over to environment. - All waste oil and oil filters was collected and if possible recycled, otherwise to be disposed of to landfills - The contractor has trained refueling personnel in these procedures. The contractor has developed an accidental spill handling action plan	- Well implemented	Contractor	Supervision Consultant
9) Community Safety from increased vehicle movements	Yes	2	All vehicles and loads at site.	- All vehicles were properly maintained and operated in accordance with transportation laws. - All loads were properly secured and fugitive loads to be covered.	- Well implemented	Contractor	Supervision Consultant
10) Workplace health and safety		2		- Contractor has abided Vietnamese Labor Code as amended 2002 as follow:. - Provided workers be with safety working environment	- Well implemented	Contractor	Supervision Consultant

	Yes		- At site	<ul style="list-style-type: none"> - Not allow drugs or alcohol on-site; - Control noise and dust provided all workers with safety equipment appropriate for the task they are employed. - The workers are to be supplied on-site with: Potable water, sanitary toilet, washing and showering facilities. - Prepared work safety regulation for each activity - Before execution, workers need to be introduced and explained site safety procedures. <p>Provided medical and first aid facilities together with a person qualified in first aid.</p>			
11) Chance discovery of archaeological and cultural sites	Yes	2	At site and local commune	Chance discoveries will be notified to the SE who will report to the EO. EO informs the Department of Culture-Sport and Tourism to deal with the chance of discoveries.	- Well implemented	Contractor	Supervision Consultant
12) Public access to site	Yes	2	-At site	<ul style="list-style-type: none"> -Erect warning signs and barriers around work areas. -Site could only be accessed with permission of contractor. <p>Visitors were warned against site hazards to avoid possible accident</p>	- Well implemented	Contractor	Supervision Consultant
13) Community and worker health and safety	Yes	2	At site and camp	<ul style="list-style-type: none"> -Workers have been educated on the social problems. and measures of preventing HIV/AIDS; -Workers in camps are 	- Well implemented	Contractor	Supervision Consultant

							provided, safe water and hygienic bathing and cooking; -Workers have been equipped with labor protecting equipment and wear them during working time. -First aid, medicines are available at site and camps for workers; Dust bins to collect wastes are provided in worker camps;			
88. Ambient Environment								Approved by:		
Parameters	Date/Location	Measured by	Monitoring Equipment	Result	Standard	% exceed	Required actions	Contractor's responsibility/Comments	Implementing agency	Supervising agency
89. Environmental Incidents During Reporting Period (if any)								Approved by:		
Environmental Incidents (Accidents, spills... complaint)		Date/Location	Report by	Description/Location	Executed actions	Follow-up Required actions	Implementing agency	Supervising agency		
90. Summary of Action required and observed (if any)										
Required actions		Timeframe (e.g in a week)		Responsible Party			Monitoring (to be completed if inspection/monitoring indicates actions are required)			
							Actions implemented:			
Provide suitable latrines as required by ADB		Immediately implemented		Contractor			Supervision Consultant			
Provide dangerous warning signs at storage of fuel		Immediately implemented		Contractor			Supervision Consultant			
							Follow-up action required:			
							Prepared by:			

Monitored by:	Phan Thi Kim Anh		Date:
Signature:			Date: 28 June 2016
Notes:			
Attachment: (pictures of construction site)			

[1] Mitigation Effectiveness Rating Criteria (Indicative examples)

- 1. Very good (meet all requirements)
- 2. Good (take main measures))
- 3. Medium (take several measures)

- 4. Poor (take few measures)
- 5. Very poor (take very few measures)