

Environmental Monitoring Report

Semestral Report
February 2019

Lao PDR: Greater Mekong Sub-region East-West Economic Corridor Towns Development Project

Prepared by Department of Housing and Urban, Ministry of Public Works and Transport, Lao PDR
for the Asian Development Bank.

Semi-Annual Environmental Safeguards Monitoring Report

ADB LOAN No.2931 – LAO(SF)
ADB GRANT No. 0313 – LAO(SF) AND NO. 0314 – LAO(UEIF)
GMS EAST-WEST ECONOMIC CORRIDOR
TOWNS DEVELOPMENT PROJECT



SEMI-ANNUAL ENVIRONMENTAL SAFEGUARDS MONITORING REPORT
AUGUST-DECEMBER, 2018

Prepared by the Project Management Unit of Department of Public Works and Transports Savannakhet, Province for the Ministry of Public Works and Transports and the Asian Development Bank.

NOTE:

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

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I. EXECUTIVE SUMMARY

A. BRIEF DESCRIPTION

1. The discussion below presents the summary description of the status of implementation of the environmental safeguards in the sub-projects during the monitoring period 01 August to 31 December 2018.

- a. The IEEs for all subprojects, including the Mekong River Embankment and Solid Waste Management and Wastewater Management-HLK sub-projects was updated in September 2018 and officially submitted to PMU and ADB on 29 November 2018. As of 31 December 2018, ADB has yet to comment on the said safeguard documents;
- b. The EMP for Mekong River Embankment subproject was submitted to PMU and ADB on 29 November 2018 and as of 31 December 2018 ADB has yet to comment on the said safeguard document. The said EMP was approved by PoNRE on 12 October 2018 and the requisite certificate secured. As per requirement of the Safeguards Policy Statement (SPS), 2009 of the ADB, the final EMP was incorporated in the tender documents for the construction of the Mekong River Embankment.
- c. The requisite Pre-construction Public Consultation (Environmental Safeguards) was conducted for the Wastewater Management-HLK Subproject on 01 August 2018. This is in compliance to the IEE and EMP of the sub-project and the SPS, 2009 of the Bank and the national environmental regulations of the Government of Laos (GoL).
- d. An internal environmental audit through interviews with the affected persons along the alignment of the Fa Ngum Road, Kaysonephomvihane Road, Phine Urban Road and Dansavan Urban Road sub-projects were conducted from 07 to 11 September 2018. During the said internal environmental audit, there were no adverse findings or major issues and concerns raised by the Aps.
- e. The PoNRE conducted an environmental audit of the Fa Ngum Road, Kaysone Phomvihane Road, Phine Urban Road, Dansavan Urban Road, Kaysone Phomvihane Wastewater Management and Kaysone Phomvihane Solid Waste Management sub-projects from 11 to 18 October 2018. The findings of the environmental audit of PoNRE is the implementation of the environmental management in the sub-projects are good but can still be improved further.
- f. Road 8 Construction Enterprise – Phoukong Construction Company and Tay Troung Son Construction Sole Co., Ltd (TSC) JV and Champakham Road-Bridge Building Construction and Maintenance Co., Ltd, Contractors for Kaysone Phomvihane Road and Fa Ngum Road respectively, conducted the required public consultations during the construction period on 07 and 11 September 2018; 09 November 2018 and 16 December 2018 in their respective Contract areas. They provided the stakeholders and affected persons (APs) with an update on the status of the works and the plan for succeeding works, environmental health and safety measures being implemented. Issue and concerns of the stakeholders and APs were also elicited during the Public Consultations. The consultations were organized as per recommendation of the PMU and CSC-NES to provide the stakeholders and APs with the venue to

provide feedback, raise issues and concerns about environmental matters directly to the Contractors, PMU and CSC.

- g. The Environmental Training was conducted on 27 to 28 December 2018. The Environmental Training had as participants the appointed Contractors of the sub-projects, Officers and Staff of the PMU and Officers and Staff of PoNRE. The Environmental Training was organized and conducted by the Construction Supervision Consultants (CSC) with assistance from the Savannaketh University.
- h. The CSC-NES conducted regular monthly environmental monitoring of the sub-projects including coordination with the relevant government agencies concerned with the implementation of the sub-projects, participation in missions of the Bank and joint monitoring with the PoNRE Savannaketh.
- i. The required Grievance logbook has been designed and provided to each subproject for proper recording of grievances that the stakeholders and APs may have relative to environmental and social/resettlement issues and concerns accruing from the implementation of the sub-projects.

2. Table 1 below presents the matrix of issues and concerns raised by ADB in their review and compliance monitoring of the Project and the response and action taken by the CSC and PMU to address the identified issues and concerns.

TABLE 1. ISSUES AND CONCERNS AND RESPONSE AND ACTION TAKEN

ITEM	ISSUES AND CONCERNS	RESPONSE/ACTION TAKEN
1	IEE to be updated to reflect DED for landfill and environmental compliance audit of existing dumpsite, drainage, flood protection and Mekong riverbank protection.	The IEEs for all the subprojects were updated and revised and submitted to Ms. Bingle E. Villanueva and all concerned parties on September 21, 2018 and the final IEEs for all the sub-projects were officially submitted to PMU and ADB on 29 November 2018.
2	DED for landfill to respond to findings of Environmental Compliance Audit, e.g. potential heavy metal contamination from dumpsite.	Based on the findings of the Environmental Compliance Audit, the PMU revised the DED for the Landfill a drainage system to collect and treat the liquid waste and leachate material that will be produced in the Landfill. The revised design will also include solid waste segregation and composting system for the collected waste.
3	1st Semi-Annual Environmental Safeguards Monitoring Report to be submitted by 15 July 2018.	As per information from Mr. Alexander, he already responded to ADB Environmental Safeguards Specialist Genevieve O' Farell on this matter and that the 1st Semi-Annual Environmental Safeguards Monitoring Report was submitted on 01 September 2018 as Annex G in the 2nd Quarter Progress Report.
4	Corrective health and safety actions, repair of damage to pre-project condition, maintenance of access for affected households and provision of adequate temporary drainage for	The Contractors for the sub-projects were instructed to maintain, at all times, access to properties and facilities of all APs and stakeholders in their areas of construction. Moreover, the Contractors were also directed

ITEM	ISSUES AND CONCERNS	RESPONSE/ACTION TAKEN
	urban roads/drainage projects in Kaysone Phomvihanh, Fa Ngum, Dansavanh and Phine.	to maintain and ensure provision, at all times, of adequate permanent/temporary drainage channels for the urban roads/drainage projects in Kaysone Phomvihanh, Fa Ngum, Dansavanh and Phine so as not to adversely affect the communities in the areas. Succeeding monitoring showed that the concerned Contractors addressed this matter accordingly and satisfactorily.
5	Periodic environmental quality monitoring (air and noise) to be carried out as per agreed EMPs and results presented in semi-annual environmental monitoring reports.	LAO-UAE Laboratory and Environmental Services Company Limited have been engaged by Road 8 Construction Enterprise – Phoukong Construction Company - Kaysone Phomvihane and Phine Urban Roads; Tay Troung Son Construction Sole Co., Ltd (TSC) JV and Champakham Road-Bridge Building Construction and Maintenance Co., Ltd, Contractors - Fa Ngum Road; Noukham Construction Co., Ltd - Dansavan Urban Road to conduct the periodic monthly environmental quality monitoring for air quality and ambient noise measurements. It should be noted that the baseline measurements were conducted for the abovementioned sub-projects in June 2018. Further, the baseline measurements for the Kaysone Phomvihane Wastewater Management was conducted in November 2018.
6	Each Contractor to appoint Environment, Health and Safety Focal Point to manage, monitor and report on environment, occupational and community health and safety requirements as per the approved EMPs and Construction EMPs (CEMP).	All Contractors of the subprojects have engaged the required Environmental, Health and Safety Officer (EHSO) who will be responsible for the implementation of the approved CEMP, conduct of regular monitoring, prepare the requisite safeguards reports and implement the prescribed GRM and Socialization.
7	Approved CEMPs for subprojects 4, 5 and 6 to be shared with ADB for information. CEMPs to include specific measures in respect of sensitive environmental receptors e.g. villages, hospitals and schools and to identify all locations for quarries, borrow pits, spoil disposal and asphalt mixing plants to ensure located at distance from sensitive receptors as specified in EMP.	As of 31 December 2018, the CEMPs of the following sub-projects have been already approved: <ul style="list-style-type: none"> ▪ Kaysone Phomvihane Road ▪ Phine Urban Road ▪ Fa Ngum Road ▪ Dansavan Urban Road ▪ Kaysone Phomvihane Solid Waste Management The CEMP for the Wastewater Management-

ITEM	ISSUES AND CONCERNS	RESPONSE/ACTION TAKEN
		<p>HLK Sub-Project is being revised and is yet to be approved.</p> <p>The CEMP for the following Sub-Projects have already been shared with ADB:</p> <ul style="list-style-type: none"> ▪ Kaysone Phomvihane Road ▪ Phine Urban Road ▪ Dansavan Urban Road <p>The CEMPs for Fa Ngum Road and Kaysone Phomvihane Solid Waste Management Sub-Projects have yet to be shared with ADB.</p>
8	Semi-annual environmental monitoring report to include records of environmental training for reporting period and planned training for next reporting period.	The first official training was conducted from 27 to 28 December 2018. Participants included the Contractors for the sub-projects, Officers and Staff of PMU, PoNRE, Housing and Urban Planning, Roads and Water Transport Sections.
9	Grievance redress mechanism to be strengthened and affected persons to be made aware through additional public consultation of GRM entry points and procedures. Sign boards with contact details for GRM focal points (contractor, PIU, etc) to be installed at each construction camp and each active construction site.	As discussed in previous sections, Public Consultations were conducted to inform the stakeholders and APs of the Project and the statues of implementation of the sub-projects and the process and procedures of the GRM. Signboards containing the contact details of the local GRM Focal Points, Contractors, Consultants and PMU have installed in the respective areas of the subprojects. Leaflets containing details and website of the project and contact details of all parties concerned were distributed to public.

B. PLANNED ACTION FOR SUCCEEDING MONITORING PERIOD

3. The following activities is planned for the next monitoring period for the Project:
 - a. Continue with the regular monthly environmental safeguards monitoring as per approved IEEs and EMPs of the sub-projects;
 - b. Supervise the conduct of the quarterly environmental quality sampling for air quality, ambient noise and water quality in the identified sampling/monitoring stations;
 - c. Review and evaluate the CEMP for WWM-HLK and OHSP for SWM and WWM-HLK sub-projects;
 - d. Review and evaluate the monthly environmental safeguards monitoring report of the appointed Contractors for the sub-projects;
 - e. Conduct the required induction/training of new Contractors and Contractors with new Environmental Health and Safety Officers (EHSO) on the requisite environmental management program for the sub-projects and the environmental safeguards requirements of the Bank and the Government of Laos.

II. PROJECT AND GENERAL SAFEGUARDS OVERVIEW

A. PROJECT BACKGROUND

4. The participating corridor towns of Kaysone Phomvihane, Phine, and Dansavanh in the Lao PDR face the pressing task of coping with the demands of rapidly growing and expanding urban areas. Local authorities want to plan and manage urban growth using an integrated approach, operate and maintain urban environmental and economic infrastructure, and efficiently deliver municipal services. Despite policy reforms to promote decentralization, local institutional capacity has not kept pace with urban sector development and economic growth. With increasing trade and traffic flows, the capacity of the corridor towns to manage local economic development in an environmentally sustainable manner urgently needs to be strengthened.

5. The expected impact of the project is for the towns of Kaysone Phomvihane, Phine, and Dansavanh to become centers of trade and investment in the EWEC, thereby contributing to the transformation of transport corridors to economic corridors in the GMS. The expected outcome is adequate essential urban infrastructure and services in the project towns. The drainage, septage management, and river embankment protection subprojects will contribute to increased climate resilience of the participating towns.

6. The key outputs of the project are as follows: (i) adoption and implementation of Strategic Local Economic Development Plans (SLEDs)¹ in the project towns, (ii) implementation of priority urban infrastructure investments, and (iii) strengthened institutional capacities for urban development. The priority subprojects for infrastructure investments were identified based on (i) consistency with project's overall goals and objectives, (ii) potential impact in contributing to economic growth and level of competitiveness, and (iii) the expressed interest and commitment of the executing agency to provide necessary resources, criteria that were discussed during the national workshops with project stakeholders.

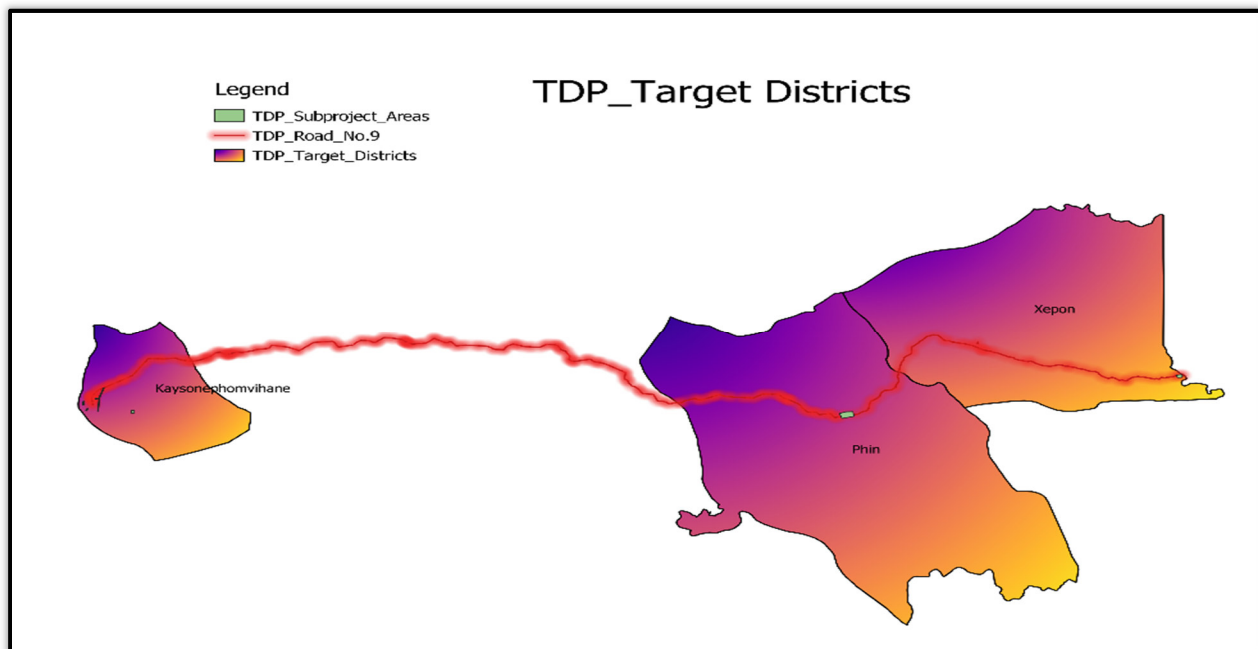
7. The Project consists of seven (7) sub-projects which are identified priority small infrastructure development works. (See Figure 1 for Target Districts). The details of the sub-projects are presented in the succeeding sections.

- a. **Fa Ngum Road Sub-Project (Kaysonephomvihane Urban Roads) (NCB-4.1B)**
 - Fa Ngum Road is composed of three (3) main roads with a total length 2,149 meters. The Contractor for this sub-project is Champakham Road and Bridge Construction Co. Ltd (CPK). The total cost is 2,289,611.17 USD and the contract duration is 24 months commencing 14 November 2017.
- b. **Kaysonephomvihane Road Sub-Project (Kaysonephomvihane Urban Roads)**

¹ The SLEDs represent a new form of planning document developed for the purpose of combining economic development planning with urban infrastructure investments. The SLEDs identify economic drivers and provide justification for infrastructure investments under the project, and by other sources.

- Kaysonephomvihane Road has total length 6,182 meters, with total cost 7,546,207.00 USD. Contractor for this sub-project is Road No. 8 Construction Enterprise with PK and TSC JV. Contract duration is 24 months commencing 11 November 2017.

FIGURE 1. TARGET DISTRICTS OF TOWNS DEVELOPMENT PROJECT



c. Phine Urban Road Sub-Project (ICB-4.3)

- Phine Urban Roads has a total length of 9,978 meters and a total cost of 4,010,613.00 USD. The construction of the sub-project was awarded to JV of Road No. 8 Construction Enterprise with PK and TSC. The Contract duration is 24 months commencing on 01 November 2017.

d. Dansavan Urban Road Sub-Project (NCB-4.2)

- Dansavan Urban Roads has a total length of 3,884 meters with total cost of 2,312,621.58 USD. The Contractor for the sub-project is Noukham Construction Co., Ltd. The Contract duration is 24 months commencing on 11 November 2017.

e. Kaysonaphomvihane Solid Waste Management Sub-Project (NCB-2.1)

- The total area covered by the sub-project is 10 hectares, primarily for the improvement of the existing landfill at a total cost 1,659,205.10 USD. VSP Construction Company Ltd was awarded the contract for the construction of the sub-project with a contract duration of 24 months commencing 22 March 2018.

f. Wastewater Management-Houylongkong Channel Sub-Project (NCB-1.1)

- This sub-project involves the construction of a HLK channel with a length of 830 meters and a pumping station with an automatic gate a total cost of 1,673,128.31 USD. The appointed Contractor is JV of Road No. 8 Construction Enterprise with PK and TSC. The Contract duration is 24 months commencing on 22 March 2018.

g. Mekong River's Embankment Sub-Project

- This subproject the construction of an embankment with a total length of 980 meters and a width of 50 meters from existing road to Mekong River.

B. PROJECT PROGRESS

8. The progress of implementation of the sub-projects as of 31 December 2018 is presented in Table 2 below.

TABLE 2. ACTUAL ACCOMPLISHMENT OF SUB-PROJECTS, 31 DECEMBER 2018

NO	SUB-PROJECT	PROGRESS (%)	
		ACTUAL	PLANNED
1	Fa Ngum Road (Kaysonephomvihane Urban Roads) (NCB-4.1B)	47.00	57.60
2	Kaysonephomvihane Road (Kaysonephomvihane Urban Roads)	40.10	55.50
3	Phine Urban Road (ICB-4.3)	52.64	49.10
4	Dansavan Urban Road (NCB-4.2)	60.00	53.95
5	Kaysonephomvihane Solid Waste Management (NCB-2.1)	21.00	28.47
6	Wastewater Management - Houylongkong Channel (NCB-1.1)	8.15	25.50
7	Mekong River Embankment	Not yet commenced	

C. ENVIRONMENTAL SAFEGUARD PLANS IMPLEMENTATION ARRANGEMENTS

9. The primary management framework overseeing the implementation of the environmental management plan (EMP) is shown in Figure 2 and is defined by the following entities:

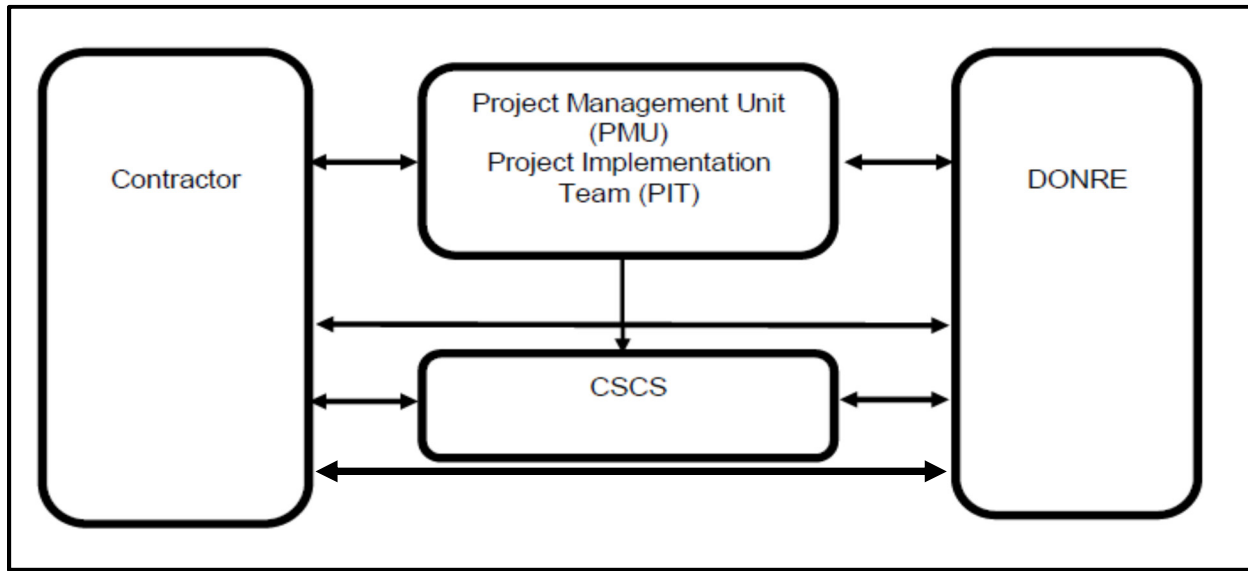
- a. Ministry of Public Works and Transports (MPWT) who is the executing agency (EA) of the subproject;
- b. The Provincial Department of Public Works and Transport (PDPWT) Savannaketh Province who is the implementing agency (IA) of subproject; The
- c. Project Management Unit (PMU) formed by the IA to oversee implementation of the subproject;
- d. The Project Implementation Team (PIT) established in each district to coordinate project activities at the district level.

10. The EA/PMU will appoint Environmental Safeguard Specialist (ESS) who is responsible for overall environment and social safeguard of project and representative of PMU for EMP implementation and monitoring.

11. A Construction Supervision Consulting Services (CSCS) Consultant with environmental expertise will be appointed. The CSCS will be responsible to ensure that the Contractor implements the EMP during the Contract Period, to establish monitoring program, review the EMP, and supervise its implementation. During the construction phase, the Contractor will generally be responsible for implementation of the mitigation measures as specified in the mitigation plan and the CSCS will supervise the implementation.

12. The Contractor's Environmental Health and Safety Officer (EHSO) will be the construction contractor's focal point for all environmental matters and is routinely on-site for the duration of the construction works. The EHSO is an appropriately briefed technical officer (often the CC site engineer). The EHSO carries out regular inspections of the Construction activities in relation to environmental issues, and provides day-to-day advice to contractor personnel about environmental issues. The EHSO will have the authority to instruct any area of the Contractor's operations to implement the requirements of the Environmental Management Plan (EMP).

FIGURE 2. ORGANIZATIONAL CHART FOR EMP IMPLEMENTATION



13. The responsibilities of the IA/PMU are summarized below:
- a. Overall responsibility for project implementation and coordination of project activities;
 - b. Supervise the activities of the Project Implementation Teams organized within the District Authorities;
 - c. Undertake procurement of goods, works and services including recruitment of consultants for project management support, capacity development and training, independent audit and safeguards monitoring;
 - d. Develop and adapt a project performance management system in monitoring project activities using indicators and parameters in the design and monitoring framework;
 - e. Obtain necessary approvals and clearances of environment and resettlement from MONRE prior to awarding of civil works contracts;
 - f. Manage separate project financial records and accounts, and prepare financial reports;
 - g. Supervise the implementation of social and environmental safeguards and including timely disclosure of safeguards documents;
 - h. Supervise the implementation of the Consultation and Participation Plan, Gender Action Plan, and Stakeholder Communication Strategy;
 - i. Supervise the implementation of the resettlement plans including adequate measures to mitigate adverse resettlement impacts;
 - j. Ensure that environment management plans and gender considerations are incorporated in the detailed engineering designs and included in the civil works contracts;
 - k. Undertake regular quality control inspection of project facilities;

- l. Manage the handover of project facilities to agencies responsible for operation and maintenance;
 - m. Prepare and submit quarterly and annual physical and financial progress reports to the EA; and
 - n. Undertake monitoring of compliance of social and environmental safeguards.
14. The PMU and ESS with assistance from the DED will ensure that the EMP becomes part of the construction contract and with assistance from the CSCS that the EMP is implemented and that the Contractor abides by the EMP. The ESS shall undertake regular site inspections and the results shall be recorded and submitted to the relevant authorities as part of progress reporting.
15. The responsibilities of the PIT are summarized below:
- a. Coordinate the implementation of project activities at the district level;
 - b. Ensure the implementation of the approved work plans and program of activities;
 - c. Prepare and submit regular quarterly and annual physical and financial progress reports to the PMU;
 - d. Oversee and coordinate civil works and construction activities;
 - e. Ensure the implementation of social and environmental safeguards and including timely disclosure of safeguards documents;
 - f. Ensure the implementation of the Consultation and Participation Plan, Gender Action Plan, and Stakeholder Communication Strategy;
 - g. Ensure implementation of resettlement plans including adequate measures to mitigate adverse resettlement impacts;
 - h. Coordinate implementation of environmental management plan, and submit regular monitoring reports to the PMU;
 - i. Coordinate the updating of the resettlement plans and monitor implementation of resettlement activities; and
 - j. Undertake monitoring of project activities based on the indicators and parameters in the Design and Monitoring Framework (DMF) and prepare regular reports to the PMU on project achievements.
16. The roles and responsibilities of the Contractor is discussed in the following:
- a. Engage an EHSO who will be responsible for the conduct and implementation of safeguards requirements of the Project, the Bank and the GoL, including the CEMP. The EHSO also will undertake the following tasks:
 - Manage construction activities with diligence and with the awareness that the important objectives are to protect the environment and to minimize construction impacts, by employing the best control mechanisms, procedures and processes within the limits of their economic feasibility;
 - Comply with Lao PDR and ADB and to provide self-monitoring to ensure compliance;
 - Implement internationally recognized good practices;

- Provide effective environmental briefing to construction staff;
- Ensure adherence to the EMP throughout the construction stage;
- Efficiently implement measures outlined in the EMP;
- Prepare and submit regular monitoring reports; and
- Conduct regular monitoring and auditing of activities.

17. The reportorial requirements for the environmental safeguards for the Project is described in Table 3 below.

TABLE 3. REPORT REQUIREMENT FOR EMP MONITORING

REPORT	FREQUENCY	PURPOSE	FROM	TO
Contractor's Environmental Monitoring and Grievance Report	Monthly	Compliance to EMP/CEMP	Contractor	CSCS, PMU
Quarterly Project Progress Report	Quarterly	Confirm EMP Compliance or Issues	CSCS	PMU/PCU
Semi-Annual Environmental Safeguards Monitoring Report	Semi-annually	Adherence to Environmental Covenants	CSCS/PMU	PoNRE/ADB

D. STATUS OF ENVIRONMENTAL SAFEGUARDS DOCUMENTS

18. Table 4 presents the status of the requisite environmental safeguards reports and documents as of 31 December 2018.

TABLE 4. STATUS OF ENVIRONMENTAL SAFEGUARDS DOCUMENTS (EMPs AND IEEs)

NO	SUBPROJECT	IEE	EMP
1	Fa Ngum Road (Kaysonophomvihane Urban Roads) (NCB-4.1B)	Updated IEEs for the sub-projects submitted to ADB on 29 November 2018.	Implementation of the tenets of the approved EMP for the sub-project is on-going.
2	Kaysonophomvihane Road (Kaysonophomvihane Urban Roads)	Updated IEEs for the sub-projects submitted to ADB on 29 November 2018.	Implementation of the tenets of the approved EMP for the sub-project is on-going.
3	Phine Urban Road (ICB-4.3)	Updated IEEs for the sub-projects submitted to ADB on 29 November 2018.	Implementation of the tenets of the approved EMP for the sub-project is on-going.
4	Dansavan Urban Road (NCB-4.2)	Updated IEEs for the sub-projects submitted to ADB on 29 November 2018.	Implementation of the tenets of the approved EMP for the sub-project is on-going.
5	Kaysonophomvihane Solid Waste Management (NCB-2.1)	Updated IEEs for the sub-projects submitted to ADB on 29 November 2018.	Approved and integrated in the tender documents for the construction of the sub-project.
6	Wastewater Management - Houylongkong Channel (NCB-1.1)	Updated IEEs for the sub-projects submitted to ADB on 29 November 2018.	Approved and integrated in the tender documents for the construction of the sub-project.
7	Mekong River Embankment	Updated IEEs for the sub-projects submitted to ADB on 29 November 2018.	Submitted to ADB on Nov 2018 and integrated in the tender documents for the construction of the sub-project.

III. ENVIRONMENTAL PERFORMANCE MONITORING

A. STATUS OF EMP IMPLEMENTATION (MITIGATION MEASURES)

19. Table 5 is provides the status of each subproject relevant to the implementation of the approved EMP. Table 6 presents the issues that require for further action from the Contractor while Table 7 presents the occupational health and safety performance of the sub-projects.

TABLE 5. COMPLIANCE WITH EMP REQUIREMENTS (ENVIRONMENTAL PERFORMANCE)

TABLE 7: COMPLIANCE WITH EMP REQUIREMENTS (ENVIRONMENTAL PERFORMANCE)						
EMP REQUIREMENTS	KPRC	FNRC	PURC	DVRC	SWMS	HLKS
PRE-CONSTRUCTION PHASE						
Appointment of EHSO	Ms. Sompheng Boutsana (020 77948540)	Ms. Phonethip Phetkhounphone (02077151111)	Mr. Keolamphone (020 99884421)	Mr. Somlith Puiyavong (030 9898062)	Mr. Souvanh Inthilat (02091375302)	Mr. Khamnoy Kounlavong (02022508800)
CEMP Development and Approval	Approved March 2018	Approved April 2018	Approved March 2018	Approved March 2018	Approved December 2018	Under revision. Target finalization January 2019
OHSP Development and Approval	Approved March 2018	Approved April 2018	Approved March 2018	Approved March 2018	Under revision. Target finalization January 2019	Under revision. Target finalization January 2019
Pre-construction consultation	Conducted	Conducted	Conducted	Conducted	Conducted	Conducted
Baseline Measurements for TSP and PM10 and Ambient Noise	Conducted in June 2018				Applied ECA results	Not required
Baseline Sampling for Surface Water Quality	Not required	Not required	Not required	Not required	Applied ECA results	Conducted in November 2018
Baseline Measurement of NOx/Sox/CO and Baseline Sampling for Groundwater Quality	Not required	Not required	Not required	Not required	Applied ECA results	Not required
Grievance Redress Mechanism Established	Leaflets has been distributed to local people. Sign Posts containing Contact has been installed. Orientation on the GRM Process has been conducted through the requisite with public consultations process. Grievance Lodging and Recording System established.					
Obtain Environmental license for borrow pits	Environmental Certificate secured				Using material from cell for refill material	Same borrow pit with KP road subproject
CONSTRUCTION PHASE						
AMBIENT AIR QUALITY						
Water unpaved areas to mitigate generation of dust	Complied Accordingly Contractor conducts watering six (6) times a day.	Complied Accordingly Contractor conducts watering six (6) times a day for section F1 and four (4) times a day for sections 2A and 2B	Complied Accordingly Contractor conducts watering three to four times a day.	Complied Accordingly Contractor conducts watering three to four times a day.	Complied Accordingly Contractor conducts watering twice day.	Complied Accordingly Contractor conducts watering twice day.
Require contractor to cover material with	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly

EMP REQUIREMENTS	KPRC	FNRC	PURC	DVRC	SWMS	HLKS
tarpaulin while in transit to avoid spillage of material						
Impose speed limits on construction vehicles	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
Regular maintenance on construction machineries and vehicles to control air emission during operation	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
ENVIRONMENTAL SAFEGUARDS MONITORING REPORTORIAL REQUIREMENTS						
Contractor is required to submit report to CSCS before 5th each month	October to December reports not yet submitted	Complied Accordingly	October to December reports not yet submitted	Complied Accordingly		
Air Quality and Ambient Noise Quarterly Monitoring	Complied Accordingly October 2018	Complied Accordingly October 2018	Complied Accordingly October 2018	Complied Accordingly October 2018	Complied Accordingly (TSP/PM10) December 2018	NA Not require
Surface Water Quality Quarterly Monitoring	NA	NA	NA	NA	Complied Conducted December 2018	Planned for February 2018
AMBIENT NOISE MANAGEMENT						
Limit construction activities, particularly operation of noise generating equipment at night	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
Position any stationary equipment that produce high noise level far from sensitive receptor	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
Require drivers to minimize blowing of horn and comply to speed limits	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
SURFACE WATER QUALITY, SOIL EROSION AND STAGNANT WATER MANAGEMENT						
All irrigation canals and channels to be protected the same way as rivers, streams, and lakes.	Complied Accordingly	Complied Accordingly	Channel is blocked and smells bad. Need de-clogging/clean-up.	Complied Accordingly	Complied Accordingly	Dike created stagnant water and bad odor. Need rectification.
No washing or repair of machinery near surface waters.	Complied Accordingly	Complied Accordingly	Washings of concrete mixer directly discharged to waterway. Establish washbays.	Complied Accordingly	Complied Accordingly	Complied

EMP REQUIREMENTS	KPRC	FNRC	PURC	DVRC	SWMS	HLKS
Where relevant, e.g. at borrow pits establish protective coffer dams, berms, plastic sheet fencing, or silt curtains should be placed between all earthworks and surface waters.	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
Earthworks not permitted during the rainy season and should be conducted during dry weather.	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
Oil and fuels should be stored and handled well away from surface waters.	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
SOLID AND HAZARDOUS WASTE MANAGEMENT						
Contractor is required to provide garbage bins with labels and categorize solid waste	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
Disposal sites must be defined with government approval areas	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
All construction sites are required tidy after work and cleanliness	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
Contractor is required to provide Hazardous Waste container: for Collection, storage, transport, and disposal of hazardous waste such as asphalt, used oils, gasoline, paint, and other toxics must follow GoL regulations	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
TREE AND VEGETATION MANAGEMENT						
Restrict tree and vegetation removal within RoWs and no unnecessary cutting of trees.	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly

EMP REQUIREMENTS	KPRC	FNRC	PURC	DVRC	SWMS	HLKS
Contractor is required to submit Tree plantation plan for RoWs and tree species must be native species	Plan being revised Will be submitted January 2019	Complied Accordingly	Plan being prepared	Plan being prepared	Plan being prepared	Not required
PUBLIC SERVICES AND UTILITIES						
Temporary bridge or access road must be provided during construction	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
Informal consultation with local people regarding disruption on construction, power and other utilities	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
Contractors require to plan with utility company removal and re-installation of utilities	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
ASPHALT PRODUCTION, TRANSPORT AND UTILIZATION						
Locate asphalt plant at approved sites and well away from all settlements, cultural areas, sensitive (e.g., schools, hospitals), and ecologically important areas.	Complied Accordingly	Location still to be defined	Location still to be defined	Location still to be defined	No asphalt work	No asphalt work
Contractors must be well trained in handling and application of bitumen	Complied Accordingly	Location still to be defined	Location still to be defined	Location still to be defined	No asphalt work	No asphalt work
Bitumen should only be spread on designated road beds and all spills should be immediately cleaned	Complied Accordingly	No asphalt work yet	No asphalt work yet	No asphalt work yet	No asphalt work	No asphalt work
CULTURAL PROPERTY OR VALUES AND CHANCE FINDS MANAGEMENT						
Ensure protection of cultural and religious sites during construction	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly
Chance-finds of relics should be reported immediately to site supervisors.	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly

EMP REQUIREMENTS	KPRC	FNRC	PURC	DVRC	SWMS	HLKS
Upon chance find all work should immediately cease, and PMU notified.	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly	Complied Accordingly

TABLE 6. ISSUES FOR FURTHER ACTION

ISSUES	KPRC	FNRC	PURC	DVRC	SWMS	HLKS
Contractors to Submit Tree Plantation Plan	Revise plan and resubmit it to CSCS on or before 30 January 2019	Implement the plan on or before 15 February 2019	Prepare Tree Plantation Plan and submit on or before January 2019	Prepare Tree Plantation Plan and submit on or before January 2019	Prepare Tree Plantation Plan and submit on or before February 2019	
	Complied accordingly	Trees will be planted by June 2019.	Complied accordingly	Complied accordingly	Complied accordingly	
Water Quality Issues/Odor			Construct two ponds to address washing of concrete mixers to mitigate contamination of nearby river on or before 31 December 2018.			Clear diversion channel of all debris and solid waste blocking the flow of water and maintain at all times.
			Construction of ponds on-going.			Bad odor minimized Clearing of channel should be undertaken regularly.
Level of Particulate Matter Exceed National Standards	Conduct watering of unpaved areas six (6) a day.	Conduct watering of unpaved areas six (6) a day.	Conduct watering of unpaved areas four (4) a day.	Conduct watering of unpaved areas four (4) a day.		
	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly		
CEMP Approval						Prepare and submit to CSCS for review and approval on or before 28 February 2019.
						Complied accordingly
OHSP Approval					Submit revised version to CSCS on or before 28 February 2019.	Submit revised version to CSCS on or before 28 February 2019.
					Complied	Complied

ISSUES	KPRC	FNRC	PURC	DVRC	SWMS	HLKS
					accordingly	accordingly

TABLE 7. OCCUPATIONAL HEALTH AND SAFETY PERFORMANCE

REQUIREMENTS	KPRC	FNRC	PURC	DVRC	SWMS	HLKS
WORKER'S HEALTH AND SAFETY						
PPEs requirement for workers such as helmet, boots, vest, mask, gloves.	Complied accordingly	Complied accordingly	Some workers not wear the PPEs	Complied accordingly	Complied accordingly	Complied accordingly
Worker's facilities with appropriate amenities such as clean drinking water, separate women and men toilets and good accommodations.	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly
Regular safety work orientation	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Non Compliance	Complied accordingly
Health, STD, HIV training or seminar	Complied accordingly	Non Compliance	Non Compliance	Complied accordingly	Non Compliance	Non Compliance
CONTINGENCY AND EMERGENCY PREPAREDNESS REQUIREMENTS						
Contact details of nearest emergency services	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	No OHSP submitted to date	No OHSP submitted to date
Fire extinguisher available in site office and facilities	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	OHSP not yet finalized. Need to incorporate comments of consultant
First Aid kits in construction sites, camps	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	OHSP not yet finalized.
Emergency responsible team/person	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly
PUBLIC HEALTH AND SAFETY AND TRAFFIC MANAGEMENT						
STD, HIV, Gender seminar for communities near work areas	Complied accordingly	Non Compliance No Expert	Non Compliance No Expert	Complied accordingly	Non Compliance No Expert	Non Compliance No Expert
Warning light and reflectorized signages should be installed in the construction	Complied accordingly	Complied accordingly	Non Compliance	Non Compliance	No requirement	No requirement
Closed sections/ detour areas defined	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	No requirement	No requirement

REQUIREMENTS	KPRC	FNRC	PURC	DVRC	SWMS	HLKS
and public notified.						
Standardized signages installed	Complied accordingly	Complied accordingly	Non Compliance Signages not standard. Some areas no signages	Complied accordingly	Complied accordingly	partial not follow the standard
Working and traffic zone must be defined and clearly demarcated in plan	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	NA	NA
Flag persons should be assigned in all work areas.	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	No Not found
Bollards and caution tape installed around work areas.	Complied accordingly	Complied accordingly	Partial Many necessities are not found	Complied accordingly	Complied accordingly	Complied accordingly
Accidents should be properly reported.	Non Compliance Two cases were not report	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly
Contractor is required to follow regulation of Lao Gov and IFC EHS guidelines	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly	Complied accordingly

B. ENVIRONMENT QUALITY MONITORING

1. Air Quality and Ambient Noise

20. Monitoring requirements are set out in detail in the EMP. The environmental quality monitoring program will be conducted on two levels (i) compliance monitoring and (ii) baseline and conduct of monitoring to determine the extent of variations and changes in the levels of pollutants in the environment and other parameters and indicators considering the implementation or operation of the project. The four (4) road and drainage construction in urban areas sub-projects namely: Kaysonphomvihane Road, Fa Ngum Road, Phine Urban Roads and Dansavan Urban Roads sub-projects were required to conduct baseline measurements and quarterly monitoring of air quality (TSP and PM10) and ambient noise levels. Two sampling/monitoring stations for each sub-project were established for the baseline measurements and quarterly monitoring. The details of the sampling/monitoring stations for each sub-project are described in Table 8 below.

TABLE 8. DESCRIPTION OF THE SAMPLING/MONITORING STATIONS, AIR QUALITY AND AMBIENT NOISE LEVELS

MONITORING STATIONS	COORDINATES OF SAMPLING/MONITORING STATIONS		DISTANCE FROM CONSTRUCTION AREA (M)	REMARKS
	AIR QUALITY	AMBIENT NOISE		
Blind People Office, Fa Ngum road	48Q 0474583E 1832199N	48Q 0474572E 1832218N	5.00	This station is located near a hospital and the construction area.
Justice Department, Fa Ngum road	48Q 0475162E 1832281N	48Q 0475147E 1832283N	7.00	This station is located near the government center and the road construction area.
Thippanya Kindergarten-Elementary School, Kaysonphomvihane road	48Q 0475185E 1830715N	48Q 0475182E 1830682N	5.00	This station is located near a school, green area and settlement area and the construction site.
Xaysombath Technology College, Kaysonphomvihane road	48Q 0475374E 1832613N	48Q 475395E 1832637N	7.00	This station is located near a school and settlement area and the construction site.
Phine District Government Office, Phine urban road	48Q 0609176E 1828441N	48Q 0609185E 1828404N	5.00	This station is located near a settlement area and the construction site.
Phine district Hospital, Phine urban road	48Q 0608220E 1827769N	48Q 0608213E 1827782N	20.00	This station is located near a hospital and the construction area.
Dansavanh Village Office	48Q 0668255E 1838841N	48Q 0668255E 1838841N	50.00	This station is located near a settlement area and the road construction site.
Dansavanh Village (No.11711, Snooker club)	48Q 0668202E 1838640N	48Q 0668202E 1838640N	5.00	This station is located near a settlement area and the road construction site.
Dansavanh Village (R-3)	48Q 0668271E 1838709N	48Q 0668263E 1838716N	3.00	This station is located near a settlement area and the road construction site.
Dansavanh Bus station (R-2)	48Q 0668271E 1838709N	48Q 0668005E 1838693N	5.00	This station is located near a bus station and the road construction area.

Note: Lao-UAE Laboratory and Environment Service Co.,Ltd has been engaged for the conduct of the air quality and ambient noise baseline measurements and quarterly monitoring for the four (4) road and drainage construction in urban areas sub-projects.

21. Baseline measurements were conducted for Dansavanh sub-project on 23-24 June 2018; Phine Urban Roads sub-project on 24-25 June 2018; Kaysone sub-project on 26-27 June 2018 and Fa Ngum sub-project on 27-28 June 2018.

22. The first quarterly environmental quality monitoring was been conducted on 01-02 October 2018 for Dansavan Urban Roads sub-project; 02-03 October 2018 for Phine Urban Roads sub-project; 04-05 October 2018 for Kaysonephomvihane and 05-06 October 2018 for Fa Ngum Road sub-project. The results of the Baseline Measurements and 1st Quarterly Environmental quality Monitoring are presented in Figures 3-6.

FIGURE 3. RESULTS OF BASELINE MEASUREMENTS AND 1ST QUARTERLY MONITORING, (TSP)

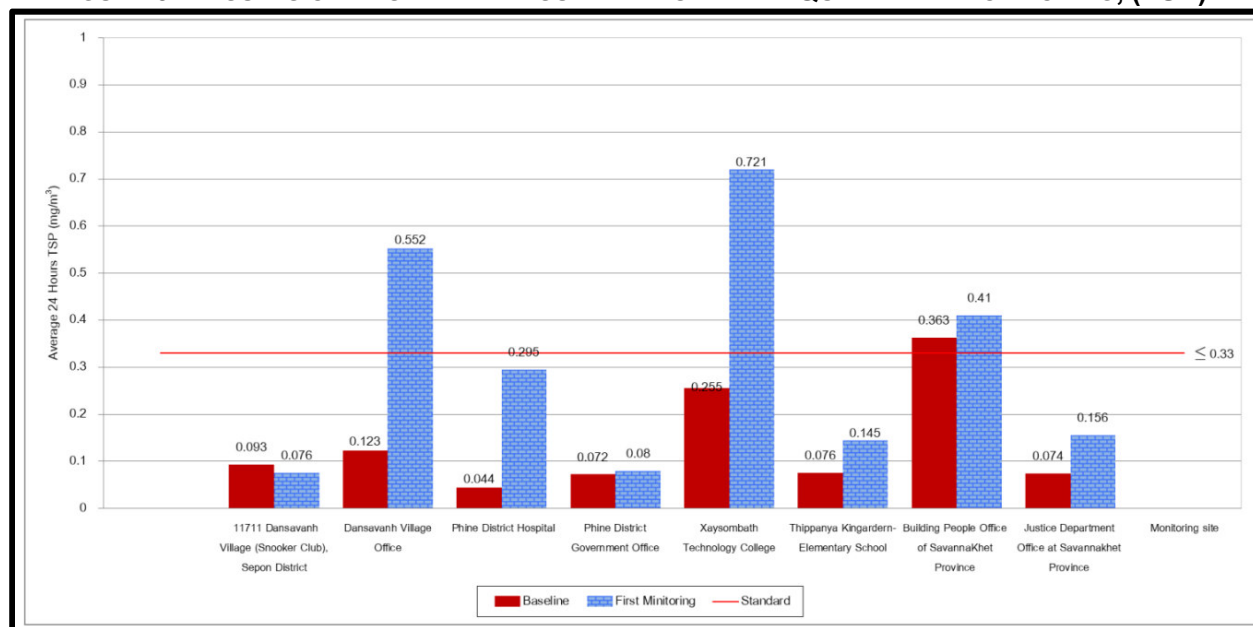


FIGURE 4. RESULTS OF BASELINE MEASUREMENTS AND 1ST QUARTERLY MONITORING, PM10

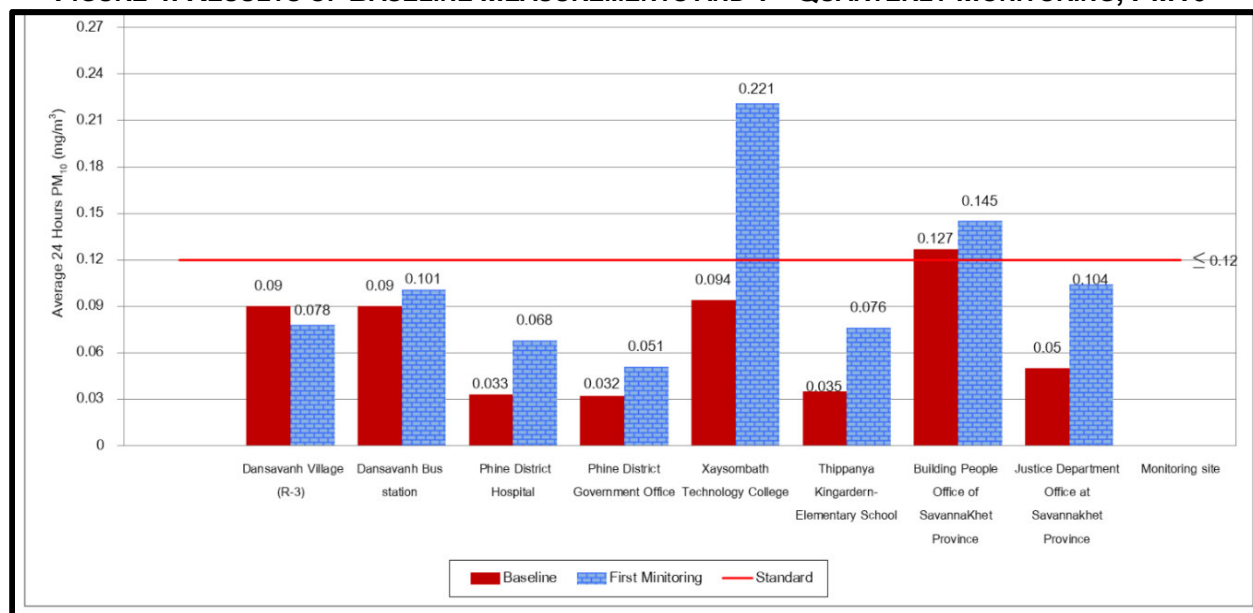


FIGURE 5. RESULTS OF BASELINE MEASUREMENTS AND 1ST QUARTERLY MONITORING, AMBIENT NOISE - LAEQ 24 HOURS

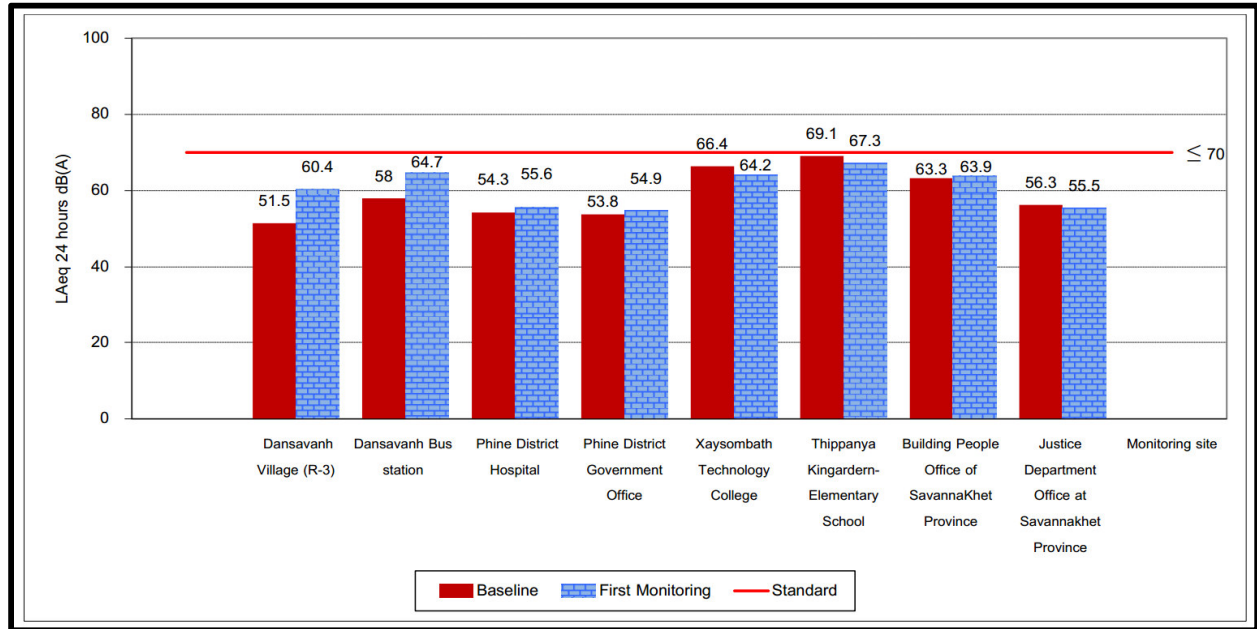
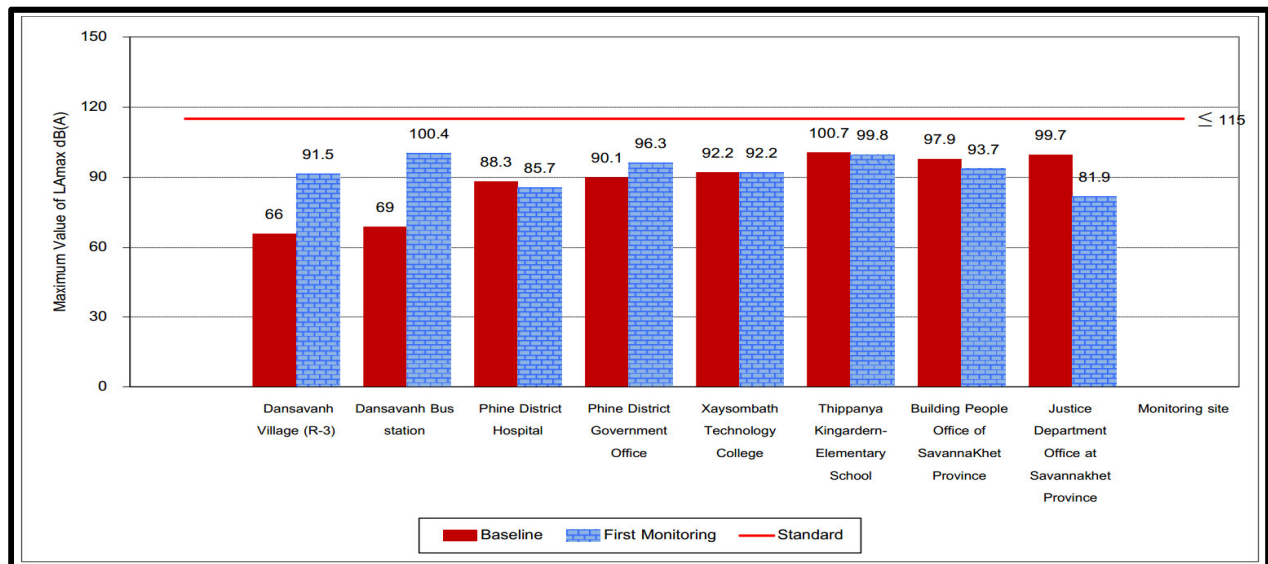


FIGURE 6. RESULTS OF BASELINE MEASUREMENTS AND 1ST QUARTERLY MONITORING, AMBIENT NOISE - LAMAX



23. The Kaysonephomvihan Solid Waste Management sub-project was also required to conduct baseline measurements and quarterly monitoring of ambient air quality at two identified stations within the project area. It was subsequently decided that the results of the Environmental Compliance Audit (ECA) be utilized to establish the baseline levels of the ambient air quality in the sub-project area. On 17 December 2018 the 1st quarterly environmental quality monitoring was conducted for the sub-project. The results of the said monitoring are still not available and will be reported in the succeeding monitoring reports.

2. Surface Water Quality Baseline Sampling

24. Kaysonophomvihan Wastewater Management-HLK sub-project was required to conduct baseline sampling for surface water quality at two (2) locations as stated in the approved EMP. However, during the ADB Mission of November 2018, it was recommended that baseline sampling be conducted at three (3) locations at the upstream of the sub-project site, middle of channel near the sub-project site and downstream of the sub-project site. Table 10 shows presents the results of the baseline sampling for the Kaysonophomvihan Wastewater Management-HLK sub-project on November 15, 2018.

TABLE 9. RESULTS OF BASELINE SAMPLING FOR SURFACE WATER BASELINE

PARAMETERS	UNIT	SAMPLE LOCATION			DETECTION LIMITED	STANDARD*
		UPSTREAM	MIDDLE	DOWNSTREAM		
pH	-	7.06	6.95	7.22	2	5-9
Temperature	°C	29.30	28.10	29.30	0-100	N
Dissolved Oxygen	mg/L	< 0.50	0.65	1.30	0.50	4-2
Biochemical Oxygen Demand	mg/L	48.75	58.20	30.60	2	≤30
Total Suspended Solids	mg/L	13	288	103	5	50-150
Total Dissolved Solids	mg/L	381.00	450.00	406.00	25	≤ 1,300
Ammonia-Nitrogen	mg/L NH3-N	10.00	8.30	10.20	1.5	0.5
Ammonium Ion	mg/L NH4	12.90	10.70	13.10	2	≤ 4
Arsenic (As)	mg/L As	0.0015	0.0021	0.0033	0.0003	0.25
Cadmium (Cd)	mg/L Cd	< 0.006	< 0.006	< 0.006	0.006	0.03
Chemical Oxygen Demand	mg/L	121.00	182	104	25	10-12
Hydrogen Sulfide	mg/L H2S	< 0.14	0.18	< 0.14	0.14	< 1
Nitrate-	mg/L NO3-	< 0.07	< 0.07	< 0.07	0.07	45
Phosphate (PO4-3)	mg/L PO43-	1.20	4.50	2.36	0.03	1-2
Surfactant	mg/L MBAS	3.21	3.28	3.11	0.10	**
Turbidity	NTU	40.00	300.00	140.00	0.10	5***
Oil and grease	mg/L	< 3.00	< 3.00	< 3.00	3.00	15
Lead (Pb)	mg/L Pb	< 0.01	< 0.01	< 0.01	0.01	0.1
Faecal Coliform	MPN/100m	>160,000	>160,000	>160,000	1.80	1000-4000
Total Coliform bacteria	MPN/100m	>160,000	>160,000	>160,000	1.80	5000-20000
Water's color/turbid 3/	B/Y/T	B/Y/T	B/Y/T			

Remark: *standard applied for category 4, *** applied drinking water, ** Not available in water standard

25. The Kaysonophomvihan Solid Waste Management sub-project was also required to conduct baseline measurements and quarterly monitoring of ground and surface water quality at two identified stations within the project area. It was subsequently decided that the results of the Environmental Compliance Audit (ECA) be utilized to establish the baseline levels of the ambient air quality in the sub-project area. On 17 December 2018 the 1st quarterly environmental quality monitoring was conducted for the sub-project. The results of the said monitoring are still not available and will be reported in the succeeding monitoring reports.

IV. PUBLIC CONSULTATION, INFORMATION DISCLOSURE AND CAPACITY BUILDING

26. In compliance to the Safeguards Policy Statement of the Bank (SPS 2009) and the approved EMPs and the Environmental Regulations of the Government of Lao, Public Consultations were conducted with the stakeholders, affected persons (APs), government representatives and concerned parties in the sub-project areas. The consultations were organized to provide the stakeholders and APs with the venue to provide feedback, raise issues and concerns about environmental matters directly to the Contractors, PMU and CSC.

27. Leaflets has been developed and distributed to local people. Sign Posts containing Contact details of the Contractor, PMU and Consultants has been installed. Orientation on the GRM Process has been conducted through the requisite with public consultations process and the requisite Grievance Lodging and Recording System has already been established. Table 10 presents the details of the Public Consultations conducted for the Project.

TABLE 10. DETAILS OF PUBLIC CONSULTATIONS CONDUCTED

NO	DATE, LOCATION, PARTICIPANT, TOPIC	CONTENTS/ AGENDA	ISSUES/ DISCUSSION/ RESULT
1	Date: August 1, 2018 (8:30-12:00) Location: Phonsavanh village meeting hall Participant: Total: 27 persons, Female: 8 persons Topic: Pre-construction Consultation in KP-Wastewater Management-HLK-Channel	Presented Project Background Construction Environment, Grievance Process of resettlement Construction scheme, environment impact & mitigation Consultation for each topic	Automatic hydraulic gate: we agreed and appreciate to have a hydraulic gate at the bridge for protecting the flood to the HLK catchment areas and we hope, it won't be repeated same mistake in the past as void from villager. Local also emphasizes that after install automatic hydraulic gate, it must have better management system and budget for maintenance and management of the gate. Roads along the channel: There are question raise up that what type of roads for both sides of channel? Mr. Chanthapasouth clearly answers that both sides of channel are unpaved road, but it is good condition enough because both roads needed to check the quality by consultant. Villager also commended that road might be too narrow during car drive and meet in opposite direction. Mr. Phomma also commended that It might design for one-way drive, it would be easier for driving, however, he also emphasizes that road over 3 meters, but car only 1.2 meters wide, so car can go two directions and carefully drive and limited speed. One villager also commended that It would be better, if road construction provides more space for avoiding accident during two cars meet in the opposite directions. Villager also asked, where are two bridges crossing the channel? Mr. Chanthapasouth, Mr. Phomma mentioned it is not clearly defined, where are the bridges, but when actual construction can be discussed again. Anouxay also said that villagers can comment where are importance for majority and necessary for local people, because bridges are built for local people. One person recommended, location 1 must be area for crossing among the Thahae and Saphantai village, and another person also commended that another location must be crossed the channel to the Thapthalar market. Mr. Phomma also end up with commend to villagers to go back and consult with villagers and provide information to our project, so during the construction, we can design for

NO	DATE, LOCATION, PARTICIPANT, TOPIC	CONTENTS/ AGENDA	ISSUES/ DISCUSSION/ RESULT
			<p>the best places.</p> <p>Resettlement: Villager asked regarding the compensation, and method of payment. Mr. Phomma, project director provides clearly answer to the audients that all affected lands will be compensated based on the unit prices from different sources, and it will be based on land price valuation from PoNRE. He also emphasizes on methodology of payment, it is different from the past, all compensation is directly transferred to affected persons by bank account, no cash system anymore. Cash system might linkage the compensation, which is might have question regarding transparency and accountability in the future. Transfer through bank account system is safe and protected corruption. Mr. Phomma also request all affected person to cooperate with resettlement team for provide accurate information and participate during the impact areas measurement in the field.</p> <p>Dust control: Villager raise up the question regarding the dust control during the dry season and it is responded by contractor that water spray will be regularly applied and maintain road condition. Villager also warns the contractor that works in the camp, they eventual work for JV, but when they stay in the areas of village authorize, they must obey and restrict to rules and law of village authority. Coming and leave must be reported to village authority.</p>
2	<p>Date: September 29, 2018 (8:30-11:00)</p> <p>Location: PhonsavangTai village meeting hall</p> <p>Participant: Total: 37 persons, Female: 26 persons</p> <p>Topic: public consultation during construction with villagers in Phonsavangtai village</p> <p>Organizer: Fa Ngum Road Construction Subproject (CPK)</p>	<p>Present current construction status, issues & mitigation</p> <p>Grievance Redness Mechanism</p> <p>Consultation for each topic</p>	<p>Villager consult regarding Park construction: CPK representative explain location, and criteria and briefly information regarding design and completed date of construction</p> <p>CPK/contractor asked for announcing for children or any persons are prohibited to take out reflection sticker and destroy safety ropes or safety poles. Village authority agreed to warn all villagers for obeying the rules and agreed to cooperate with contractor</p> <p>Villagers also request for support on fix the old bridge at the temple, because during rainy season, it is very difficult to access, CPK PM mentioned that eventual it is not related to construction issues, We are happy to support, we will send engineer to check and assist village based existing material we have, but we can support only in dry season.</p> <p>NES also inform villagers, if there is any issues regarding environment don't forget to call relevance agency for better and faster solving environmental issues.</p>
3	<p>Date: September 7 & 11, 2018</p> <p>Location: Fa Road, KaysonePhomvihane road, Dansavan Urban road, and Phine urban road construction sites.</p> <p>Participant: interviewer: total 19 persons, Female: 9 persons, but each project 9 persons.</p>	<p>Interview local people who live around projects for their perception on environment management in each subproject</p> <p>Interview local passengers, who travel cross the</p>	<p>Conclusion of report: Environmental and safety performance is very importance and priority in construction project, all mitigations are implemented according the plan, it clearly shows local people gave high rate on environmental mitigation action for all subprojects, on the other hand, safety management in each subproject is quite low rating.</p> <p>The most significant environment management in each subproject that are well mitigated as dust control, cleanliness and tidiness, noise control, flood protection and water stagnate prevention,</p>

NO	DATE, LOCATION, PARTICIPANT, TOPIC	CONTENTS/ AGENDA	ISSUES/ DISCUSSION/ RESULT
	<p>Interviewee: 482 persons, Female: 244 persons</p> <p>Location: Kaysonephomviharn road, Fa Ngum road, Dansavan urban Road & Phine urban road construction areas.</p> <p>Topic: Assessment of local perception on Environment, Safety prevention in 4 road subprojects,</p> <p>Organizer: Join among Consultant, PMU, PIT & contractors</p>	<p>construction on their perception on safety management in each subproject</p>	<p>consultation before excavation & temporary access road. The critical question asking perception rate on grievance information is very low rate because this information was not well disseminated, or local people played less attention on information.</p> <p>The safety management in each subproject has low rate from local perception, this safety management has focus only traffic safety management, which is related to installation on signages, safety poles, safety rope, barrier, including speech truck and information regarding grievance and insurance in case there was any accident. This safety management found higher rate only Dansavan urban road subproject.</p> <p>After interview, there are some mitigations have been improved and addressed to the concerning of local people and comments from provincial assembly. Based on results from local perception, some environmental mitigations and safety management are recommended below:</p> <p>Dust Control: Water spraying in the main town construction should operate at least 4 times per day and increase 6 times per day where are many cars and dense traffic, project like Phine & Dansavan should spray water at least 3 times per day.</p> <p>All subprojects are required to increase more signages, safety poles, safety rope and reflection in construction sites. All signages and safety tools should be adequate installation. Where are excavations areas should install signages and other safety tools in advance.</p> <p>Public consultation must re-organize with each village to disseminate information regarding grievance, insurance, including signpost contact for public, Safety officer in each subproject is required to regular check & monitor environment and safety issues in the construction sites as daily for remove all unsafety from construction and obtain environment mitigation.</p>
4	<p>Date: November 9, 2019</p> <p>Participant: 28 persons, 14 Females</p> <p>Location: Nalao village meeting hall</p> <p>Organizer: FA Ngum Road subproject (CPK)</p> <p>Topic: public consultation during construction phase</p>	<p>Present current construction status, issues & mitigation</p> <p>Grievance Redness Mechanism</p> <p>Consultation for each topic</p>	<p>1). Villagers required for more watering in the construction sites, consultant asked villagers that contractor regular water as promised at least 4 times per day in 2A and 2B, 6 times per day in F1 section. Contractor responded that before promising and during boat racing festival, because all staffs were off, regarding public holidays. And villagers also agreed during this period, water is regular spray and moisture in the construction.</p> <p>2). CPK/contractor asked for announcing for children or any persons are prohibited to take out reflection sticker and destroy safety ropes or safety poles. Village authority agreed to warn all villagers for obeying the rules and agreed to cooperate with contractor</p> <p>3). Villager also consulted regarding access road, how long access road will be built from main road, contractor stated that so far, there is no budget in BoQ, but surely it will be built</p> <p>4). Villager consulted the stagnant wastewater in front of restaurant, odor, how contractor to solve it.</p>

NO	DATE, LOCATION, PARTICIPANT, TOPIC	CONTENTS/ AGENDA	ISSUES/ DISCUSSION/ RESULT
			<p>Contractor claimed that we immediately to fix it this week, to drain out the stagnant wastewater to drainage system.</p> <p>5). Villager also consulted regarding connection among household wastewater to drainage system. Contractor explain that pile will be built by household and contractor responsible only collection hole for each household at the drainage.</p> <p>6). NES also emphasis regarding environment, health and safety issues as priority for construction, mobile phone is available, please contact for any concern or issue occur</p>
5	<p>Date: December 16, 2018 Location: Phonxay Temple Participant: 58 persons, including 21 females. Topic: public consultation during construction</p>	<p>Present current status of construction & plan Environment, Health and safety mitigation Consultation for each issue</p>	<p>The conclusion of consultation: Contractor agreed to increase and obtain moisture of construction to avoid dust pollution that might affect to local people health Contractor agreed to maintain road, where are numerous of holes, eventual construction not arrive yes, it should be maintained Villagers also require contractor to construct drainage to finish as soon as possible to avoid business disruption from long procedure of construction Villager also request contractor to maintain access road, cross Kaysonphomvihane road as unpaved road on the way to cemetery.</p>
6	<p>Date: December 29, 2018. Location: Main worker camp of R8CE Participant: 33 persons, included 2 females Topic: STD & HIV prevention, symptom & treatment.</p>	<p>1). What is STD & common STD for prevention 2). What is HIV?? Symptom & Prevention 3). Demonstration for using condom & free distribution of condom</p>	<p>No record.</p>
7	<p>Kaysonphomvihane road: October 11-12, 2018 total 8 persons, include 2 females Fa Ngum road: October 13, 2018. Participant: 8 persons included 2 females. KP-SWM & KP-WWM-HLK-Channel: Oct 14, 2018. 16 persons including 4 females (8 person per subproject) Dansavan Urban road: October 16-17, 2018, 7 persons included 2 females Phine Urban: October 17-18, 2018. 7 persons, included 2 females. Topic: Environment, health & safety inspection from DoNRE</p>	<p>Inspect construction sites at least 2 location each subproject Inspect worker's camp Inspect borrow pit for 6 subprojects</p>	<p>The common issues found and recommended to each subproject Install extinguisher near fuel tank, with warning sign and prohibit sign regarding smoke, fire... Construction Material must be stored tidy and build specific stockpile for material for KP-SWM subproject, Phine Urban road. Toilet and bathroom must be installed and garbage bin specific for KP-WWM-HLK-channel subproject. the camp is weak and need to be improved. There is drainage construction, and there are many locations without properly cover, it is risk accident, contractor must immediately cover with cover specific for all road construction Increase safety warning sign, safety rope, safety poles or barriers in the construction sites, specific for Kaysonphomvihane road and Phine urban road Not allow to waste construction equipment directly to natural stream, specific for Phine urban road (concrete mixer washing) Build temporary storage for garbage for waste of construction & not all to burn any garbage specific for Phine urban road Increase more watering in the construction at least 3-</p>

NO	DATE, LOCATION, PARTICIPANT, TOPIC	CONTENTS/ AGENDA	ISSUES/ DISCUSSION/ RESULT
			4 times per day specific in Phine urban road construction
8	Date: December 27-28, 2018 Location: DPWT meeting hall Participant: 16 persons, included 4 females Topic: Environment Training	1). Env background 2). Env law 3). National Env standard 4). Waste instruction 5). EMP responsible party & roles 6). Env potential impacts 7). Env mitigation 8). Env Monitoring and report 9). Env checklist 10). Monthly EMR 11). Grievance, public consultation & Emergency plan.	1). Environment training program has 16 participants included 4 females and two trainers, this training was conducted for two days at DPWT meeting hall during 27-28 December, 2018. There are 11 staffs from 6 subprojects, one person from PMU and another 4 persons from relevance agencies. 2). Based on evaluation, the participants have increased their knowledge on environment particular for EMP/CEMP management an average 27.53%. 3). The advance group in participants have increase their knowledge on environment management 19.67%, but the intermediate and lower group of participants have increased 34.20%. 4). This training has been provided significantly environment management to all participants particular EMP/CEMP implementation management.

28. The DPWT with the CSCS conducted an Environment Training on 27-28 December 2018. The training program included topics on EMP Preparation, Health and Safety at the worksites and basic environmental management concepts. It was participated in by officials and staff of PMU, concerned government agencies and the appointed contractors.

29. An assessment of the local perception on Environment and Safety Performance in the four (4) road sub-projects of Towns Development Project was conducted on 07 to 11 September 2018.

30. (Copies of the full reports of the Environmental Training Program and Assessment of the Local Perception on Environment and Safety Performance in 4 road subprojects of Towns Development Project can be provided upon request)