

Environmental Monitoring Report

Project Number: 43319-033

Loan 2983-CAM (COL), Loan 8265-CAM (SCF)

Grant 0334-CAM (UEIF), Grant 0335-CAM (SCF)

Semi-Annual Environmental Monitoring Report (January to June 2022)

September 2022

Cambodia: Greater Mekong Subregion Southern Economic Corridor Towns Development Project

Neak Loeung Flood Control Subproject

Prepared by the Ministry of Public Works and Transport for the Asian Development Bank.

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Environmental Monitoring Report

The 10th Semi-Annual Environmental Monitoring Report
(January to June 2022)
July 2022

CAMBODIA: Greater Mekong Sub Region Corridor Towns Development Project

(GMS: Southern Economic Corridor Towns Development Project)

LOAN 2983(SF)/8265(SCF), GRANTS 0334(UEIF)/0335(SCF)-CAM

Sub-projects of Neak Loeung

Prepared by:

Project Management Unit of the Ministry of Public Works and Transport (PMU/MPWT).

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ABBREVIATIONS

ADB	-	Asian Development Bank
CEMP	-	Construction of Environmental Management Plan
CSCS	-	Consultancy Services for Construction Supervision
EA	-	Executing Agency
ECO	-	Environmental Control Officer
EMC	-	Environmental Monitoring Consultant
EMP	-	Environmental Management Plan
EMR	-	Environmental Monitoring Report
ESMU	-	Environmental and Social Management Unit
GMS	-	Greater Mekong Sub region
IEE	-	Initial Environmental Examination
MRF	-	Material Recovery Facility
MPWT	-	Ministry of Public Works and Transport
MOE	-	Ministry of Environment
PDPWT	-	Provincial Department of Public Works and Transport
PMU	-	Project Management Unit
PIU	-	Project Implementation Unit
PISCD	-	Project Implementation Support and Capacity Development
PPE	-	Personal Protective Equipment
SPS	-	ADB Safeguard Policy Statement (2009)
WWTP	-	Wastewater Treatment Plant
UXO	-	Unexploded Ordnance

I. EXECUTIVE SUMMARY

Introduction:

1. This report is the 10th Semi-annual Environment Monitoring Report (SEMR) covering the period of January to June 2022 of Southern Economic Corridor Towns Development Project (SECTDP) which has been continuous updated from the 9th SEMR, and prepared to fulfill the safeguard policy requirement of ADB; the Project is Category B for environmental safeguards. This report is prepared by the Project's Environmental Safeguard Consultant.

2. The report provides information on environmental progress and concerns for the implementation stage of the sub-project. For this report presents supervision of construction work activities, the progress of the civil works of the sub project and consultant's role for the required task as defined in the scope of work of the supplementary assistance. Additionally, construction works of six (6) sub projects contracts were finished and handed over completely in 2020 as the following: 1) CW 01a: Construction of additional works for 3 MRFs building (completed on 25 April 2020); 2) Construction of MRFs Building at Battambang, Bavet & Poipet (completed on 24 August 2018) ; 3) CW5: Improvement of Urban Road Section at Bavet (completed on 30 July , 2020 and the defects liability period ended on 30 July 2021); 4) CW06: Battambang Storm Drainage (completed and handed over to Employer on 31 December 2019 and the defects liability period ended on 31 December 2020); 5) CW 07: Poipet Storm Drainage (completed on 31 July, 2020, and handed over to the Employer on 14 August 2020 and defects liability period ended on 31 July 2021); 6) CW 08: Bavet Storm Drainage (completed on 22 November 2020 and the defects liability period ended on November 2021 as the details indicated in Table 1). CW 10: Neak Loeung Flood Control subproject was awarded on 14 December 2020 and construction works started on 5 April 2021.

3. The findings are based on the reviewing of: 1) monthly engineering progress reports from Consultancy Services for Construction Supervision (CSCS), the monthly reports from January to June, 2022; 2) The Quarterly reports from Project Implementation Support and Capacity Development Consultants (PISCD); 3) monthly progress reports submitted by the Contractors; and 4) visual findings obtained during the site visit of site-specific monitoring by the Environmental Safeguards Consultant of the PMU, and PISCD Environmental Specialist.

Table 1: Project Overview, Snapshot of Project Progress

Project Number and Title:	Loan 2983–CAM(SF); Loan 8265 – CAM(SCF); Grant 0334 – CAM(UEIF); Grant 0335–CAM(SCF), GMS: Southern Economic Corridor Towns Development Project	
Safeguards Category	Environment	B
Reporting period:	01 January to 30 June 2022	
Last report date:	July - December 2021 (January 2022)	
Key sub-project activities since last report:	<p><u>Completed and Handed Over Contracts:</u> As of 31 December 2021, the subprojects have completed and handed over contracts as below: I- The construction of additional works for 3MRFs (CW01a) was completed on 25 April 2020,</p>	

	<p>II- Construction of MRFs Building at BTB, Bavet, and Poipet, the general civil works was completed on 24 August 2018;</p> <p>III- CW05: Subproject Improvement of Urban Road Section at Bavet was completed the project on 30 July 2020 and the defects liability period ended on 30 July 2021;</p> <p>IV- CW06: Battambang Storm Drainage subproject was completed and handed over to the Employer on 31 December 2019 and the defects liability period ended on 31 December 2020;</p> <p>V- CW07: Poipet Storm Drainage subproject was completed on 31 July 2020, and handed over to the Employer on 14 August 2020; and the defects liability period ended on 31 July 2021; and</p> <p>VI- CW08: Bavet Storm Drainage subproject was completed on 22 November 2020. And the defects liability period ended on 22 November 2021.</p> <p><u>Ongoing Contracts:</u> During this period, Neak Loeung Flood Control Subproject (CW10) was contracted an award on 14 December 2020 and commencement of civil work since 05 April 2021. The overall physical progress is 50% of the civil work as of 30 June 2022.</p>
Report prepared by:	PMU under technical support from Environmental Safeguard Consultant
Report checked by:	PMU-MPWT

Summary of Construction Progress:

4. As of 30 June 2022: CW10: Construction of Neak Loeung Flood Control Dike is at overall physical progress of 50%.

Summary of EMP Implementation:

5. Construction works have been implementing in accordance with the provisions of the EMP such as reviewing of monitoring report format, regulatory compliance action plan and camp layout review and preparation of site camp and approval by local authority. The Contractor's Construction Environmental Monitoring Plan (CEMP) is successfully being implemented by the Contractor through the PISCD (Environmental Expert) engaged by executive agency with the approval of PMU.

6. The field monitoring found that some of the mitigation measures are being implemented by the Contractor are:

- COVID-19 prevention measures have been implemented in camp sites and construction site in Neak Loeung Flood Control (CW10);
- Approved borrow pit/quarry areas of subproject have been used;
- Sprinkling of water on access roads is ongoing carried out regularly at Neak Loeung Flood Control during compaction works and it helps to control dust,
- Workers, and staffs at work site have been using PPE for health and safety reason at working site,

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- Facilities at workers' camp site such as proper accommodation rooms, kitchen, gender-segregated toilets, gender-segregated shower rooms, septic tank, proper electricity connection, potable water, waste bins, fire extinguisher, first aid kits and safety kits (COVID-19 prevention) are in place properly.
- Hiring of unskilled workers including women were observed at Neak Loeung Flood construction sites.
- Traffic signs have been using at constructing site, roads connecting to the constructing site and flagmen have been working to manage the traffic.
- Project signboards and GRM signboards are at campsite, constructing site and commune hall properly.

Summary of Monitoring Activities:

7. The following activities were undertaken for the six (6) months (January – June 2022):

Role	Activity	Number
PIU	Consultation visit	4 times
CSCS	Monthly reports	6 reports
PISCD	Site inspections	5 times
PMU	Monitoring	7 times
PMU-PIC environment	Monitoring	1 time
ADB	Mission	None

8. Environmental quality monitoring for this reporting period was not done by the contractor.

Table 2: Summary of Environmental Quality Monitoring Jan – Jun. 2022

Neak Loeung Flood Control Subproject (CW10)				
Issued Monitored	Location	Actual Jan. - Jun. 2022	Results of Environmental Quality	National Standard
Air Quality	Two locations: - P0530903/1242067 - P0532526/1244023	No	Environmental quality tests (Air quality, noise, vibration, surface water) were not conducted during the reporting period (Jan-Jun. 2022).	CO (<20), NO ₂ (<0.1), SO ₂ (<0.3), PM ₁₀ (<0.05), PM _{2.5} (<0.025), Pb (<0.005)
Noise	Two locations: - P0530903/1242067 - P0532526/1244023	No		Day time (75), Evening (70), Night (50)
Vibration	Two locations: - P0530903/1242067 - P0532526/1244023	No		Day time (65), Night time (60)
Surface Water	Two locations: - P0531353/1241996 - P0531022/1242066	No		pH (6.5-8.5), DO (7.5-2.0), TDS (<1000), TSS (25-100), BOD ₅ (1.0-10), COD (<50),

				Total Coli form (<5000)
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Summary of Occupational Health and Safety Issues

9. Construction of Neak Loeung Flood Control subproject (CW10) was observed:
 - All workers and staff are using PPE properly at constructing site, e.g. The workers wear face-mask all the time.
 - Workers are checked the temperature in every day to comply with COVID-19 prevention measures. As the result, there is no case of COVID-19 infection in this reporting period.
 - The safety signages, first aid kit, and fire extinguishers are in place properly.

Summary of Consultation Activities:

10. The Contractor and PMU/PIU officials have met local people and local authority in the project area to inform them about the construction works.

11. The training on Environmental Monitoring, GRM and COVID-19 prevention was not conducted during this reporting period as it was already conducted once in period reporting period (22 September 2021).

12. During the site monitoring on 20 May 2022, PMU Environmental Safeguards Consultant and PMU Project Manager met and consulted with Mr. Sreng Long (Director), Mr. Hum Visal (Site Engineer), Mr. Orng Leang Meng (Environmental and health safety staff), workers and truck drivers about the safeguards performance for this subproject.

Summary of Key Issues/Complaints, GRM and Actions in Response to Complaint:

13. There is no any issue and complaint encountered during the reporting period of January – June 2022.

Conclusion:

14. In conclusion, by the end of June 2022, the Neak Loeung Flood Control subproject (CW-10) has implemented mitigation measures stating in Environmental Management Plan (EMP) and Construction Environmental Management Plan (CEMP) properly. The contractor should continue the implementation of the Environmental Monitoring Plan, perform self-monitoring including the preparation of monthly environmental monitoring report submitting submitted on time to PMU/MPWT and the PISCD.

15. The actions recommendations during previous monitoring period (the 9th EMR) have been implemented.

- i) Conducting environmental quality monitoring by contractor according to EMP/CEMP (It will report in next reporting period-Jul-Dec 2022);
- ii) Keep implementing COVID-19 prevention measures strictly both at camp site and constructing site;
- iii) Keep good performance of implementation of the EMP/CEMP for the Neak Loeung Flood Control subproject.

16. During this reporting period, environmental mitigation measures have been implemented properly based on EMP/CEMP. The health and safety plan regarding to the prevention of COVID-19 has been strictly monitored and restricted at the camp site, and construction site. And project information and GRM signboards are in places properly.

17. There are several follow-up activities for next reporting period are described as below:

- Conducting environmental quality monitoring by contractor according to EMP/CEMP as soon as possible in between July and August 2022;
- Keep implementing COVID-19 prevention measures strictly both at camp site and constructing site;
- Ensure all workers are properly equipped with sufficient PPEs.
- Keep good performance of Implementation of the EMP/CEMP for Neak Loeung Subproject.

II. PROJECT OVERVIEW, GENERAL SAFEGUARD MATTERS

1. Project Overview

18. The project will improve urban infrastructure and service delivery has been progressing the civil works of the three subprojects of the said towns (Bavet, Battambang, and Poipet) over the period of 4 years (2017 to 2021), and the Neak Loeung Flood Control Subproject (CW-10) has been contracted an award and under construction.

19. As of June 30, 2022, construction works of six (6) sub projects contracts were finished and handed over completely in 2020 as the following 1) CW 01a: Construction of additional works for 3 MRFs building (completed on 25 April 2020); 2) Construction of MRFs Building at Battambang, Bavet & Poipet (completed on 24 August 2018); 3) CW5: Improvement of Urban Road Section at Bavet (completed on 30 July 2020 and the defects liability period ended on 30 July 2021); 4) CW06: Battambang Storm Drain (completed and handed over to Employer on 31 December 2019 and the defects liability period ended on 31 December 2020); 5) CW 07: Poipet Storm Drainage (completed on 31 July 2020 and , and handed over to the Employer on 14 August 2020 and defects liability period ended on 31 July 2021); 6) CW 08: Bavet Storm Drainage (completed on 22 November 2020 and the defects liability period ended on 22 November 2021). The campsites for these subprojects were cleaned up and returned to owners as it states in the SEMR for July-December 2020. On the other hand, CW 10: Neak Loeung Flood Control subproject was contracted an award on 14 December 2020 and commenced construction works since on 05 April, 2021.

20. **Impact and Outcome:** The impact has been improved living environment in Project towns. The outcome has been improved municipal service delivery and urban infrastructures in the Project towns.

2. Project Progress

2.1 Contract Signed

21. In this period, Subproject for Neak Loeung Flood Control has been contracted on 14 December 2020 and commencement of civil work has started since 05 April 2021 as showing in the table below:

Table 3: Contract Signed

Contract Signed					
Package No.	Sub Project	Contract Period (days)	Date of start work	Date of completion	Contractors
CW10	Neak Loeung Flood Control	911	05-Apr-2021	30-July-23	M.T.A Construction Co., Ltd

Source: Monthly progress report (August, 2021) of CSCS

2.2 Civil Work Progress against Schedules of 30 June 2022:

22. The overall progress of physical infrastructure subprojects is considered on time despite there is a minor delay in contract award for CW-10 and updated Detailed Resettlement Plan.

Table 4: Civil Work Progress (%) against Schedules

Progress as of 31 December 2021	CW-10	Total
Planned (%)	45 %	100
Actual (%)	50 %	111
(%)	+05 %	+11

3. Safeguard Plans Implementation Arrangements & Documentation

3.1 Roles and Responsibilities in EMP Implementation and Monitoring

23. The environmental management plan (EMP) defines the institutions and responsibilities for environmental safeguards and EMP implementation as follows:

- 1) Ministry of Public Works and Transport (MPWT/PMU) is the executing agency (EA) of the subprojects;
- 2) The Provincial Department of Public Works and Transport (PDPWT/PIU) at the provincial level is the implementing agency (IA) of the subprojects;
- 3) The project management unit (PMU) formed by the EA oversees implementation of the subproject of Neak Loeung flood control;
- 4) A PMU environmental control officer (ECO) is identified;
- 5) The ECO will form part of the environmental and social management unit (ESMU) for the subproject.

24. The roles and responsibilities for EMP implementation and monitoring are described in Table 4:

Table 5: The roles and responsibilities of the different in EMP implementation and monitoring

Agency	Roles/ Responsibilities
The EA/PMU	<ul style="list-style-type: none"> - Overall responsibility for subproject implementation and establishment of the subproject Management Unit (PMU); - Approve medium term and annual rolling plans for subproject implementation; - Ensure compliance of Loan Covenants; - Approve procurement plans, bidding documents including EMP, bid evaluation and contract awards; - Submit regular quarterly and annual subproject reports to ADB; - Ensure compliance of subproject implementation with ADB's social and environmental policies and guidelines;

The IA/PIU	<ul style="list-style-type: none"> - Coordinate and monitor subproject activities of the PIU; - Support PIU in carrying out the approved annual rolling plans including EMP related activities; - Coordinate and provide capacity development program for PIU; - Obtain necessary approvals from respective departments prior to awarding of civil works contracts; - Support PIU in the implementation of EMPs; - Coordinate regular reporting of PIU to EA on EMP implementation; - Undertake regular quality control inspection of subproject facilities; - Manage the handover of subproject facilities to agencies responsible for operation and maintenance. - Prepare and submit regular quarterly and annual subproject reports; - Supervise civil works contractors; - Ensure that EMPs are incorporated in the detailed designs and included in civil works contracts; - Ensure EMP implementation; submit regular monitoring reports to IA and EA; and - Monitor EMP implementation
Contractor	<ul style="list-style-type: none"> - Preparation of CEMP, and conduct monitoring environmental items basically and follow-up all activities at the project sites, camp site, and other material yards. - Daily/Weekly and monthly monitoring - Health, Safety and Environment (HSE) report Monthly - Provide sufficient funding and human resources for implementation of the EMP - Ensure proper and timely implementation of required pre-construction and construction mitigation measures in the EMP - Implement additional environmental mitigation measures, as necessary.
Project Implementation Support and Capacity Development Consultant (PISCD)	<ul style="list-style-type: none"> - Review and update the IEE reports and EMPs; - Ensure that environment management plans (EMP) and related environmental considerations are factored in detailed designs and technical engineering of the urban infrastructure subprojects under the Project; - Conducts environmental safeguards due diligence assessments; - Assess the capacity development needs of Project Staff on environment safeguards measures and recommend appropriate capacity building interventions and training programs, including the preparation of TOR for independent environment monitoring, as may be necessary; - Ensure that environment safeguards measures are adequately considered in the bidding documents and in the evaluation criteria for selection and awarding of contracts for civil works, goods and services; - Coordinates, advise, assist on environment related concerns during the Project implementation and recommend appropriate action plans, and assist in monitoring implementation of environmental safeguards, including the impact environmental measure on urban sector development.
Consultancy Services for Construction Supervision (CSCS)	<ul style="list-style-type: none"> - Provided overall responsibility of conducting all the project work - Review the contractor's method statement and work program to ensure conformity with the Environment Management Plan (EMP) - Other safeguard regulations (including resettlement, gender and

	other social safeguard issues).
Environmental Monitoring Consultant (EMC)	<ul style="list-style-type: none"> - Review environmental indicators; - Verify the compliance with statutory requirements prior to construction, e.g. government approvals, permitting, certificates set by government; - Assess reports of internal monitoring determine if adverse environmental impacts are being mitigated properly; - Monitor the implementation of individual management plans; - Conduct periodic site inspections to ensure that measures in the EMPs are being implemented; - Determine the overall performance of the EMP; - Formulate necessary measures/actions to resolve problems to improve EMP implementation; - Prepare external monitoring reports (Semi-annual of Environmental Monitoring Report) submit to PMU and ADB; and - Prepare the completion report will highlight important findings, lesson, best practices to be considered and/or replicated in future similar undertakings.

25. The following table confirms the status of the key roles for EMP implementation:

Table 6: Status of Environmental Safeguards Roles

Role	Status and Issues
PISCD Environmental Specialist	Date started – April 2018 – Full Time
CSCS	Work commenced on Feb. 15, 2018 – full time
PIU – Safeguards Team/officer	PIU Safeguards Team for Neak Loeung Flood Control sub-project is in place.
PMU- Environmental Control Officer (ECO)	Date started: Feb. 2013 (date of loan sign), counterpart time
Environmental and Social Management Unit (ESMU)	2 staffs were identified for the project and started working together with PMU since loan effective on April 2013.
Contractor – Environmental staff for Neak Loeung sub-project	Start the work since 29 June 2021

26. **Contractors:** has willingness to implement environmental safeguards mitigation measures to ensure that the EMP/CEMP of the sub-project are complied with.

27. **PISCD and CSCS:** are continually providing support to the PMU/PIU and the Contractors through close inspection of implementation of the environmental management measures and daily compliance at site. The PSCD regularly submits reports to PMU on monitoring of EMP implementation and compliance of Contractors, which serve as the bases for PIU to provide close guidance at site.

28. **PMU:** Aside from assigning technicians for each package, the PMU have also assigned staff to monitor the EMP implementation for the whole Project. The PMU leaders and staff in charge of each package, have been aware of responsibilities of the implementation of environmental impacts mitigation measures of each package. The PMU staffs are in close coordination with the PIU, thus compliance to the update EMP is gradually improving.

3.2 Monitoring and reporting System on Environmental Safeguards

29. Project staff (PMU, PIU), and the Contractors were oriented at the beginning of the subproject implementation on environmental compliances including procedures for monitoring and reporting as well. PIU established a system with support of PISCD to monitor on environmental safeguards of the subproject including identify the indicators was set out in the monitoring plan of the EMP.

3.3 ADB Approvals

30. The IEE and separated EMP for the Neak Loeung Food Control Subproject were updated and submitted to ADB in January 2020. ADB issued a NOL for the updated IEE and EMP on 03 February 2020.

31. Additionally, ADB provided NOL for commencement on civil works for CW10 on 05 April 2021. The following table confirms the status of the Borrower's Environmental Management Plan for the sub-projects:

Table 7: Status of IEE/EMP report for the subproject

Report Type	PMU Submitted	Submitted to MOE	ADB provided NOL
IEE&EMP report of Neak Loeung Flood Control	PMU submitted the letter to MOE on May 08, 2019	<ul style="list-style-type: none"> - MOE confirmed on 21 Aug. 2019 - EMP was approved on 13 April 2020 	03 February 2020

3.4 CEMP Approvals

32. As of December 2021, CEMP for Neak Loeung Flood Control Subproject has been approved in 15 March 2021 (Table 8).

Table 8: CEMP Approvals Status

CW Package	Role	Status and Issues	Further Updated Needed?
CW10	Neak Loeung Flood Control Subproject	- Approved by PMU 15 March 2021	- No

III. ENVIRONMENTAL PERFORMANCE MONITORING

33. Performance monitoring is required to assess the overall performance of the EMP. A performance monitoring system is normally developed by the EA for the entire subproject. Select indicators of major components of the environment that will be affected primarily by the construction phase are drawn from the mitigation and monitoring plans and summarized in the Table 9.

34. This section presents the compliance status of Environmental Management and Monitoring Plan of the subproject under implementation stage.

1. Status of EMP Implementation (Pre-Construction)

35. The subproject requires to specify in the EMP with respect to: (i) design measures and public disclosure; (ii) project boundaries/location and change alignment; (iii) environmentally responsible procurement; (iv) allocation, staff mobilization and environmental capacity development; (v) unexploded ordnances if necessary; (vi) updating EMP, and reporting.

2. Compliance with EMP during Construction – Neak Loeung Flood Control subproject

36. The following table summarizes the compliance with EMP mitigation measures for flood control sub-project at Neak Loeung. The table uses the EMP requirements from the EMP specific to the subproject.

Table 9: Neak Loeung Flood Control EMP Compliance – January-June 2022

	EMP Requirement	Compliance during this reporting period (Yes, No, Partial or Not Applicable)	Reasons for Not Full Compliance	Further Action to Take	Date for Action	Who will Implement Action
1	Management of Worker camps	Yes		None		
2	Land clearing (loss of trees, vegetation, and landscape)	Yes		None		
3	Traffic Management	Yes		None		
4	Solid and Liquid Construction Waste Management	Yes		None		
5	Erosion Control	Yes		None		
6	Air, noise pollution and vibration control	Yes		None		
7	Utility and Power disruption	Yes		None		
8	Public and workers' health and safety	Yes		None		
9	Civil works – water quality & aquatic resources	Yes		None		
10	Cultural heritage/ property damage/ chance finds	Yes		None		
11	Extraction from quarries or borrow pits	Yes		None		
12	closure of construction sites	Not Applicable		Construction is still going on		

37. For all 'Partial' or 'No' compliance issues in the table above, the actions needed to solve the compliance issues are in the table below:

Table 10: Neak Loeung Flood Control EMP Compliance Actions Needed

	EMP Requirement	Reasons for Not Full Compliance	Further Action to Take	Date for Action	Who will Implement Action
	No need	-	-	-	-

38. The table below follows up on issues from previous Environmental Monitoring Reports for this subproject. This table confirms that the action was completed or that the action is outstanding.

Table 11: Neak Loeung Flood Control – Follow Up on Outstanding Issues from Previous Reports

Issue	Required Action	Responsibility and Timing	Resolution
None			

3. Health and Safety Performance Monitoring

39. Site inspection during this period (January to June 2022) was carried out on 20 May 2022, the health and safety measures have been implementing properly according to the plan in order to prevent accidents and health hazards. Based on interviewed with some workers they confirmed that PPEs (gear, helmets, jackets, boots etc.) has been provided by Contractor. Also, the hygienic conditions and facilities such as availability of sufficient drinking water, electricity, first aid, fire extinguisher, mosquito nets etc. of site camps at Neak Loeung were also monitoring. COVID-19 prevention measures have been implemented strictly and all workers are not allowed to have contact with local people or go outside the construction site and campsite as there are many cases of COVID-19 infection at Neak Loeung. Also, facial masks, alcohol/soap are provided to workers and daily temperature control is done for every worker to ensure the safety. During this reporting period, there is no case of COVID-19 infection.

Table 12: Neak Loeung Subproject (Flood Control) EHS Compliance –January - June 2022

	EHS Requirement	Compliance during this reporting period (Yes, No, Partial or Not Applicable)	Reasons for Not Full Compliance	Further Action to Take	Date for Action	Who will Implement Action
1	Workers wearing PPE	Yes		None		
2	First Aid Kits Available	Yes		None		
3	Fire Extinguishers Available	Yes		None		
4	COVID-19 Prevention Kits (Mask, Alcohol, Temperature Meter)	Yes		None		
5	Training on EMP, GRM	N/A	The training was conducted before starting the construction	N/A		

40. For all 'Partial' or 'No' compliance issues in the EHS Compliance tables above, the actions needed to solve the compliance issues are in the table below

Table 13: All Subprojects EHS Compliance - Actions Needed

Subproject		EMP EHS Requirement	Reasons for Not Full Compliance	Further Action to Take	Date for Action	Who will Implement Action
None						

41. The table below follows up on issues from previous Environmental Monitoring Reports for this all subproject regarding Health and Safety. This table confirms that the action was completed or that the action is outstanding.

Table 14: Health and Safety - Follow Up on Outstanding Issues from Previous Reports

Issue & Subproject Location	Required Action	Responsibility and Timing	Resolution
None			

4. Environment Effect Monitoring

42. Regular site visit is carried out to monitor by Environmental Safeguards Consultant of PISCD whether the contractor has implemented mitigation measures in the respective EMP properly. If any non-compliance was observed, the PISCD will inform and proposes suitable measure/s to rectify those issues. During this period (January – June 2022), site visit was made to the contract package of Neak Loeung Flood Control subproject on 20 May 2022. As of 30 June 2022, environmental quality monitoring was not conducted during this reporting period and the contractor admitted their missing action. After getting an instruction by PMU Environmental Safeguards Consultant, the contractor promises to conduct environmental quality monitoring in between July and August 2022.

IV. PUBLIC CONSULTATION, INFORMATION DISCLOSURE, CAPACITY BUILDING

4.1 Consultation

43. During the time period from January to June 2022, informal communication with some local people and local authorities were done individually by the contractor to inform about sub-project and schedule of the civil work. The monitoring was conducted on 20 May 2022 by PMU Environmental Safeguards Consultant. The camp site and construction site were visited and monitored to check the safeguards compliance with EMP of the sub-project. Mr. Sreng Long (Director), Mr. Hum Visal (Site Engineer), Mr. Orng Leang Meng (Environmental and health safety staff), workers and truck drivers were met and discussed during the site monitoring.

4.2 Training

44. During the reporting period, training course on Environmental Management and Monitoring, GRM's Implementation and COVID-19 Prevention was not conducted by PISCD because it was conducted once on 22 September 2021.

V. GRIEVANCE REDRESS MECHANISM

45. Based on site inspection and review monthly progress reports from January to June

2022, there is no complaint or grievance at the Neak Loeung Flood Control sub-project.

Summary:

- Number of new grievances, if any, since last monitoring period: None
- Number of grievances resolved: None
- Number of outstanding grievances: None

Table 15: Type of grievance redress by the relevant stakeholders within the project areas

Type of Grievance	Details (Date, person, address, contact details, etc.)	Required Action, Responsibility and Timing	Resolution
Old Issues from Previous Reports			
None			
New Issues from This Report			
None			

VI. CONCLUSION

46. For this reporting period from January – June 2022, the civil work progress of the Neak Loeung Flood Control (CW10) sub-project is 50% while target is 45%.

47. Environmental safeguard compliance has been implementing and maintaining momentum, recognizing the implementation of a critical aspect of Southern Economic Corridor Towns Development Project. Environmental mitigation measures related to the Neak Loeung Flood Control (CW10) sub-project have been implementing in line with Environmental Safeguard Framework. The site monitoring conducted by PMU-Environmental Safeguards Consultant noted that the contractor has implemented the mitigation measures following the EMP/CEMP such as workers using proper PPEs, traffic signs and flagmen in place, proper implementation of COVID-19 prevention measures (daily temperature control, regular hand sanitation, wearing mask, workers not allow to go out site the camp and construction site, only female chef to buy foods to cook for workers), facilities of camp site (proper worker's rooms, availability of clean water and electricity with proper set-up, proper workers' eating place, segregated male and female toilets and shower rooms, concrete floor on the ground to avoid muddy in rainy season, proper oil and fuel storage and so on) in good condition.

48. Recommendations for improvement over the next six-month from July – December 2022 are described as the following:

- 1) Conducting environmental quality monitoring by contractor according to EMP/CEMP as soon as possible in between July and August 2022;
- 2) Keep implementing COVID-19 prevention measures strictly both at camp site and constructing site.
- 3) Keep good performance of implementation of the EMP/CEMP for Neak Loeung Subproject.

Annex 1: Field Photographs During Site visit at Neak Loeung Sub-project (CW10)

Worker's campsite (20 May 2022)	Worker's campsite (20 May 2021)
Eating place for workers and staffs (20 May 2022)	Eating place for workers and staffs (20 May 2022)
Cooking place (20 May 2022)	First aid box, fire extinguisher, and electricity breaker box (20 May 2022)



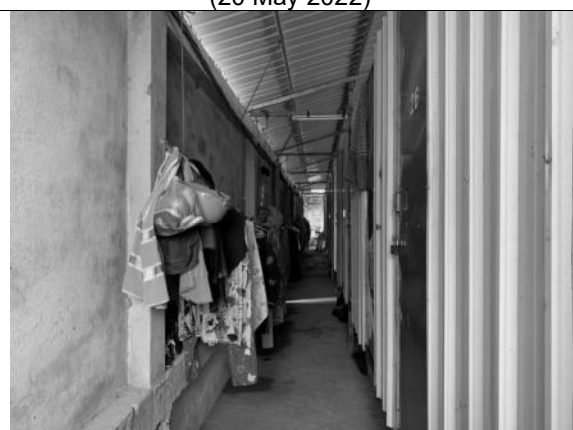
Drinking water and covid-19 post
(20 May 2022)



Preparing food for workers and staff
(20 May 2022)



Organic waste bin and recycle waste bin
(20 May 2022)









Workers' rooms (20 May 2022)



COVID-19 Poster (20 May 2022)



Petroleum storage room at campsite
(20 May 2022)

	
<p>Female and male shower rooms at campsite (20 May 2022)</p>	<p>Male and female shower rooms at campsite (20 May 2022)</p>
	
<p>Female shower room at campsite (20 May 2022)</p>	<p>Female and male toilets at campsite (20 May 2022)</p>
	
<p>Male toilet at campsite (20 May 2022)</p>	<p>Hand washing facility and underground septic tank (20 May 2022)</p>



Worker's campsite at construction site
(20 May 2022)



Set-up another campsite for workers
(20 May 2022)



PMU Environmental Safeguards Consultant
conducting site monitoring (20 May 2022)



GRM signboard at commune hall
(20 May 2022)






Project and GRM signboards at construction site
(20 May 2022)



PMU Environmental Safeguards Consultant
conducting site monitoring (20 May 2022)

	
Traffic sign for safety (20 May 2022)	Compacting foundation with clay (20 May 2022)
	
Constructing retention pond (20 May 2022)	Constructing retention pond (20 May 2022)
	
Constructing foundation of pumping station (20 May 2022)	Constructing foundation of pumping station (20 May 2022)

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<p>Worker wearing PPE during working hours (20 May 2022)</p>	<p>Water spraying for dust control (20 May 2022)</p>
	
<p>Flagman at access road to construction site (20 May 2022)</p>	

Annex 2: Environmental Monitoring Checklist (CW10)

CAM: GMS No. 1 – Southern Economic Corridor Towns Development Project

Project name: *GMS No. 1: Southern Economic Corridor Towns Development Project*
Project site: *Neau Loeung Flood Control subproject*

Environmental monitoring sheet, monitoring date *20 May 2022*

No.	Description	Location	Appropriate Facilities/ Protection method	Degree of environmental condition				
				1	2	3	4	5
1	Leaks and spills of hazardous material	Fuel storage area	safety sign				✓	
			far from watercourse >20m				✓	
			far from drain channel >10m				✓	
			concrete flooring				✓	
			concrete curve or wall				✓	
2	Erosion	Construction sites	leakage				✓	
			spilling				✓	
			soil type				✓	
			side slope				✓	
			compaction				✓	
3	Borrow pit/quarry	Borrow/quarries area	re-vegetation				✓	
			embankment				✓	
			retention pond				✓	
			shape (rectangular)			✓		
			wall slope				✓	
4	Water quality	Project site	depth (m)				✓	
			fence			✓		
			slope				✓	
			depth (m)				✓	
			fence				✓	
5	Air quality	Access road	laden sedimentation				✓	
			floating solid waste				✓	
			floating liquid waste				✓	
			dust				✓	
			spray water				✓	
6	Noise	Site close to settlement	dust				✓	
			cover on materials				✓	
			spray water				✓	
			any complain				✓	
			any complain				✓	
7	Waste management	Project site	liquid waste				✓	
			solid waste/garbage				✓	
			human waste				✓	
			hazardous waste				✓	
			liquid waste				✓	
8	Drainage	Worker camp	solid waste/garbage				✓	
			human waste				✓	
			hazardous waste				✓	
			liquid waste				✓	
			solid waste/garbage				✓	
9	Damage road/culvert/bridge	Storage area	human waste				✓	
			hazardous waste				✓	
			arrangement				✓	
			functioning				✓	
			arrangement				✓	
10	Traffic	Access road	functioning				✓	
			arrangement				✓	
			functioning				✓	
			arrangement				✓	
			functioning				✓	
11	Safety	Project site	pavement				✓	
			foundation				✓	
			pavement				✓	
			structure				✓	
			congestion				✓	
12	Community perception	Access road	accident				✓	
			safety sign				✓	
			barrier				✓	
			pavement condition				✓	
			accident				✓	
13	Safety	Quarry/workshop	safety sign				✓	
			tool/equipment				✓	
			education/training				✓	
			safety sign				✓	
			tool/equipment				✓	
14	Community perception	Camp/quarry	education/training				✓	
			conflict with local people				✓	
			any complain from people				✓	
			conflict with local people				✓	
			any complain from people				✓	

Notes: 5-excellent, 4-very good, 3-good, 2-poor, 1-very poor
Updated EMP for Neak Loeung Flood Control Dike

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Annex 3: COVID-19 Health and Safety Plan Checklist

Monitoring Checklist for COVID-19 Prevention Measures

Below is a checklist for prevention measures.

N.o	Preventing measures to COVID-19, some measures are needed to be implemented as below:	Yes	No
1	Dissemination about COVID-19 prevention and mitigation measures to staff and workers through orientation or distributing leaflet/poster at information/safety board at each construction and camp site;	✓	
2	Daily checking temperature of staff and workers prior starting the works;	✓	
3	Staff and workers have to wear masks all the time and properly;	✓	
4	Do not share personal items or supplies such as phones, pens, notebooks, tools, etc.;	✓	
5	Avoid common physical greetings, such as handshakes;	✓	
6	Maintain a minimum physical distance of one metre from others if possible;	✓	
7	Wash hands often with soap and water for at least 20 seconds after using the washroom, before handling food, after blowing nose, coughing, or sneezing, and before smoking. If hands are not visibly soiled, and soap and water are unavailable, alcohol-based hand sanitizer can be used;	✓	
8	All offices and jobsites implement additional cleaning measures of common areas. All door handles, railings, ladders, switches, controls, eating surfaces, shared tools and equipment, taps, toilets, and personal workstation areas are wiped down at least twice a day with a disinfectant, such as disinfectant wipes. Individuals are responsible for cleaning and disinfecting their workstations;	✓	
9	Commonly touched surfaces on vehicles and equipment are thoroughly cleaned and disinfected at the end of shifts and between users;	✓	
10	Coughing or sneezing into a tissue or the bend of your arm, not your hand; And dispose of any tissues you have used as soon as possible in a lined waste basket and wash your hands afterwards;	✓	
11	Complying with any instructions announced by Ministry of Health accordingly	✓	