

Environmental Monitoring Report

2nd Semestral Report
November 2021

Cambodia: Integrated Urban Environmental Management in the Tonle Sap Basin Project

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

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Semi-Annual Environmental Monitoring Report

KINGDOM OF CAMBODIA

Ministry of Public Works and Transport

Integrated Urban Environmental Management in the Tonle Sap Basin Project

Reporting Period: *July-December 2020*

Date: *February 2021*

SEMR Report Number: *2*

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1 ENVIRONMENTAL SAFEGUARDS SUMMARY

1. The 2nd Semi-annual Environment Monitoring Report (SEMR) covers the period of July to December 2020 for the Integrated Urban Environmental Management In the Tonle Sap Project. The SEMR has been prepared to fulfil the safeguard policy requirement of ADB.
2. The SEMR is prepared by the Project Management Implementation Support (PMIS) team and checked by the PMU for the Project.
3. For detailed information and background to the Project, please see main Project Documents. Only issues relevant to Environmental Safeguards are included in this report.

1.1 Summary of Project Progress

4. The following table gives a brief summary of the project progress for contract award, construction and key activities in this reporting period:

Table 1 Project Progress Summary- ALL subprojects

Safeguards Category	Environment	B	
Reporting Period:	July-Dec 2020	Date Last Report Issued:	Sept. 2020
Contracts Awarded to Date:	CW-05 Pursat Drainage and WWTP awarded (31th December 2019) to Kiri Dangrek Construction Co. Ltd CW-06 Kampong Chhnang and Pursat Landfill Sites awarded 30th October 2019, Signed 31st December 2019 to UNG SIMSIA CONSTRUCTION CO., LTD		
Construction Progress to Date:	As of December 2020, the physical construction progress is as follows: CW-05: 30.79 % construction completed. Construction started January 22nd 2020. CW-06: Kampong Chhnang landfill 43.59 % and Pursat landfill 39.07 % construction completed. Construction started April 11th 2020.		
Key Sub-project Activities in this Reporting Period:	Construction Activities CW-05: WWTP: Sludge drying bed; Over flow; guard house, Pre cast manhole, Pre Casting RC pipe Drainage: Cleaning and repairing of existing drainage; Pre Casting manhole CW-06: Site Clearance, backfill, internal road and land filling, Construction of administration building, construction of fence around landfill site, construction of drainage and installation of pipe culverts and access road in landfill site. Permits or Consents Issued:		

	No new permits or consents required in this reporting period.
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1.2 Summary of EMP Implementation

5. EMP implementation is summarised in the following points, for this reporting period:

- CW05 contractor has an 18,000l water truck which is used regularly e.g. x3 day in August, when dust is generated by site works.
- CW05 work camp is well run and has appropriate measures for COVID protection and fire protection.
- CW05 was significantly affected by flooding in October when Pursat town was affected by heavy rains and flood water from the river.
- COVID has slowed the field work for the project teams in terms of delivering GRM training in advance of construction.

1.3 Summary of EMP Monitoring

6. EMP monitoring is summarised in the following points, for this reporting period:

- Number of Monitoring Visits to Construction Site and wider area: Everyday by PIU, Every month by PMIS team
- Number of Environmental Samples Tested: No sampling to date
- 7. The Construction work of CW-06 has been started since April 2020. Monitoring will begin following training in monitoring with PMU and PIU in Q1 2021.
- 8. Construction work of CW-05 has been started since April 2020 to January 2021. Monitoring will begin in Q1 2021.

1.4 Summary of Complaints, Issues and Corrective Action

9. Any complaints, issues and corrective action that has been identified or implemented is summarised in the following points, for this reporting period:

- Issues Raised: None
- Grievances Raised with GRM: 0 grievances
- Corrective Action issued by project to Contractor: 2 corrective action plans to manage flood response:
 - Postponed the construction work at WWTP for CW-05 due to flooding
 - Postponed the construction work at Both landfills (Pursat and Kampong Chhnang) for CW-06 due to flooding

2 SAFEGUARDS STAFF, TRAINING AND DOCUMENTATION

2.1 Implementation Arrangements

10. The EMP defines the Environmental Safeguards roles and responsibilities. The roles are required to be filled in order to meet the EMP requirements. The following table gives the status of the key roles for EMP implementation for all subprojects.

Table 2. Status of Environmental Safeguard Roles- ALL subprojects

Safeguards Role	Status & Comment			
PMU- Environmental Safeguards Officer	Date Started:	-11 th May 2020	Full Time/ Part Time	PT
	Comment	Mr Penh Socheat		
PIU Environmental Safeguard Counterpart (Focal Point)	Date Started:	-22 nd January 2020	Full Time/ Part Time	PT
	Comment	Mr. Bun Tainglay		
National Environmental Specialist PMIS team	Date Started:	September 2018	Full Time/ Part Time	PT
	Comment	Mr. Chea Mong		
International Environmental Specialist PMIS team	Date Started:	October 2018	Full Time/ Part Time	[PT
	Comment	Ms. Rachel Wildblood		
Contractor Environment Health & safety Staff (Ung Simsia Construction Co.,LTD) (CWO6)	Date Started:	-22 nd January 2020	Full Time/ Part Time	FT
	Comment	Mr. Oum Seyhakmony		

	Comment	Mr. Meng Sovida		
Contractor Environment Health & safety Staff (Kiri Dangrek Construction Co. Ltd) (CWO5)	Date Started:	-22 nd January 2020	Full Time/ Part Time	FT
	Comment	Mr. San Sey (On site Project Manager)		

11. The project concludes that the environmental safeguards roles are being partially fulfilled

2.2 Training & Capacity Building

12. The following table gives the environmental safeguards training courses that have been completed during this reporting period.

Table 3. Environmental Safeguards Training Provided and Planned- ALL subprojects

Training Course Title	Training Date	Participants	Training Provider
EMP implementation, monitoring and reporting	08-09-2020	PMU=2, PIU=8 and Contractor=3, CSC=2	PMIS National Environmental Consultant
Grievance Redress Mechanism	09-09-2020	PMU=2, PIU=8, Local Authority=10 Contractor=3,	PMIS National Environmental Consultant
Affected People Consultation	09-09-2020	PMU=2, PIU=8, Local Authority=10 Contractor=3,	PMIS National Environmental Consultant

Note: See attendant list in annex 5 and photo in annex 4

2.3 ADB Approvals

13. The following table gives information on the status of the safeguards documents.

Table 4. Status of Environmental Safeguard Documents- ALL subprojects

Safeguards Documents	Update Issued (Latest Version)	Submitted to ADB	ADB Approval Status
Consolidated IEE: Several major revisions to change scope throughout 2018 and 2019, incorporating ADB comments and removing cancelled embankment project. June 30 th 2020 update - filled gaps noted by ADB, and inclusion of IEIA data (baseline/consultation)	IEE_TS1Consolidated-25Oct18(SK)-rev_RCW-APRIL2019.docx IEE_TS1Consolidated- 08 JULY 2020.doc	Version April 2019 to ADB Version 8th July 2020 to ADB direct from PMIS	Approved and disclosed
EMP Kampong Chhnang Landfill October 2018 version reviewed by ADB Nov 2018 and comments incorporated – minor amend April 2019 following ADB comment	EMP document issued by PMU	23 August 2018 (with tender document)	Approved and disclosed
EMP Pursat Landfill October 2018 version reviewed by ADB Nov 2018 and comments incorporated– minor amend April 2019 following ADB comment	EMP document issued by PMU	23 August 2018 (with tender document)	Approved and disclosed
EMP Pursat Urban Drainage Draft updated by PMIS April 2019 based on comments from ADB on previous EMPs	EMP document issued by PMU	6 August 2019 (with tender document)	Approved and disclosed
CMEI Due Diligence Report Environmental DDR completed by PMIS 28 th July 2020, First Draft. Final Draft completed Dec 2020.	Final Version Issued	To be completed and returned to ADB August 2020 Update issued Dec. 2020	Approved and disclosed
REA (Screening) Kampong Chhnang WWTP submitted and revised further with change of site location	Latest: TS1_KC WWTP ENV Screening DRAFT 31 July 2020.docx	31 July 2020 to ADB direct from PMIS	-

Safeguards Documents	Update Issued (Latest Version)	Submitted to ADB	ADB Approval Status
IEE Kampong Chhnang WWTP submitted and revised further with change of site location	TS1_KC WWTP_ IEE_v1.2_ 310720.doc	31 July 2020 to ADB direct from PMIS	Waiting approval

2.4 National Approvals

14. The following table gives an update on the necessary national approvals required for the project to proceed.

Table 5. Status of National Approvals for Environmental Documents- ALL subprojects

Documents	Submitted to MoE	Approved By MoE	Status	Comment
CW-05 IEIA Pursat Urban Drainage	n/a	19 th November 2019	Approved	
CW-06 IEIA Landfills	n/a	19 th November 2019	Approved	
CW-05&06 UXO Clearance	n/a	n/a	Clearance Given 26 th June 2020	Clearance for all sub-projects
IEIA Kampong Chhnang Urban Drainage	n/a	n/a	Approval Expected July 2021	

2.5 Construction Environmental Management Plan (CEMP) Approvals

15. The following table confirms the status of the Construction Environmental Management Plan (CEMP) for each CW package. Although there was a delay in CEMP approval for CW-06, during this period the EMP was in place and the contractor remained contractually obliged establish an operational system for managing environmental impacts, and carry out all of the monitoring and mitigation measures set forth in the IEE & EMP, as per clause in Contract Conditions, SCC, GCC 9.6.

Table 6. Status of CEMP Approvals- ALL subprojects

Civil Works Package/ Subproject	CEMP Given to PMU	Approved By PMU:	Comment:
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CW-06 Kampong Chhnang and Pursat Landfill Sites	July 2020,	09 February 2021	Reviewed by National and International Environmental consultants of PMIS August 2020 and comments returned to PMU. Delays due to late submission of CEMP by contractor and delays in responding to PMU comments.
CW-05 Pursat Drainage and WWTP	17 th January 2020	25 February 2020	Reviewed by National and International Environmental consultants of PMIS 4 th February 2020 and comments returned to PMU. CEMP sign off by PMU within 2 months of contract award.
Kampong Chhnang sewerage system and WWTP	NA	NA	NA

3 EMP IMPLEMENTATION

3.1 Environmental Performance

16. The following table gives the environmental impact mitigation measures in the Borrower (Project) EMP and the corresponding CEMP and how the project is progressing with implementing the mitigation measures, for each subproject.

17. The evidence for the compliance is through a combination of documentation and discussion between the Contractor and PMU:

Table 7. Status of EMP Compliance CW-05 Pursat Drainage & WWTP

No.	EMP Requirement (Mitigation Measure)	Compliance Description (Yes, No, Partial, N/A at this stage)	Comment or Further Explanation if Needed	Reasons for Not Full Compliance
Before Construction Starts				
1	EMP in Bidding Documents	Yes	EMP was included in procurement package.	

2	GRM mechanism disseminated and functioning KC and PS	Yes	Training provided	
3	GRM Sign Board at Construction Site entrance	Yes		
4	CEMP provided by contractor	Yes	Supplied by contractor, and approved by PMU	
5	All licences and permits in place	Partial	UXO certificate is awarded	No evidence of PDOE letter/permission regarding disposal of waste is provided to date.
Construction				
6	1. Water will be sprayed at least twice per day on construction sites, material handling areas when fugitive dust is noticeably generated. 2. All topsoil and overburden removed should be stockpiled for later restoration 3. The contractor will provide a Traffic Management Plan to the PMU for approval which will include: a) How the contractor will inform the community and businesses of construction traffic routes b) Any advice/information the contractor will give to affected people during construction c) How the contractor will manage traffic including any road closures specifying management around Pursat Market. 4. Trained traffic marshal will be used to direct vehicle movements on and around construction sites and in all urban areas. 5. Minimize time that excavations and exposed soil are left open/exposed. Backfill immediately after work is completed	Yes		
7	6. Develop plan of days and locations where outages in utilities and services will occur, or are expected. 7. Contact local utilities and services providers with schedule, and identify possible contingency back-up plans for outages. 8. Contact affected community to inform them of planned outages. 9. For any unavoidable outages, schedule during low use time such between 24:00 and 06:00. 10. Construction work should start at night time or section by section during working at dense population at Pursat market area.	N/A		
8	11. Required aggregate volumes must be calculated prior to extraction to prevent wastage.	Yes	Materials handled	

	12. Define and schedule how fabricated materials such as steel, wood structures will be transported and handled. 13. Trucks carrying dry construction materials such as earth; aggregate will be covered with tarpaulins or other suitable cover. 14. Driving on unmade roads, trucks will be limited to 15 kph. Warning sign to inform road users of turning heavy vehicles will be used where trucks cross or turn off the National Road #5. 15. Asphalt and concrete batching facilities will be located at least 500m downwind from the nearest dwellings in order to reduce the impact of fumes on humans and to be fitted with necessary equipment such as bag house filters to reduce fugitive dust emissions. 16. Water will be sprayed on material storage areas, and borrow pits where fugitive dust is generated and where vehicles are transporting materials on unmade roads, generating dust, where human receptors are within 300m.		without impact on environment	
9	17. Maintain all exhaust systems in good working order; undertake regular equipment maintenance; 18. Restrict construction activities using heavy machinery between 7 am-5 pm; In particular, are activities such as pile driving. 19. Provide advance warning to the community on timing of noisy activities. Seek suggestions from community members to reduce noise annoyance, particularly related to noise sensitive activities at receptors 20. Public notification of construction operations will incorporate noise considerations; information procedure of handling complaints through the Grievance Redress Mechanism will be disseminated. 21. Ensure noise monitoring is undertaken near sensitive receptors, particularly dwellings when construction machinery is operational 22. Construction vehicles and machinery will be maintained to a high standard to minimize emissions 23. All construction workers will use appropriate Personal Protective Equipment (PPE) including ear defenders when operating machinery; 24. No washing or repair of machinery within 50m of surface waters including river and irrigation canal. 25. Maintain equipment in proper working order 26. Replace unnecessarily noisy vehicles and machinery. 27. Vehicles and machinery to be turned off when not in use. 28. Construct temporary noise barriers around excessively noisy activity areas where possible.	Yes	No observed issues with noise or pollution from machinery	
10	29. Measures in the sub-plan related to spoil management will include as a minimum:	Yes		

	a) Preference must be given to use of spoil other construction sites, or disposed in spent quarries or borrow pits b) Uncontaminated spoil to be disposed of in Government approved sites, which will not be on agriculturally productive land, within 50m of a water course, including stream, river or irrigation channel, on sloped land, within 50 m of cultural heritage sites, within 100 m of any other culturally or ecologically sensitive feature. c) Contaminated spoil disposal must be tested for contaminants then follow Government regulations including handling, transport, treatment (if necessary), and disposal and will be isolated from human contact and environmental receptors by plastic sheeting or similar. d) A record of type, estimated volume, and source of disposed spoil must be recorded			
11	30. Sub-plan will include measures to explain how the contractor will: a) Manage general solid and liquid waste from construction in line with Government regulations, and will cover, collection, handling, transport, recycling, and disposal of waste created from construction activities and worker force. b) Make clear arrangements for storage and transportation of all hazardous and non-hazardous waste to an authorised and approved disposal point (approved by Provincial Department of Environment). c) Segregate recyclables at source and given/sold to recycler (plastic, metal, card, paper as a minimum) d) Store all solid waste to be stored in containers with lids, within 25 m from all surface water, water supplies, and cultural and ecological sensitive receptors. e) Prohibit burning of waste at all times; f) Provide all vehicles/drivers with plastic bags for waste collection and prevent any unauthorized waste disposal with particular attention paid to prevention of waste entering water ways including drainage ditches g) Provide a schedule of solid and liquid waste pickup and disposal must be established and followed that ensures construction sites are as clean as possible. h) All spills must be cleaned up completely with all contaminated soil removed and handled in accordance with Spoil Sub-Plan A.	Partial	The solid waste is collected by local waste collection company. During the flooded period the site allowed litter to escape containers.	
12	31. Occupational H&S measures to be included in the management sub-plan will include: a) Assurance that all workers are equipped with, and use Personal Protective Equipment (PPE). b) Specifications for the PPE to be used on site and the contractors' approach to enforcement of its use by workers c) Sufficient signage giving occupational health and safety warnings and information disclosure within all construction sites – sub-plan to include example warnings.	See table below		

	d) Details of worker education and awareness seminars for construction hazards will be given. A construction site safety program will be developed and distributed to workers. e) Details of daily toolbox meetings (safety briefings) f) Details of the site accident record book which will be maintained where all major or minor accidents and incidents are recorded with actions taken. g) An Environment Health and Safety qualified engineer or staff member will be engaged for the contract and adequate first aid equipment provided on site. h) Warning signs will be set up if mud is likely on public roads. Mud will be removed at the end of each day. Other spillages on public roads will be removed immediately. i) Drinking water must be provided at all construction sites 32. The Emergency Response Plan will set out detailed Preventative Measures for all types of incidents covered in the Emergency Plan. This will include: j) Prevention of Injury and Accidents – to include Personal Protective Equipment requirements for construction workers, training requirements k) Prevention of Spillage - All construction fluids such as oils, and fuels will be stored on hard standing with sealed drainage with a capacity of 110% of the largest fuel container, will include procedures on refueling and maintaining vehicles. l) Prevention of Fire – to include measures for Ignition Sources including prevention of smoking on construction site, management of flammable materials and liquid. m) Other Incidents – prevention measures relevant to other issues considered relevant by the contractor 33. The Contractor will develop Emergency Response Procedures prior to construction. The procedures will cover actions to be taken in case of: n) Worker injury (e.g. construction or traffic accident) o) Spillage (e.g. fuel spillage) p) Fire (e.g. fuel or chemicals storage area); and q) Any other incidents anticipated by the contractor.			
13	34. If a camp for construction workers is required, the contractor will set out a management plan which includes: a) A map showing camp lay out, welfare facilities, and first aid kit locations. b) Accommodation facilities including pit latrines for male and female workers, adequate drainage to prevent flooding, security including a no weapons policy and waste disposal areas.	Yes		

	c) Pit latrines to be located at least 200m from surface waters, and in areas of suitable soil profiles and above the groundwater levels d) A clean-out or infill schedule for pit latrines must be established and implemented to ensure working latrines are available at all times. e) Worker camps will have adequate drainage. f) Providing firefighting equipment will be provided in all camps and will have adequate signage and prescribed testing intervals. g) The septic should be provided in worker camp. h) Plan of how camp areas will be restored to original condition after construction completed 35. If a construction camp is not required, the contractor will not require a Management Plan but will: i) Provide adequate waste disposal facilities including garbage cans for workers. j) Provide welfare facilities including water for washing, drinking and include facilities for male and female workers k) Provide toilets for male and female construction workers with a cleaning schedule l) The contractor will give priority to local labor force and retain evidence of how local labor recruitment efforts were undertaken. 36. The contractor will ensure training is delivered to construction workers on the following and the contractor will provide a training schedule: m) HIV Aids education awareness n) Cambodian laws for foreign labor regarding: hunting, fishing and traffic rules o) Grievance Redress Mechanism – how to deal with affected people who make a complaint to a worker p) Occupational Health and Safety and Emergency Procedures.			
14	37. Community H&S measures to be included in the management sub-plan will include: a) Details of appropriate fencing or protective barriers, lighting and buffer zones which will be provided around all construction sites including barriers with lighting where needed on access roads and populated locations. b) Sufficient signage and information disclosure, and site supervisors and should be placed at all sites. c) Details of Warning signs which will be set up if mud is likely on public roads. Mud will be removed at the end of each day. Other spillages on public roads will be removed immediately. d) Details of signage and speed controls if public roads are to be affected by construction traffic.	See H&S table below		

	e) Details of sufficient signage giving community dangers / warnings and information disclosure outside all construction sites, include example warnings. f) Speed limits suitable for the size and type of construction vehicles, and current traffic patterns should be developed, posted, and enforced on all roads used by construction vehicles. 38. For urban excavations measures to be included in the sub-plan will detail how the contractor will ensure: g) Access will be safely maintained for pedestrians and vehicles to schools, markets, houses, pagodas and commercial establishments h) Temporary safe access will be constructed by the contractor where needed. i) No temporary access shall be greater than 3:1 slope to allow access to all. j) For WWTP construction measures to be included in the sub-plan will detail how the contractor will ensure access to farm land surrounding the WWTP.			
15	39. Refuelling only in designated areas which are to be 50 m from a water course and drip trays to be used when refuelling or topping up / changing machinery fluids 40. Construction fluids such as oils, and fuels should be stored and handled on a bunded impermeable surface; a bund will be provided around any above ground fuel storage tanks with a capacity of 110% of the largest single tank. 41. All chemicals and fuels will be in labeled containers.	Yes	Fuels stored in bunded impermeable area	
16	42. The contractor will repair any damage caused such as damage from heavy vehicles to local roads, on completion of construction. The repairs will be to pre-project condition or better at the cost of the contractor.	N/A		
17	43. Ensure irrigation canal is protected from run off and sedimentation through controlled construction site drainage using berms, or plastic sheet fencing around all excavations and earthwork areas. 44. Earthworks should be conducted during dry periods. 45. Maintain a stockpile of topsoil for immediate site restoration following backfilling. 46. Protect exposed or cut slopes with planted vegetation, and stabilize all slopes. 47. Rip rap at sensitive area especially high slope or in front of run off area 48. Re-vegetate all areas of exposure soil immediately after work is completed.	Yes	Note: Extreme flooding of WWTP site challenging for sedimentation prevention	

18. 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 8. EMP– Actions Needed for Compliance CW-05 Pursat drainage & WWTP

No.	EMP Requirement	Further Action to Take	Date for Action	Who will Implement Action
5	Licences/Permits	Confirmation that permission is given for disposal of construction waste at a suitable site	August 2020 (not met) January 31 – (new date)	PMU to ask Contractor
12	Solid waste containment and collection	WWTP site to ensure all waste is collected and plastic bottles separated.	January 31 2021	PMU to ask Contractor

19. The following table gives information on environmental performance issues from previous Environmental Monitoring Reports. This table confirms that the action was completed or that the action is outstanding.

Table 9. EMP Compliance Outstanding Issues from Previous Report(s) – CW-05 Pursat drainage& WWTP

Issue	Required Action	Responsibility and Timing	Resolution	Required Action
GRM mechanism disseminated and functioning KC and PS	Training to ensure GRM is functioning	PMIS September/October 2020	YES PMIS team already conducted the training in September 2020	
GRM Sign Board at Construction Site entrance	Install signboard at all construction sites	Contractor September/October 2020	YES Contractor already install 28 January 2021	
Licences/Permits	Confirmation that permission is given for disposal of construction waste at a suitable site	PMU Ask Contractor August 2020		PMIS need to follow up with contractor

Table 10. Status of EMP Compliance CW-06 - landfill sites Pursat (lot 2)

No.	EMP Requirement (Mitigation Measure)	Compliance & Description (Yes, No, Partial, N/A at this stage)	Comment or Further Explanation if Needed	Reasons for Not Full Compliance
Before Construction Starts				
1	EMP in Bidding Documents	Yes	EMP was included in procurement package.	
2	GRM mechanism disseminated and functioning KC and PS	Yes		
3	GRM Sign Board at Construction Site entrance	No	Require in EMP for both landfills but not in BOQ.	
4	CEMP provided by contractor	Partial	Supplied by contractor	PMIS team reviewed the CEMP and await a revised copy considering amendments to ensure it is compliant with the EMP requirements in bidding document.
5	Well drilling method statement for PS and KC landfills	No		Requested again in the CEMP comments from PMIS [July 2020]
6	All licences and permits in place	Partial	UXO certificate is awarded	No evidence of PDOE letter/permission regarding disposal of waste is provided to date.
Construction phase				
7	1. For all 15 households 0-500 m of the landfill site that want to accept mitigation measures: q) Installation of opening glass window frames and fly screens into a maximum of 8 windows within the house. r) Provision of 50 viable tree or shrub saplings (native species, to be determined through consultation) to provide a vegetation screen around the	N/A		Too early to be required

	front or back, and sides of the property; the resident is responsible for aftercare.			
	2. Asphalt and concrete batching facilities will be located at least 500m downwind from the nearest dwellings in order to reduce the impact of fumes on humans and to be fitted with necessary equipment such as bag house filters to reduce fugitive dust emissions. 3. Water will be sprayed on material handling areas, and borrow pits where fugitive dust is generated if it will impact on workers or residents. 4. Trucks carrying dry construction materials such as earth will be covered with tarpaulins or other suitable cover. 5. Stockpiles and materials will be stored at least 50m from surface waters with drainage directed away from the irrigation canals or drainage channels 6. Driving on unmade roads, trucks will be limited to 15 kph. Warning sign to inform road users of turning heavy vehicles will be used where trucks cross or turn off National Road. 7. Construction traffic movements will be scheduled to avoid congested and/or sensitive periods 8. borrow site will be sign posted, fenced or contoured to ensure unauthorised/accidental access to any steep sided pits	Partial	Implementation by contractor	The contractor need to cover on soil trucks during transport from borrow site to landfill site
8	9. Maintain all exhaust systems in good working order; undertake regular equipment maintenance; 10. Restrict construction activities using heavy machinery work between 8am-6pm; 11. Provide advance warning to the community on timing of noisy activities. Seek suggestions from community members to reduce noise annoyance, particularly related to noise sensitive activities at receptors 12. Public notification of construction operations will incorporate noise considerations; information procedure of handling complaints through the Grievance Redress Mechanism will be disseminated. 13. Ensure noise monitoring is undertaken near sensitive receptors, particularly dwellings when construction machinery is operational 14. Construction vehicles and machinery will be maintained to a high standard to minimize emissions 15. All construction workers will use appropriate Personal Protective Equipment (PPE) including ear defenders when operating machinery; 16. No washing or repair of machinery within 50m of surface waters including irrigation canals. 17. Project owner should prepare 1500 m fence with 2 m height around the project site. 18. Growing trees to protect dust as well as noise and vibration.	Yes	No observed issues with noise or pollution from machinery	

9	19. The contractor will take and store a Pre-Condition photograph of all houses and other structures along the 1500m access road within 30 m of the road shoulder and make the photos available to MPWT should any dispute occur.	Yes		
10	20. Follow requirements in Technical Specification regarding tree size, planting and aftercare requirements 21. Native species only to be approved by PDoE	N/A		
11	22. Provision of adequate short-term drainage away from construction sites to prevent contaminated run off. 23. Installation of temporary storm drains or ditches for construction sites to manage and control the flow and direction of surface water run off 24. Spray water on areas being worked if fugitive dust is generated if it will impact on workers or residents. 25. If groundworks reveal cultural chance finds, the contractor will stop work immediately, fence off the area, and notify the PMU. Work will not commence until MPWT approval is given.	Yes		
12	26. Refueling only in designated areas which are to be 200m from a water course and drip trays to be used when refueling or topping up / changing machinery fluids 27. Construction fluids such as oils, and fuels should be stored and handled on a bunded impermeable surface; a bund will be provided around any above ground fuel storage tanks with a capacity of 110% of the largest single tank. 28. All chemicals and fuels will be labeled 29. Spill control measures will be included in emergency response measures	Partial		Contractor need provides the equipment for spill control
13	30. Sub-plan will include measures to explain how the contractor will: a) Follow the waste hierarchy and demonstrate how waste will be prevented and recycled and will show effective management of materials on site through good house-keeping and work planning b) Clear arrangements for storage and transportation of all hazardous and non-hazardous waste to an authorised and approved disposal point (approved by Provincial Department of Environment). c) Recyclables to be separated at source and given/sold to recycler (plastic, metal, card, paper as a minimum) d) All solid waste to be stored in containers with lids. e) Prohibit burning of waste at all times; f) Provide all vehicles/drivers with plastic bags for waste collection and prevent any unauthorized waste disposal with particular attention paid to prevention of waste entering water ways including drainage ditches g) Criteria for spoil disposal including levels of contamination and location for spoil disposal (to be approved by municipal authorities) h) No disposal of spoil on on agriculturally productive land or within 50 m of a water course	Yes		

14	31. Community H&S measures to be included in the management sub-plan will include: r) Details of appropriate fencing, protective barriers, and buffer zones which will be provided around all construction sites including barriers where needed on access roads and populated. s) Details of Safety measures, if required, to prevent access by members of the public and livestock to any borrow site excavations t) Details of Warning signs which will be set up if mud is likely on public roads. Mud will be removed at the end of each day. Other spillages on public roads will be removed immediately. u) Details of signage and speed controls if public roads are to be affected by construction traffic. v) Details of sufficient signage giving community dangers / warnings and information disclosure outside all construction sites, include example warnings. 32. Occupational H&S measures to be included in the management sub-plan will include: w) Assurance that all workers are equipped with, and use Personal Protective Equipment (PPE). x) Specifications for the PPE to be used on site and the contractors' approach to enforcement of its use by workers y) Sufficient signage giving occupational health and safety warnings and information disclosure within all construction sites – sub-plan to include example warnings. z) Details of worker education and awareness seminars for construction hazards will be given. A construction site safety program will be developed and distributed to workers. - aa) Details of daily toolbox meetings (safety briefings) - bb) Details of the site accident record book which will be maintained where all major or minor accidents and incidents are recorded with actions taken. - cc) An Environment Health and Safety qualified engineer will be engaged for the contract and adequate first aid equipment provided on site. - dd) Warning signs will be set up if mud is likely on public roads. Mud will be removed at the end of each day. Other spillages on public roads will be removed immediately. - ee) Provision will be made for safety precautions when using 220 to 240V Electric Power tools if the workers are likely to be working within wet or flooded environments. 33. The Emergency Response Plan will set out detailed Preventative Measures for all types of incidents covered in the Emergency Plan. This will include:	See H&B tables below		
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	ff) Prevention of Injury and Accidents – to include Personal Protective Equipment requirements for construction workers, training requirements gg) Prevention of Spillage - All construction fluids such as oils, and fuels will be stored on hard standing with sealed drainage with a capacity of 110% of the largest fuel container, will include procedures on refueling and maintaining vehicles. hh) Prevention of Fire – to include measures for Ignition Sources including prevention of smoking on construction site, management of flammable materials and liquid. ii) Other Incidents – prevention measures relevant to other issues considered relevant by the contractor 34. The Contractor will develop Emergency Response Procedures prior to construction. The procedures will cover actions to be taken in case of: jj) Worker injury (e.g. construction or traffic accident) kk) Spillage (e.g. fuel spillage) ll) Fire (e.g. fuel or chemicals storage area); and 35. Any other incidents anticipated by the contractor.			
15	36. [if required] If a camp for construction workers is required the contractor will set out a management plan which includes: a) A map showing camp lay out, welfare facilities, and first aid kit locations. . It will be at least 50m from the nearest house. b) Accommodation facilities including pit latrines for male and female workers, adequate drainage to prevent flooding, security including a no weapons policy and waste disposal areas. c) Pit latrines to be located at least 200m from surface waters, and in areas of suitable soil profiles and above the groundwater levels d) Schedule of HIV Aids education awareness to be given to workers. e) Training on relevant laws for foreign labor (including hunting, fishing and traffic rules); 37. If a construction camp is not required, the contractor will not require a Management Plan but will: f) Provide adequate waste disposal facilities including garbage cans for workers. g) Provide welfare facilities including water for washing, drinking and include facilities for male and female workers h) Provide toilets for male and female construction workers with a cleaning schedule	Partial	Supplies by contractor	Contractor need to provide one more toilet for workers in camp.

	38. The contractor will give priority to local labor force and retain evidence of how local labor recruitment efforts were undertaken			
16	39. If staging area required (not within construction camp area) the contractor will: a) Provide a layout map of staging area and its location which will not be within 20m of any surface waterbody and not in an area liable to flood 40. The site will not be at least 50m from a residential property	Yes		
17	41. Topsoil from construction areas will be retained and used for landfill landscaping and rehabilitation 42. The contractor will provide a clear plan of how the following sites will be restored to their original condition following the end of construction; a) Worker camp b) Staging area c) Access roads to landfill site 43. Any damage shall be repaired as per the technical specification in the bidding documents 44. All waste will be removed, and compacted ground restored. 45. Revegetation of sloped areas such as access road slopes with natural grass species to prevent wet season erosion	Yes		

Table 11: Status of EMP Compliance CW-06 - landfill sites Kg Chhnang (lot 1)

No.	EMP Requirement (Mitigation Measure)	Compliance & Description (Yes, No, Partial, N/A at this stage)	Comment or Further Explanation if Needed	Reasons for Not Full Compliance
Before Construction Starts				
1	EMP in Bidding Documents	Yes	EMP was included in procurement package.	
2	GRM mechanism disseminated and functioning KC and PS	Yes		
3	GRM Sign Board at Construction Site entrance	No	Require in EMP for both landfills but not in BOQ.	
4	CEMP provided by contractor	Partial	Supplied by contractor	PMIS team reviewed the CEMP and await a revised copy considering amendments to ensure it is compliant with

				the EMP requirements in bidding document.
5	Well drilling method statement for PS and KC landfills	No		Requested again in the CEMP comments from PMIS [July 2020]
6	All licences and permits in place	Partial	UXO certificate is awarded	No evidence of PDOE letter/permission regarding disposal of waste is provided to date.
Construction phase				
7	46. For all 8 households within 0-500 m of the landfill site that want to accept mitigation measures: a) Installation of opening glass window frames and fly screens into a maximum of 8 windows within the house. b) Provision of 50 viable tree or shrub saplings (native species, to be determined through consultation) to provide a vegetation screen around the front or back, and sides of the property; the resident is responsible for aftercare	N/A		Too early to be required
	47. Asphalt and concrete batching facilities will be located at least 500m downwind from the nearest dwellings in order to reduce the impact of fumes on humans and to be fitted with necessary equipment such as bag house filters to reduce fugitive dust emissions. 48. Water will be sprayed on material handling areas, and borrow pits where fugitive dust is generated if it will impact on workers or residents. 49. Trucks carrying dry construction materials such as earth will be covered with tarpaulins or other suitable cover. 50. Stockpiles and materials will be stored at least 50m from surface waters with drainage directed away from the irrigation canals or drainage channels 51. Driving on unmade roads, trucks will be limited to 15 kph. Warning sign to inform road users of turning heavy vehicles will be used where trucks cross or turn off National Road. 52. Construction traffic movements will be scheduled to avoid congested and/or sensitive periods 53. borrow site will be sign posted, fenced or contoured to ensure unauthorized/accidental access to any steep sided pits	Partial	Implementation by contractor	The contractor need to cover on soil trucks during transport from borrow site to landfill site
8	54. Maintain all exhaust systems in good working order; undertake regular equipment maintenance; 55. Restrict construction activities using heavy machinery work between 8am-6pm;	Yes	No observed issues with noise or	

	56. Provide advance warning to the community on timing of noisy activities. Seek suggestions from community members to reduce noise annoyance, particularly related to noise sensitive activities at receptors 57. Public notification of construction operations will incorporate noise considerations; information procedure of handling complaints through the Grievance Redress Mechanism will be disseminated. 58. Ensure noise monitoring is undertaken near sensitive receptors, particularly dwellings when construction machinery is operational 59. Construction vehicles and machinery will be maintained to a high standard to minimize emissions 60. All construction workers will use appropriate Personal Protective Equipment (PPE) including ear defenders when operating machinery; 61. No washing or repair of machinery within 50m of surface waters including irrigation canals. 62. Project owner should prepare 1500 m fence with 2 m height around the project site. 63. Growing trees to protect dust as well as noise and vibration.		pollution from machinery	
9	64. The contractor will take and store a Pre-Condition photograph of all houses and other structures along the 1500m access road within 30 m of the road shoulder and make the photos available to MPWT should any dispute occur.	Yes		
10	65. Follow requirements in Technical Specification regarding tree size, planting and aftercare requirements 66. Native species only to be approved by PDoE	N/A		
11	67. Provision of adequate short-term drainage away from construction sites to prevent contaminated run off. 68. Installation of temporary storm drains or ditches for construction sites to manage and control the flow and direction of surface water run off 69. Spray water on areas being worked if fugitive dust is generated if it will impact on workers or residents. 70. If groundworks reveal cultural chance finds, the contractor will stop work immediately, fence off the area, and notify the PMU. Work will not commence until MPWT approval is given.	Yes		
12	71. Refueling only in designated areas which are to be 200m from a water course and drip trays to be used when refueling or topping up / changing machinery fluids 72. Construction fluids such as oils, and fuels should be stored and handled on a bunded impermeable surface; a bund will be provided around any above ground fuel storage tanks with a capacity of 110% of the largest single tank. 73. All chemicals and fuels will be labeled 74. Spill control measures will be included in emergency response measures	Partial		Contractor need provides the equipment for spill control
13	75. Sub-plan will include measures to explain how the contractor will:	Yes		

	i) Follow the waste hierarchy and demonstrate how waste will be prevented and recycled and will show effective management of materials on site through good house-keeping and work planning j) Clear arrangements for storage and transportation of all hazardous and non-hazardous waste to an authorised and approved disposal point (approved by Provincial Department of Environment). k) Recyclables to be separated at source and given/sold to recycler (plastic, metal, card, paper as a minimum) l) All solid waste to be stored in containers with lids. m) Prohibit burning of waste at all times; n) Provide all vehicles/drivers with plastic bags for waste collection and prevent any unauthorized waste disposal with particular attention paid to prevention of waste entering water ways including drainage ditches o) Criteria for spoil disposal including levels of contamination and location for spoil disposal (to be approved by municipal authorities) p) No disposal of spoil on on agriculturally productive land or within 50 m of a water course			
14	76. Community H&S measures to be included in the management sub-plan will include: - mm) Details of appropriate fencing, protective barriers, and buffer zones which will be provided around all construction sites including barriers where needed on access roads and populated. - nn) Details of Safety measures, if required, to prevent access by members of the public and livestock to any borrow site excavations - oo) Details of Warning signs which will be set up if mud is likely on public roads. Mud will be removed at the end of each day. Other spillages on public roads will be removed immediately. - pp) Details of signage and speed controls if public roads are to be affected by construction traffic. - qq) Details of sufficient signage giving community dangers / warnings and information disclosure outside all construction sites, include example warnings. 77. Occupational H&S measures to be included in the management sub-plan will include: - rr) Assurance that all workers are equipped with, and use Personal Protective Equipment (PPE). - ss) Specifications for the PPE to be used on site and the contractors' approach to enforcement of its use by workers	See H&B tables below		

	tt) Sufficient signage giving occupational health and safety warnings and information disclosure within all construction sites – sub-plan to include example warnings. uu) Details of worker education and awareness seminars for construction hazards will be given. A construction site safety program will be developed and distributed to workers. vv) Details of daily toolbox meetings (safety briefings) ww) Details of the site accident record book which will be maintained where all major or minor accidents and incidents are recorded with actions taken. xx) An Environment Health and Safety qualified engineer will be engaged for the contract and adequate first aid equipment provided on site. yy) Warning signs will be set up if mud is likely on public roads. Mud will be removed at the end of each day. Other spillages on public roads will be removed immediately. zz) Provision will be made for safety precautions when using 220 to 240V Electric Power tools if the workers are likely to be working within wet or flooded environments. 78. The Emergency Response Plan will set out detailed Preventative Measures for all types of incidents covered in the Emergency Plan. This will include: aaa) Prevention of Injury and Accidents – to include Personal Protective Equipment requirements for construction workers, training requirements bbb) Prevention of Spillage - All construction fluids such as oils, and fuels will be stored on hard standing with sealed drainage with a capacity of 110% of the largest fuel container, will include procedures on refueling and maintaining vehicles. ccc) Prevention of Fire – to include measures for Ignition Sources including prevention of smoking on construction site, management of flammable materials and liquid. ddd) Other Incidents – prevention measures relevant to other issues considered relevant by the contractor 79. The Contractor will develop Emergency Response Procedures prior to construction. The procedures will cover actions to be taken in case of: eee) Worker injury (e.g. construction or traffic accident) fff) Spillage (e.g. fuel spillage) ggg) Fire (e.g. fuel or chemicals storage area); and 80. Any other incidents anticipated by the contractor.			
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15	81. [if required] If a camp for construction workers is required the contractor will set out a management plan which includes: i) A map showing camp lay out, welfare facilities, and first aid kit locations. . It will be at least 50m from the nearest house. j) Accommodation facilities including pit latrines for male and female workers, adequate drainage to prevent flooding, security including a no weapons policy and waste disposal areas. k) Pit latrines to be located at least 200m from surface waters, and in areas of suitable soil profiles and above the groundwater levels l) Schedule of HIV Aids education awareness to be given to workers. m) Training on relevant laws for foreign labor (including hunting, fishing and traffic rules); 82. If a construction camp is not required, the contractor will not require a Management Plan but will: n) Provide adequate waste disposal facilities including garbage cans for workers. o) Provide welfare facilities including water for washing, drinking and include facilities for male and female workers p) Provide toilets for male and female construction workers with a cleaning schedule 83. The contractor will give priority to local labor force and retain evidence of how local labor recruitment efforts were undertaken	Partial	Supplies by contractor	Contractor need to provide one more toilet for workers in camp.
16	84. If staging area required (not within construction camp area) the contractor will: b) Provide a layout map of staging area and its location which will not be within 20m of any surface waterbody and not in an area liable to flood 85. The site will not be at least 50m from a residential property	Yes		
17	86. Topsoil from construction areas will be retained and used for landfill landscaping and rehabilitation 87. The contractor will provide a clear plan of how the following sites will be restored to their original condition following the end of construction; d) Worker camp e) Staging area f) Access roads to landfill site 88. Any damage shall be repaired as per the technical specification in the bidding documents 89. All waste will be removed, and compacted ground restored. 90. Revegetation of sloped areas such as access road slopes with natural grass species to prevent wet season erosion	Yes		

Table 12. EMP–Actions Needed for Compliance CW-06 - landfill sites Lot 1&2

	EMP Requirement	Further Action to Take	Date for Action	Who will Implement Action	Resolved in this reporting period?
3	GRM Signboard	Discussion with PMIS/PMU on resolution for missing item in BOQ and contractor's contract	Q1 2021	PMIS/PMU	No
4	CEMP provided by contractor	CEMP needs to be amended in line with PMIS comments/observations	September 2020	Contractor	No
5	Well drilling method statement	As above, required as part of CEMP	September 2020	Contractor	No
6	Licences/Permits	Confirmation that permission is given for disposal of construction waste at a suitable site	August 2020	PMU to ask Contractor	No
8	Production, Transport and Use of materials - measures for dust, resource use and water quality	PMIS will inform to contractor on trucks cover during transportation.	Feb 2021	Contractor	Yes
12	Storage and Use of chemicals and fuels – measures for spill control	Contractor need to prepare the storage area	Jan 2021	Contractor	No
15	Construction worker camp management (subplanC)	Contractor need to provide one more toilet for workers in camp.	Jan 2021	Contractor	No

20. The following table gives information on environmental performance issues from previous Environmental Monitoring Reports. This table confirms that the action was completed or that the action is outstanding.

Table 13. EMP Compliance Outstanding Issues from Previous Report(s) – CW-06 - landfill sites Lot 1&2

Issue	Required Action	Responsibility and Timing	Resolution	Required Action
GRM mechanism disseminated and functioning KC and PS	Training to ensure GRM is functioning	PMIS /October 2020	PMIS team already conducted the training in September 2020	

GRM Sign Board at Construction Site entrance	Install signboard at all construction sites	Contractor September/October 2020	Contractor need to provide the GRM sign boards.	Due to the GRM sign board is not in the list of BOQ, so PMU & PMIS and contractor need to discuss to fulfil this requirement. The GRM sign board has been installed by contractor and PMIS on 24 th February 2021
CEMP provided by contractor	CEMP needs to be amended in line with PMIS comments/observations	Contractor September 2020	Contractor provides in January 2021	
Well drilling method statement for PS and KC landfills	Method statement needed as part of CEMP	Contractor September 2020	Contractor need to provides the method statement in CEMP	Contractor provides in revise CEMP in January 2021
Licences/Permits	Confirmation that permission is given for disposal of construction waste at a suitable site	PIU to Ask Contractor August 2020	Contractor need to arrange this permission	PIU need to follow up with contractor

3.2 Health and Safety Performance

21. The following table gives the Health and Safety impact mitigation measures in the Borrower EMP and how the project is progressing with implementing the mitigation measures, for all subprojects.

Table 14. Status of Health and Safety Compliance - ALL subprojects

	Health and Safety Requirement	Compliance & Description (Yes, No, Partial, N/A at this stage)	Comment or Further Explanation if Needed	Reasons for Not Full Compliance
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1	Community Health and Safety Measures – barriers, signs, mud removal	Not known/unclear		Needs follow up with contractor.
2	PPE provision and use	Yes – all sites		PPE has been provided and is worn.
3	H&S signage around site	CW05 – Yes CW06 – No	CW05 – clear repeated messages in Khmer on H&S issues	CW06 None seen in photographs provided. Needs follow up with contractor.
4	H&S training delivered for staff	Not known/unclear		Needs follow up with contractor.
5	H&S Accident Book on site and used	Not known/unclear		Needs follow up with contractor.
6	An Environment Health and Safety qualified engineer engaged and on site	Yes – all sites		
7	Electrical safety on site is considered by contractor	Yes		
8	Emergency Response Plan – in place, procedures visible and training given	Partial		Fire fighting equipment and first aid kits on site (CW05) but require evidence of training and wider emergency procedures e.g. spill emergency.
9	COVID-19 Response	Yes	This SEMR covers the start of the COVID-19 Pandemic. To date there is evidence of regular temperature checks for staff.	Hygiene awareness / practices need follow up to ensure adequacy.

22. 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 15. Status of Health and Safety Actions Needed for Compliance - ALL subprojects

	Health and Safety Requirement	Further Action to Take	Date for Action	Who will Implement Action	Action Identified In Previous SEMR (Y/N) – Resolved?
1	Community Health and Safety Measures – barriers, signs, mud removal	Site monitoring required to check community H&S issues particularly landfill access roads	30-Sept-2020	PMU/PIU	Yes
3	H&S signage around site for CW06	Site monitoring to confirm signage is clear and occupational H&S adequate for CW06	30-Sept-2020	PMU/PIU	Yes
4	H&S training delivered for staff	Need evidence of training e.g. training notes or records for H&S	30-Sept-2020	PMU/PIU	Yes
5	H&S Accident Book on site and used	Need to see accident book or methodology for recording accidents or incidents.	30-Sept-2020	PMU/PIU	Yes
7	Electrical safety on site is considered by contractor	Need to confirm on site electricity supply and power points etc are safe e.g. elevated from flood risk	30-Sept-2020	PMU/PIU	Yes
8	Emergency Response Plan – in place, procedures visible and training given	Need evidence that staff are aware of what to do in emergency and they have had training.	30-Sept-2020	PMU/PIU	not solved

23. The table above confirms additional follow up monitoring is required to check in detail on H&S issues on all sites.

4 EMP MONITORING

4.1 Environmental Quality Monitoring

24. Environmental quality monitoring requirements are defined in the Monitoring Plan section of the EMP. The following table gives a summary of the environmental quality monitoring requirements for each subproject

Table 16. EMP Environmental Quality Monitoring Requirements during Construction CW05 Pursat drainage

Environmental Issue Monitored	Location	Responsible Organisation	Frequency	Monitoring Timing During Construction
Ambient Air Quality	Housing near WWTP site Urban receptor in town (Market, Pagoda, Hospital)	Contractor/ Laboratory	Every 6 months during construction	July and January
Noise	As above	Contractor/ Laboratory	Every 6 months during construction	July and January
Surface water quality	Point 1 Upstream & Downstream (1387711.00 m N 381990.00 m E)	Contractor/ Laboratory	Every 6 months during construction	July and January

Table 17. EMP Environmental Quality Monitoring Requirements during Construction CW-06 - landfill sites

Environmental Issue Monitored	Location	Responsible Organisation	Frequency	Frequency
Ambient Air Quality	PS Site Boundary & Tuol Mkak village nearest residential receptor KC Site Boundary & Trapeang Sbov village nearest residential receptor	Contractor/ Laboratory	Every 6 months during construction	October and April
Noise	As above	Contractor/ Laboratory	Every 6 months during construction	October and April
Groundwater quality	PS Borehole drilled on site and Tuol Mkak village KC	Contractor/ Laboratory	Every 6 months during construction	October and April

	Borehole drilled on site and Trapeang Sbov village			
Surface water quality	PS Pond adjacent to access road: 12°31'29.89"N, 103°58'51.66"E KC Pond closest to site boundary: 12°13'50.38"N, 104°37'9.85"E	Contractor/ Laboratory	Every 6 months during construction	October and April

25. The following table gives information on the environmental quality monitoring implemented, during this reporting period. Detailed results compared to relevant national / international standards are in Annex 1. The table shows monitoring during IEIA preparation. No monitoring has taken place since construction started.

Table 18. EMP Environmental Quality Monitoring in this reporting period - ALL subprojects

Subproject	Environmental Issue Monitored	Location	Monitoring Date	Comment On Results / Compliance
CW06 and CW05	Surface water quality	KC Landfill - pond PS Landfill irrigation canal PS River	Not known. IEIA team	Irrigation canal significantly over national limit for COD, oil/grease, nitrogen, phosphorous as is the pond for arsenic. All samples are significantly over national standards (<1000) for coliforms ranging from 1500 to 2400.
CW06 and CW05	Air quality	KC Landfill site PS Landfill site PS drainage location	Not known. IEIA team	National standards appear to be met. WHO standard for ozone not met but sampling time is not comparable (between national and WHO standards).
CW06 and CW05	Noise	KC Landfill site PS Landfill site PS drainage location	Not known. IEIA team	WHO standards are met for most locations. Cannot compare with National Standards (dB(A) as LAeq used in reported results.

4.2 EMP Monitoring Site Visits

26. The PIU conduct regular weekly visits to the construction sites and provide reports on findings to the PMIS team in Khmer language.

4.3 Construction Phase Affected People Consultation

27. During the construction phase, the following table gives information on the consultations that were undertaken in order to understand the impact of the project on Affected People and how effective the EMP Mitigation measures are for residents, businesses and other affected people around the construction sites.

Table 19. Construction Phase Affected People Consultation- ALL subprojects

Subproject	Consultation Date	Person Consulted / Location	Outcome / Issues	Corrective Action Needed	Action Implemented by (person/date)
Not yet started					

28. The project team recognise a lack of community engagement during the reporting period, which was primarily due to lack of field work because of COVID 19 inhibiting movement and both the project team and community's concerns over attending public events or travelling.

5 DISCLOSURE, COMPLAINTS, CORRECTIVE ACTION

5.1 Information Disclosure

29. The following table gives information on any information disclosure activities undertaken. :

Table 20. Information Disclosure- ALL subprojects

Topic / Reason for Information	Date / Location	Method of Disclosure	Outcome / Results
Initial Environmental Examination (IEE)	July 2020	ADB Website	https://www.adb.org/projects/42285-013/main
Output 3 Community Mobilization and Environmental Improvements (Due Diligence Report)	December 2020	ADB Website	https://www.adb.org/projects/documents/cam-42285-013-sddr-1

5.2 Grievance Redress Mechanism

30. The following table gives information on complaints about the project the Project Team is aware of, during this reporting period. The table includes:

- Complaints made thorough GRM entry points
- Issues raised in consultation;
- Issues raised any other way that the project team is aware of.

31. For issues that have already been solved, this is confirmed in the final column of the table. Where possible the project tries to solve all issues as quickly as possible through informal discussions between the affected people and the contractor.

Table 21. Project Complaints or Issues- ALL subprojects

Details of Complaint / Issue Raised	Detail of Person (Date, Name, Contact Details)	Action Needed & Date	Comment / Resolved?
Not applicable. None Raised in this reporting period			

32. The following table gives information on all issues raised in previous SEMRs which are not yet resolved:

Table 22. Project Complaints or Issues – Not resolved from previous reports- ALL subprojects

Details of Complaint	Detail of Person (Date, Name, Contact Details)	Action Needed & Date	Reason this is still not resolved
Not applicable for first SEMR			

5.3 Corrective Action

33. The following table gives information on any formal corrective action that has been issued to the contractor in order to improve environmental performance.

34. This is regarding formal corrective actions, rather than the outstanding actions required for EMP compliance remain as presented in the EMP Implementation section of this SEMR:

Table 23. Corrective Action Issued- ALL subprojects

Reason for Corrective Action	Date Issued	Outcome	Comment / Follow Up
During the flooding period the sub-project in Pursat (CW-05) need to be postponed.	28 th September 2020	The contractor has been postponed the construction work until now not yet start due to need VO for additional work.	PIMS consultant need to follow up the contractor
During the flooding period the sub-project in Pursat and Kg Chhnang landfill (CW-06) need to be postponed.	28 th September 2020	The contractor has been postponed the construction work	PIMS consultant need to follow up the contractor

35. There are two corrective actions are issued for this report period.

6 CONCLUSION & RECOMMENDATION

36. Conclusion:

- Overall the project team concludes that no significant or unanticipated environmental impacts were noted during this reporting period.
- During the wet season, all subprojects were affected by flooding, in particular Pursat wastewater treatment plant and drainage works which affected the work schedule, and affected the WWTP site organisation including waste management.
- The environmental due diligence report for the Community Mobilised Environmental Improvements component for the project has been completed and disclosed by ADB.
- The PIU and PMIS teams continue to visit the construction sites, for monitoring and supervisory activities. As a result of these visits, to no significant environmental non-compliance are identified on the ground.

- The team recognise that the issue of no consultation and environmental monitoring persists. Consultation is particularly important with affected people in the dense urban core, where issues from nuisance and access should be confirmed.

37. Recommendations:

- PIU will undertake Consultation with Affected People particularly for the urban areas affected by Pursat drainage works as a priority.
- PMU/PMIS will ensure the necessary environmental monitoring is conducted for all subprojects as required by the national IEIA and the Borrower EMP.
- PMU/PMIS will follow up on the outstanding EMP compliance issues in this report.
- PMU/PMIS will monitor the health and safety mitigation measures in particular to ensure that current missing data on compliance is obtained.
- PMIS will continue its training and capacity building activities, supporting the PIU and PMU.

Annex 1 Environmental Quality Monitoring Results

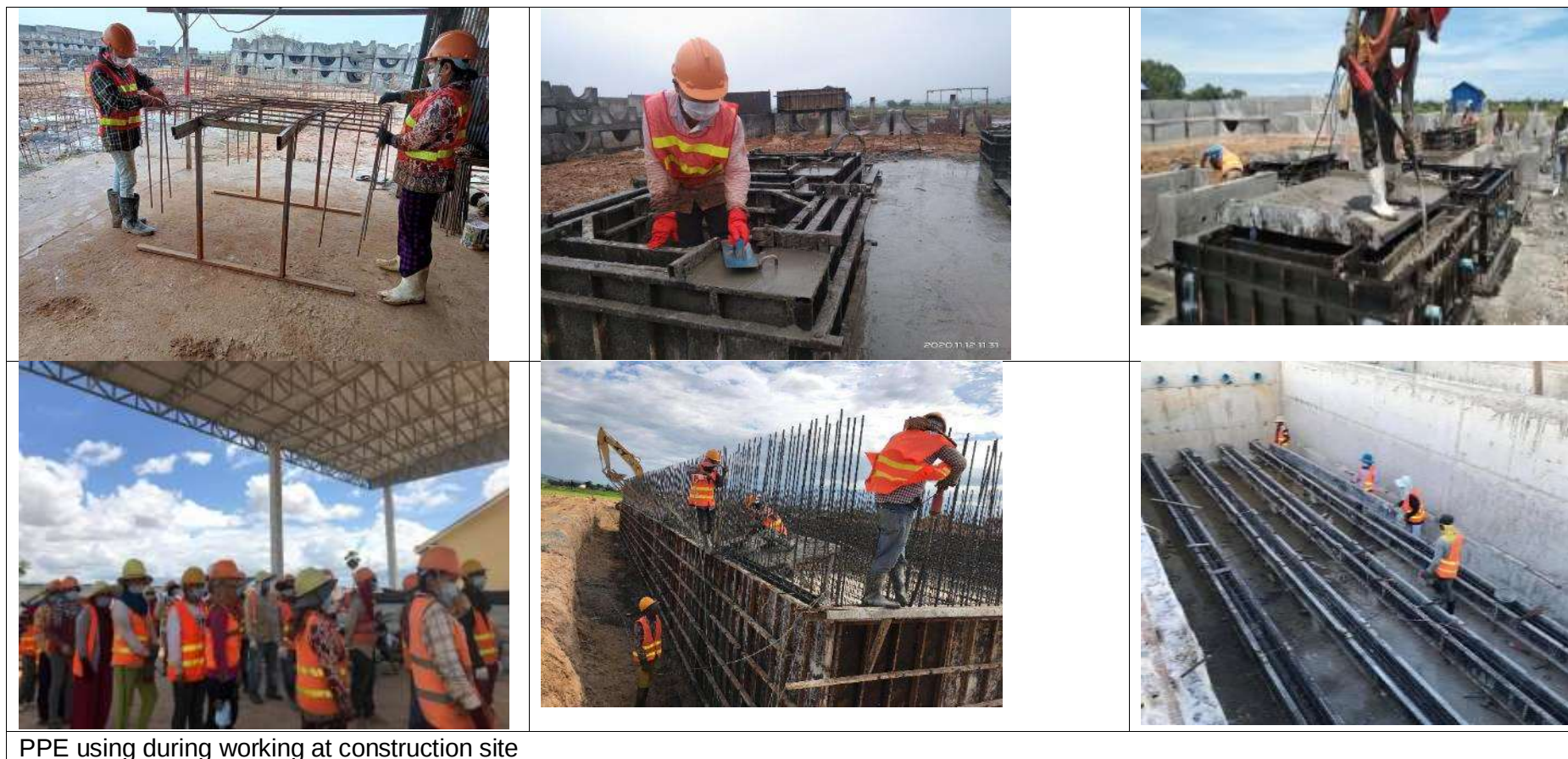
None available

Annex 2 Construction Site Photographs CW05



Covid-19 preventing by checking temperature, wearing mask and hand cleaning with alcohol

		
Alcohol bottle	Firefighting	Warning sign
		
Clean water		Warning sign



		
Cleaning toilets in worker camp site	Cleaning toilets in worker camp site	Kitchen in camp site
		
Traffic signs in construction site	Traffic signs in construction site	Traffic signs in construction site



High flood during September and October 2020 at WWTP Pursat province



Flooded WWTP and uncollected plastic waste empty drum on site

GRM sign board for CW-05

Annex 3 Construction Site Photographs CW06
3.1 Kampong Chhnang Province



Training to unskill workers on how to use cutting equipment



Covid-19 prevention (Checking temperature, Spraying alcohol and wearing mask)



Toilet for men and women



First aid kit



Firefightings





Construction work equip with PPE during working in construction site



គណៈកម្មាធិការតាមដាន និង គ្រប់គ្រងបរិស្ថានសង្គម និង បរិស្ថានធម្មជាតិ				
សម្រាប់គម្រោងសាងសង់ និង ប្រតិបត្តិការសាងសង់ប្រព័ន្ធធាតុចូលស្រះទឹកស្រាបសម្រាប់ប្រជាជន				
ល.រ	ឈ្មោះ	តំណក់	មុខរបរ	អាសយដ្ឋាន
០១	លោក ឈឹម ឈន់	គណៈកម្មាធិការតាមដាន និង គ្រប់គ្រងបរិស្ថានសង្គម និង បរិស្ថានធម្មជាតិ	ប្រធាន	ភូមិ ០១ ផ្ទះ ០១
០២	លោក ឈឹម សុខ	គណៈកម្មាធិការតាមដាន និង គ្រប់គ្រងបរិស្ថានសង្គម និង បរិស្ថានធម្មជាតិ	អនុប្រធាន	ភូមិ ០១ ផ្ទះ ០២
០៣	លោក គូ ឈឹម	គណៈកម្មាធិការតាមដាន និង គ្រប់គ្រងបរិស្ថានសង្គម និង បរិស្ថានធម្មជាតិ	អនុប្រធាន	ភូមិ ០១ ផ្ទះ ០៣
០៤	លោក ហ៊ុន ឈឹម	គណៈកម្មាធិការតាមដាន និង គ្រប់គ្រងបរិស្ថានសង្គម និង បរិស្ថានធម្មជាតិ	អនុប្រធាន	ភូមិ ០១ ផ្ទះ ០៤
០៥	លោក ហ៊ុន ឈឹម	គណៈកម្មាធិការតាមដាន និង គ្រប់គ្រងបរិស្ថានសង្គម និង បរិស្ថានធម្មជាតិ	អនុប្រធាន	ភូមិ ០១ ផ្ទះ ០៥
០៦	លោក ហ៊ុន ឈឹម	គណៈកម្មាធិការតាមដាន និង គ្រប់គ្រងបរិស្ថានសង្គម និង បរិស្ថានធម្មជាតិ	អនុប្រធាន	ភូមិ ០១ ផ្ទះ ០៦
០៧	លោក ហ៊ុន ឈឹម	គណៈកម្មាធិការតាមដាន និង គ្រប់គ្រងបរិស្ថានសង្គម និង បរិស្ថានធម្មជាតិ	អនុប្រធាន	ភូមិ ០១ ផ្ទះ ០៧



GRM sign board installation at construction site

3.2 Pursat province



Training to unskill workers on how to use cutting equipment



Checking temperature





Worker equip with PPE during working in construction site



GRM sign board installation at construction site

Annex 4: Training Photo in Pursat 8 to 9-09-2020



EMP training and site visit to WWTP site



EMP training and site visit to WWTP site



GRM training at Pursat DPWT





Training Photo in Kampong Chhnang 10 to 11-09-2020



		
EMP training at DPWT of Kampong Chhnang	GRM training at Kampong Chhnang DPWT	
		
GRM training at Kampong Chhnang DPWT		

Annex 5: Participant list in Environmental safeguard training from 8 to 11-09-2020

គម្រោងកែលម្អគ្រប់គ្រងបរិស្ថានក្នុងជំរឿនទន្លេសាប

Integrated Urban Environmental Management in the Tonle Sap Basin Project (IUEMTSP)

បញ្ជីចំណូល/ Attendance List

វគ្គបណ្តុះបណ្តាលស្តីពី សុវត្ថិភាពបរិស្ថាន ក្នុងដំណាក់កាលអនុវត្តគម្រោង សម្រាប់អង្គភាពគ្រប់គ្រង និងអនុវត្តគម្រោង ក្រុមហ៊ុនសាងសង់ និងរោងចក្រមូលដ្ឋាន

TRAINING ON Project Implementation Environmental Safeguard for PMU/PIU, Contractors and Local Authority

រោងចក្រ ថ្ងៃទី ០៨ ខែ កញ្ញា ឆ្នាំ ២០២០ / Pursat Province, 08th September 2020

ល.រ No	ឈ្មោះ Name	ភេទ Gender	តំណាង Position	អង្គភាព Unit	លេខទូរស័ព្ទ Phone Number	ហត្ថលេខា Signature
1	វ៉. វិហារៈមុនី	ប	ប្រធាន	ក្រុមហ៊ុន	០១០៥៥៨៦២	[Signature]
2	វ៉. គង្គារា	ប.	Office	DPWT Pursat	០១០៧៥៤២៩៩	[Signature]
3	វ៉. វ៉. វ៉.	- ឈ	ប្រធាន	DPWT Pursat	០១២៩៨៦២	[Signature]
4	វ៉. វ៉. វ៉.	- ឈ	ប្រធាន	ក្រុមហ៊ុន	០១០៨៣៤៥៤	[Signature]
5	វ៉. វ៉. វ៉.	- ឈ	ប្រធាន	ក្រុមហ៊ុន	០១២៩៨៦២	[Signature]
6	វ៉. វ៉. វ៉.	ប	PIU	ក្រុមហ៊ុន	០១២៦៧៧៧៧	[Signature]
7	វ៉. វ៉. វ៉.	ប	ប្រធាន	KRD	០៧១០៩៤២	[Signature]
8	វ៉. វ៉. វ៉.	- ឈ	ប្រធាន	KRD	០៦១៩៥៧៧៧	[Signature]
9	វ៉. វ៉. វ៉.	ប	ប្រធាន	ក្រុមហ៊ុន	០១០៩៨៣៤	[Signature]
10	វ៉. វ៉. វ៉.	ប	PIU	ក្រុមហ៊ុន	០១២៩០៣០៤	[Signature]
11	វ៉. វ៉. វ៉.	ប	PIU	ក្រុមហ៊ុន	០១២៦៧៧៧	[Signature]
12	វ៉. វ៉. វ៉.	ប	ប្រធាន	ក្រុមហ៊ុន	០១២៩៨៦២	[Signature]
13	វ៉. វ៉. វ៉.	ប	ប្រធាន	PHIS	០៨១៥៩៨៥៦	[Signature]
14	វ៉. វ៉. វ៉.	ប	PMU	PMU	០១២៨៨៣៤	[Signature]
15	វ៉. វ៉. វ៉.	ប	PMU	PMU	០១២៨៨៣៤	[Signature]

គម្រោងគ្រប់គ្រងបរិស្ថានក្នុងជំពូកបឹងទន្លេសាប

Integrated Urban Environmental Management in the Tonle Sap Basin Project (IUEMTSP)

បញ្ជីចំណូល/ Attendance List

**វគ្គបណ្តុះបណ្តាលអ្នកកំណត់ការអនុវត្តគម្រោង សម្រាប់អង្គភាពគ្រប់គ្រង
និងអនុវត្តគម្រោង ក្រុមហ៊ុនសាងសង់ និងអាជ្ញាធរមូលដ្ឋាន**

**TRAINING ON Project Implementation Environmental Safeguard for PMU/PIU, Contractors
and Local Authority**

រោងចក្រ ថ្ងៃទី ០៨ ខែ កញ្ញា ឆ្នាំ ២០២០ / Pursat Province, 08th September 2020

ល.រ No	ឈ្មោះ Name	ភេទ Gender	តំណ Position	អង្គភាព Unit	លេខទូរស័ព្ទ Phone Number	ហត្ថលេខា Signature
1	Srey Socheat	M	DTL	PMIS	077488888	
2	Chea Mong	M	Environment	—	012523107	
3	Chann Mary	F	Support Staff	—	09839407	
4	NUON UDOM	M	Site	—	011258541	
5						
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គម្រោងកែលម្អគ្រប់គ្រងបរិស្ថានក្នុងជំពូកបឹងទន្លេសាប

Integrated Urban Environmental Management in the Tonle Sap Basin Project (IUEMTSP)

បញ្ជីចំណូល/ Attendance List

វគ្គបណ្តុះបណ្តាលស្តីពី សុវត្ថិភាពបរិស្ថាន ក្នុងដំណាក់កាលអនុវត្តគម្រោង សម្រាប់អង្គភាពគ្រប់គ្រង និងអនុវត្តគម្រោង ក្រុមហ៊ុនសាងសង់ និងអាជ្ញាធរមូលដ្ឋាន

TRAINING ON Project Implementation Environmental Safeguard for PMU/PIU, Contractors and Local Authority

អាជ្ញាធរ ថ្ងៃទី ០៩ ខែ កញ្ញា ឆ្នាំ ២០២០ / Pursat Province, 09th September 2020

ល.រ No	ឈ្មោះ Name	ភេទ Gender	តំណ Position	អង្គភាព Unit	លេខទូរស័ព្ទ Phone Number	ហត្ថលេខា Signature
1	ស្រី គង្គារី ឈុំន	ប	បេក្ខជន	ថា	០១២៨៨៣១៥៤	
2	ឃុំ ចាន់ដា	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០៩៨៥៣៦០៧	
3	ស្រី ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០៩៨៧២២៦០៦	
4	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០១២៥៤៧១៦៤	
5	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០៩៨៧៣៤៧៤	
6	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០៩៧២៤៣៧៧	
7	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០៩៧៤៤៤៤៤	
8	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០១២៦៧៨៣០	
9	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០១៧២៧១៧២	
10	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០១២៩១៤៧៤	
11	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០៩៧២២២១១	
12	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០៧៧៤៤៤៤៤	
13	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០១២៥២៣១៧	
14	ឈុំន ឈុំន	ប	បេក្ខជន	ក្រុមហ៊ុន ២	០៩៨៣៩៦១០	
15						

គម្រោងកែលម្អគ្រប់គ្រងបរិស្ថានក្នុងជំរឿនបឹងទន្លេសាប

Integrated Urban Environmental Management in the Tonle Sap Basin Project (IUEMTSP)

បញ្ជីចំណូល/ Attendance List

វគ្គបណ្តុះបណ្តាលស្តីពី សុវត្ថិភាពបរិស្ថាន ក្នុងដំណាក់កាលអនុវត្តគម្រោង សម្រាប់អង្គភាពគ្រប់គ្រង និងអនុវត្តគម្រោង ក្រុមហ៊ុនសាងសង់ និងអាជ្ញាធរមូលដ្ឋាន

TRAINING ON Project Implementation Environmental Safeguard for PMU/PIU, Contractors and Local Authority

ពេលវេលា ថ្ងៃទី ០៩ ខែ កញ្ញា ឆ្នាំ ២០២០ / Pursat Province, 09th September 2020

ល.រ No	ឈ្មោះ Name	ភេទ Gender	តំណាង Position	អង្គភាព Unit	លេខទូរស័ព្ទ Phone Number	ហត្ថលេខា Signature
1	គី. វណ្ណារតន្ត្រី	ប	ប្រធានគម្រោង	គី. វណ្ណារតន្ត្រី	090555862	[Signature]
2	ល. ឡានសារី	ប	office	DPWT Pursat	010756299	[Signature]
3	ឡ. វណ្ណ	ប	ប្រធាន	DPWT P	012986262	[Signature]
4	គ. ឡាន	ប	អគ្គនាយក	អគ្គនាយកដ្ឋាន	010834556	[Signature]
5	ល. ឡាន	ប	ប្រធាន	ប្រធាន	092394309	[Signature]
6	ឡ. ឡាន	ប	PIU	អគ. ឡាន	012679933	[Signature]
7	ឡ. ឡាន	ប	អគ. ឡាន	KRD	0749094422	[Signature]
8	ឡ. ឡាន	ប	អគ. ឡាន	PMIS	084595656	[Signature]
9	ឡ. ឡាន	ប	ប្រធាន	KRD	061957722	[Signature]
10	ឡ. ឡាន	ប	អគ. ឡាន	អគ. ឡាន	070993142	[Signature]
11	ឡ. ឡាន	ប	PIU	អគ. ឡាន	012903004	[Signature]
12	ឡ. ឡាន	ប	PIU	Pursat DPWT	012262100	[Signature]
13	ឡ. ឡាន	ប	PMU	PMU	014885445	[Signature]
14	ឡ. ឡាន	ប	PMU	PMU	012451545	[Signature]
15	ឡ. ឡាន	ប	PMIS	PMIS	04258541	[Signature]

គម្រោងកែលម្អគ្រប់គ្រងបរិស្ថានក្នុងតំបន់ទន្លេសាប

Integrated Urban Environmental Management in the Tonle Sap Basin Project (IUEMTSP)

បញ្ជីចំណូល/ Attendance List

វគ្គបណ្តុះបណ្តាលស្តីពី សុវត្ថិភាពបរិស្ថាន ក្នុងដំណាក់កាលអនុវត្តគម្រោង សម្រាប់អង្គភាពគ្រប់គ្រង និងអនុវត្តគម្រោង ក្រុមហ៊ុនសាងសង់ និងអាជ្ញាធរមូលដ្ឋាន

TRAINING ON Project Implementation Environmental Safeguard for PMU/PIU, Contractors and Local Authority

កំពង់ឆ្នាំង ថ្ងៃទី ១០ ខែ កញ្ញា ឆ្នាំ ២០២០ / Kampong Chhnang Province, 10th September 2020

ល.រ No	ឈ្មោះ Name	ភេទ Gender	តំណែង Position	អង្គភាព Unit	លេខទូរស័ព្ទ Phone Number	ហត្ថលេខា Signature
1	សាត សុផុល	M	site	USS	0962921613	
2	សំ អ៊ុយ ឆ្មារ៉ុន	M	site	USS	070251555	
3	ស៊ី ណារី វិសាល	M	Site	USS	081887869	
4	ស្រី ធីតា	M	Site	PMIS	011258541	
5	ស្រី ធីតា	F	PMU	PMU	017883445	
6	ស៊ី ធីតា	M	PMU	PMU	012451565	Roddy
7	ស្រី ធីតា	M	PIU	DPWT	0979960699	
8	ស្រី ធីតា	M	PIU	DPWT	015253366	
9	ស្រី ធីតា	F	PIU	DPWT	078893063	
10	ស្រី ធីតា	M	PIU	DPWT	012647446	
11	Soy Socheat	M	DTL	PMIS	077485858	
12	MENGSOVINA	M	ធីតា	USS	070207932	
13	សំ ធីតា	M	ធីតា	PMIS	012523107	
14	ស្រី ធីតា	M	ធីតា	DPWT	012915467	
15	ស្រី ធីតា	M	ធីតា	PMIS	010225586	

គម្រោងកែលម្អគ្រប់គ្រងបរិស្ថានក្រុងជុំវិញបឹងទន្លេសាប

Integrated Urban Environmental Management in the Tonle Sap Basin Project (IUEMTSP)

បញ្ជីចំណូល/ Attendance List

វគ្គបណ្តុះបណ្តាលស្តីពី សុវត្ថិភាពបរិស្ថាន ក្នុងដំណាក់កាលអនុវត្តគម្រោង សម្រាប់អង្គភាពគ្រប់គ្រង និងអនុវត្តគម្រោង ក្រុមហ៊ុនសាងសង់ និងអាជ្ញាធរមូលដ្ឋាន

TRAINING ON Project Implementation Environmental Safeguard for PMU/PIU, Contractors and Local Authority

កំពង់ឆ្នាំង ថ្ងៃទី ១០ ខែ កញ្ញា ឆ្នាំ ២០២០ / Kampong Chhnang Province, 10th September 2020

ល.រ No	ឈ្មោះ Name	ភេទ Gender	តំណ Position	អង្គភាព Unit	លេខទូរស័ព្ទ Phone Number	ហត្ថលេខា Signature
1	ជីក សុភ័ក្ត្រ	ប្រុស	បុគ្គលិក	ក្រុមហ៊ុន	01 57 33030	
2	ឈាន់ ហ៊ុន	ប្រុស	បុគ្គលិក	PMIS	098 994 104	
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គម្រោងគ្រប់គ្រងបរិស្ថានក្រុងជុំវិញបឹងទន្លេសាប

Integrated Urban Environmental Management in the Tonle Sap Basin Project (IUEMTSP)

បញ្ជីចំណូល/ Attendance List

វគ្គបណ្តុះបណ្តាលស្តីពី សុខភាពបរិស្ថាន ក្នុងដំណាក់កាលអនុវត្តគម្រោង សម្រាប់អង្គភាពគ្រប់គ្រង និងអនុវត្តគម្រោង ក្រុមហ៊ុនសាងសង់ និងពេទ្យាបមូលដ្ឋាន

TRAINING ON Project Implementation Environmental Safeguard for PMU/PIU, Contractors and Local Authority

កំពង់ឆ្នាំង ថ្ងៃទី ១១ ខែ កញ្ញា ឆ្នាំ ២០២០ / Kampong Chhnang Province, 11th September 2020

ល.រ No	ឈ្មោះ Name	ភេទ Gender	តំណាង Position	អង្គភាព Unit	លេខទូរស័ព្ទ Phone Number	ហត្ថលេខា Signature
1	ស៊ីណាវី វិសាល	M	site	USS	091 987869	
2	លាភ សុខុម	M	site	USS	096 991413	
3	ល. គុណស្រី	M	site	USS	070251555	
4	ស្រី ធីតា	M	site	PMIS	011258541	
5	ស្រី ធីតា	F	PMU	PMU	017883445	
6	ស្រី ធីតា	M	PMU	PMU	012451545	
7	ល. គុណស្រី	M	PIU	PIU	0979960699	
8	ល. គុណស្រី	M	PIU	DPWT	01525996	
9	ស្រី ធីតា	F	PIU	DPWT	078893063	
10	ល. គុណស្រី	M	PIU	DPWT	012647436	
11	Say Sachtat	M	DTZ	PMIS	077485858	
12	MENKONVANDIA	M	site	USS	070907079	
13	ល. គុណស្រី	M	site	PMIS	012528107	
14	ល. គុណស្រី	M	site	DPWT	012945062	
15	ល. គុណស្រី	M	site	PMIS	010225586	

គម្រោងគ្រប់គ្រងបរិស្ថានក្នុងតំបន់ទន្លេសាប

Integrated Urban Environmental Management in the Tonle Sap Basin Project (IUEMTSP)

បញ្ជីចំណុះ/ Attendance List

វគ្គបណ្តុះបណ្តាលស្តីពី សុវត្ថិភាពបរិស្ថាន ក្នុងដំណាក់កាលអនុវត្តគម្រោង សម្រាប់អង្គភាពគ្រប់គ្រង និងអនុវត្តគម្រោង ក្រុមហ៊ុនសាងសង់ និងលេខាធិការមូលដ្ឋាន

TRAINING ON Project Implementation Environmental Safeguard for PMU/PIU, Contractors and Local Authority

កំពង់ឆ្នាំង ថ្ងៃទី ១១ ខែ កញ្ញា ឆ្នាំ ២០២០ / Kampong Chhnang Province, 11th September 2020

ល.រ No	ឈ្មោះ Name	ភេទ Gender	តំណែង Position	អង្គភាព Unit	លេខទូរស័ព្ទ Phone Number	ហត្ថលេខា Signature
1	ជីវ សុភ័ក្ត្រ	ប្រុស	លេខាធិការ	ក្រុមហ៊ុន	015723030	
2	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	0975755997	
3	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	016724313	
4	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	0975746584	
5	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	012 832 186	
6	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	077 468352	
7	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	0975064908	
8	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	0972067665	
9	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	092742512	
10	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	0963242556	
11	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	089710745	
12	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	099688827	
13	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	0942587400	
14	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	0994400	
15	ស្រី ឈន់	ស្រី	លេខាធិការ	ក្រុមហ៊ុន	088521271	

គម្រោងកែលម្អគ្រប់គ្រងបរិស្ថានក្នុងជំពូកទីបីនៃទន្លេសាប

Integrated Urban Environmental Management in the Tonle Sap Basin Project (IUEMTSP)

បញ្ជីចម្កុល/ Attendance List

វគ្គបណ្តុះបណ្តាលស្តីពី សុវត្ថិភាពបរិស្ថាន ក្នុងដំណាក់កាលអនុវត្តគម្រោង សម្រាប់អង្គភាពគ្រប់គ្រង និងអនុវត្តគម្រោង ក្រុមហ៊ុនសាងសង់ និងលេខាធិការមូលដ្ឋាន

TRAINING ON Project Implementation Environmental Safeguard for PMU/PIU, Contractors and Local Authority

កំពង់ឆ្នាំង ថ្ងៃទី ១១ ខែ កញ្ញា ឆ្នាំ ២០២០ / Kampong Chhnang Province, 11th September 2020

ល.រ No	ឈ្មោះ Name	ភេទ Gender	តំណែង Position	អង្គភាព Unit	លេខទូរស័ព្ទ Phone Number	ហត្ថលេខា Signature
1	លី ធីតា	ស	លេខាធិការ	ក្រុមហ៊ុន	010254668	[Signature]
2	កូ វណ្ណៈ	ប	លេខាធិការ	ក្រុមហ៊ុន	08478343	[Signature]
3	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	097317107	[Signature]
4	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	085375997	[Signature]
5	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	098941189	[Signature]
6	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	099858372	[Signature]
7	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	0967096636	[Signature]
8	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	0627246992	[Signature]
9	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	016328104	[Signature]
10	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	099444444	[Signature]
11	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	097321506	[Signature]
12	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	012344952	[Signature]
13	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	012337019	[Signature]
14	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	01250258	[Signature]
15	ស៊ី អរិយ័ន	ប	លេខាធិការ	ក្រុមហ៊ុន	0892161786	[Signature]

គម្រោងកែលម្អគ្រប់គ្រងបរិស្ថានក្នុងជំរឿនបឹងទន្លេសាប

Integrated Urban Environmental Management in the Tonle Sap Basin Project

បញ្ជីចំណូល/ Attendance List

វគ្គបណ្តុះបណ្តាលស្តីពី សុវត្ថិភាពបរិស្ថាន ក្នុងដំណាក់កាលអនុវត្តគម្រោង សម្រាប់អង្គភាពគ្រប់គ្រង និងអនុវត្តគម្រោង ក្រុមហ៊ុនសាងសង់ និងលេខាធិការមូលដ្ឋាន

TRAINING ON Project Implementation Environmental Safeguard Training for PMU/PIU, Contractors and Local Authority

ខេត្តកំពង់ឆ្នាំង, ថ្ងៃទី ១១ ខែ កញ្ញា ឆ្នាំ ២០២០ /Kampong Chhnang Province, 11th September 2020

ល.រ No.	ឈ្មោះ Name	ភេទ Gender	តំណ Position	អង្គភាព Unit	លេខទូរស័ព្ទ Phone Number	ហត្ថលេខា Signature
1	ឡាន វិសាល	ប	លេខាធិការ	ក្រសួង	092431407	
2	គឹម វិសាល	ប	លេខាធិការ	ក្រសួង	094660746	
3	ឈាន់ វិសាល	ប	លេខាធិការ	ក្រសួង	098396107	
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