

Environmental Monitoring Report

Semi-Annual Report

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(January – June 2019)

July 2019

TIM: Road Network Upgrading Project

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

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Abbreviations and Acronyms

ADB	–	Asian Development Bank
ANPM	–	National Authority for Petroleum and Mineral
CAFI	–	Conselho de Administração do Fundo Infraestrutura
CEMP	–	Contractors environmental management plan (submitted preconstruction for approval by PMU & ADB)
CITES	–	Convention on the International Trade in Endangered Species of Wild Fauna and Flora
DMMR	–	Directorate of Mines and Mineral Resources
DNCPIA	–	National Directorate for Pollution Control and Environmental Impact (NDPCEI)
DPW	–	Directorate General of Public Works
DRBFC	–	Directorate of Roads, Bridges and Flood Control
EHSG	–	Environmental Health and Safety Guidelines (of World Bank Group)
EIS	–	Environmental impact statement
EL	–	Environmental License
ELL	–	Environmental Licensing Law (Decree No. 5/11)
EMP	–	Environmental management plan (as submitted for approval to obtain EL)
mEMR	–	Monthly environmental monitoring report (as submitted by PISC for approval by PMU)
ESO	–	Environment and safety officer (of the civil works contractor)
ESU	–	Environment and Social Unit (within the DPW's PMU)
GRC	–	Grievance redress committee
GRM	–	Grievance redress mechanism
GOTL	–	Government of Democratic Republic of Timor-Leste
IEC	–	International Environmental Consultant (PISC)
IES	–	International Environmental Specialist (ET - PMU)
JICA	–	JapanInternationalCooperation Agency
MAF	–	Ministry of Agriculture and Fisheries
MEC	–	Minsitry of Economic Coordination
MOF	–	Ministry of Finance
MPW	–	Ministry of Public Work
NDLPSC	–	National Directorate of Land and Property and Cadastral Services (within MOJ)
NEC	–	National Environmental Consultant (PISC)
NES	–	National Environmental Specialist (PMU)
NET	–	National Environmental Assistant (PMU)
NGO	–	Non – government organization
NR1UP	–	National Road No. 1 Upgrading Project
PISC	–	Project implementation and supervision consultant (supporting the PMU)
PMU	–	Project Management Unit within DPW
ROW	–	Right-of-way
RP	–	Resettlement plan
SAEMR	–	Semi Annual Environmental Monitoring Report (this report)
SEA	–	Secretary of State for Environment
SPS	–	Safeguard Policy Statement 2009 (of the ADB)
SEIS	–	Simplified environmental impact statement (as submitted for approval to obtain EL)
TA	–	Technical assistance

1. Introduction

A. Background

1. Roads are the primary mode of transport Timor-Leste. The core network of national roads connects the capital Dili, 13 districts, and 900 km of district roads that link major population centers to the national roads. About 80% (1,800 km) of core roads are (or used to be) paved.

2. The road network deteriorated in the period that preceded independence in 2002 due to a lack of investment in maintenance and rehabilitation; deteriorating further during 2002–2011 due to inadequate reinvestment in the road network. Frequent landslides and road closures caused by intense rainfall and geotechnical instability in mountainous areas make the situation worse.

3. Timor-Leste's development partners have responded to the challenge in a substantial and coordinated way. The Government of the Democratic Republic of Timor Leste, Directorate General of Public Works (DPW) with ADB assistance, has developed the Medium-Term Road Network Development Program, the implementation of which started in 2010. ADB support is closely coordinated with the World Bank (WB) the Japan International Cooperation Agency (JICA) the Government of Australia, and the European Union (EU). With the support of ADB, JICA and the WB, the government will have advanced the upgrading about 515km or 36% of the national road network by the end of 2018.

4. ADB has been the lead development agency in the road sector and the ADB-financed road project portfolio that includes six TA projects, three project grants, one sector grant, and two loans for the sector. In this reporting period ADB has supported the Road Network Upgrading Project (RNUP), the Road Network Upgrading Sector Project (RNUSP) and the National Road No.1 Upgrading Project (RNUP). RNUP and RNUSP have received additional funding and the projects that are financed are included in this SAEMR. The Road Network Development Sector Project (RNDSP) was completed in 2016. Details of the road projects are summarized in Table 1. The location of the projects is shown in Figure 1.1. ADB's projects are on track to upgrade about 365km of national roads by 2019.

Table 1.1: Summary of ADB Financed Road Projects

Project	Approval date	Length (km)	Subprojects	Status (June 2019)
RNDSP	20-Nov-09	(i) 37 (R1-R2); (ii) 33 (RMC 1-4)	(i) A03-03/04 Liquica-Atabae (R1-R2); (ii) Balibo – Maliana (RMC 1-4)	(i) R1 completed 2013 R2 completed 2015 (ii) RMC 2 completed 2014.
RNUP	30-Mar-12	52	(i) Tibar - Liquica (R3); (ii) Tibar - Gleno (R4)	(i) R3 completed 2016. (ii) R4 completed 2016.
RNUP-AF	Oct. 2014	4.5	Tacitolu - Tibar (dual carriageway)	Construction Progress 63.71 %
RNUP-AF	June 2016	43.8	(i) C13 Ermera - Fatubessi; (ii) C16/17 Package 1 Aipelo-Bazertete	(i) Construction Progress 4.00 % (ii) Construction Progress 42.27 %
			(iii) C16/17 Package 2 Bazertete-Tokolui	(i) Construction Progress 0.22 %
RNUSP	19-Sep-13	81	(i) Manatuto – Laclubar Junction (ii) Laclubar Junction – Natabora	(i) Project completed Dec 2018 (ii) Construction Progress 91.99%
RNUSP-AF	03-Dec-15	99	(i) Baucau – Lautem;	Construction Progress 37.69%
			(ii) Maubara – Karimbala - Atabae – Mota Ain	Construction Progress 32.32%
BVHP	In Prep.	58.3	A03 Baucau - Viqueque	Project Preparation
NR1UP	31-Mar-16	46.7	A01-01 Dili - Manatuto	Construction Progress 65.59%
		57.7	A01-02 Manatuto – Baucau	Construction Progress 75.08%

AF = additional funding

B. Description of Projects

5. **Road Network Development Sector Project.** The RNDSP was physically completed in September 2015 and the project closed in May 2016. The project targeted improving routine maintenance practices on existing national roads, and upgraded continuous road lengths incorporating climate-resilient designs. The RNDSP has completed upgrading for 37km of the 78km length of A03-03/04 from Liquica - Mota Ain (R1-R2) and 33Km in the Batugade-Balibo-Maliana sections (RMC 1, 2, 3 & 4). RNDSP was concluded in the reporting period July to December 2016. Environmental specialists are keeping a watching brief on the Liquicia to Atabae sections during travel to the west for inspections of RNUSP-AF.

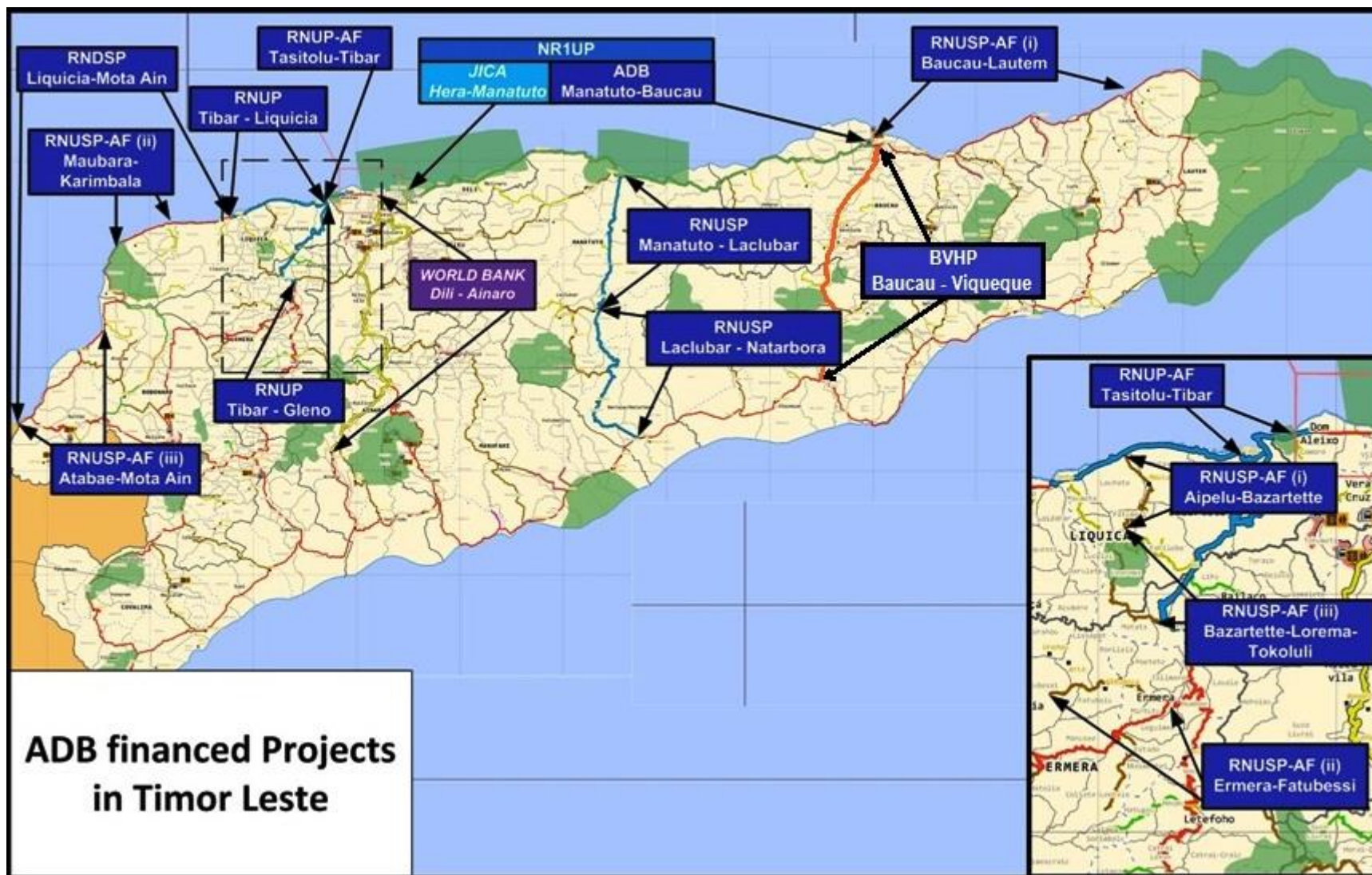
6. **Road Network Upgrading Project.** The RNUP complements the RNDSP by financing the upgrading the roads from Dili to Liquica and from Tibar to Gleno and results in substantial improvement in access to Dili from the west. The completed components of this project comprise upgrading roads from (i) Dili to Liquica (21km), (ii) Tibar to Gleno (31km), (iii) feasibility study and detailed design of the Manatuto to Natarbora road, and (iv) supervision of construction of the Dili - Liquica and Tibar - Gleno roads. Additional financing was approved in March 2014 to allow construction of a 4.55km section of the Dili - Liquicia road to be constructed to a significantly higher standard than originally envisaged and realignment of another section (Tacitolu to Tibar) to provide for traffic associated with the proposed Tibar Bay port development. Additional financing is also approved to administer three district feeder roads financed by the EU; (i) C16-C17 Package 1 Aipelo – Bazertete (13.50 km); (ii) C13 Ermera – Fatubessi (11.81 km) and (iii) C16-C17 Package 2 Bazertete – Tokoluli (18.5 km). In this reporting period, all the contract packages under the RNUP-AF are active. The project implementation and supervision consultants and contractors for district feeder roads (i) C16-C17 Package 1 Aipelo – Bazertete and (ii) C13 Ermera – Fatubessi and (iii) C16-C17 Package 2 Bazertete –Tokoluli mobilised. The civil work for Aipelo – Bazertete commenced on 18 May 2018 with the 540 calendar days contract duration and expected to be completed by 9 November 2019. Notice of Commence for Ermera - Fatubessi issued to the contractor on 18 July 2018, the Notice of Commence rescheduled for 15 March 2019 because of the security issue and the access to the site. Based on the revised completion date, C13 Ermera – Fatubessi will be completed by 7 July 2020 (480 calendar days). The project implementation for Bazartete – Tokoluli commenced on 21 May 2019 with the 540 calendar days contract duration and expected to be completed by 11 November 2020.

7. **Road Network Upgrading Sector Project.** The RNUSP focuses on the roads servicing the north coast in the western and eastern regions of Timor-Leste (i) Maubara – Karimbala – Atabae – Mota Ain and (ii) Baucau – Lautem (iii) the north-south links from Manatuto to Natarbora, from Baucau to Viqueque, and inland from Lautem to Lospalos. The project will: (i) upgrade and climate-proof national roads of about 117 km of roads to a climate-resilient standard including 81km of priority roads from Manatuto to Natarbora. Two construction contracts have been active since 2015: namely (i) Manatuto to Laclubar Junction and (ii) Laclubar Junction to Natarbora. The RNUSP Package 1 Manatuto – Laclubar Junction completed in December 2018 and now is under the 1 year Defect Notification Period. The Package 2 Laclubar Junction – Natarbora is scheduled to be completed on 22 August 2019 based on the revised completion date in the approved Variation Order No. 3. This project also includes preparation of detailed designs for future priority road links including detailed engineering design and social and environmental due diligence; prepared for about 169km of national roads (Baucau –Lospalos – Lautem – Com and Baucau – Viqueque). Two more construction contracts have been active since October

2017 under additional financing: (i) Baucau – Lautem (ii) Maubara – Karimbala : Atabae – Mota Ain. The Baucau Viqueque Highway Project is scheduled to be started in August 2019.

8. **National Road No.1 Upgrading Project.** The NR1UP project road is 105 kilometers long and is the primary national road near the the north coast which connects the Capital city (Dili) with the second largest town Baucau and municipalities and agricultural areas further to the east. The NR1UP has two packages A01-01 (Dili to Manatuto 46.7km) and A01-02 (57.7km Manatuto to Baucau). ADB is cofinancing the project on a parallel basis with the Japan International Cooperation Agency (JICA). JICA is supporting upgrading Dili to Manatuto and ADB is supporting upgrading Manatuto to Baucau. Construction of both sections commenced in early 2016. The Manatuto to Baucau section was taken up for financing by ADB in the June to December 2017 reporting period.

Figure 1.1 Location of ADB financed projects



C. Status of Projects

9. Environmental assessments have been conducted for all projects and environmental management plans (EMP) have been prepared.

10. The Environmental License for RNUSP (Manatuto –Laclubar – Natarbora) renewed (2nd renewal) in 12 April 2019 with validity until 12 April 2021. The environmental licenses for A01-02 (Manatuto-Baucau) and RNUP-AF (Tasitolu-Tibar) were also issued in 12 April 2019 and both valid until 12 April 2021. The renewal of Environmental Licenses for these projects were submitted to Secretary of State for Environment (SEA) before the licenses are due to expire.

11. The environmental assessments and EMPs for the two new contracts under RNUP-AF (Aipelo-Bazartete and Ermera-Fatubessi) were submitted in July 2017 and approved by ADB. The SEA approved the SEIS's-EMP's for both projects and issued the Environmental Licenses on July 13th 2018 with two years validity until July 2020.

12. The environmental assessments and EMPs for the two other contracts under RNUP AF (i) Maubara – Karimbala : Atabae – Mota Ain and (ii) Baucau – Lautem were submitted by January 2017 and approved by ADB. The PMU has been actively driving the issue of these environmental licenses application in a good coordination with the National Directorate for Pollution Control and Environmental Impact (DNCPIA) to address the Technical Comments to complete the applications. The Environmental Licenses for both Maubara – Karimbala : Atabae – Mota Ain and Baucau – Lautem issued on 24 January 2019, valid for two years until January 2021.

13. The environmental assessment for District Road Feeder C16/17 Package 2 (Bazartete to Tokoluli) was carried out on 2012 during the feasibility study and detailed design drawings. The SEIS was primarily prepared by the environmental specialists in the environmental team in PMU who received support periodically by the feasibility study and design consultant of EGIS International (EGIS) consultants to assist in the preparation of the environmental license application.

14. The portion of District Road Feeder C16/17 Package 2 (Bazartete to Tokoluli) alignment immediately to the south of the Project road crosses Foho Fatumasin Protected Area. Based on the importance of the Mount Fatumasin Protected Area to the avifauna diversity of Timor Leste as a whole, GoTL contracted for avifauna surveys were conducted in August and September 2017.

15. The avifauna survey in the area to the south of the Project road confirmed the presence of 37 bird species, including 13 of 15 species recorded in earlier years that are considered to be of restricted range (distributed over areas covering in total less than 50,000 km²). However the current study of avifauna did not record the critically endangered, Yellow-Crested Cockatoo *Cacatua sulphurea* at Foho Fatumasin Protected Area and the species is therefore considered to be locally extinct at Foho Fatumasin. The Avifauna information has been included in the environmental assessment for District Road Feeder C16/17 Package 2 (Bazartete to Tokoluli).

16. The Environmental Team in PMU completed the assessment Project Document (PD) as part of the application for environmental license for the Bazartete to Tokoluli road project and submitted to SEA on October 15th 2018. DNCPIA Technical Comments on PD in March 2019 was addressed and replied with the revised PD on April 2019. No categorization issued

by SEA as per this reporting period. The draft environmental assessments and EMP will be submitted following categorization by DNCPIA during the next reporting period.

17. The environmental assessment for Baucau – Viqueque Highway Project carried out by Dongsung and Kunhwa Engineering consultants as part of the feasibility study and detailed design drawings on 2015. The application for environmental License started with the submission of Project Document to the DNCPIA on March 2017, the SEIS-EMP on October 2018 awaiting the issuance of environmental license.

18. The Environmental Team in PMU worked cooperatively to update and fine tune the environmental assessment and prepare the Project Document (PD) and the draft of Simplified Environmental Impact Statement (SEIS) and the Environmental Management Plan (EMP) and proceed the environmental license application processes for projects under the portfolio.

19. The contractors for each contract package have the responsibility to secure the Mineral License for the material extraction. All of the projects initiated the application for the mineral licenses for every specific locations immediately after the commencement of the project. The quarry locations for the projects under the ADB road project portfolio are secured with ANPM Location Approvals, except the Loes River quarry for the Maubara – Karimbala – Atabae – Mota Ain project which is under ANPM assessment due to the other applications from local companies on that river.

20. The contractors capability to fulfill the mineral license application requirement has become the issue across the project. This obstacle resulted the slow progress on the issuance of Mineral License.

21. For the summary information, the NR1UP Manatuto – Baucau secured eight Mineral Licenses for sand and gravel material sources, the Mineral Licenses are granted until August 2019. The Tasitolu – Tibar Four Lanes have not yet got the Mineral Licenses for two locations (Nuaer Mountain and Tibar River). The RNUSP Laclubar Junction – Natarbora is on the process of renewing the Mineral License since lapse on January 2017 for both Diric Hun (Laclubar) gravel and Lamara River quarries.

22. The Baucau – Lautem has applied for three river quarries (Uaimuhi, Soba and Ilalai rivers), all required documents have been submitted to ANPM for approval. The Maubara – Karimbala – Atabae – Mota Ain applied for four river quarries (Morae, Loes, Fatulagung and Batugade rivers) awaiting ANPM approval. The contractors (CBMI) for these two contract packages are hiring an independent local consultant to assist the application for the mineral license.

23. The district feeder road C13 Ermera – Fatubessi and C16/17 Package 1 Aipelu – Bazartete have secured the location approvals for both Gleno River and Aipelu River respectively. The progress of the application is ongoing since the submission of the Mining Proposal and SSEMP on 7 November 2018.

24. The status of the projects' portfolio environmental License application are shown in Table 1.2 and the Mineral License application status are presented in Table 1.3 (at the end of this section).

D. Institutional Arrangements

25. The executing agency for the upgrading and improvements projects is the Conselho de Administração do Fundo Infraestrutura (CAFI) and the implementing agency is the DPW.

The agency for implementation within DPW is the Project Management Unit (PMU) established to manage and implement projects financed wholly or partially by GOTL's development partners.

26. The PMU is embedded in the Directorate of Roads, Bridges and Flood Control (DRBFC) under the Directorate General for Public Works (DGPW) and is responsible for managing programs with financing from GoTL development partners, e.g. ADB, JICA, EU and WB etc. The PMU is responsible for day to day management of the programs, including implementation of requisite safeguards measures on all projects.

27. Through program support, the PMU has developed environmental and social safeguards teams each of which comprises international and national specialists who are financed jointly by ADB and WB. However, since 18th October 2018 the contract of International Environmental Specialist was not extended and the team remain with a National Environmental Specialist and A National Environmental Assistant who deal with environmental issues across the projects. The environmental specialists in PMU are responsible for monitoring and compliance of safeguard requirements, environmental management and monitoring and capacity development for environmental safeguards for contractors across all projects and more broadly within MPW. In practice PMU has accumulated considerable experience in dealing with the safeguard requirements of development partners and other government agencies.

28. The implementation of each subproject is supervised by a team of consulting engineers known as the Project Implementation and Supervision Consultants (PISC). Within each project there are one or more contract packages or components which are undertaken by contractors. Each Contractor is required to have an officer to oversee environmental, health, safety and traffic matters; responsible to supervise the workforce in the implementation of mitigation measures for environment management, health, safety and traffic control as required in the EMP. This staff in the Contractor team is generally referred to as the Environmental and Safety Officer (ESO) or in some cases the contractors have an Environmental Officer (EO) and a Safety Officer (SO). The updated status of the PISCs' environmental specialists and the Contractors' ESO/EO and SO monitoring arrangement during this period for each contract package are presented in Table 1.4.

29. The need for construction materials (gravel and sand) to support the project has led the contractors to establish numerous mountain and river quarries in the vicinity of the project corridors. Under the Ministerial Diploma 64/2016 on Specific Rules for the Licensing of the Mining Activity the contractor is required to apply for a mineral license before setting up a quarry or other source for mineral extraction. The National Authority of Petroleum and Minerals (ANPM) within the Ministry for Mineral Resources is the authority responsible to control the mining activity around the country. A good coordination has been achieved by the environmental specialists in PMU by regular liaison with ANPM to address the concerns on mineral licenses requirements and to facilitate road projects.

30. In December 2016 the MINISTRY OF COMMERCE, INDUSTRY AND ENVIRONMENT (MCIE) the MINISTRY OF PETROLEUM AND MINERAL RESOURCES (MPMR) and the MINISTRY OF PUBLIC WORKS, TRANSPORT and COMMUNICATIONS (DPW) reached an agreement to establish cooperative arrangements in the process of securing environmental and mineral licenses for the extraction of construction materials in order to accomplish the desire of the Government to complete the major investments being utilized for the rehabilitation of roads. The cooperative arrangements are called the memorandum of understanding (MOU). The environmental authority is the Secretary of

State for Environment (SEA) under the Ministry of Commerce Industry and Environment (MCIA).

31. In the MOU the three ministerial authorities agreed to recognize the Environmental License, including the Environmental Management Plan (EMP) and Simplified Environmental Impact Statement (SEIS) used to secure the Environmental License for the Project as evidence of satisfactory compliance with the environmental requirements of DNCPIA for purpose of securing mineral licenses. The Environmental License obtained by MPW from MCIA/SEA for the road construction being evidence of compliance to the requirement of mitigating the environmental impact due to the construction of the road project including the ancillary facilities of quarrying; borrow pits; installation of asphalt plant, crushing plant, batching plant, fabrication plant and other facilities necessary for the road project. The arrangements made under the previous government are under consideration at the end of this reporting period.

32. The Decree Law No. 14/2018 (The Organic Law of VIII Constitutional Government; 17 August 2018) gives the authority to the Ministry for Petroleum and Mineral to carried out the respective procedural for environmental Licensing and to approve the Environmental License application for the petroleum and mineral resources sectors.

33. When construction companies identify a potential source, Location Approval must first be sought from ANPM. Each location is approved individually by ANPM in principal at this stage. Construction companies must then complete the requirements of the Ministerial Diploma 64/2016 as agreed in the MOU including Mining Plan including a Site Specific Environmental Management Plan (SSEMP) and other requirements for each location to obtain the Mineral License. Construction companies will not be fully authorized to extract construction materials without subsequently obtaining the Mineral License or the Provisional License.

34. Normally the Mineral License will be issued subject to documents required under MD64/2016 above being completed and that ANPM and DNCPIA gives their endorsement of the mineral extraction activities and associated facilities. However the Organic Law of VIII Constitutional Government Decree Law 14/2018 gives the authority to the Ministry for Petroleum and Mineral Resources to issue the Environmental License and Mineral License for the Mining and Petroleum sectors. All the contractors are now submit their application for Environmental License and Mineral License for the quarry operation to ANPM.

E. Arrangements for monitoring

35. The current arrangement of the environmental unit in PMU comprises with a national environment specialist (NES) and national environmental assistant (NEA) responsible for the coordination of environmental management, environmental monitoring and capacity development across all ADB, JICA, EU and WB projects. The NES and the NEA contracts have been extended for another six months till December 2019.

36. The IES contract (intermittent) finished on 18th October 2018, the recruitment process for IES is ongoing right now within the Ministry office. Based on the plan, the recruitment for the International position for Environmental / Resettlement Specialist (including Chief Technical Advisor, Road Construction Advisor, Contract / Quantity Engineer) will be advertised on September 2019.

37. Started from the end of the IES contract, ensuring compliance with environmental safeguard requirements falls to the NES with the NEA assistance and direct guidance from

PMU Project Manager. NES have to liaise directly with the Project Implementation and Supervision Consultant's (PISC) to manage the projects to be in line with the EMP and contract requirements and keeps a site diary for each contract.

38. Overall, the PMU environmental unit is functioning in managing the environmental requirements as per contract and specifications across the projects. The current arrangement without International environmental specialist experiencing some obstacles in the reporting and the completion of the environmental assessment for the upcoming projects such as C16/17 Package 2 Bazartete – Tokoluli and Baucau – Viqueque Highway Project. The International Environmental Specialist position is required to reinstate the normal monitoring system to manage the projects.

39. The Project Implementation and Supervision Consultants (PISC) for each project have one international environment consultant (IEC-intermittent) and one national environment consultant (NEC–full time) responsible for environmental management and monitoring for the project component contracts under their control.

40. In practice there are one or more contractors under each project. Each contractor is required to have officers covering environmental and safety that are sometimes combined in one position of Environmental and Safety Officer (ESO); also overseeing traffic management. The ESO liaises directly with and receives instructions from NEC and IEC through the PISC.

41. NEC liaises directly with the contractors ESO on a daily basis. NECs keep a site diary for each contract that they are responsible. The IEC provides intermittent (usually about 3 weeks to one month every quarter) mentoring for the NEC and training for the contractor staff. The IES and NES mentor the PISC's NEC environmental officers when the IEC is not working on the project.

Table 1.2: ADB Road Projects Status, Categorization and Documents

Project	Subprojects	Category	Documents	Environmental License (Original)	Environmental License (Renewal)	Environmental License (2 nd Renewal)
RNDSP	(i) A03-03/04 Liquica-Mota Ain-Batugade (R1-R2); (ii) Balibo – Maliana (RCM 1-4)	B	(i) SEIS 2012 (ii) Maintenance only but followed EMP for R1 & R2.	(i) 21 Sep 2011	(i) 13 Jan 2014	
RNUP	(i) Tibar – Liquicia (R3); (ii) Tibar – Gleno (R4)	B	SEIS & EMP June 2016	(i) 31 May 2012 (ii) 16 Aug 2012	(i) 19 Sep 2014 (ii) 02 Oct 2014	
RNUP-AF	Tacitolu– Tibar (4 lane - dual carriageway)	B	SEIS & EMP June 2016	18 Jan 2017	Due 17 Apr 2019	Due 12 Apr 2021
NR1UP	A01-01 Dili - Manatuto	B	SEIS & EMP May 2014	13 Jul 2015	Due 17 Apr 2019	Due 24 Jan 2021
NR1UP	A01-02 Manatuto – Baucau	B	SEIS & EMP Jun 2016	18 Jan 2017	Due 17 Apr 2019	Due 12 Apr 2021
RNUSP	Manatuto – Laclubar – Natabora	B	SEIS & EMP June 2014	02 Jul 2014	Due 16 Mar 2019	Due 12 Apr 2021
RNUP-AF	(i) C13 Ermera - Fatubessi	B	(i) First Draft SEIS & EMP Submitted 14 th June 2017 Final SEIS-EMP submitted 13 July 2018	13Jul 2018	Due 13 Jul 2020	
	(ii) C16/17 Package 1 Aipelo-Bazertete	B	(ii) First Draft SEIS & EMP Submitted 14 th June 2017 Final SEIS_EMP submitted 13 th July 2018	13Jul 2018	Due 13 Jul 2020	
	(iii) C16/17 Package 2 Bazertete-Tokolui	TBC	(iii) C16/17 Package 2 Bazertete-Tokolui Project Document is submitted to SEA 15 th Oct 2018. Revised PD submitted to SEA on April 2019 Draft SEIS (awaiting input from detailed avifauna study Aug Sep 2017). EMP in press.	Awaiting SEA Categorization	N/A	
RNUSP-AF	(i) Baucau – Lautem;	B	(i) Final SEIS & EMP 29 th Oct 2018	24 Jan 2021	N/A	
	(ii) Maubara – Karimbala	B	(ii) Final SEIS & EMP 29 th Oct 2018	24 Jan 2021	N/A	
	(iii) Atabae – Mota Ain	B	(iii) Final SEIS & EMP 29 th Oct 2018	24 Jan 2021	N/A	
BVHP	Baucau – Viqueque	B	SEIS & EMP drafted to ADB May 2017 SEIS & EMP submitted to DNCPIA 8 th Oct 2018. Revised SEIS & EMP submitted to SEA 10 ^h Apr 2019	Awaiting SEA approval	N/A	

N.B. Environmental License validity minimum 2 years. NYR = not yet received.

Table 1.3: Updated Contractors' Mineral Licenses for the Material Source

PROJECT DETAILS	RNUP-AF	RNUSP	RNUSP-AF		RNUP-AF		
	KEI	SINOTECH	DONGSUNG		NIPPON KOEI	KCI jv KECC & LASA	
	CWY	CNI22	CBMI		SHANGHAI	SHANGHAI	
	R3W	Package 2			Part 2	C13	C16/17 Pack 1
	TAS-TIB	LAC - NAT	BAU-LAU	MAU-KAR - ATA - MOT	MAN - BAU	ERM-FAT	AIP-BAZ
Location	Tibar Sand	Laclubar Quarry	Uaimuhi River	Morae River	Sumase River (Sand)	Gleno River	Aipelo River
Application Status	Loc. Approval 4 July 2017. 4th and 5th Revised Mining Plan submitted 28 Feb 2018 & 27 April 2018. Revised SEMP submitted 8 Oct 2018. Application ongoing	One year Renewal Application ongoing	Location Approval on 5-Mar-2018. SEMP and Mining Proposal submitted to ANPM (27-Mar-2018, 8-Jun-2018, 27-Mar-2019). Application ongoing	Location Approval on 22-Jan-2018. SEMP submitted to ANPM 20 Feb 2018. Revised Mining Proposal 10-Apr-2019. Application ongoing	Loc. Approval 9 Dec 2016. Final SEMP submitted 24 July 2018.	Loc. Approval May 2019. Awaiting Loc. Approval. Application ongoing	Loc. Approval 12 Oct 2018. Mining Prop. & SEMP submitted 7 Nov 2018. Application ongoing
Mineral License	Not Yet	Jan 2016 - Jan 2017	Not yet	Not yet	Aug 2018 - Aug 2019	Not yet	Not yet
Location	Nuaer Mountain quarry	Lamara River	Soba River	Loes River	Sumase River (Gravel)		
Application Status	Loc. Approval 4 July 2017. 4th and 5th Revised Mining Plan submitted 28 Feb 2018 & 27 April 2018. Revised SEMP submitted 8 Oct 2018. Application ongoing	One year Renewal Application ongoing	Location Approval on 5-Mar-2018. SEMP and Mining Proposal submitted to ANPM (27-Mar-2018, 8-Jun-2018, 27-Mar-2019). Application ongoing	Location Oppinion submitted 7-Nov-2017 AND 14-Mar-2018. Awaiting Location Approval. Application ongoing	Loc. Approval 9 Dec 2016. Final SEMP submitted 24 July 2018.		

Mineral License	Not Yet	Jan 2016 - Jan 2017	Not yet	Not yet	Aug 2018 - Aug 2019		
Location			Ilalai River	Fatulagun River	Manulede River (Sand)		
Application Status			Location Approval on 5-Mar-2018. SSEMP and Mining Proposal submitted to ANPM (27-Mar-2018, 8-Jun-2018, 27-Mar-2019). Application ongoing	Location Approval on 22-Jan-2018. SSEMP and Mining Proposal submitted to ANPM 20-Feb-2018. Updated SSEMP 25-Oct-2018). Revised Mining Proposal 25-Jun-2018, 22-Feb-2019, 5-Mar-2019, 9-May-2019. Application ongoing	Loc. Approval 27 April 2017. Final SSEMP submitted 24 July 2018.		
Mineral License			Not yet	Not yet	Aug 2018 - Aug 2019		
Location				Batugade River	Vemasse River (Sand)		
Application Status				Location Approval on 13-Feb-2018. SSEMP and Mining Proposal submitted to ANPM 12-Mar-2018. Revised Mining Proposal 10-April-2019. Application ongoing	Loc. Approval 9 Dec 2016. Final SSEMP submitted 24 July 2018.		

Mineral License				Not yet	Aug 2018 - Aug 2019		
Location					Vemasse River (Gravel)		
Application Status					Loc. Approval 9 Dec 2016. Final SSEMP submitted 24 July 2018.		
Mineral License					Aug 2018 - Aug 2019		
Location					Laleia River (Sand)		
Application Status					Loc. Approval 5 Jan 2017. Final SSEMP submitted 24 July 2018.		
Mineral License					Aug 2018 - Aug 2019		
Location					Laleia River (Gravel)		
Application Status					Loc. Approval 5 Jan 2017. Final SSEMP submitted 24 July 2018.		
Mineral License					Aug 2018 - Aug 2019		
Location					Vemasse (Humburea) Gravel		
Application Status					Loc. Approval 3 April 2017. Final SSEMP submitted 24 July 2018.		
Mineral License					Aug 2018 - Aug 2019		

Table 1.4: Supervision Consultant Team and Contractor Monitoring Arrangement January – June 2019.

PROJECT	COMPANY	MONITORING PERSONEL	MONITORING PERIOD	REMARKS
RNUSP (LA CLUBAR – NATARBORA)	SINOTECH	(IEC) Ms. Dolores Viloría	To be mobilized August 2019	Ms. Dwi Setianingsih (Former IEC) resigned Dec 2018
		(NEC) Mr. Delio Denny Guterres		
	CNI	(ESO) Mr. Liu Baobao	June 2019 (on leave)	O Yang bo (Former ESO) substituted June 2019
		(Interim ESO) Mr. Liu Banghai	June 2019	
RNUP-AF FOR TACITOLU TO TIBAR 4 LANES	KATAHIRA	(IEC) Ms. Dolores Viloría	16 June – 30 June 2019	KATAHIRA Demobilized Dec 2018 – 1 May 2019 due to the contractual issue.
		(NEC) Ms. Teresinha Alberto	2 May – June 2019	
	CWY	(EO) -		Not in post since Oct 2017
		(SO) -		
		(Ass. EO) Mr. Andre Sarmento	January – June 2019	Assigned since Oct 2017
NRA01-02 MANTUTO – BAUCAU	NIPPON KOEI	(IEC) Ms. Cristina Quinalayo	June 2019	Nippon KOEI Demobilized 15 July 2019 due to the contractual issue.
		(NEC) Mr. Leonardo De Sousa Rosa	January – June 2019	
	SHANGHAI	(EO) Mr. Sheng Yang		
		(SO) Mr. Renato Reis	January – June 2019	
RNUSP-AF MAUBARA – KARIMBALA AND ATABAE – MOTA AIN	DONGSUNG	(IEC) Dr. Ashadul Alam	1 Jan 2019 – 29 Mar 2019 2 May 2019 – 15 Aug 2019	Assigned for both MAUBARA – KARIMBALA AND ATABAE – MOTA AIN and BAUCAU TO LAUTEM
		(NEC) Ms. Divina Maria Marques	January – June 2019	
	CBMI	(EO) Ms. Ma Li	January – June 2019	
		(SO) Mr. Jorge Piedade Leite	January – June 2019	
		(Ass. SO) Mr. Afonso Florentino	January – June 2019	
RNUSP-AF BAUCAU TO LAUTEM	DONGSUNG	(IEC) Dr. Ashadul Alam	1 Jan 2019 – 29 Mar 2019 2 May 2019 – 15 Aug 2019	Assigned for both MAUBARA – KARIMBALA AND ATABAE – MOTA AIN and BAUCAU TO LAUTEM
		(NEC) Mr. Efrem Rolando G. Tilman	January – June 2019	
	CBMI	(EO) Mr. Jose Orlando Pereira	January – June 2019	Nilton Antonio Jakarias (Former EO) resigned Dec

PROJECT	COMPANY	MONITORING PERSONEL	MONITORING PERIOD	REMARKS
				2018.
		(SO) Ms. Tan Yanxia	Feb – June 2019	Huang Quidy (Former SO) substituted Feb 2019
RNUP-AF BAZARTETE	AIPELU-	(IESC) Mr Satish Kumar Damodara	26 May – 10 June 2019	Proposed to assign another NESC for District Road (C16/17 Pack 1 & 2 and C 13) in the next reporting period
		(NESC) Mr. Agapito Galucho Freitas	January – June 2019	
	SHANGHAI	(EO) Mr. Fang Zhenlei (Acting)	May – June 2019	
		(HSO) Mr. Wang Lingkai (Acting)	May – June 2019	
RNUP-AF FATUBESSI	ERMERA-	KCI	(IESC) Satish Kumar Damodara	26 May – 10 June 2019
			(NESC) Mr. Agapito Galucho Freitas	15 March – June 2019
	SHANGHAI	(EO) Mr. Yu Hui		Not in post since 15 March 2109 (Contract Commencement Date)
		(SO) Mr. Liu Huandao		
RNUP-AF BAZARTETE - TOKOLULI	KCI	(IESC) Satish Kumar Damodara	26 May – 10 June 2019	
			(NESC) Mr. Agapito Galucho Freitas	May – June 2019
	SHANGHAI	(EO)		
		(SO)		

2. Monitoring Activities

42. **Methodology.** In order to achieve consistency and harmonisation, monitoring is conducted in a similar way for all projects, by following the approved environmental management plan (EMP). Monitoring is conducted by visual observation to check if the project activities are mitigated in line with the EMP; checking that mitigation measures are being implemented. The EMPs for some early projects (e.g. RNDSP and RNUP) were less developed but the implementation of later projects has led to more comprehensive EMP with a more extensive suite of core mitigation measures; that can generally be applied to many road projects. The core mitigation measures have been promulgated in the past four years and will continue to be applied to all new projects going forward. The EMP is designed to be updated by the contractors, ideally by the ESO, in the pre-construction stage. In practice the contractors environmental awareness at the beginning of project implementation is very low and capability is limited although this has improved in many cases after training. The first stage of interaction is to provide environmental compliance and awareness training (ECAT). However, even when training is completed, experience shows that ESOs require very significant support from both PMU and PISC staff to update the Contractors EMP (CEMP) and to complete weekly inspections and monthly environmental reports. Project specific issues such as location of ancillary and associated facilities (quarries, crushers, batching plant and asphalt mixing plant etc.) are also included in each CEMP.

43. Checklists have been prepared for all the main project activities. The general checklist designed to be completed on each monitoring occasion to identify the location and type of impacts that are not being controlled sufficiently well. Other checklists are designed to provide guidelines for specific construction activities and the required mitigation measures in the EMP (e.g. contractor camp, spoil disposal, quarry and manufacturing areas health and safety etc.). The IEC and NEC conduct joint inspections with the ESOs and instruct the ESOs as necessary to complete the checklists or NECs complete the checklists if the contractor does not. Stand alone monthly environmental monitoring reports (mEMR) are submitted each month. If mitigation measures are not implemented, in practice, the first case is to request action verbally. If there is no response this is followed by written instructions and Corrective and Preventative Action Requests (CPARs). Checklists are appended to the mEMR and instructions for the month are summarised in the mEMR.

44. The coverage of the checklists is presented in Table 2.1. Checklists were updated in September 2016 in English with corresponding translation to Chinese (simplified) as currently all contractors are Chinese or Philipino and this covers the working languages on all the projects. After group discussions with all NECs from ADB, WB and JICA projects (ECAT 6 December 2017) the checklists are seen as adequate, although there may be some changing to the wording were necessary.

Table 2.1: Environmental Checklists

NUMBER	TITLE	FREQUENCY OF COMPLETING
CL 01	GENERAL MONITORING PROGRESS & ACTION	At least weekly
CL 02	CONSTRUCTION YARD/CONTRACTOR BASE CAMP / OFFICE	At least monthly
CL 03	SPOIL DISPOSAL – SETUP & CLOSE OUT (includes macadam)	At least monthly
CL 04	SPOIL DISPOSAL OPERATION (Monitoring includes macadam)	At least monthly
CL 05	BORROW PIT/QUARRY – SETUP & CLOSE OUT	At least monthly
CL 06	BORROW PIT / QUARRY OPERATION	At least monthly
CL 07	MANUFACTURING AREAS (Crusher & Asphalt Mixing Plant AMP, Batching Plant, Casting Yard etc.)	At least monthly
CL 08	CONTRACTOR WORKER ACCOMODATION	At least monthly
CL 09	HEALTH AND SAFETY	At least monthly

45. Translation into local languages can be provided by the NES and NEA as necessary. At the round of capability development training (ECAT 6 December 2017) it was agreed that further refinement of the checklists would be made in 2018/2019 as necessary. based on project experience. The checklists may be updated in the next reporting period based on discussion during joint inspections. Checklists are common to all projects. The effectiveness of checklists and any emerging problems with contractors will be reviewed again at an ECAT workshop in the next reporting period. Although the contractors' environmental awareness is generally very low, the core mitigation measures have been promulgated since the IES was engaged in October 2013 and will continue to be applied to all aspects of the subprojects until they are completed.

46. The IEC, NEC refer to the EMP, CEMP and checklists and instruct the ESOs as necessary. In practice the first case is to request action verbally. If this does not illicit an acceptable improvement, written instructions to the contractor are usually by letter from the PISC to the contractor. If verbal and written instructions from PISC, IEC and NEC to the contractor have not achieved the necessary action then the IES and/or NES will revisit the site and issue a letter listing contraventions of the EMP and/or a corrective and preventative action request (CPAR) to the PISC to enforce on the contractor. In unusual circumstances (safety or danger) an instruction from the PISC may be issued to stop work. The intermittent monitoring undertaken by the PMU is presented in Appendix 1A. The summary of monitoring from monthly environmental monitoring progress reports undertaken by the PISC is presented in Appendix 1B. Letters listing any non-compliances with EMPs are issued after periodic site inspections for all projects.

47. **Participants in the monitoring.** The NES, NEA, IECs, NECs and ESOs all participate in environmental monitoring. Other staff in PMU and PISC will also report back problems if they are observed. The ESOs and the NECs work with each other on a daily basis. The IECs are present intermittently; generally during the pre-construction stage for setting up associated facilities and just before and after submission of license renewals and the quarterly environmental reports. IES, NES and NET participate intermittently during any given month and respond to specific issues or problems and keep a watching brief on all projects. In addition the IES and NES mentor the NECs when the IECs are out of country. IES and NES have also conducted group training and workshop activities (ECAT 1 - November 2015, ECAT 2 - May 2016, ECAT 3 Contractors only June 2016, ECAT 4 - September 2016, ECAT 5 - June 2017 and ECAT 6 - December 2017) for the NECs and additional on site training sessions for monitoring with the NECs, to mentor the NECs when the IECs are out of country. Project specific ECATs have taken place with all Contractors and PISC staff either individually or in groups as contractors have mobilised. The ECAT 7 rescheduled for this reporting period was cancelled due to the absence of the IES in post started mid October 2018. The ECAT 7 or meetings after joint inspections will be conducted in the next reporting period to follow up on the amended reporting format, checklists in the updated format and to provide more training on aspects of the EMP, site clean up and rehabilitation procedures and report writing. In the past IES and NES have also conducted occasional training presentations on specialist subjects such as environmental management which includes reference to monitoring procedures. In the meantime IECs on NR1UP and RNUSP-AF have conducted more training on all aspects of the EMP, monitoring, safety and traffic issues which may also be covered more formally in the next round of joint inspections, as requested by NECs and ESOs. There are third party monitoring for environment issues done by the DNCPIA and ANPM which recorded by some contractors during this period. The dates for the site monitoring undertaken by the PMU and PISC and participants are presented in Appendices 1A and 1B, respectively.

48. **Frequency of monitoring.** The ESOs and the NECs work together daily and the NEC keeps the site diary up to date. The NES / NEA will visit each project / site for a joint inspection with the NEC and ESO targeting at least twice per quarter (or more frequently if special needs arise). Unannounced spot inspections can be carried out at any time by the NES and NEA, such as after heavy rain or earth tremors or if there is a complaint or serious accident. Under normal operations the IEC and/or NEC will be instructed by the NES and IES to get the contractor to improve any EMP matters that need attention and improve mitigation as necessary, with follow up letters to the resident engineers in the PISCs, accordingly. In practice interaction between the PMU and each project takes place several times per quarter. The frequency of monitoring from the PMU environmental team during this period is a little bit lower compare to previous periods due to the PMU Project Manager request for the NES to attend several meetings with relevant stakeholders as there are no International advisor to accompany the Project Manager as normally.

49. **The checklists** are designed for use on a regular basis each month by Contractor ESOs and the NECs in the PISC and reported in the monthly environmental monitoring reports (mEMR).

50. The general checklist (CL01) is expected to be completed on each monitoring occasion during and after field visits by ESOs and NECs. The checklist is used to identify any locations where there is a non-compliance with the mitigation measures specified in the EMP and the type of impacts giving rise to the non-compliance at that location. This can provide an overview of the locations visited and the types of impacts that are occurring which require mitigation. The locations can be identified and necessary action noted for follow up.

51. Checklists CL02, CL07, CL08, CL09 are designed to provide a guide to focus on the key mitigation measures for certain key construction activities and are recommended to be completed at least once a month. CL02 is for contractor base camp – maintenance yard. CL07 covers manufacturing areas such as crushers batching plant, casting yard and asphalt mixing plant. CL08 focusses on the mitigation measures needed at the contractors accommodation. In some cases the accommodation is located within the base camp, in others the accommodation is separate. These four checklists may need to be completed more frequently if there are many non-compliances with the EMP requirements and more inspections are necessary such as when activities that create environmental impacts are very intense or are changing or if the Contractor does not respond to request to improve compliance with the EMP.

52. The Checklists CL03 and CL05 focus, respectively, on the activities and potential impacts during the setting up of designated spoil disposal areas and borrow pits/quarries. The Checklists CL03 and CL05 should be followed once during preparation of the sites, while the necessary permissions and approvals are being put in place. CL04 and CL06 focus, respectively, on the operation and decommissioning of spoil disposal areas and borrow pits/quarries and the procedures and potential impacts that need to be controlled. Decommission and rehabilitation of spoil disposal areas and borrow pits/quarries is covered in the approved EMP. The checklists can also be used by any interested parties to identify the key impacts for the main construction activities.

53. Consultants have generally supported the PMU well in the completion of checklists, and have issued site instructions to Contractors in respect of matters raised by PMU in various Corrective and Preventative Action Requests (CPARs). Whereas Contractors have in many cases generally been responding to the requests made for improvements, response time has become too long in this reporting period. There have been exceptions where there have been several incidences where it has been necessary to repeat CPARs. This matter

has received particular emphasis at the end of this reporting period and it will continue to be emphasised in the next. Some improvements have been noted but continued vigilance is required from all the PISCs to make sure the contractors respond to the CPARs and apply all the EMP requirements on every project.

54. **Main activities.** The main activities during monitoring are direct observations on site of the status of the implementation of the mitigation measures in the SEIS, EMP and Environmental License for each project. In addition there are weekly and monthly progress meetings held with the PISC during which environmental and safety matters can be raised. The monthly progress meetings are attended by the NES during which environmental issues and priorities are raised. For reporting issues such as preparation of CEMP, preparation of monthly environmental reports, applications to extract construction minerals and for quarry and batching plant etc., and other reports. *Ad hoc* meetings are arranged in PMU, on site or PISC and contractors offices as necessary.

55. During this monitoring period the PMU environmental unit conducted 19 joint site inspections for the ongoing ADB-GoTL road projects portfolio. Total of 272 project site inspections done by the Environmental Specialists in the PISC teams. The details of the joint site inspections from PMU and PISCs are presented in Appendix 1A and 1B.

Table 2.2: Summary of Monitoring ADB Road Projects (January-June 2019)

Project	Location	Monitoring Conducted by PMU	Monitoring Conducted by PISC
RNDSP	(i) A03-03/04 Karimbala – Atabae (R2)	Completed	Completed
RNUP	(i) Tibar – Liquicia(R3)	Completed	Completed
	(ii) Tibar – Gleno(R4)	Completed	Completed
RNUSP	(i) Manatuto – Laclubar Junction (P1)	3	Completed
	(ii) Laclubar Junction – Natabora (P2)	3	67
RNUP-AF	Tacitolu– Tibar (dual carriageway)	6	13
NR1UP	A01-02 Manatuto – Baucau	1	7
RNUSP-AF	(i) Bacau - Lautem	1	37
	(ii) Maubara Karimbala & Atabae Mota Ain	1	102
RNUP-AF (EU)	(i) Ajpelu-Bazartete	2	42
	(ii) Bazartete-Tokoluli	2	Not mobilize yet
	(iii) Ermera-Fatubessi	0	4

3. Works in Progress

56. **Road Network Development Sector Project.** The RNDSP R-1 was completed on 14 November 2013 and defects liability period ended on 13 November 2014. The R-2 was completed in September 2015, with the completion certificate issued on 30 September 2015 and Defects Liability Period (DLP) ending in September 2016.

57. Total of ten bioengineering sites were completed by the R-2 Contractor by September 2015. The progress of these bioengineering sites after the completion date have been observed informally by PMU environmental specialist in order to collect empirical information on the success of these measures as a basis for future guidance on bioengineering installations. The bioengineering using live stakes on fill slopes has been successful and many trees are now fully mature at over 3m with crowns of 1m to 2m diameter. The live stakes are adapting very well along the coastal environment. These installations provide a good example for future bioengineering installations on fill slopes.

58. **Road Network Upgrading Project.** The RNUP Tibar – Gleno road (R4) works started in October 2013 and completed on the revised completion date of April 30th, 2016 and inaugurated in June 2016. The section for Tibar – Liquica (R3) works started in November 2013 and completed on the revised completion date of August 15th, 2016. The defects notification period expired a year later in 2017 and continue with two years performance based maintenance on each contract. The Final EMR for both sections submitted upon completion date of the projects. The environmental specialists have been observing the the progress of the bioengineering sites occasionally in order to collect empirical information on the success of these measures as a basis for future guidance on bioengineering installations. The bioengineering using various techniques such as pallsades, mixtures of grasses, brush layers, live stakes on both cut slopes and fill slopes. The successful installation observed on the grass and brush layers, whereas the live stakes growth are minimum in over 20 locations. The altitude, climate and soil conditions identified are as the main factor contribute to the slow growth of live stakes. This lesson learned experience provides future guidance on bioengineering installations on cut and fill slopes in the differencet environment.

59. **Road Network Upgrading Project – Additional Financing.** The Civil works for RNUP-AF for **Tacitolu to Tibar 4 Lanes** started in February 2017 with the total improvement length 4.55 Kms. Project accomplishment as per June 2019 is about 63.71% The construction work mostly on earthworks and embankment, construction of bidge, cross drains, line drains and retaining walls. Bioengineering work is started in this reporting period with the installation of the grass sodding. Construction of line drains and retaining walls is approaching completion in most sections. Application of the surface course bituminous pavement is scheduled to be started by August 2019. The construction of the Tibar Bridge at Km12+700 and seawall at Km10+100 to Km10+300 were completed. The operation of the spoil disposal sites is acceptable. The crushers and sand washing have been active at the Contractor's compound. The installation of asphalt mixing plant is calibrated and on the operational condition for the surface course bituminous pavement work.

60. The **RNUP-AF Tacitolu to Tibar 4 Lanes** Contractor has applied for mineral licenses for both a mountain quarry at Nuaer and river borrow pit in Tibar in February 2017. ANPM has issued a technical comments and awaiting contractor's revision. The ANPM has issued the technical comments on the SSEMP for both quarry sites submitted to on 8 October 2018, the Contractor is preparing the revision to be resubmitted. The renewal

application for the Road “Mother” Environmental License was approved and issued by SEA on 12 April 2019 with two years validity until 12 April 2021.

61. The **RNUP-AF** District Feeder Roads (EU) contract was activated by May 2018 and the same Contractor will complete all Aipelu-Bazartete, Bazartete - Tokoluli and Ermera-Fatubessi sections.

62. The Contractor has mobilised the workers and equipment onsite to implement the project based on the contract which started on 18 May 2018 for the C16/17 Package 1 Aipelu–Bazertete. The progress of civil work as per June 2019 is 42.27% consists of clearing and grubbing, excavation for lined ditch and gabion box, construction of cross drains. The construction of Contractor’s camp at Km 1+800 was completed, however the dedicated room for sickbay has not finalized. An area opposite to the contractor camp has been cleared for screening sub-base materials. The application for location approval submitted to ANPM on 1st August and approved on 12th October 2018. The contractor required to submit the SSEMP and the Mining Proposal to ANPM on 7 November 2018 for approval to issue the Environmental and Mineral Licenses for the Aipelu River quarry site. The CEMP for Aipelu-Bazartete is under contractor revision, the PISC has been requested to assist.

63. During this reporting period for C13 Ermera–Fatubessi the issues of limited access over two old baley bridges which require strengthening for safe passage of heavy equipment, restoration of collaps sections of the access from Gleno to Ermera and security concern of the contractor staff onsite have been solved with the higher governmental authorities and the assistance from the Local government, PNTL and F-FDTL.

64. Notice to Commence reissued to the contractor on 15 March 2019. As per May 2019 the contractor have started the mobilization of the equipment (50%) and manpower (17.65%). The construction progress as per June 2019 is 4.00% consists of main project activities such as construction of the Contractor’s Camp, survey work for the road allingment and roadway maintenance.

65. **Road Network Upgrading Sector Project.** The RNUSP from Manatuto via Laclubar Junction to Natarbora has been under construction since 2015. The section from Manatuto to Laclubar Junction (Package 1) commenced in 15 January 2015. The section from Laclubar Junction to Natarbora (Package 2) commenced in 16 March 2015. Since the last reporting period both projects have progressed significantly as the weather has been more favourable. The civil works for Manatuto to Laclubar Junction completed on 24 December 2018 whereas the revised completion date for Laclubar Junction to Natarbora is extended to 22 August 2019. The Environmental License for the Manatuto – Laclubar – Natarbora Road Upgrading Project lapse on 16 March 2019. The renewal Environmental License issued by SEA in 12 April 2019 with two years validity until 12 April 2021.

66. **Package 1 (Manatuto to Laclubar Junction)** as per December 2018 accomplished 96.7%, and the road was reported to be substantially completed. The Taking Over Certificate was issued by the engineer on 14 December 2018 and the project is now under one year Defect Notification Periods (DNP) commencing on 15 December 2018. The road furnitures such as road signs, road markings and other road safety measures are being installed.

67. With the completion of the project, the environmental and mineral licenses for contractor quarry site and auxiliary facilities are not required to be extended. The Site Clean Up and Rehabilitation Plan submitted to PMU on December 2018 also covers the decommissioning plan for these facilities.

68. **Package 2 (Laclubar Junction to Natarbora)** Overall cumulative Accomplishment is 91.99% as per June 2019 and the civil works are expected to be completed by 22 August

2019 based on the revised contract completion date. The construction activity during this period are laying of base courses, asphalt paving, drainage and slope protection structures. The trial section for bioengineering work started this reporting period.

69. RNUSP Package 2 Contractor worked in 2015 to secure one mineral license for two stone quarries (Barique Km105 and Km115) and Lamara river (Km140). The renewal application for the quarries has been submitted to ANPM and after several iterations of the various supporting documents payment arrangements have been agreed. The capability of the contractor staff to process the supporting documents for mineral licenses was the main obstacle and cause of delay of securing the mineral licenses, however there is now a delay with the agreed payments. PMU environmental specialists supported the Contractor early in this reporting period and PISC had joint meetings with ANPM / Contractor / PMU in March 2018. PISC went through the applications in detail with the Contractor. The inputs from the PISC IEC have had some positive effect and CNI22 they have completed the necessary documents, but these will not be progressed technically until the problem with payments is resolved. The support from PMU and ANPM and intervention by the PISC has eventually caused the the Contractor to engage to the point where they have complied with the requisite documentation. This Contractor has a very poor record on how they have addressed the mining license requirements based on feedback from ANPM and PMU observations but the current hiatus is attributed to problems with payments. The Contractor has secured the renewal Environmental Licenses on October 2018 stone quarries (Barique Km105 and Km115).

70. **Road Network Upgrading Sector Project – Additional Financing.** The RNUSP-AF has two sections being constructed by two separate teams from the same Contractor. The sections are Upgrading and Maintenance of the Baucau to Lautem Road (Km 123+105 to Km 182+040 with exception), Maubara to Karimbala Road (Km 49+700 to Km 54+100 and 58+100 to Km 62+600) and Atabae to Mota Ain (Km 85+300 to Km 114+200). Both section of RNUSP-AF commenced on 5 September 2017.

71. **Baucau to Lautem** Based on the Monthly Progress Report as per June 2019, the Actual Cumulative Accomplishment is 37.69%. The main work activities are embankment, aggregate sub base and base courses preparation, asphalt pavement, stone masonry retaining wall and line ditch structures, pipe and box culverts. There are three exceptions areas to be skipped related at Km 123+105 to Km 123+700 related to the resettlement issues near the local market, Km 161+160 to 161+230 and Km 163+600 to Km 163+650 regarding complaint from local people on sacred places and Km 181+800 to Km 181+920 on the protection of cultural property (Lautem Fort).

72. Location approvals were obtained for three river quarry locations in Bau-Lau on March 2018. In June 2018 the documentation to support applications for mineral licenses along with the SSEMPs for each river quarry have been submitted. The ANPM request to provide the Road “Mother” Environmental License as one of the requirement was complied. The Contractor resubmitted the revision of the Mining Proposal and SSEMP on May 2019. The application for environmental license for the base camp, crushers, batching plant and asphalt mixing plant at Laga submitted to DNCPIA on 13th July 2018, no comments from DNCPIA as per this reporting period.

73. **Maubara to Karimbala and Atabae to Mota-Ain (MKAM).** The Contractor achieved the Actual Cumulative Accomplishment by 32.32% as per June 2019. Environmental compliance and awareness training was conducted for the Contractor in February at the commencement of the project and the PISC IEC provided further training during the first tour of duty in February and March 2018. There has been further interaction and on the job

training on an intermittent basis with PISC ESO and the Contractor's ESO and senior management during site inspections.

74. Location approvals were obtained for three locations in MKAM; Morae River and Fatulagun River on 22nd January 2018 and Batugade River on 13th February 2018. In 20 February 2018 the contractor submitted the first SSEMP draft Morae River and Fatulagun River, the SSEMP for Batugade River submitted on 12 March 2018. Revision made to the ANPM comments on SSEMP for Fatulagun River quarry resubmitted on 25 October 2018. The ANPM request to provide the Road "Mother" Environmental License as one of the requirement was complied. The Contractor resubmitted the revision of the Mining Proposal and SSEMP on May 2019.

75. The Contractor for Bau-Lau and MKAM has so far established a good rapport with ANPM in respect of a proactive attitude to addressing the minning license requirements.

76. **Dili to Baucau Highway Project; Manatuto to Baucau Road.** The commencement date of A01-02 (Manatuto to Baucau) was on 18 August 2016. The project based on the new completion date will be completed on 25 April 2020. The Actual Cumulative Accomplishment to date as per May 2019 is 75.08%. Works in this period in various sections have included are embankment, aggregate sub base and base courses preparation, asphalt pavement, bridge construction, stone masonry retaining wall and line ditch structures, pipe and box culverts. Sections of the road are in various stages of completion. Environmental compliance and awareness training was conducted for the Contractor 2016 at the commencement of the project and there has been further interaction with the Contractor's SO and EO and senior management at joint inspections since commencement.

77. The contractor has applied for eight mineral licenses to allow provision of construction materials. There are four locations in river borrow pits; Sumassi River (sand and gravel), Laleia River (sand and gravel), Vemasse River (sand and gravel) and Manlede River (sand) and a mountain quarry (gravel) at Humburea mountain adjacent to the river at Vemasse. The applications have been submitted to ANPM in 2016 and location approvals for all quarries were granted by 2017. As of 27th August 2018 the ANPM issued the Mineral Licenses for all of these quarry sites. The site specific Environmental Licenses application for all quarry sites, Vemase camp, crusher, bathing plant and asphalt mixing plant submitted to DNCPIA on 17th August 2018. Consultation for Vemase community living near the quarry and ancillary facilities conducted on 27th November 2018, public consultations for other quarry site affected community will be conducted in the next reporting period to comply with the DNCPIA requirements. Capability of the contractor staff on processing the mineral license is the main obstacle showing on the delay of securing the mineral license.

78. Photographs of the works in progress on each project are presented in Appendix 2.

4. Monitoring Results and Actions

79. On 22 January 2019 PMU issued a CPAR letter to all Supervision Consultant subject to the strengthening of systems and procedures to improve performance in respect of safeguards implementation. The Team Leader/Resident Engineer is required to effectively implementing the EMP and to ensure that the PISC team including all the International experts and the national staff in the are aware on the general awareness of environmental compliance matters during the implementation of the project.

80. A MEMORANDUM issued by the PMU to all Supervision Consultants on 17 April 2019 with the instruction to amend the Quarterly Environmental Monitoring Report (QEMR) format. The purpose of the change is to harmonize the reporting across all projects and to address the Secretary of State for Environment (SEA) requirement of the Environmental License renewal application to incorporated the types of specific management and monitoring plans as stated in the Ministerial Diploma 46/2017 (Annex VI). The PISCs responded with the submission of the new format for the Monthly and Quarterly Environmental Monitoring Reports.

81. **Road Network Upgrading Project – Additional Financing - Tacitolu to Tibar New Port Road.** The Project Implementation Supervision Consultant (PISC) activity on RNUP-AF:Tas-Tib was temporarily stopped on February 2019 – May 2019 with the demobilization of the PISC staff in regards to the contract issue. Within this period the supervision work was taken over by the DRBFC. Several joint inspections were carried out by PMU, PISC, DRBFC and Contractor during this monitoring period and a further joint inspection and follow up is planned for early in the next reporting period.

82. The main issues were (i) requirement to obtain necessary mineral licenses and environmental licenses for all quarry sites and anillary facilities (ii) traffic management and maintainance of the intallation of traffic signages (iii) dust control (iv) dumping of spoiled asphalt in Tasitolu Lake and (V) sea wall construction methodology and the outlet of lead off drains at Tasitolu section to reduce the potential contamination of corals and sea grass.

83. The environmental issues recorded during the absence of the PISC was the issue of the asphalt dumping at Tasitolu Lake. There was a letter from Secretary of State for Environment **No.Ref:47/MCAE/GSEA/II/2019** date 18 February 2019 concerning the dumping of existing asphalt at the Tasitolu Lake Protected Area. The PMU site inspection on 1 March 2018 confirmed the dumping of asphalt materials at Tasitolu Lake III. In the meeting on 12 March 2019, China Wu Yi Co., Ltd. informed that the dumped asphalt materials were removed, PMU requested the contractor to submit the report. A Follow up inspection on 14 March 2019 by PMU noted that the asphalt materials have not been removed.

84. To solve the issue, PMU issued **CPAR 012** required immediate action no later than 22 March 2019 to remove the dumped asphalt materials and restore the Tasitolu Lake to its original condition. The contractor removed the dumped asphalt materials at Tasitolu Lake on 16 May 2019 and checked, verified and reported by PISC on the CPAR respond letter to PMU on 20 May 2019.

85. During this reporting period a room utilizes for basic medical is provided in the contractor's camp with medical staff and first aid kits in case of emergency. Contractor fuel storage tank provided with a sealed floor and bund and was recommended for the installation of rooftop. Contractor provided two water trucks to do the watering 3-4 times per day covering the whole section during the sunny days. During the monthly coordination meetings, PMU requested the PISC-Contractor to maintain the instalation of all warning

signs, assign the flagmen onsite to control the traffic during the construction activity. Dust nuisance is minimal as the road surface is wet during the rainy days. To control the dust PMU request PISC to faster the vertical alignment up to the basecourse layer at Tasitolu which is planned to be asphalted on July 2019.

86. The **District Feeder Roads (EU) Aipelu-Bazartete (C16/17 Package 1)**. On 13 July 2018 the Secretary of State for Environment approved the SEIS-EMP for Aipelu-Bazartete and issued the Environmental License with the 2 years validity up to July 2020. As per this reporting period January-June 2019 the Supervision Consultant for RNUP-AF Aipelu-Bazartete issued 18 Site Instruction (SI) letters for environmental matters. The PMU followed up the concerned issues raised in the previous reporting period with issuance of three CPARs letters for environmental and safety issues in July, October and November 2018. The CPAR 003 is the specific CPAR issued for dust nuisance. The requests have been followed up so far by the PISC NEC. The Contractor has provided water tank for watering in the working areas and prioritizing the sensitive receptors (schools and residence areas). The schedule of water sprinkling is four (4) times a day. The Contractor is using underground water sources located at station 1+750 to 1+800 R/S for construction activities purpose as well as watering the road to control dust. The Contractor is advised to keep follow the schedule during the ensuing dry period. The revised CEMP submitted on October 2018 needs minimum revision to cover actual information on the approved spoil disposal locations, Health and Safety and Traffic Management Plan. The Contractor has also been requested to identify a safe method of accommodating / diverting passing traffic, as there will be no widening of the road and in general traffic management will be more difficult than on a wider road, even though there is infrequent traffic. The updated CEMP has been finalized and will be submitted to PMU in the next reporting period.

87. **The District Feeder Roads (EU) Ermera-Fatubessi (C13)**. The Secretary of State for Environment approved the SEIS-EMP for Ermera-Fatubessi and issued the Environmental License on 13 July 2018 with the 2 years validity up to July 2020. The notice of Commence for Ermera - Fatubessi issued to the contractor on 18 July 2018, the Notice of Commence rescheduled for 15 March 2019 because of the security issue and the access to the site. Based on the revised completion date, C13 Ermera – Fatubessi will be completed by 7 July 2020 (480 calendar days). Monthly Environmental report for Ermera to Fatubessi project has been submitted to PMU in June 2019.

88. The persons involve in the EMP monitoring are the PISC International and National Environmental Specialist and the Contractor's Environmental and Safety Officer. Along with the mobilization of the contractor equipment and manpower, the civil work activities such as clearing and grubbing, digging and excavation have been started during June 2019. The contractor office and accommodation is located at Aldeia Villa Suco Poetete, the facility is rented from the local residence at Sta. 0+030 L/S.

89. There are 2 spoil disposal areas operated at Km0+700 R/S and Km1+720 R/S with the land owner agreements. Two borrow pit areas identified for material sources at Km0+700 L/S and Km2+720 L/S. The contractor been informed to start the Mineral License and Environmental License application to ANPM.

90. The water source for the contractor daily need is sourced from the water pipe at Km0+030 whereas for construction and dust control activities is sourced from the public water pipe at Km1+700 L/S. The first HIV Awareness Training conducted on 29 June 2019 attended by contractor's workers, consultant staff and the local students. The speaker was invited from Chinese Medical Team Guido Valadares National Hospital.

91. Road Network Upgrading Sector Project. Package 1 (Manatuto - Laclubar)

completed on 15 December 2018 with the issuance of Taking Over Certificate and the Final Environmental Monitoring Report submitted on December 2018. The project is now under the Defect Notification Period (DNP) for one year. The consultant submitted the Contractor's Site Clean Up and Rehabilitation Plan (SCURP) on 23th November 2018 as respond to the CPAR 16th October 2018. The SCURP covers decommissioning of anillary facilities, quarry sites and disposal areas and identifies 62 outstanding issues related to the 23 spoil disposal sites, 14 temporary stockpile areas, 3 surplus material sites, 19 issues on base camp and anillary facilities and 3 quarry sites to be follow up during the DNP and PBM periods. The clean up and rehabilitation work has been conducted for some of the disposal areas in Package 1 (Manatuto - Laclubar) during this monitoring period and will be continue within the DNP.

92. Road Network Upgrading Sector Project. Package 2 (Laclubar-Natarbora)

CPAR 012 issued to the PISC on 22 January 2019. The issues presented in the CPAR are the requirement to follow up the series of Site Instruction (SI) from PISC to Contractor which have been collected from the Monthly Environmental Monitoring Reports (June 2018 to September 2018). It is noted that out of 22 SI, 2 SI were complied with the action required, 7 SI with partial complied and 13 SI with not complied. PISC is required to follow up the Contractor's compliances and provide the updated close out status of those issues and report it in the monthly Environmental Monitoring Report January – February 2019.

93. Dust control has not been an issue for much of this reporting period due to improved sealed pavement completed this period and the rainy season. However continued attention to dust control was concerned especially along the settlement areas. Watering the road according to a fixed schedule three times a day was requested in the letter (Pack 2 CPAR005) issued in March 2017 maintained in compliance.

94. The unusual rainfall and weather conditions in the project resulted to a disaster with big impact to the commuters economically using the Natarbora-Manatuto road. The continuous rain brought heavy flooding during the night of 12th of May causing the collapse of Lamara Bridge, 2-span with the first span of Abutment "B" totally fall underwater that stop the flow of traffic plying to the Natarbora-Manatuto road section. The detour road constructed in the river at the downstream section with a temporary and semi-permanent access where it should hold for at least the duration of the rehabilitation for the "new" Lamara Bridge.

95. The spoil materials are now being disposed of to the designated waste disposal areas and the spoil quantity is less as most of the clearing and grubbing and cutting for the road widening has been completed. Most recently the key issues drawn to the contractors attention have again been to do with routine safety procedures. Some improvements have been made but signage, segregation and barriers need to be installed or improved to many working areas especially those with deep excavation. Workers are frequently found without proper PPE and this was again reiterated to the attention of the PISC and Contractor.

96. The contractor strated the trial section for bioengineering work at Km 122+000 – Km 122+080 R/S. The PMU rejected the planting material due to the introduce of the invasive species (*Jatropha gossypifolia*). The consultant was instructed to stop utilize the invasive species and to supervise the implementation of the work based on the agreed schedule. The species is categorize as the invasive species which destroy native vegetations. The PMU suggested to follow the agreed plan for the Bio-Engineering works.

97. The PISC and the contractor have been informed on several occasions that the mineral licenses must be kept up to date and renewals must be dealt with efficiently in a

timely manner. The Environmental License for mountain quarry site and the facilities renewed by the SEA on October 2018.

98. **Road Network Upgrading Sector Project – Additional Financing.** The PISCs and Contractor teams on both sections of RNUSP-AF have been responsive to the ECAT training provided on February. The replacement for the resigned IEC has been mobilized on site on October 2018, Dr. Ashadul Alam have started the service on an intermittent contract to cover both packages.

99. **Baucau to Lautem** The PISC has completed monitoring on 37 days in this reporting period. The Contractor for RNUSP-AF in this section was well prepared in the pre-construction stage and the draft CEMP was prepared in a timely manner. The Contractor has established a total of 6 (six) disposal areas on this reporting periods and the Contractor is required to follow up with routine water spraying schedule for period of 2019 at least 4 times a day. The fuel storage in the Contractor Camp has been bunded in the sealed floor with (110%) largest tank and the Contractor is reminded to include a Sump to collect the fuel. The Contractor, with the participation of the staff of Baucau Hospital has implemented

100. STI and HIV/AIDS Prevention program conducted three times during this monitoring period on 25 February 2019 at suco Euquisi, 27 April 2019 at Raumoco village Suco Daudere and 22 of June 2019 conducted in Village Binagua Suco Samalari involving local authority, contractor and consultant staff and the community. The Safety training also conducted three times at Contractor's camp for the workers on 26 January, 29 April and 26 June 2019.

101. There are four accidents reported during this monitoring period. On 11 January 2019 (16:30), a single accident involving contractor concrete mixing truck which fall down on to the detour road at Sta. 165+780 due to the slippery road and the driver speeding. Two injured persons provided with first aid and proper medical treatment. In the same month on 21 January 2019 (08:16 AM) at Sta 146+800 due to the heavy rain the excavating site condition was not stable, land slide happened and caused the excavator slipped. No casualty as the operator found completely safe without any minor injury and the excavator was in good workable condition after rescue. The third accident occurred on 15 May 2019 at 14:30 in Raumoco village Sta. 165+800 due to the operated excavator on the unstable soil and land slide happened caused the excavator slipped and sinked into the mud. No casualty and the excavator was not damaged. The last accident reported for this monitoring period occurred on 29 May 2019 at 12:50 PM involving contractor water tank and caused one casualty of contractor chinese worker. The water truck arrived on site and Mr. Quan Zhongyan began to direct the driver to back up to spray water for sub base course. It was reported that the driver reversed too fast and hit Mr. Quan Zhongyan which died on the spot. The contractor are advised to train the drivers to obey the rules of road safety to avoid such accident happen in the future.

102. The issue from monthly report June to September 2018 was collected and The PMU sent out CPARs003 letter to request Consultant to assist Contractor follow up the site instructions were sent out by Consultant to Contractor which include the environmental concerns on signage, barriers and safe marking of deep excavations. The Contractor is being reminded regularly to install the traffic management along the working stretches. Consultant and Contractor have been distributed the announcement letter in Tetum Language to local authorities, Police PNTL, director of schools and for the students to help and assistant the maintained sign boards along the project are in good condition.

103. **Maubara to Karimbala and Atabae to Mota-Ain** The PISC has completed monitoring on 102 days in this reporting period. The Contractor group for RNUSP-AF in this

section seems to be less well prepared in the pre-construction stage although the draft CEMP was prepared in a timely manner it needs to be updated for clearance. The requirements for safe stockpiling have been raised as much of this section is very near the coast.

104. The CPAR003 was sent to Consultant on 22 January 2019, the issues were collected from monthly report from June to September 2018 asking Consultant to follow up the site instruction to the Contractor. Signage, barriers, PPE and safe marking of deep excavations and secondary containment provided for the fuel storage tanks at the contractor base camp have been raised in CPARS001, CPAR002 and CPAR003 as significant matters that need to be follow up.

105. During the monitoring period, the water trucks are under control in offsites works and road works areas as the Contractor have water sprinkling tank to control dust everyday based on their schedule. The schedule of water sprinkling is four (4) times a day. Contractor is advised to follow the schedule during the ensuring dry period. The daily schedule of spraying achieved countersigned and checked by the consultant. The Contractor have provided personel protective equipment (PPE), distributed to workers but use of PPE is yet to implement appropriately by the workers in several locations.

106. Disposal locations for general waste and local recycling options need to be identified. During this period the Contractor has established a total of twenty eight (28) spoil disposal areas up to end of June 2019. Section1 Maubara has three(3), Section 2, Karimbala has (8) and section 3 Atabae-Mota Ain has seventeen (17) disposal areas. The safety Trainings conducted in Manduki Camp site on 18 January and 27 March 2019 for the contractor's staff. There is no accident reported during this reporting period. The contractor has provided a bund for the fuel storage and the sealed floor with (110%) largest tank to contain the fuel storage however Contrator is remind to be included a sump inside the bund.

107. During the excavation of Box Culvert at Sta. 85+978, found some human remains and bones. The work activity immediately stopped and the Bobonaro Municipal Government was informed. The National Forensic Police the did the investigation and transfere the remains.

108. The contractor with the assistance from a Doctor in Atabae Hospital conducted the STI and HIV/AIDS Prevention program three times during this monitoring period on 9 January 2019 at suco Maubara, 15 February 2019 at Suco Batugade and 11 May 2019 conducted at contractor camp in Manduki. The HIV Awareness Program attended by local authority, contractor and consultant staff and the community. The Safety training conducted four times at Contractor's camp and working site for the workers on 18 January, 27 March, 29 April and 22 June 2019.

109. There was an accident recorded on 26 March 2019 at Sta. 96+730 Manduki hill section. The accident involving contractor dump truck and wheel loader, the dump truck carelessly parked in the operation range of the loader and slightly scratched the truck. No injury recorded, the contractor then advised to deploy flagmen and spotter to control the traffic and the heavy machine operator.

110. **National Road No.1 Upgrading Project; Part 2 Manatuto to Baucau.** On 22 January 2019 the PMU issued CPAR 008 to draw the PISC attention on the environmental issues for Manatuto-Baucau project package which mainly covers pollution control, PPE, sp[oil disposal and traffic management. The issued CPAR requires the Team Leader/Resident Engineer to ensure that the team including all the International experts and the national staff in the (PISC) are aware on the general awareness of environmental

compliance matters during the implementation of the project, it is not just a subject matter for the PISC environmental specialists.

111. In CPAR 008 specifically concerns on the identified trees to be retained between Km97 to Km 112 have been cut with no justification. The CPAR required PISC to investigate how and why the identified trees to be retained have been cut and provide the actual status of the identified possible trees to be maintained, also to include this explanation and method to protect all other trees already agreed not to be cut in the next monthly Environmental Monitoring Report.

112. The instruction in the CPAR 008 also draw attention on the Monthly Environmental Monitoring Report and Quarterly Environmental Monitoring Report which shall be submitted to PMU within ten days after the end of the month or quarter to which they refer as stipulated in the ToR for Consulting Services. As reported in the previous SaEMR regarding the submission of Monthly and Quarterly Environmental Monitoring Reports, the PISC again failed to provide the reports to the PMU as stipulated in the supervision consultant contract. PMU on verbal communication reiterated the requirement in the requirements to submit the documents on time.

113. Based on the MEMR for the month of January 2019, there was no traffic accident recorded, The contractor has subsequently improved traffic control and signage especially at detours and where traffic is required to reduce to one lane. Additional thirty speed limit signs and 10 spots (both side) warning sigs have been intalled on the project site to improve the traffic management in the previous period.

114. The PISC received a complaint on 24 January 2019 from the local commuity regarding the wastewater from the engineers' compound that discharged directly to the rice paddies adjacent to the compound. The wastewaste coming from the septic tank and the kitchen sink pollute the cultifated land. The discussion made to solve the issue by compensate the affected person and re direct the wastewater to the newly designated soil absorption pit being excavated and constructed by the contractor.

115. Table 4.1 and 4.2 below present the summary of the Site Instructions (SI) issued by the PISCs to the Contractors and the CPARs issued by the PMU to the PISCs respectively. The details of CPARs for each project are tabulated in Appendix 4.

Table 4.1: Summary of SI issued by PISCs to the Contractors (Jan-June 2019)

Project	Site Instructions				
	No. SI Issued Jan-June 2019	Complied	Partial Compliance	Not Complied	Unclear
RNUSP Laclubar-Natarbora	22	3	1	16	2
RNDSP-AF Maubara-Karimbala-Atabae-Mota Ain	53	20	17	16	-
RNDSP-AF Baucau-Lautem	24	3	10	10	1
RNUP-AF C16/17 Pack 1 Aipelu-Bazartete	23	6	1	12	4
RNUP-AF Tasitolu-Tibar	23	-	-	-	-
NR1UP A01-02 Manatuto-Baucau	-	-	-	-	-

Table 4.2: Summary of PMU CPARs issued to PISC (Jan-June 2019)

Project	CPARs	Issue date	Response From PISC& Contractor
RNUSP Laclubar-Natarbora	CPAR012	22-Jan-2019	Contractor has complied several issues
RNDSP-AF Maubara-Karimbala-Atabae-Mota Ain	CPAR03	22-Jan-2019	Contractor has complied several issues
RNDSP-AF Baucau-Lautem	CPAR03	22-Jan-2019	Contractor has complied several issues
RNUP-AF C16/17 Pack 1 Aipelu-Bazartete	CPAR04	22-Jan-2019	Contractor response received (Dust Control)
RNUP-AF Tasitolu-Tibar RNUSP Laclubar-Natarbora	CPAR011	22-Jan-2019	Contractor has complied several issues
	CPAR012	22-Jan-2019	Contractor continuous monitoring
	CPAR013	15-March-2019	Response received 20 May 2019
RNDSP-AF Maubara-Karimbala-Atabae-Mota Ain	CPAR07	22-Jan-2019	Response received 21 May 2019
	CPAR08	22-Jan-2019	Engineer justification is provided

5. Summary and Conclusion

116. **Summary.** The PMU has been actively driving the issue of these environmental licenses application in a good coordination with the National Directorate for Pollution Control and Environmental Impact (DNCPIA) to address the Technical Comments to complete the applications.

117. The Final SEISs-EMPs for the three road sections under RNUSP-AF (Baucau – Lautem, Maubara – Karimbala ; Atabae – Mota Ain) were submitted to SEA on 29th October 2018 and approved. The SEA then issued the environmental Licenses for these road project on 24 January 2019 with 2 years validity until 24 January 2021.

118. There are three environmental licenses renewed on 12 April 2019 for the RNUSP (Manatuto – Laclubar Junction – Natabora), NR1UP: (Manatuto – Baucau) and RNUP-AF (Tasitolu-Tibar 4 Lanes). All renewed environmental licenses valid for 2 years and due to lapse on 12 April 2012.

119. The Environmental Licenses for RNUP-AF: EU Roads C16/17 Package 1 (Aipelu – Bazartete and C13 (Ermera – Fatubesse) have been issued and due to expire on July 2020.

120. The application for environmental license for RNUP-AF: EU Roads - C16/17 Package 2 (Bazartete-Tokoluli) with the Project Document (PD) submitted to SEA on 16th October 2018. The SEA Technical Comment (18 March 2019) was addressed and the revised PD submitted to SEA on 22 April 2019 awaiting Categorization. The SEIS – EMP for Baucau Viqueque Highway Project submitted on 8th October 2018 and received the SEA technical Comment on 20 March 2019. The revised SEIS – EMP was resubmitted on 10 April 2019, the Environmental License is expected to be issued within August 2019. Follow up on the application has been regularly done with the DNCPIA to address the technical comments and fasten the issuance of license.

121. The RNUSP Package 1 Manatuto – Laclubar Junction completed the project on 24 December 2018 and the Final Environmental Monitoring Report submitted on December 2018. The outstanding environmental issues are reported in Contractor's Site Clean Up and Rehabilitation Plan which submitted to PMU on 23th November 2018 to be follow up during the DLP and PBM periods. The rehabilitation work for the spoil disposal areas are noted during this monitoring period.

122. The Decree Law No. 14/2018 (The Organic Law of VIII Constitutional Government; 17 August 2018) gives the authority to the Ministry for Petroleum and Mineral to carried out the respective procedural for environmental Licensing and to approve the Environmental License application for the petroleum and mineral resources sectors. All contractors have been informed regarding this new regulation, the progress of the assessment of documents (Mining Proposal and SSEMP) for licensing application is expected to be fast in the proceeding period as there are now regulated by ANPM office.

123. The monitoring and capacity development programmes are generally proceeding in a satisfactory manner. However, despite several non-conformances with the EMP having been brought to the attention of the PISCs and contractors, in many cases these have not been rectified in a timely manner. Whereas some minor non-conformances and lapses in performance may be expected in any environmental monitoring programme the recurring non-conformances are not acceptable and PISCs and contractors require continual reminders that these issues are significant and must be addressed immediately; for checking in the next reporting period.

124. The contractors and PISCs on all projects have been given awareness training on the policy, legal, and administrative framework. The requirements for mitigation measures and environmental monitoring and procedures are clearly set out in the contracts. Contractors and PISCs have been consulted on the checklists and the recommended procedures for environmental monitoring have been worked out following consensus; during various ECAT and other training sessions. During this reporting period some Contractors and PISCs conducted Environmental, Health and Safety trainings and STI/HIV awareness programmes. The HSE trainings carried out by the PISC environmental specialists whereas the presentators for the STI/HIV awareness programmes usually provided by health professionals from the nearest hospitals.

125. For most contractors' whereas ESOs did not have the general capability to compile substantial reports in English and have required much help in compiling the CEMP the situation has improved some what as expected in the last monitoring period as most recently recruited NECs have better language skills and the translators have been more involved in the capacity building. The effort noted from all the PISCs to help complement the documentation to a create a more informative report in all projects. Improvements can be seen so far as the contractors (assisted by PISCs) are by now presenting clearer and more effective documentation. Ready flow of information needs to be improved on outstanding mineral license and environmental license applications and all the EMP requirements and mitigation measures on every project at all times.

126. CEMPs are now in place for all projects but will require updating (as expected) in the next reporting period to respond to recent developments with mineral licenses as the projects proceed. These will be reviewed in the next monitoring period.

127. PISC consultants have generally supported the contractors and PMU well in the completion of checklists, monthly monitoring reports and other documents required from the contractors. Except other consultants, the supervision consultant for NR1UP P2 - Man-Bau NIPPON KOEI CO., LTD., failed to submit the Environmental Monitoring Reports (Monthly and Quarterly) as stipulated in the supervision contract requirement. This issue was a burden for the PMU to finalize the Semi Annual Environmental Monitoring Report to ADB.

128. MEMORANDUM issued by the PMU to all Supervision Consultant on 17 April 2019 with the instruction to amend the Quarterly Environmental Monitoring Report (QEMR) format. The purpose of the change is to harmonize the reporting across all projects and to address the Secretary of State for Environment (SEA) requirement of the Environmental License renewal application to incorporated the types of specific management and monitoring plans as stated in the Ministerial Diploma 46/2017 (Annex VI). The PISCs responded with the submission of the new format for the Monthly and Quarterly Environmental Monitoring Reports except consultant for NR1UP P2 - Man-Bau.

129. Environmental compliance and awareness training (ECAT) was conducted for all projects and on the job training for the PISC NEC and the Contractor's HSO continued during the project implementation as the different aspects of works are carried out. The ECAT for Baucau – Viqueque Highway Project will be conducted when the PISC NEC and the Contractor's HSO mobilized on August 2019.

130. Environmental monitoring, capacity building and follow up have been intensively incorporated in the joint site inspections, on-the-job training for NES, NEA, NECs and ESOs. CPARs and letters have been issued to PISCs following site inspections where non-compliance with the EMPs have been identified. Further ECAT training and on the job training for NECs will take place on a project by project basis in the next reporting period.

131. **Environmental Monitoring Staff.** The Project Implementation Supervision Consultant (PISC) for RNUP-AF Tasitolu Tibar 4 Lanes demobilized February 2019 and remobilized again on May 2019 due to the contract issue. Within this period the supervision work was taken over by the DRBFC. The PISC for NR1UP Manatuto – Baucau notified the PMU to demobilized the staff on at the 15 June 2019.

132. The PISCs IEC on RNUSP Packages 2 will be remobilized for the final monitoring for Package 2 in the next reporting period to prepare the final documentation for Package 2. The IEC for RNUSP-AF and RNUP-AF are in post and have visited the projects in this reporting period and will visit the projects again in the next reporting period.

133. In PMU the NES and NEA are in post full time with the contract extended for six month contracts up to the end of December 2019 respectively. The IES contract (intermittent) finished on 18th October 2018 no extension of IES contract up to the end of this reporting, the issue is now handled by the MPW Ministry Office.

134. The National Environmental Specialist (NES) with the assistance of NEA, has continued to fulfil the expected TOR in an coordinated way. The NES has been especially active in this period with updating reports and following up on environmental licenses and the government requirement to update the SEIS and EMP for the renewal of environmental Licenses. The NES also continues to provide guidance to the NEA. During this reporting period the NES had been designated to cover the IES work as there was no contract extension for the IES. These situation reflected on the decline on joint site inspections done by the PMU environmental specialists as more time engaged to do the paper works and attending meetings.

135. **Limitations.** Lack of ability of some contractors to allot the necessary resources to complete applications for mineral licenses (often due to their lack of ability to work in the English language) is still a concern for the report writing and prompt implimentation and reinforcement of the mitigation measures. The contractor's for Baucau – Lutem, Maubara – Carimbala and Atabae – Mota Ain hire a local consultant to provide assisstance in completing the Mining Proposal and SSEMP, progress has been noted on the application.

136. In this reporting period the IECs in the PISCs have responded further to earlier encouragement to assist and support the Contractor to complete mineral license applications in a timely manner. This has improved the situation somewhat but further improvements must be followed through. The Contractors are at least now showing initiative and applying for mineral license renewals at least a month before they are due. As the technical experience of some contractors has developed. Hold ups with mineral licenses now seem to be more due to administrative and payment issues rather than technical difficulties with document submissions.

137. The time allotted for the intermittent IECs in the PISCs in this reporting period has been better used to effectively assist the contractors with the completion of necessary documentation. More emphasis will be applied by the PMU environmental specialists in the next reporting period to encourage the PISC's IECs to follow up strictly with (i) all measures requested in previous CPARs (ii) focusing more on assisting the contractors on outstanding administrative issues such as updating CEMP (iii) updateing mineral license applications and supoporting documentation as well as (iv) more emphasis on applying all the mitigation measures in the EMP.

138. The work load has experienced by PMU safeguard team to cover the eight ongoing contracts in this reporting period under ADB projects, two new lots Baucau – Venilale and Venilale – Viqueque are going to be started on August 2019. In addition there are three

contracts on DNP period and one contract is just started under the WB and one contract under Jica to manage. The frequency of monitoring has a bit less during this reporting period for PMU as the NES should also accompany the former PMU Project Manager attending meeting with relevant stakeholders. For the PISC NEC monitoring, in total there have been site inspections on more than 272 days spread across eight projects for the the six months in this reporting period. In parallel there has been emphasis on other development partner projects and upcoming projects requiring follow up on applications for Environmental Licenses.

139. **Outstanding Issues.** At the end of this reporting period there were some outstanding environmental issues on RNUSP Package 1 (Manatuto-Laclubar Junct.) as reported in the SCURP. RNUSP Package 2 Contractor has still had difficulty to provide the information to complete the requirement for renewal of Mineral License for three quarry sites but significant progress has been made. IEC in PISC has tried to assist the contractor to comply the requirements as requested by PMU. This will be reiterated to the PISC for RNUSP Package 2 in February 2019. On NR1UP P2 there are remaining outstanding matters identified during the ADB November mission requiring urgent action early in the next reporting period. On both RNUSP-AF and RNUP-AF the mineral license applications need to be followed up efficiently for the earliest issuance. In addition the environmental specialists in PMU will continue to monitor and inspect all other projects as they are coming on stream. For the main construction works, a close watch was kept on all packages. In this reporting period close follow up has been made on renewal of all environmental licenses, applications for mineral licenses and following up on application for the Environmental License for all projects.

140. It is noted in the mEMRs that the issued Site Instructions (SI) from the PISC to the Contractor are not properly addressed complied. The SI should be promptly follow up and closed out within the time line and the updated status shall be reported in the mEMR for the record.

141. The PISC is required to submit the Monthly and Quarterly Environmental Monitoring Reports in timely manner as stipulated in the PISC Contract. The reports are essential for monitoring and completion of the SaEMR. The PISC for NR01UP Manatuto – Baucau has failed to submit the QEMR since 2018, PMU notify them in series of Monthly Coordination Meetings and CPAR 008.

142. With the notification from the PISC for NR01UP Manatuto – Baucau to demobilize all of their staff by 15 July 2019, the MPW should take necessary arrangement to assign temporary supervision team to supervise the work to be in line with the Contract and specification.

143. Additional two new project road contracts (District Road C13 Ermera – Fatubessi) and C16/17 Package 2 Bazartete – Tokoluli under ADB management and another project (Lot 2 Laulara – Solerema) under WB has started this monitoring period. The Baucau – Viqueque Highway Project (Two Lots) will reach the construction stage in August 2019. Total in the next reporting period 12 projects under implementation stage. Other new projects are much further and will take much longer to travel to and from. Increasing in the paper work load for PMU NES, distance of project locations and travel requirements to cover all projects under PMU management can decrease the intensity of the joint site inspection and on-the-job training for the PISC NEC and Contractors' EO.

144. **Recommendations.** The current strategy, systems and procedures for environmental management and monitoring has up to the latter part of this reporting period, generally been acceptably in with ADB requirements. However there are a number of

burgeoning issues on several projects that will need intensified attention to prevent serious non-compliance in the next reporting period. In order to keep an acceptable level of compliance in the forthcoming reporting period, sufficient attendance in the field and observation and interaction with consultants and contractors must be maintained. The environmental specialists in PMU must remain focussed on all aspects of the portfolio, in particular joint field inspections, on the job training for Contractor's and productive interaction with the PISCs and Contractors. This is once more especially relevant at this time as there are additional two new project road contracts (District Road C13 Ermera – Fatubessi) that started 15 March 2019 and C16/17 Package 2 Bazartete – Tokoluli which commenced on 21 May 2019, and the Baucau – Viqueque Highway Project (Two Lots) will reach the construction stage in August 2019. In addition the new projects must be covered. The strategy has been to try and make a joint inspection on each project at least every six weeks (twice per quarter). However PISCs must drive the Contractor's to respond with constructive action on the issued CPARs before the next inspection period. The present strategy for monitoring and environmental awareness training programme will be continued for new contractors and consultants; with refresher training, updated as necessary to take account of recent trends and developments.

145. In the past it has been emphasised that when on assignment in Timor Leste, IECs in the PISCs need to balance time equally between monitoring, report writing, renewal of mineral licenses and assisting the contractor to deal with location approvals and mineral license requirements. Mobilization and demobilization in Timor Leste for IECs is now required to be agreed in advance between PISC and PMU and deliverables for the mobilisation period need to be agreed face to face at the outset of the mobilisation period with the environmental specialists in PMU. The input for each IEC during each mobilization should be discussed and agreed at least three months in advance with each IEC and informed to the environmental specialists in PMU; at least by the point of demobilization from the previous tour of duty. However some degree of flexibility should be included to allow for any unforeseeable impacts and changes. Whereas IEC time in Timor Leste should be more focused on report writing, it is also important to address outstanding issues in CPARs and renewal of licenses. Mentoring the NEC and making sure contractors are in compliance with the EMP are still key functions of the IEC.

146. Communications on the projects are improving and the PISC consultants are being able to use the Contractor's translator. Generally these translators can speak the home language of the contractor (e.g. Chinese) as well as English and in some cases Tetum; and with some technical / engineering training can function adequately. The intermediary language is English. The communications have been facilitated both on-site and in progress meetings by the Contractor's translators.

147. Contractors have been recommended to engage a sufficiently qualified and properly resourced Environmental Officer and Health and Safety Officer (or combined Health Safety and Environmental Officer) full time on site capable in compiling the required environmental documents for the project (CEMP, SSEMP, Health and Safety and Traffic Management plans) as well as being capable to follow up in a timely manner on the necessary completion of requirements for mineral license applications and complete the necessary monitoring and reporting on mineral extraction for ANPM.

148. The idea to use the assistance from the qualified independent local consultant to assist the contractor preparing the documents for the Mineral License and Environmental License Application to ANPM have a good effect on the application progress.

149. Further strengthening of systems and procedures to improve performance in respect of safeguards implementation, the Team Leader/Resident Engineer is required to ensure that the EMP is effectively implemented. Also as the leader of the supervision team, the Team Leader/Resident Engineer is required to ensure that the team including all the International experts and the national staff in the (PISC) are aware on the general awareness of environmental compliance matters during the implementation of the project. Sufficient resources and support from the PISCs is required so that the PMU can sustain the level of input to support the operational procedures that allowed compliance with ADB requirements in the past. In the meantime environmental management and monitoring on all PMU projects must proceed with the available resources to achieve an acceptable level of compliance.

6. APPENDICES

Appendix 1A – Monitoring conducted by PMU (IES and NES) during monitoring period

Appendix 1B – Monitoring conducted by PISC (IEC and NEC) during monitoring period

Appendix 2 – Sample Photographs of Projects during the reporting period

Appendix 3 – Compliance with Environmental Management Plan

Appendix 4 – Corrective and Preventative Action Requests

Appendix 5 – Responsibilities for Environmental Management

Appendix 1A –Monitoring conducted by PMU (January – June 2019)

DATE OF MONITORING	SINOTECH		NIPPONKOEI		KATAHIRA	Dongsung			KCI		
	RDIJ	CNI22	Sinohydro	SCG	China Wu Yi	CBMI			Shanghai		
	Man - Lac	Lac - Nat	Dil - Man	Man - Bau	Tas - Tib	Bau - Lau	Mau - Kar	Ata - Mota	Aip - Baz	Erm - Fat	Baz - Tok
2/01/2019	JP	JP	JP								
4/01/2019					JP		JP	JP			
1/03/2019					JP						
4/03/2019					JP						
5/03/2019			JP	JP		JP					
19/03/2019					JP				JP		JP
21/03/2019	JB	JB									
29/03/2019									JB		JB
23/04/2019	JB	JB									
17/05/2019					JB						
28/05/2019			JB								
27/06/2019					JP						

KATAHIRA	Katahira and Engineers International	Man - Lac	Manatuto – Laclubar Junction
SINOTECH	Sinotech Engineering Consultants Limited	Lac - Nat	Laclubar Junction – Natarbora
NIPPONKOEI	Nippon Koei - Phil Koei	Dil - Man	Dili – Manatuto
Dongshung	Dongshung Engineering Co Ltd	Man - Bau	Manatuto – Baucau
KCI	Korean Consultants International	Tas - Tib	Tasitolu – Tibar 4 Lanes
RDIJ	R. D. Interior Junior Construction	Bau - Lau	Baucau – Lautem
CNI22	China Nuclear Industry 22nd Construction Co., Lda.	Mau - Kar	Maubara – Karimbala
SINOHYDRO	Sinohydro Corporation Limited	Ata - Mot	Atabae – Mota Ain
SCG	Shanghai Construction Group	Aip - Baz	Aipelu – Bazartete
CWY	China Wu Yi &	Erm - Fat	Ermera - Fatubessi
CBMI	Chonqing Road Engineering Group, Co., Ltd.	Baz - Tok	Bazartete - Tokoluli
		JPP	Jose Paulo Pinto (PMU National Environmental Specialist)
		JB	JovenBaretto (PMU National Environmental Assistant)

Appendix 1B –Monitoring conducted by PISC (IEC and NEC) (January – June 2019)

Abbreviations same as Appendix 1a

Monthly Monitoring Report	SINOTECH		NIPPON KOEI CO., LTD	KATAHIRA	Dongsung		KCI	
	RDIJ	CNI22	SCG	CWY	CBMI	CBMI	Shanghai	Shanghai
	Pack 1 (Manatuto-Laclubar)	Pack 2 (Laclubar-Natarbora)	Part 2 (Manatuto-Baucau)	4 Lanes Tasitolu New Port Road	Baucau-Lautem	Maubara-Karimbala ; Atabae – Mota Ain	Aipelo-Bazartete	Ermera-Fatubesi
January	Project completed	3,5,6,8,9,10,12,14,15,16,22,23,24,25,26,29,30.	18,19,21,22,23,24,25.	3,6,	5,8,9,10,11,14,17,24	4,8,11,12,14,15,16,17,18,22,23,24,25,29.	11,15	
February		2,6,7,8,9,10,11,13,14,15,17,19,20,21,22,25,26		No monitoring conducted during this period	6,7,8,9,11,12,13,14,15,26	1,2,4,5,6,7,9,12,13,14,16,18,19,20,21,25,26,27.	15,25,	
March		1,5,6,7,11,13,14,18,19,21,23,24,25,26,27,28,29		No monitoring conducted during this period	7,8,9,11,12,13,15,22	1,2,4,5,9,11,12,13,14,15,16,18,19,20,21,22,26,27,28,30.	2,13,14,21,25,29	Project started
April		1,2,3,4,5,8,9,10,11,15,16,17,18,23,24,25		No monitoring conducted during this period	5,15,23,28	2,3,4,8,9,11,15,16,17,22,23,24,25,27.	17,22,24,26,29,30	Contractorr Mobilization
May				6,8,15,17,22,25,27,31	7,13,14,23,	2,3,7,8,9,11,13,15,16,18,21,22,23,25,27,28.	9,11,14,15,16,19,23,25,27,28,30.	Contractorr Mobilization
June				1,14,21	7,14,24	5,7,8,10,11,12,13,14,15,18,19,21,22,25,26,27,28,29	8,10,14,16,19,26,28,29,30	12,16,26,29
Total		67	7	13	37	102	42	4

Appendix2–Sample Photographs of Projects during the reporting period

RNUSP Package 2 Laclubar-Natarbora Sample Site Inspection Photographs January to June 2019

<p>March 2019 ongoing spoil disposal stabilization work at Km 119</p>	<p>April 2019 Asphalt Paving, workers are not equipped with PPE (boots, gloves, masks and trosers) for personal safety</p>
	 <p>8.84983, 125.99956, 785.0m 30 Apr 2019 09:43:56 STA: 117+320 - 117+760 RS</p>
<p>12 May 2019 heavy flooding during the night causing the collapse of Lamara Bridge</p>	<p>May 2019 Construction of Detour Facilities along Lamara River (Sta. 140+640), Downstream Side</p>
	 <p>8.84511, 125.00554, 100.0m 13 Jul 2019 3:40:59 PM</p>
<p>May 2019 Sta. 129+730 – Sta. 130+060 unusual rain caused many areas along the road section collapsed. Signages advised to be installed.</p>	<p>May 2019 Construction of Stone Masonry Retaining Wall, non-compliance on PPE.</p>
	 <p>sta:100+370-390 RS</p>

NR1UP Package 2 Manatuto–Baucau Sample Site Inspection Photographs January to June 2019

<p>January 2019 (CPAR 008) request the consultant to provide engineering justification on the cut trees outside the work limit.</p>	<p>January 2019 (Sta. 106 to Sta. 114) Existing road was removed after both sides of embankment laid to minimize dust nuisance.</p>
	
<p>March 2019 Construction of median line with the installed bollards to warn and assist commuters visibility on the road obstruction</p>	<p>February 2019 (Km59+800) stockpiling the sub base material on the road with the installed bollards to warn and assist commuters on the road obstruction.</p>
	
<p>1 May 2019, Traffic accident at Sta. 94+600 R/S</p>	<p>The eroded spoil material near Zuis III (Sta. 99+140) bridges to be cleaned up and pulled back to avoid encroachment into the river.</p>
	

RNUSP-AF Baucau-Lautem Sample Site Inspection Photographs January to June 2019

25 February 2019 HIV Awareness Training conducted at Suco Euquisi.



March 2019, installation of road signages to warn the commuters on the road obstruction and direct to the detour road.



5 March 2019 Joint site inspection MPW-PMU-PISC-Contractor to follow up the project issues



May 2019 Construction of RCBC at Sta. 116+700 PPE compliance.



June 2019. Asphalt Paving Sta. 115+360 R/S workers are provided with PPE.



25 June 2019 HIV Awareness Training conducted at Binagua Village Suco Samalary



RNUSP-AF Maubara-Karimbala Sample Site Inspection Photographs January to June 2019

January 2019 (Km 51 – Km 53) dedicated water truck in this section to control the dust three times per day as per EMP and CPAR 002.



09 January 2019, STI and HIV/AIDS Awareness Program at Maubara attended by Contractor's workers and local community.



March 2019 (Sta. 97+610) Flagmen assigned to control the traffic during the line ditch excavation work.



10 April 2019 (Sta. 85+950) Culvert work temporarily stopped as human remains found on site. Local authority and police informed.



May 2019 (Sta. 108+800) worker are not provided with PPE during the asphalt paving work.



22 June 2019 Safety Training in progress for contractor's workers



RNUP-AF Four Lanes 2 Tasitolu-Tibar Sample Site Inspection Photographs January to June 2019

4 January 2019 effective traffic control (guard post and the guardman) controlling the public to not enter construction site at shortcut section.



24 January 2019 Director of DRBFC received the Renewal of Environmental License for Tasitolu – Tibar 4 Lanes issued by the SEA.



1 March 2019 PMU inspection confirmed the dumping of asphalt material at Tasitolu Lake.



1 March 2019 PMU inspection, the contractor continue water the road to minimize the dust.



April 2019, workers are equipped with PPE constructing the line drain at Sta 10+200 L/S



May 2019, Joint site inspection PMU-MPW-PISC-Contractor to identify affected electricity poles and discuss the proper reposition.



RNUP-AF C16/17 Package 1 Aipelo–Bazartete Photographs January to June 2019

<p>Identified slide section slope for bioengineering sites</p>	<p>Installed caution tape at the deep excavation area to warn the commuters</p>
	
<p>19 March 2019 dust observed at the Mota Ulun settlement area</p>	<p>Workers are not equipped with PPE</p>
	
<p>19 March 2019 Flagmen assigned at the construction site to manage the traffic</p>	<p>Warning sign installed approach the working area to warn the commuters</p>
	

Appendix 3 – Compliance with EMP

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
Climate change adaptation	Risk of increased erosion and damage to road infrastructure	<ul style="list-style-type: none"> Ensure all measures incorporated in design are implemented 	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH
Contractor prepared Awareness and orientation of Contractor	All foreseeable impacts captured in CEMP.	<ul style="list-style-type: none"> The following sections or method statements shall be included in the CEMP based on the EMP and the CEMP shall be prepared by the Contractor in the preconstruction stage for approval by PISC and endorsement by PMU and implementation by the Contractor: Waste Disposal (covering spoil disposal, general waste and hazardous waste); Quarries, borrow areas and construction materials management; Blasting and vibration; Asphalt, hot mix plant, rock crushers and bitumen supply; Erosion control and runoff; Bridge repairs and river protection; Water contamination prevention; Dust and noise minimization; Tree cutting and replanting; Enhancement planting; Construction camp operations, sanitation and diseases; Power and utilities protection; Drainage system, irrigation and water resources; Safety precautions - workers and public; 	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	PARTLY COMPLIED WITH (being updated)	PARTLY COMPLIED WITH (being updated)	PARTLY COMPLIED WITH (being updated)

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<p>gardens, and access to the resources and springs;</p> <ul style="list-style-type: none"> • The contractor is to ensure that workers' actions outside work site are controlled and Suco codes and rules of conduct are observed at all times; • The contractor will identify one member of their staff to be the liaison between the Suco chiefs and elders and contractor, as well as between the contractor and PMU; • Worker camp location and facilities will be located at least 500m from settlements and agreed with local communities and facilities approved by PMU and managed to minimize impacts; • Adequate signage and security provided at the site office and works yard and prevention of unauthorized people (especially children) entering the area; • Hire and train as many local workers as possible by using labour from each suco as the work proceeds along the road from suco to suco. 							
	Health & safety	<ul style="list-style-type: none"> • Provide adequate housing for all workers at the construction camps and establish clean canteen/eating and cooking areas; • Potable water, clean water for showers, hygienic sanitation facilities/toilets with sufficient water supply, worker canteen/rest area and first aid facilities will be provided. Separate toilets shall be provided for male and female workers; • Portable lavatories (or at least pit latrines in 	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	PARTIALLY COMPLIED WITH (under construction)

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<p>remote areas) shall be installed and open defecation shall be prohibited and use of lavatories encouraged by cleaning lavatories daily and by keeping lavatory facilities clean at all times;</p> <ul style="list-style-type: none"> • Wastewater effluent from contractors' workshops and equipment washing-yards will be passed through gravel/sand beds and all oil/grease traps and contaminants will be removed before discharging it into natural streams. Oil and grease residues shall be stored in drums awaiting disposal in Tibar in line with the agreed waste management section of the EMP and the Environmental License; • Predictable wastewater effluent discharges from construction works shall have the necessary permits from DNCPIA and local authorities before the works commence; • As much as possible, food shall be provided from farms nearby or imported to the area. Bush meat supplies from protected areas will be banned to discourage poaching. Solid and liquid wastes will be managed in line with the provisions of the waste management section of the EMP; • Use of guns and hunting equipment by workers will be banned and dismiss workers taking or using green timber or hunting or in possession of wildlife; • Entry to the protected areas, IBAs and/or sensitive areas (beaches and mangrove areas) by workers will be banned; • Provision of adequate protection to the 							

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		general public in the vicinity of the work site, including advance notice of commencement of works, installing safety barriers if required by villagers, and signage or marking of the work areas; <ul style="list-style-type: none"> Provision of safe access across the works site to people whose suco and access are temporarily affected or disconnected during construction works (especially across drainage works in sucos); 							
	Spread of communicable diseases	<ul style="list-style-type: none"> Construction camp(s) will be established in areas with adequate drainage in order to prevent water logging at the camp and formation of breeding sites for mosquitoes in order to facilitate flow of the treated effluents; Implementation of HIV/AIDS awareness and prevention program – community (villages) 	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	PARTIALLY COMPLIED WITH
Operation of construction plant and vehicles generating emissions	Emission of exhaust from vehicles and machinery; Dust from aggregate crushing plant; generated by heavy vehicles transporting materials on roads; Uncovered loads on trucks; Dust from exposed stockpiles	<ul style="list-style-type: none"> Construction equipment will be maintained to a good standard. The equipment will be checked at regular intervals to ensure they are maintained in working order and the checks will be recorded by the contractor as part of environmental monitoring; Prohibition of the use of equipment and machinery that causes excessive pollution (i.e. visible smoke) at the Project site; Material stockpiles being located in sheltered areas and be covered with tarpaulins or other such suitable covering to prevent dusty material becoming airborne; Ensuring that all vehicles transporting potentially dust-producing material are not 	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	PARTIALLY COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	PARTIALLY COMPLIED WITH (all equipment in next reporting ariod)

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<p>overloaded, are provided with adequate tail-boards and side-boards, and are adequately covered with a tarpaulin (covering the entire load and secured at the front, sides and tail of the vehicle) during transportation. This is especially important as there are a number of suco along the road;</p> <ul style="list-style-type: none"> Damping down of the road, especially within 100m the sucos along the road and any roads being used for haulage of materials, during the dry season shall take place four times per day; and <p>Periodic qualitative air quality monitoring.</p>							
Works in, or adjacent to, rivers and streams and in the vicinity of the coast	<p>Erosion of riverbanks,; Effects on river structure including (i) changes to river water flows, including levels and velocity; (ii) changes to channel depth, structure & location resulting from excavations; and (iii) changes to riverbanks;</p> <p>Increased turbidity of river waters due to gravel extraction;</p> <p>Increased siltation at culverts;</p>	<ul style="list-style-type: none"> Material stock-piles will not be located within riverbeds or the islands in the centre of rivers. Similarly, they will not be located within the current area of floodplain in areas subject to regular flooding (i.e. once per year or more). All land will be for temporary uses will be rehabilitated to original condition or better condition upon completion of the works to the satisfaction of the PMU; Scour protection will be used as temporary measures, as needed, to ensure temporary structures do not damage river configuration; Movements of vehicles and machinery, and hence disturbance, within the riverine habitats will be minimized at all times; No vehicles or machinery shall be washed in the river; In the event that the contractor causes damage to the river bank or other structural 	COMPLIED WITH	COMPLIED WITH	PARTIALLY COMPLIED WITH	PARTIALLY COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
	Construction materials are washed out into rivers and other areas	<p>parts of a river, the contractor is solely responsible for repairing the damage and/or paying compensation;</p> <ul style="list-style-type: none"> • Embankments and in-stream/river activities will be monitored during construction for signs of erosion; • Re-vegetation with local fast growing species, or other plants in consultation with the land owners and suco chiefs, will be carried out incrementally and as quickly as possible after work within any river habitat has been completed; and • Spoils, rubbish or any material will not be disposed of within any river system including riverbed, banks or floodplain areas. Suitable disposal sites will be designated in consultation with land owners and suco chiefs and approved by PMU. 							
Sourcing of materials (river gravels, aggregates etc)	<p>Extraction of river gravels from the beds or active channels of rivers changes hydrology altering channel & erosion;</p> <p>Extraction from quarries or borrow pits leaves unusable land, exposed water table, attracts rubbish dumping, reduces visual values</p>	<ul style="list-style-type: none"> • Contractor to prepare materials extraction plan as part of CEMP; • Stockpile topsoil for later use and fence and re-contour borrow pits after use. Properly remove topsoil, overburden, and low-quality materials and stockpile near the site to be covered and preserved for rehabilitation; • Gravel and alluvial material shall not be removed within 10m of the river bank or within 200m upstream or downstream from a bridge; • Gravel and alluvial material shall not be removed to a depth of greater than 2m and holes in river bed shall be re-contoured when extraction is complete; 	COMPLIED WITH License renewal obtained for quarry April 2018.	PARTIALLY COMPLIED WITH License obtained for quarry Jun 2016 (renewal under processing)	PARTIALLY COMPLIED WITH Location Approval obtained for quarries (5 locations)applied in 2017 - under processing)..	PARTIALLY COMPLIED WITH License for quarries (2 locations)applied- under processing).	PARTIALLY COMPLIED WITH License for quarries (3 locations)applied in 2018 - under processing).	PARTIALLY COMPLIED WITH License for quarries (3 locations)applied in 2018 - under processing).	PARTIALLY COMPLIED WITH Laboratory testing of materials quarries (2 locations)Licence to be applied innext reporting period 2018 if suitable).

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<ul style="list-style-type: none"> • Alluvial terraces or alluvial deposits which lie on the river beds but not covered by water in normal hydrological conditions; shall be preferred; • Use quarry with highest ratio between extractive capacity (both in terms of quality) and loss of natural state; • Use quarry sites lying close to the alignment, with a high level of accessibility not on slopes and with a low hill gradient; • Reinstate upon completion of construction works at each section damaged access roads, agricultural land and other properties due to transport of quarry/borrow materials, other construction materials and any other project-related activities n; • Provide adequate drainage to avoid accumulation of stagnant water during quarry/borrow site operation; • Avoid use of quarry sites located on river bed. If it is not possible to locate quarries out of river beds use only quarry sites lying on large rivers as approved by PMU. Quarry sites lying on small rivers and streams shall be avoided; • Cut berms and terraces during and after extraction in quarries in the mountainous or hilly areas to stabilize slopes, or wherever slopes are important, and implement a drainage system and vegetation cover for rehabilitation; • Dewatered and fence quarries and borrow pits as appropriate, upon completion of extraction activities to minimize health and 							

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<p>safety risks;</p> <ul style="list-style-type: none"> • Ensure borrow pits are left in a tidy state with stable side slopes and proper drainage in order to avoid creation of water bodies favorable for mosquito breeding; • Prevent accidental access and avoid drowning when pits become water-filled by implementing measures such as fencing, providing flotation devices such as a buoy tied to a rope, and backfill as soon as practicable; and • Additional extraction sites and/or borrow pits will not be opened without the restoration of those areas no longer in use; • Refill borrow pits as required by DNCPIA using inert surplus spoil material and • Mark refilled borrow pits and cover with soil and plant vegetation as required by DNCPIA. • The excavation and restoration of sites and borrow areas, as well as their immediate surroundings, will be undertaken in an environmentally sound manner to the satisfaction of the PMU. Sign-off to this effect by PMU will be required before final acceptance and payment under the terms of the contract. • Decommissioning of all accommodation, plant and construction materials processing areas will include removal of all residual contamination, waste, machinery and constructed facilities. • Decommissioning plan will be included in 							

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		the CEMP covering rehabilitation, revegetation and recontouring of quarries, borrow areas and construction materials processing areas.							
Spoil disposal. The mitigation measures also apply equally to discarded asphalt of macadam pavement surfaces.	Improper disposal impacts habitats and water courses	<ul style="list-style-type: none"> • Contractor's CEMP to include section on spoil disposal • Spoil will be reused as far as possible for bulk filling; • Spoil shall not be stockpiled at the side of the road or dumped over the road edge or the crash barriers; • Spoil will not be disposed of in rivers and streams or other natural drainage path; • Under no circumstances will spoil be dumped into any other watercourses (the sea, cliffs near the sea, rivers, streams, drainage, irrigation canals, etc.); • Under no circumstances will spoil be temporarily dumped into any other watercourses (rivers, streams, drainage, irrigation canals, etc.); • Spoil disposal shall not cause sedimentation and obstruction of flow of watercourses, damage to agricultural land and densely vegetated areas; • Spoil will not be disposed of on fragile slopes, flood ways, wetland, farmland, forest, mangrove and associated salt flats, beaches, religious or other culturally sensitive areas or areas where a livelihood is derived; • Surplus spoil will be used where practicable for local repair works to fill eroded gullies 	COMPLIED WITH	COMPLIED WITH	PARTIALLY COMPLIED WITH	PARTIALLY COMPLIED WITH	PARTIALLY COMPLIED WITH	PARTIALLY COMPLIED WITH	PARTIALLY COMPLIED WITH

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		and depression areas and degraded land in consultation with local community; <ul style="list-style-type: none"> • Spoils shall only be disposed to areas approved by land owner, local authority, PISC and PMU; • Spoils shall only be disposed to areas that have acceptable ecological and engineering safety as approved by PISC and PMU; • Spoil will be to disposed of to disused quarries and abandoned borrow pits where practicable; • Disposed spoil will be spread in 15 cm layers and compacted to optimum moisture content, covered with topsoil, landscaped and provided with drainage and vegetation to prevent erosion in line with best practice; • The spoil disposal site shall be located at least 20m from surface water courses and shall be protected from erosion by avoiding formation of steep slopes and by grassing and other planting. 							
Clearing, grubbing, cut and fill activities, construction of embankments; Gravel extraction from rivers leads to erosion; Stockpile and staging areas lead to loss of land use	Soil erosion & silt generation; Increased runoff / erosion; Sediment contamination of rivers; Turbidity	<ul style="list-style-type: none"> • All required materials will be sourced in strict accordance with GOTL guidelines and the EMP; • Material stock-piles, borrow pits and construction camps will only be located on unused land or non-agricultural land following consultation with PMU, land owners and suco chiefs. All land will be rehabilitated to its original condition or better condition upon completion of the project works; • Excavated material will be reused and 	COMPLIED WITH	PARTIALLY COMPLIED WITH	PARTIALLY COMPLIED WITH	PARTIALLY COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<p>surplus will be used to refill borrow pits;</p> <ul style="list-style-type: none"> • In the event that the contractor causes damage to agricultural land, productive land or gardens, the contractor is solely responsible for repairing the damage and/or paying compensation based on the rates in the approved resettlement plan; • Embankments and in-stream/river activities will be monitored during construction for signs of erosion. A standby pile of stones and rocks should be kept on hand to be used in the event that there is bank or channel erosion for work in location of stream and river; • Gabion baskets, rip-rap or bio-engineering methods will be used to both strengthen the road and to prevent erosion upstream and downstream of bridge abutments; • Re-vegetation of riverbanks will be carried out with fast growing species, or other plants in consultation with the land owners and suco chiefs, as quickly as possible after work has been completed; • Random and uncontrolled fly-tipping of spoil, or any material, will not be permitted. Suitable dump sites will be designated in consultation with land owners and suco chiefs. Dump sites will not be permitted within 50m of rivers or streams or on garden land or in areas used for livelihood production by suco residents; and • Obtaining all necessary permits or approvals for location of construction camps, material extraction sites and sources of construction 							

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<ul style="list-style-type: none"> • Diversion ditches will be dug around material stockpiles to catch runoff; • Minimizing interference with natural water flow in rivers, water courses or streams within or adjacent to work sites. Pollution of water resources will not be permitted; • Abstraction from water resources may be permitted after prior approval from PMU in consultation with local suco leaders and local authorities. • Solid wastes, debris, spent oil or fuel from construction machinery or plant, construction material, or waste vegetation removed from work sites will not be dumped in or near streams, rivers or waterways • Discharge of sediment laden construction water or material (including dredged spoil) directly into the rivers, sea, inter-tidal area or surface waters will not be permitted. All such construction water will be discharged to settling ponds or tanks prior to final discharge; • Discharge zones from culverts and drainage structures will be carefully identified, and structures will be lined with rip-rap. Down-drains and chutes will be lined with rip-rap, masonry or concrete; • Spoil and material stock piles will not be located near the coast, on the coastal side of the Project road, or within 15 m of waterways, streams or rivers, or on the edge of slopes or hills above rivers or stream; • Hydro-carbons, fuel, and other chemicals as required for the works, will be stored in 							

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		secure containers or tanks located >50m away from surface waters, or streams. Any spills will be contained and immediately cleaned up as per the requirements of the emergency response plan prepared by the contractor (and approved by PMU); and <ul style="list-style-type: none"> All water, waste-water and other liquids shall be disposed of after treatment in line with the Environmental License - see below 							
General activities - solid and liquid waste generation	Uncontrolled and un-managed waste disposal	<ul style="list-style-type: none"> Contractor's CEMP to include section on waste disposal, recycling and re-use of materials from the project; Areas for disposal to be agreed with local authorities and checked and recorded and monitored by the PMU; Segregation of wastes shall be observed. Cleared foliage, shrubs and grasses may be given to local farmers for fodder and fuel. Organic (biodegradables) shall be collected and disposed of on-site by composting; NO Burning. Waste associated with the project or the supporting activities is NOT allowed to be burned anywhere ; Burning of construction and domestic wastes shall be prohibited; Recyclables shall be recovered and sold to recyclers; Residual general wastes shall be disposed of in disposal sites approved by local authorities; Construction/workers' camps shall be provided with garbage bins; Disposal of solid wastes into flood ways, 	COMPLIED WITH	COMPLIED WITH	PARTIALLY COMPLIED WITH	COMPLIED WITH	PARTIALLY COMPLIED WITH	PARTIALLY COMPLIED WITH	COMPLIED WITH

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<p>wetland, rivers, other watercourses, farmland, forest, mangrove and associated salt flats, beaches, places of worship or other culturally sensitive areas or areas where a livelihood is derived canals, agricultural fields and public areas shall be strictly prohibited;</p> <ul style="list-style-type: none"> • There will be no site-specific landfills established by the contractors. All solid waste will be collected and removed from the work camps and disposed in the local authority designated waste disposal sites at Tibar; and • Waste disposal areas approved by local authorities shall be rehabilitated, monitored, catalogued, and marked if required. 							
Use of hazardous materials	<p>Oil and other hazardous chemicals are spilled into the environment resulting in pollution; Hydrocarbon leakage or spills from construction camps and workshops; Accidents placing people at risk</p>	<ul style="list-style-type: none"> • Emergency Response Plan (as part of EMP) shall be prepared as part of the CEMP by Contractor to cover hazardous materials/oil storage, spills and accidents; • Ensure that safe storage of fuel, other hazardous substances and bulk materials are agreed by PMU and have necessary approval/permit from DNCPIA and local authorities. • Hydrocarbon, toxic material and explosives (if required) will be stored in adequately protected sites consistent with national and local regulations to prevent soil and water contamination. • Equipment/vehicle maintenance and re-fuelling areas will be confined to areas in construction sites designed to contain spilled lubricants and fuels. Such areas shall 	<p>PARTIALLY COMPLIED WITH</p> <p>Site Clean up and Restoration Plan submitted on 23 November 2018 to be follow up.</p>	<p>PARTIALLY COMPLIED WITH</p>	<p>PARTIALLY COMPLIED WITH</p>	<p>PARTIALLY COMPLIED WITH</p>	<p>COMPLIED WITH</p>	<p>COMPLIED WITH</p>	<p>PARTIALLY COMPLIED WITH</p>

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<p>be provided with drainage leading to an oil-water separator that will be regularly skimmed of oil and maintained to ensure efficiency;</p> <ul style="list-style-type: none"> • Fuel and other hazardous substances shall be stored in areas provided with roof, impervious flooring and bund/containment wall to protect these from the elements and to readily contain spilled fuel/lubricant; • Segregate hazardous wastes (oily wastes, used batteries, fuel drums) and ensure that storage, transport and disposal shall not cause pollution and shall be undertaken consistent with national and local regulations; • Ensure all storage containers are in good condition with proper labeling at least in English and Tetun; • Regularly check containers for leakage and undertake necessary repair or replacement; • Store hazardous materials above flood level; • Discharge of oil contaminated water shall be prohibited and all oily waste shall be taken to Tibar oil disposal facility as required by DNCPIA; • Used oil and other residual toxic and hazardous materials shall not be poured on the ground; • Used oil and other residual toxic and hazardous materials shall be disposed of in an authorized facility off-site but shall be taken in sealed drums to Tibar oil disposal facility as required by DNCPIA; 							

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<ul style="list-style-type: none"> Adequate precautions will be taken to prevent oil/lubricant/ hydrocarbon contamination of river channel beds; Ensure availability of spill clean-up materials (e.g., absorbent pads, etc.) specifically designed for petroleum products and other hazardous substances where such materials are being stored; Spillage, if any, will not be washed away but will be immediately cleaned up using absorbant cleaning materials with utmost caution to leave no traces; Spillage waste to disposal sites approved by local authorities and approved by PMU; All areas intended for storage of hazardous materials will be quarantined and provided with adequate facilities to combat emergency situations complying with all the applicable statutory stipulation; The contractors shall identify named personnel in their EMP in-charge of storage sites for hazardous materials and ensure they are properly trained to control access to these areas and entry will be allowed only under authorization. 							
Construction activities causing accidental damage to existing services	Interference with existing infrastructure; Water supply contaminated, and power and telecommunications supplies disrupted through knocking over	<ul style="list-style-type: none"> Consult with inservice providers to minimize physical impacts on public infrastructure and disruption to services; Reconfirm power, water supply, telecommunications and irrigation systems likely to be interrupted by the works and any additional trees to be cut near utilities; Contact all relevant local authorities for 	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
	poles or breaking of pipelines or exposing water table during works.	utilities and local village groups to plan re-provisioning of power, water supply, telecommunications and irrigation systems; <ul style="list-style-type: none"> Relocate and reconnect utilities well ahead of commencement of construction works and coordinate with the relevant utility company at the district and district levels for relocation and reconnection well before works commence and include for compensatory planting for trees; Inform affected communities well in advance; Arrange reconnection of utilities and irrigation channels in the shortest practicable time before construction commences; and If utilities are accidentally damaged during construction it shall be reported to the PMU, DRBFC and utility authority and repairs arranged immediately at the contractor's expense. 							
Encroachment into precious ecology, disturbance of marine and terrestrial habitats, effects on flora and fauna	Impacts on terrestrial habitats; Workers poach animals for food or feathers etc; Protected or sensitive areas affected	<ul style="list-style-type: none"> Invasive species shall not be introduced. Contractor's site office, works yard, rock crushers, material storage, borrow pits, and quarries will all be approved by PMU and will not be permitted in any ecologically important sites or areas valuable for conservation; Vegetation clearance during construction activities, especially of trees along the river banks and road-side, will be minimized and no greater than the absolute minimum in line with the detailed designs; 	COMPLIED WITH	PARTIALLY COMPLIED WITH	PARTIALLY COMPLIED WITH	PARTIALLY COMPLIED WITH			

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<ul style="list-style-type: none"> • Under no circumstances is the contractor permitted to fell or remove mangroves; • Contractors will not cut any trees within or outside the project at the request of the local land owners or suco leaders without prior approval from PMU; • Vegetative cover cleared from the roadside during rehabilitation activities will be kept for land protection and re-vegetation. Contractors will be responsible for re-vegetation in cleared areas; • The contractor will be responsible for providing adequate knowledge to construction workers in relation to existing laws and regulations regarding illegal logging. Contract documents and technical specifications will include clauses expressly prohibiting the felling of trees, not requiring to be cleared by the project, by construction workers for the term of the project; • The contractor will be responsible for providing adequate knowledge to construction workers in respect of fauna. Contract documents and technical specifications will include clauses expressly prohibiting the poaching of fauna by construction workers and making the contractor responsible for imposing sanctions on any workers who are caught trapping, killing, poaching, or being in possession of or having poached fauna; • The PMU will supervise and monitor a ban on use of forest and mangrove timber and workers shall be prohibited from cutting 							

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		equipment maintenance will be undertaken; <ul style="list-style-type: none"> The contractor will prepare a schedule of operations that will be approved by suco chiefs and PMU. The schedule will establish the days, including identifying days on which there should be no work, and hours of work for each construction activity and identify the types of equipment to be used; Workers will be provided with ear defenders and noise abatement equipment as may be required; and Temporary noise barriers will be used if necessary as approved by the PMU Any complaints regarding noise will be dealt with by the contractor in the first instance through the GRM. 							
Presence of vehicles and equipment in villages, use of people's land for access to construction site, traffic and safety issues	Traffic and access disrupted during construction; Traffic safety affected	<ul style="list-style-type: none"> The contractor will prepare, and submit to PMU, a traffic management plan detailing diversions and management measures; Signs and other appropriate safety features will be used to indicate construction works are being undertaken; Contract clause specifying that care must be taken during the construction period to ensure that disruptions to access and traffic are minimized and that access to villages along the Project road is maintained at all times; Provincial Works and village officials will be consulted in the event that access to a village has to be disrupted for any time and temporary access arrangements made; Construction vehicles will use local access roads, or negotiate access with land owners, 	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<p>rather than drive across vegetation or agricultural land, to obtain access to material extraction sites. Where local roads are used, they will be reinstated to their original condition after the completion of work;</p> <ul style="list-style-type: none"> The road will kept free of debris, spoil, and any other material at all times; Disposal sites and haul routes will be identified and coordinated with local officials; Provision of adequate protection to the general public in the vicinity of the work site, including advance notice of commencement of works, installing safety barriers if required by villagers, and signage or marking of the work areas; and Provision of safe access across the works site to people whose villages and access are temporarily affected during road re-sheeting activities. 							
General activities, handling equipment and plant; construction vehicles	Worker health and safety risks	<ul style="list-style-type: none"> At least one month before construction commences the contractors will demonstrate to the PMU they are properly resourced and a qualified/experienced environment and safety officer (ESO) will be identified by the contractors in the bid; Establishment of safety measures as required by law and by good engineering practice and provision of first aid facilities at work sites, in vehicles and establishment of an first aid/health post at the camp; The contractor will conduct of training (assisted by PMU) for all workers on safety 	COMPLIED WITH but ESO generally late arrivals	COMPLIED WITH but ESO late arrivals and do no speak English	COMPLIED WITH but ESO late arrivals and do no speak English	COMPLIED WITH but ESO late arrivals and do no speak English	COMPLIED WITH ESO changed but late arrivals speaks English	COMPLIED WITH EO &SO changed post but late speakEnglish	COMPLIED WITH but ESO late but speaks English

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<p>and environmental hygiene at no cost to the employees. The contractor will instruct workers in health and safety matters as required by law and by good engineering practice and provide first aid facilities;</p> <ul style="list-style-type: none"> • Instruction and induction of all workers by the contractor in health and safety matters, including road safety is required for all operatives before they start work; • The contractor will instruct and induct all workers in health and safety matters (induction course) including construction camp rules and site agents will follow up with toolbox talks on a weekly basis. Workforce training for all workers starting on site will include safety and environmental hygiene; • Workers shall be provided with appropriate personnel protection equipment (PPE) such as safety boots, helmets, reflector vest, gloves, protective clothes, dust mask, goggles, and ear protection at no cost to the workers; • Fencing will be installed on all areas of excavation greater than 1m deep and sides of temporary works; • Fencing will be installed on all excavation, borrow pits and sides of temporary bridges; • Reversing signals (visual and audible) shall be installed on all construction vehicles and plant. • Provision of potable water supply in all work locations; 							

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		<ul style="list-style-type: none"> Scheduling of regular (e.g. weekly tool box talks) to orientate the workers on health and safety issues related to their activities as well as on proper use of PPE; Where worker exposure to traffic cannot be completely eliminated, protective barriers shall be provided to shield workers from passing vehicles. Another measure is to install channelling devices (e.g., traffic cones and barrels) to delineate the work zone; and Construction camps shall be provided with toilets/sanitation facilities in accordance with local regulations to prevent any hazard to public health or contamination of land, surface or groundwater. To ensure these facilities never overflow they shall be well maintained and cleaned regularly to encourage use and allow effective operation and emptied regularly at disposal site approved by PMU. 							
Presence of construction workers	Various social impacts including: (i) social disruption; (ii) possibility of conflicts or antagonism between residents and workers; (iii) spread of communicable diseases including STIs and HIV/AIDS;	<ul style="list-style-type: none"> The contractor will appoint an EO to address health and safety concerns and liaise with the PMU and sucos within the Project area; Barriers (e.g., temporary fence), and signs shall be installed at construction areas to deter pedestrian access to the roadway except at designated crossing points; Adequate signage and security will be provided at the site office and works yard and prevention of unauthorized people (including children) entering work areas and camp. Warning signs will be provided at the periphery of the site warning the public not 	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH	COMPLIED WITH

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
	<p>(iv) children are potentially exposed to exploitation; (v) impacts on community health and safety</p>	<p>to enter;</p> <ul style="list-style-type: none"> • The general public/local residents shall not be allowed in high-risk areas, e.g., excavation sites and areas where heavy equipment is in operation and these sites will have a watchman at the entrance to keep public out; • Speed restrictions shall be imposed on Project vehicles and equipment traveling within 50m of sucos and sensitive receptors (e.g. residential, schools, places of worship, etc.); • Upon completion of construction works, borrow areas will be backfilled or temporarily fenced, awaiting backfilling; • Provisions will be made for site security, trench barriers and covers to other holes and any other safety measures will be installed as necessary; • Drivers will be educated on safe driving practices to minimize accidents and to prevent spill of spoil and hazardous substances (fuel and oil) and other construction materials during transport; • Contractors will ensure that no wastewater is discharged to local water bodies, mangroves, rivers, streams or lakes; • Measures to prevent proliferation of mosquitoes shall be implemented (e.g., provision of insecticide treated mosquito nets to workers, installation of proper drainage to avoid formation of stagnant water, standing water will not be allowed to accumulate in the temporary drainage 							

Project activities	Environmental Impact	Mitigation measures to be included in EMP	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		traffic regulations once road is upgraded <ul style="list-style-type: none"> Awareness raising through village meetings will be needed to create road safety programs Ongoing community awareness ascertain village concerns regarding traffic calming & management 							
Spread of communicable diseases	Roads act as pathway for spread of communicable diseases such as HIV and STIs	<ul style="list-style-type: none"> At expected traffic volumes risk of spread of such diseases are not expected 	Project on Defect Liability Period (DLP)	Project is in Construction Phase	Project is in Construction Phase	Project is in Construction Phase	Project is in Construction Phase	Project is in Construction Phase	Project is in Construction Phase
Any other	Unintended or unanticipated impacts	<ul style="list-style-type: none"> As required to avoid or reduce effects or impacts 	Ongoing monitoring	Project is in Construction Phase	Project is in Construction Phase	Project is in Construction Phase			

Note: The EMP table above is the approved EMP for RNUSP P1 and P2 Projects (Manatuto – Laclubar and Laclubar – Natarbora).

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Appendix 4 – Corrective and preventative action requests for ADB Projects 2016 & 2018.

CPAR	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP DIL MAN	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
CPAR 001	<p>Clearing Lined Drains. Km65+235 – Km100+355 existing line drains and newly constructed drains blocked. No temporary drainage. Disposal for surplus debris from drains and culverts. Dispose of debris and waste macadam to approved spoil disposal area. Clear the drain and required to construct temporary drains and erosion control structures. 22 January 2016</p> <p>The issue closed out immediately and monitored up to the project completion.</p>	<p>Dust Control. More frequent watering is required in most areas, particularly near schools and housing. Please ensure water spraying is carried out at least every three hours in all areas in line with good practice, unless there has been rain within the preceding three hours; in which case spraying shall commence after three hours without rain. 2 December 2016</p> <p>The issue was monitored up to the completed black top (asphalt) in most sensitive areas)</p>	<p>Spoil Disposal. Km37+500 - Km38+500 (5m left side) clearing & grubbing waste and spoil materials are dumped improperly in unsecured land which is NOT in line with Decree Law 5/2011, Contract and EMP requirements. 16 September 2016</p> <p>The issue is closed out satisfactorily</p>	<p>Contractor's Environmental Management Plan (CEMP). Contractor to produce their site specific EMP covering all the associated facilities such as Quarries, Crusher, Cement Batching Plant, Asphalt Mix Plant, Sand Washing, Worker Accommodation etc. In Press</p>	<p>Fuel Tank, Fuel tank at the contractor's camp is not bunded and covered properly. Fuel tanks with total $\geq 5000l$ need to be shaded and bunded to contain 110% of largest tank within the bund. 28 August 2017</p> <p>The issue is closed out. Contractor has build the bund but still need to be shaded</p>	<p>CEMP & Historical building. • Follow up with Sec. of State for Art and Culture (Ministerio da Arte e Cultura) to ensure protection and identify any constraints cause by the Lautem Fort old historical building at Km181+710 in Lautem area to be protected. 30 July 2018.</p> <p>19 September 2018 follow up by PMU environmental team (The fort is protected and debris of the wall have been placed and secured in the police station area.</p>	<p>Spoil Disposal area. • Spoil will not be disposed of on fragile slopes, flood ways, wetland, farmland, forest, and mangrove and associated salt flats, beaches, religious or other culturally sensitive areas or areas where a livelihood is derived. • Spoil disposal to proceed only after Contractor has provided an agreement of the area of disposal area and sign by land owner and Suco Chief, checked PISC engineer in line with Checklist No.3. 23 July 2018.</p> <p>15 spoil disposal areas has been provided in the monthly report August 2018 with land owner name, size, station and agreement.</p>	<p>Work area markers and station numbers. • Work area markers should be spaced at regular intervals (<25m) in order to ensure that the work activities remain within the designated work area. • Work area markers should be replaced as necessary to indicate to work crews the limits of the work area not to be exceeded. 23 July 2018</p> <p>August 2018 monthly report – Contractor was installed project signboard in the starting point dated 25 august 2018 and warning sign along the project area as well as slide area. Contractor still needs to mark stations number with clear station number.</p>

CPAR	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP DIL MAN	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
CPAR 002	<p>No Burning of Waste. Disposal of Garbage and Oily Waste. Contractor camp at Cribas Km88+200. Garbage and office waste being dumped and burned outside camp fence behind kitchen. NO BURNING OF WASTE ALLOWED. No proper disposal of waste. 22 January 2016</p> <p>The issue closed out immediately and monitored up to the project completion.</p>	<p>NO BURNING OF WASTE IS ALLOWED. On some occasions there has been burning of office and kitchen waste inside the Barique camp. This practice must cease. 2 December 2016</p>	<p>NO BURNING OF WASTE IS ALLOWED anywhere on this Project. This is spelled out in the EMP and is generally in line with best practice. In addition, no burning or destruction of flora or pastureland is permitted in any Protected Area. As specified above Mt. Kuri stretches from Km35+500 to Km 48+800 (approx.) and no burning is therefore allowed in this area either. 16 September 2016</p> <p>No burning issue since verbal instruction given to Contractor on site during PMU monthly inspection by environmental team September 2016</p>	<p>Dust Control. Water spraying must take place three times per day as required in the environmental license. Contractor to provide a schedule (including dates and volume of water of water sprayed and source refiling) of water spraying truck operations carried out each month. 5 June 2017</p>	<p>Contractor's Environmental Management Plan, Health and Safety Plan and Traffic Management Plan Contractor to produce their site specific plan EMP, Health and safety Plan and traffic management plan covering all the associated facilities. 29 September 2017</p>	<p>Mineral Licenses, • Remind Contractor to follow up closely on the applications for Mineral Licenses for quarries and Environmental Licenses for all quarries crushers, batching and asphalt plant and ancillary facilities y (and consider to request provisional license if process is delayed beyond the validity period present licenses, to allow continuation of quarrying) as granted by the licenses. 17 October 2018</p> <p>(Contractor has followed up with ANPM authorities) information is provided in monthly report November 2018</p>	<p>Dust Control/Watering schedule. • Water spraying must take place at least three times per day as required in the Environmental License. Contractor to increase the amount of water sprayed to exceed 500ml (0.5litres) per square meter per spraying. Increase water truck passes accordingly to achieve this target. 17 October 2018</p> <p>Contractor has followed the instruction letter. Information is provided in monthly report November 2018. Pictured is attached.</p>	<p>Safety concerns to be maintained and improved. • Provide PPE (hard helmet, reflective vest, gloves, and dust mask and safety boots) for workers. • Flagmen should be posted on site provided with adequate instruction and equipment/tools such as red and green flags or STOP and GO board to control the traffic and two way radio as necessary. 5 October 2018</p> <p>16 October 2018 Contractor has conducted environmental, health and safety training for contractor's and consultant staff. Contractor scheduled going to conduct seminar for HSE training in January 2019.</p>
CPAR 003	<p>Fuel Tanks Secondary Containment. Contractor camp at Cribas Km88+200. Fuel storage</p>	<p>Fuel Tanks Secondary Containment. The two fuel tanks at Barique must be covered and banded to</p>	<p>Top Soil Conservation. Topsoil from all ground clearing should be removed and</p>	<p>Spoil Disposal Sites. Contractor should provide the waiver signed by the</p>	<p>Spoil Disposal Sites, burning is not allowed at any location. Extinguish any</p>	<p>The issues presented are the series of Site Instruction (SI) from PISC to Contractor</p>	<p>The issues presented are the series of Site Instruction (SI) from</p>	<p>Specific CPAR Specific CPAR letter was sent to Contractor (Dust</p>

CPAR	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP DIL MAN	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
	<p>not bunded fuel tank with total ≥ 5000l need to be bunded large enough to contain 110% of the contents of the largest tanks within the bund. Seal the ground under both tanks. 22 January 2016</p> <p>The issue closed out immediately.</p>	<p>contain accidental spill from leakage or rupture of the tanks. Residual spilled fuel and oil must be gathered up and disposed of as contaminated waste at Tibar disposal area. 2 December 2016</p>	<p>stockpiled for future use in rehabilitation works. This is spelled out in the EMP and is generally in line with best practice and is also a requirement of the specification. 16 September 2016</p> <p>The issue is closed out (most of the cutting for the road widening has less topsoil)</p>	<p>sucu chief and land owner approval of using the land as spoil disposal site to the engineer to be submitted to PMU record. No spoil to take place on river/stream banks or other drainage path. 28 August 2017</p>	<p>spontaneous/accidental fires immediately Contractor should provide their waiver signed by the suco chief and land owner approval of using the land as spoil disposal site before dumping commences to engineer and submit to PMU for record. 29 September 2017</p> <p>No burning issue since PMU environmental team visit the site on the 7 of June 2018 and verbal instruct was given to the contractor to distinguish immediately burning garbage in the contractor yard. Spoil disposal area is up to date and attached agreement in the monthly report.</p>	<p>which have been collected from the Monthly Environmental Monitoring Reports (June 2018 to September 2018). It is noted that 13 SI had been issued to the Contractor during that period and all of the action required in the SI were partial complied. 22 January 2019</p>	<p>PISC to Contractor which have been collected from the Monthly Environmental Monitoring Reports (June 2018 to September 2018). It is noted that out of 12 SI issued to the Contractor, 3 SI were complied with the action required, 5 SI with partial complied and 4 SI with not complied. 22 January 2019</p> <p>Improvement on the EMP with the required mitigation on PISC letter 8 April 2019</p>	<p>Control) CPAR003 attach with some issues with traffic control</p>
CPAR 004	<p>Km 93 to Km 99. existing line drains and newly constructed temporary drains blocked. No temporary drainage. Disposal of surplus debris from drain and culverts. March 2017</p> <p>The issue closed out immediately and monitored up to the project completion.</p>	<p>Spoil Disposal. Overloading of spoil disposal areas was observed in November. Spoil disposal opportunity spaces are limited and must be planned and controlled effectively. Spoil area must not be allowed to slip down on to roads or houses. Strict attention is required to spoil disposal and stability calculations are recommended for spoil tips to avoid slips. 2</p>	<p>Contractor's Environmental Management Plan (CEMP). Contractor to produce their site specific EMP covering all the associated facilities such as Quarries, Crusher, Cement Batching Plant, Asphalt Mix Plant, Sand Washing, Worker Accommodation etc. In Press</p> <p>CEMP Cleared.</p>	<p>Drinking water. Sufficient drinking water should be provided at all working stations near the workers. Advisory levels are 2 L per workers per day to avoid heat stress. 28 february 2018</p>	<p>Portable batching Plant. Portabl batching plan (PBP) allowed to set up discharging into river bed. Sludge should not discharge to river bed. Hazardous material including cements waste water shall not discharged directly on the ground. 24 October 2017</p>			<p>The issues presented are the series of Site Instruction (SI) from PISC to Contractor which have been collected from the Monthly Environmental Monitoring Reports (June 2018 to September 2018). It is noted that out of 8 SI issued to the Contractor, 1</p>

CPAR	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP DIL MAN	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		December 2016						SI were complied with the action required, 2 SI with partial complied and 5 SI with not complied. 22 January 2019
CPAR 005	Dust nuisance and road obstruction. Speed bumps made from rocks, used tires and tress trunks were put by the affected residents on the road to slow down the passing vehicles and reduce creating dust. 30 March 2017 The issue closed out immediatelyand monitores up to the project completion.	No PPE for many workers. Warning sign should be install at the both sides approaching the road working areas. 30 March 2017 Continous monitoring for the compliance	Km 20-Km 28. Culverts construction and detour roads: Lack of watering, dusty working areas affected workers and communters. Plan the watering schedule within this section to water the bare road surface three times a day in line with the Environmental License. 28 July 2017 Continous monitoring for the compliance	Dust Control/Watering schedule . • 2 August 2018 Response letter from Consultant 4 Sept 2018 3 times/day watering as required by Environmental license (500 ml/sq.m), Dust control plan july 2018 tracking and update monthly report, effectiveness of contractor watering schedule, provide orinasal for workers.	Contractor's Environmental Management Plan , CEMP overdue and need for CEMP and construction methodologies for the bridge and seawall. CEMP to include proposed method for construction of seawall, or use method identified in the SEIS. PISC to assist contractor on preparing the CEMP follow the PMU instruction. 1 March 2018			
CPAR 006	Dust Nuisance from bare road surface along the community neighborhoods. Plan the watering schedule with special attention to residential areas to water the road three times per day in line with EMP and environmental license's conditions. 28 July 2017 The issue closed out immediatelyand monitores	Approx Km 104 LS No PPE for workers. Workers working on the slope protection structure are not provided with PPE. Dusty working area. Children around the working area. 28 July 2017 Continous monitoring for the compliance	Dust nuisance impact on the dense settlements, active working areas and visibility for passing vehicles. Minimize dust by regulars spraying water to maintain acceptable visibility for road users. 27 september 2017 Continous monitoring for the compliance	Contractor's Environmental Management Plan (CEMP). • PISC to assist the Contractor with updating the CEMP with location approvals, mineral licenses and progress on environmental licenses for approval by the PISC and endorsement by PMU. • Summary and	Attachment of ADB letter 11 of April and 7 of June. Griavance redress Mechanism. USAID concern (Conservation International), Marine life at Dili rock (Km 8+749 - 9+980) 13 June 2018 Consulant letter 5 July 2018; Consultant proposal letter (ref Nos. RNUP-UT-CWYC-502) is submitted to			

CPAR	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP DIL MAN	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
	up to the project completion.			<p>attendance lists from recent public consultations (e.g. Vemasse 31 July 2018) to be included. 16 October 2018</p> <p>November monthly report; Mineral license for 5 locations have been approved by ANPM. Contractor got the mineral license for five locations. The information is up to date on the CEMP, However consultant has to follow up with contractor as PMU cleared the CEMP with instruction to update in case of change of scope.</p>	<p>the contractor. Consultant proposal is to have public consultation with the divers and local authorities and other concerned stakeholders must undertaken prior to construction of the seawall to present the methodologies and the schedule activities, and also to install a bulletin board.</p>			
CPAR 007	<p>Drinking water. Sufficient drinking water should be provided at all working stations near the workers. Advisory levels 2L per workers per day to avoid heat stress. Workers should be encouraged to drink water at least once per hour to avoid heat stress and maintain performance 27 September 2017</p> <p>The issue closed out immediately and monitored up to the project</p>	<p>Dust nuisance at the dense settlements and active working area. Contractor's drivers should be trained and instructed to follow safe speed limits and contractors shall enforce this on the drivers. Workers at the active working area should be provide with dust mask. 28 September 2017</p> <p>Continuous monitoring for the compliance</p>	<p>Fuel and chemical storage (hazardous substances). Identifies the need for provision of bunded storage areas for all fuel and chemicals with impermeable base and bund walls of sufficient capacity to contain 110% of the volume of the largest tank within the bund. 27 September 2017</p> <p>Fuel bund constructed</p>	<p>Ongoing issues with dust control, only two water trucks observed in operation (9.30am – 1pm). 22 January 2019</p> <p>Issues in the CPARs addressed and justified on the Consultant response letter on 21 May 2019</p>	<p>PUBLIC ACCESS TO SITE AND RUNOFF Km10+300, ACCESS TO SEA WALL CONSTRUCTION AREA north of Km10+300 to Km 10+100, INCOMPLETE CEMP. Drinking water. Sufficient drinking water should be provided at all working stations near the workers. 13 June 2018</p> <p>Consultant letter 5 July 2018, Contractor immediately provided on the following day including</p>			

CPAR	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP DIL MAN	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
	completion.				barricade of stockpiled construction materials on the road way at sta. 10+620. However consultant retired to the contractor to provide standard size of warning signs pursuant to the said item. Instruction was also given to the contractor on the issue of surface runoff from sta. 10+950 to sta. 10+300 for the necessary diversions, bunds, sand bagging or temporary drainage to divert the runoff. Drinking water are provided for workers at working stations.			
CPAR 008	<p>No PPE. and traffic sign. Provide(hard helmet, reflective vest, gloves, dust mask and safety boots) for all workers. Maintain installation ad safety barrier and reflective tape at sides of all high platforms, uneven surface, edge of diversions at the road side, > 1m above surrounding areaand edge of concrete structure construction, replace as necessary. 6 December 2017</p> <p>The issue closed out immediatelyand monitores up to the project completion.</p>	<p>Km 105 Quarry Operation; stockpiling and hauling of material done on the public road, narrowing the road and endangering road user. Renewal of Mineral License. 6 December 2017</p> <p>Continous monitoring for the compliance</p>	<p>Dust nuisance on the laid embankment sections impact on the workers at the active working areas, sensitive receivers (schools, health posts, markets and village) and visibility of the commuters creating traffic hazard. 28 february 2018</p> <p>Continous monitoring for the compliance</p>	<p>Trees if outside the work limit as far as possible to be retained. The engineer shall establish the limit of work and designate all trees and other things to be retained. The Contractor shall preserve all objects designated to remain. Please refer to the attached file of Trees identified to be retained between Km97 to Km 112. 22 January 2019</p> <p>Engineer justification provided</p>	<p>Sea Wall construction . Silt Fence. The KIE has concluded that the silt fence is unnecessary as the works will be done at low tide. Access Road ,Tides. The methodology says that work will proceed at low tides but does not identify the possible low tides for the month that are available. Only working times are identified.</p> <p>The seawall construction finalized with minimal impact to the sea side as per PMUmonthly monitoring.</p>			

CPAR	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP DIL MAN	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
CPAR 009	<p>Drinking water. Sufficient drinking water should be provided at all working stations near the workers. Advisory levels 2L per workers per day to avoid heat stress. Workers should be encouraged to drink water at least once per hour to avoid heat stress and maintain performance. 12 March 2018</p> <p>The issue closed out immediately and monitored up to the project completion.</p>	<p>Dust nuisance at the dense settlements and active working area. Contractor's drivers should be trained and instructed to follow safe speed limits and contractors shall enforce this on the drivers. Workers at the active working area should be provide with dust mask. 2 March 2017</p> <p>Continuous monitoring for the compliance</p>	<p>Dust Control. Insufficient attention is paid to dust control and the previous existing pavement has been removed in most areas. Excessive dust is reducing visibility and may be a contributing cause of several recent traffic accidents and significant nuisance to the general public. 17 May 2018</p> <p>Continuous monitoring for the compliance</p>		<p>Sea Wall Construction. • Contractor to include an acceptable construction methodologies for the bridge and seawall in the revised CEMP. • Site-specific mitigation measures for the seawall construction, to be at least as effective as those proposed approved in the Environmental License, should be included in the CEMP to be reviewed and cleared by PMU. Previous submissions are insufficient and do not contain all the elements including timing of works and activities (viz. tides) requested by PMU. 30 July 2018.</p> <p>Response letter from consultant 10 August 2018, the construction methodology of seawall from sta. 10+080 to sta. 10+320 RS was forwarded to your office last July 2018 including the timing of works and activities during low tide and the Dili tide chart for the month of July 2018.</p>			
CPAR 010	<p>Partial or inappropriate PPE noted at number of work sites. • Provide PPE (hard helmet, reflective vest, gloves, dust mask and safety</p>	<p>Dust Control / watering schedule. • If no rain in past 5 hours, water spraying must take place at least three times per day as required in the</p>	<p>Dust control / Watering schedule . Water spraying must take place at least three times per day as required in the</p>		<p>Sea wall construction. • Silt Fence. The KEI has concluded that the silt fence is unnecessary as the works will be done at low tide. 'Sea Wall</p>			

CPAR	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP DIL MAN	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
	<p>boots) for all workers. • Maintain provision of PPE (hard helmet, reflective vest, gloves, orinasal (N95) dust mask and safety boots) for all workers in all working areas. 6 August 2018</p> <p>The issue closed out immediately and monitored up to the project completion.</p>	<p>environmental License. Contractor to increase the amount of water sprayed to exceed 500ml (0.5litres) per square meter per spraying. Increase water truck passes accordingly to achieve this target. Provide photographs and an updated schedule (including dates and volume of water sprayed and source refilling) of water spraying truck operations carried out each month and this should be checked by the PIS Consultant's (PISC) National Environmental Consultant (NEC) weekly. 6 August 2018</p> <p>Consultant reinforce letter to contractor date 19 October 2018. Contractor to spray water at the strethc of the road to prevent people of the villages from dust in schedule' Morning 07:00 OTL Noon 11:00 OTL and afternoon 16:00 OTL during dry season</p>	<p>environmental License. Contractor to increase the amount of water sprayed to exceed 500ml (0.5litres) per square meter per spraying. Increase water truck passes accordingly to achieve this target. Provide photographs and an updated schedule (including dates and volume of water sprayed and source refilling) of water spraying truck operations carried out each month and this should be checked by the PIS Consultant's (PISC) National Environmental Consultant (NEC) weekly. 2 August 2018</p> <p>PISC respond on 22 October 2018. Continous monitoring for the compliance</p>		<p>Conditions 16th August and 18th August 2018 with photograph' 23 August 2018</p> <p>Response letter from consultant 13 September 2018 ; We will comply all the conditions mentioned on the said letter in order to protect the nearby corals and to reduce risks from working on the seashore including the method of monitoring of the construction works considering that the installation of silt fence has already been deleted.</p>			
CPAR011	<p>Requirement for Site Cleanup and Restoration Plan (SCURP). • Time bound Site Clean Up and Restoration Plan (SCURP) should be</p>	<p>Disposal areas. Provide time bound action plan to rehabilitate as necessary any spoil disposal areas which are not stable in line with the EMP; plant</p>	<p>Dust control / Watering schedule . Water spraying must take place at least three times per day as required in the</p>		<p>The issues presented the series of Site Instruction (SI) from PISC to Contractor which have been collected from the Monthly Environmental</p>			

CPAR	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP DIL MAN	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
	<p>drafted immediately (by end of October 2018) for all of the Contractor's ancillary facilities focusing on the Cribas base camp. The NEC should assist the Contractor in this regard and the SCURP should cover the project maintenance activities throughout the defects notification and performance based maintenance periods. 16 October 2018.</p> <p>SCURP submitted to PMU on Dec 2018</p>	<p>grass and tress as necessary to reinstate the areas as required by the specification to the satisfaction of the PISC. Ensure spoil disposal at all locations remains within the agreed and marked area. 16 October 2018</p> <p>Spoil disposal areas detail is provided in the monthly environemntal report October to November 2018, Consultant still need to follow up with contractor to provide time bound action plan to rehabilitate as necessary unstable disposal areas.</p>	<p>environmental License. Contractor to increase the amount of water sprayed to exceed 500ml (0.5litres) per square meter per spraying. Increase water truck passes accordingly to achieve this target. Provide photographs and an updated schedule (including dates and volume of water sprayed and source refilling) of water spraying truck operations carried out each month and this should be checked by the PIS Consultant's (PISC) National Environmental Consultant (NEC) weekly. 2 August 2018</p> <p>Response letter from Consultant 20 Feb 2019 Control dust (Complied satisfactory) Sinohydro/PISC to advise PMU regarding the watering schedule, 500mL/sq.m watering 3-4 times day water</p>		<p>Monitoring Reports (June 2018 to September 2018). It is noted that out of 15 SI issued to the Contractor, 1 SI was complied with the action required, 5 SI with partial complied, 3 SI with not complied and 6 SI with unclear status. 22 January 2019</p>			
CPAR012		<p>The issues presented are the series of Site Instruction (SI) from PISC to Contractor which have been collected from the Monthly Environmental</p>	<p>Traffic control and management, Dust control is inadequate, Health and safety issues and Spoil had been dumped beyond</p>		<p>Instruction and induction of all workers by the Contractor in health and safety matters, including road safety is required before they start work.</p>			

CPAR	RNUSP P1 MAN-LAC	RNUSP P2 LAC-NAT	NR1UP DIL MAN	NR1UP MAN BAU	RNUP-AF TAS-TIB	RNUSP-AF BAU-LAU	RNUSP-AF MKAM	RNUP-AF AIP-BAZ
		Monitoring Reports (June 2018 to September 2018). It is noted that out of 22 SI, 2 SI were complied with the action required, 7 SI with partial complied and 13 SI with not complied. 22 January 2019	the construction limits and by seaside vegetation in close proximity of the beach. 22 January 2019 Continous monitoring for the compliance		Safety patrol should be introduced to supervise the implementation of Traffic Management Plan. 22 January 2019 Continous monitoring for the compliance			
CPAR013					This is to notify Contarctor the letter from Secretary of State for Environment No.Ref:47/MCAE/GSEA//2019 date 18 February 2019 concerning the dumping of existing asphalt at the Tasitolu Lake Protected Area. Tasitolu Lake is declared as the Protected Area based on the Decree Law 05/2016 National System of Protected Area to protect areas representing all ecosystems, cultural, history and all critical habitats for endemic and other species that are protected under national law as well as for migratory species found in Timor-Leste. 15 March 2019 Issue close out on May 2019. The dumped asphalt removed.			

Appendix 5 –Responsibilities for Environmental Management

Agency	Responsibilities
Ministry of Public Works (MPW)	<ul style="list-style-type: none"> • Overall responsibility for project construction and operation • Ensure that sufficient funds are available to properly implement all agreed environmental safeguards measures • Ensure that the Project, regardless of financing source, complies with the provisions of lending institution environmental and other policies. • Ensure that Project complies with GOTL environmental laws and regulations • Ensure that tender and contract documents for civil works include all relevant parts of the environmental assessment and project agreements • Submit at least quarterly safeguards monitoring reports to Asian Development Bank
Project Management Unit (PMU)	<ul style="list-style-type: none"> • Ensure that EMP is updated with respect to detailed designs and that contractor completes CEMP in the preconstruction phase. • Ensure that EMP and CEMP provisions are implemented to mitigate environmental impacts to acceptable levels • Ensure that Project complies with Asian Development Bank policies and GOTL laws and regulations • Engage and retain two staff within PMU as environment specialist (ES) and social safeguards specialist (SSS) • Ensure that environmental protection and mitigation measures in the SEIS and EMP are incorporated into the detailed design including climate change adaptation measures. • Ensure that requisite measures from the SEIS and EMP are incorporated into the bid and contract documents • Ensure that measures from the SEIS and EMP are incorporated into the Contractors EMP document • Undertake environmental management capacity building activities for MPW and orientation and awareness training for contractors • Ensure that MPW has obtained necessary environmental license(s) from Secretary of State for Environment(SEMA) prior to award of civil works contracts. • Assist MPW to establish an environmental grievance redress mechanism, as described in the SEIS, to receive and facilitate resolution of affected peoples' concerns, complaints, and grievances about the Project's environmental performance • Undertake monitoring of the implementation of the EMP & CEMP (mitigation and monitoring measures) • Prepare quarterly or semi-annual environmental monitoring reports for submission to Asian Development Bank and other co-financiers as necessary • Based on the results of EMP & CEMP monitoring, identify environmental corrective actions and prepare a corrective action plan, as necessary, for submission to Asian Development Bank and other co-financiers as necessary • Implement all mitigation and monitoring measures for various project phases specified as PMU's tasks in the EMP & CEMP • Work with DRBFC to undertake any additional environmental assessment for sub-projects prior and submit to Asian Development Bank and DNCPIA for review and clearance
Project Implementation and Construction Supervision Consultant (PISC-included in PMU)	<ul style="list-style-type: none"> • Provide training and capacity building to MPW and PMU staff (including management) and provide training to engineers and contractors prior to the submission of contractor's CEMP • Incorporate into the project design the environmental protection and mitigation measures identified in the EMP for the design stage including climate change adaptation measures included in the SEIS. • During detailed design phase provide all necessary information to the MPW to facilitate obtaining environmental licenses from DNCPIA prior to award of civil works contracts • During detailed design notify PMU of any change in alignment or project design/components and provide all necessary information to the PMU to facilitate preparation of any additional environmental assessment prior to project construction as required in the EMP (e.g., preparation of new or supplementary environmental assessment in case of change in alignment that will result to adverse environmental impacts that are not within the scope of the SEIS prepared during loan processing, etc.) • Update, based on detailed design, the EMPs and other environmental protection and management measures to be incorporated in bid and contract documents • Assist PMU to undertake monitoring of the implementation of the EMP & CEMP (mitigation & monitoring measures) including incorporating reports from the Contractor. • Assist PMU to prepare quarterly progress reports and semi-annual safeguards monitoring reports for submission to Asian Development Bank and MPW as necessary including incorporation of reports from the Contractor the Contractor s and corrective action requests to contractor • Based on the results of EMP &CEMP monitoring, identify environmental corrective actions and prepare a corrective action plan, as necessary, for submission to Asian Development Bank and other co-financiers as necessary
THE CONTRACTOR (Contractor)	<ul style="list-style-type: none"> • Participate in induction training on EMP provisions and requirements delivered by the PMU and incorporate in the CEMP. • Prepare the CEMP and submit to PISC for approval and PMU for endorsement. • Provide sufficient funding and human resources for proper and timely implementation of mitigation measures

Agency	Responsibilities
	<p>required in the EMP.</p> <ul style="list-style-type: none"> • Obtain necessary environmental license(s) from DNCPIA for ancillary facilities for subproject works, quarries, crushers, batching plant, hot-mix plant etc. prior to commencement of civil works contracts • Obtain necessary mineral license(s) from ANPM for ancillary facilities for subproject works, quarries, hot-mix plant etc. prior to commencement of civil works contracts • Ensure that all workers, site agents, including site supervisors and management participate in training sessions delivered by PMU and PISC. Maintain a record of training and conduct of awareness sessions for staff to ensure compliance with environmental and safety statutory and contractual obligations including the approved EMP. • Ensure compliance with environmental statutory and contractual obligations and proper implementation of Asian Development Bank requirements including approved EMP & CEMP. • Based on the results of CEMP monitoring, cooperate with the PISC and PMU to implement environmental corrective actions and corrective action plans, as necessary. • Respond promptly and efficiently to requests and instructions from PMU and PISC for environmental corrective actions and corrective actions and implement additional environmental mitigation measures, as necessary.
Secretary State for Environment (SEA)	<ul style="list-style-type: none"> • Review and approve environmental assessment reports required by the GOTL • Issue & renew environmental licenses as required by the GOTL during the life of the project • Undertake monitoring of the project's environmental performance based on their mandate
National Authority for Petroleum and Mineral (ANPM)	<ul style="list-style-type: none"> • Review and approve Location Opinion on sites for extraction of construction material as required by the law • Issuing / granting and renewing mineral licenses specifically for supply of construction materials; referred to as mining (downstream and upstream activities) in the law • Undertake monitoring of the extraction of the construction material, health and safety and rehabilitation plan based on their mandate
Secretary of State for Professional Training and Employment	<ul style="list-style-type: none"> • Ensure the implementation of the work in line with the Labour Law • Support government to enhance the labour policy and regulatory framework • Provide training to improve worker skills and capacities • Ensure the statutory requirements for employers and employees rights and duty are observed
Department of Protected Area Ministry of Agriculture, Forestry and Fisheries	<ul style="list-style-type: none"> • Establish and maintain the national system of protected areas • Identify areas requiring protection based on scientific data & prepare proposal to establish protected areas • Demarcate the Protected Areas and their zones and administrate the protected areas' operation • Protect the valuable ecosystem and other species • Enforce the law in consultation with other relevant institutions and suco councils.
National Directorate of Cultural Heritage	<ul style="list-style-type: none"> • Preserving and managing cultural heritage as part of Timorese cultural identity. • Assist to identify physical cultural heritage resources potentially affected by the project
District Administration Ministry of State Administration	<ul style="list-style-type: none"> • Ensuring community well being and hygienic living conditions, controlling government utilities and preserving local cultural heritage resources • Coordinate with community to provide human resources to support the project • Assist in coordinating community concerns with regard to the implementation of the project