# ENVIRONMENTAL MONITORING REPORT

Semestral Report:

January–June 2026

July 2026

## REPUBLIC OF ARMENIA: CONSTRUCTION OF THE KAJARAN TUNNEL (TRANCHE 4)

(Financed by the Eurasian Fund for Stabilization and Development)

Prepared by the “Road Department” Fund of the Ministry of Territorial Administration and Infrastructure of the Republic of Armenia for the EFSD

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## ABBREVIATIONS

| | |
|---|---|
| ADB | Asian Development Bank |
| AP | Affected Person |
| CEMP | Contractor`s Environmental Management Plan |
| COVID-19 | Coronavirus Disease |
| EFSD | Eurasian Fund for Stabilization and Development |
| EIA | Environment Impact Assessment |
| EMP | Environmental Management Plan |
| GRG | Grievance Redress Group |
| GRM | Grievance Redress Mechanism |
| LARP | Land Acquisition and Resettlement Plan |
| MTAI | Ministry of Territorial Administration and Infrastructure |
| Mo E | Ministry of Environment |
| RA | Republic of Armenia |
| RD | Road Department Fund |
| SEMR | Semestral Environmental Monitoring Report |
| SNCO | State Non-Commercial Organization |
| SSEMP | Site-Specific Environmental Management Plan |

# I. INTRODUCTION

## 1.1. Preamble

1. This is the third Semestral Environmental Monitoring Report (SEMR) for Construction of the Kajaran Tunnel (Tranche 4) Project (N 3).

## 1.2. Headline Information

2. This SEMR for Construction of the Kajaran Tunnel (Tranche 4) Project covers reporting period from January to June 2026. The report describes the status of project implementation, activities carried out by the RD with regard to environmental safeguard issues. The civil works did not start yet.

# II. PROJECT DESCRIPTION AND CURRENT ACTIVITIES

## 2.1. Project Description

3. The "North-South Road Corridor Investment Program" is a major investment project operating on the territory of Armenia, which aims to reconstruct a 550 km highway along the entire territory of the country, connecting China, Central Asia, India and Iran with Georgia, the Russian Federation and Europe, implemented in accordance with high international standards. Crossing the territory of Armenia from south to north (Meghri-Kapan-Goris-Yerevan-Ashtarak-Gyumri-Bavra), the transport corridor adjoins the Georgian road from the south, which continues towards the ports of Poti and Batumi (on the Black Sea) and further to Russia, countries of the CIS and the European Union. The complex project “Construction of the North-South Road Corridor” is one of the priorities for the development of the road transport network of the Republic of Armenia, and, in fact, is the reconstruction of the historical “Silk Road”. The North-South Road Corridor is also part of the AH 82 international road linking the Central Asian countries such as Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The integrated project will improve Europe-Caucasus-Asia communication at the point where Western Asia joins Eastern Europe.

4. Financing of the investment program of the transport corridor is carried out on the basis of a framework agreement on financing signed on September 15, 2009 between the Government of Armenia and the Asian Development Bank. At the moment, the reconstruction and construction of the transport corridor is financed with the financial support of the Asian Development Bank, as well as co-financing from the European Investment Bank and the Eurasian Fund for Stabilization and Development. The implementation of the project is divided into separate stages (Tranches), within which separate loan agreements are concluded for each specific Tranche.

5. The donor of the project "Construction of the Kajaran Tunnel (Tranch 4)" (construction of the Kajaran tunnel (total length about 7.2 km) and reconstruction of the existing M-2, Yerevan-Yeraskh-Goris-Meghri-Iran border road section (total length about 4.0 km)) (hereinafter referred to as the Project) is the Eurasian Fund for Stabilization and Development The agreement on the provision of an investment loan from the EFSD between the Republic of Armenia and the EFSD was signed on July 26, 2024.

6. The Ministry of Territorial Administration and Infrastructure of Republic of Armenia is responsible for the overall management of the Project. Road Department Fund was appointed as the Project Implementation Unit (PIU) acting under the Agency Agreement signed with the Ministry of Territorial Administration and Infrastructure of Republic of Armenia.

7. The location of the project site under Tranche 4 is presented in *Figure 1* below.

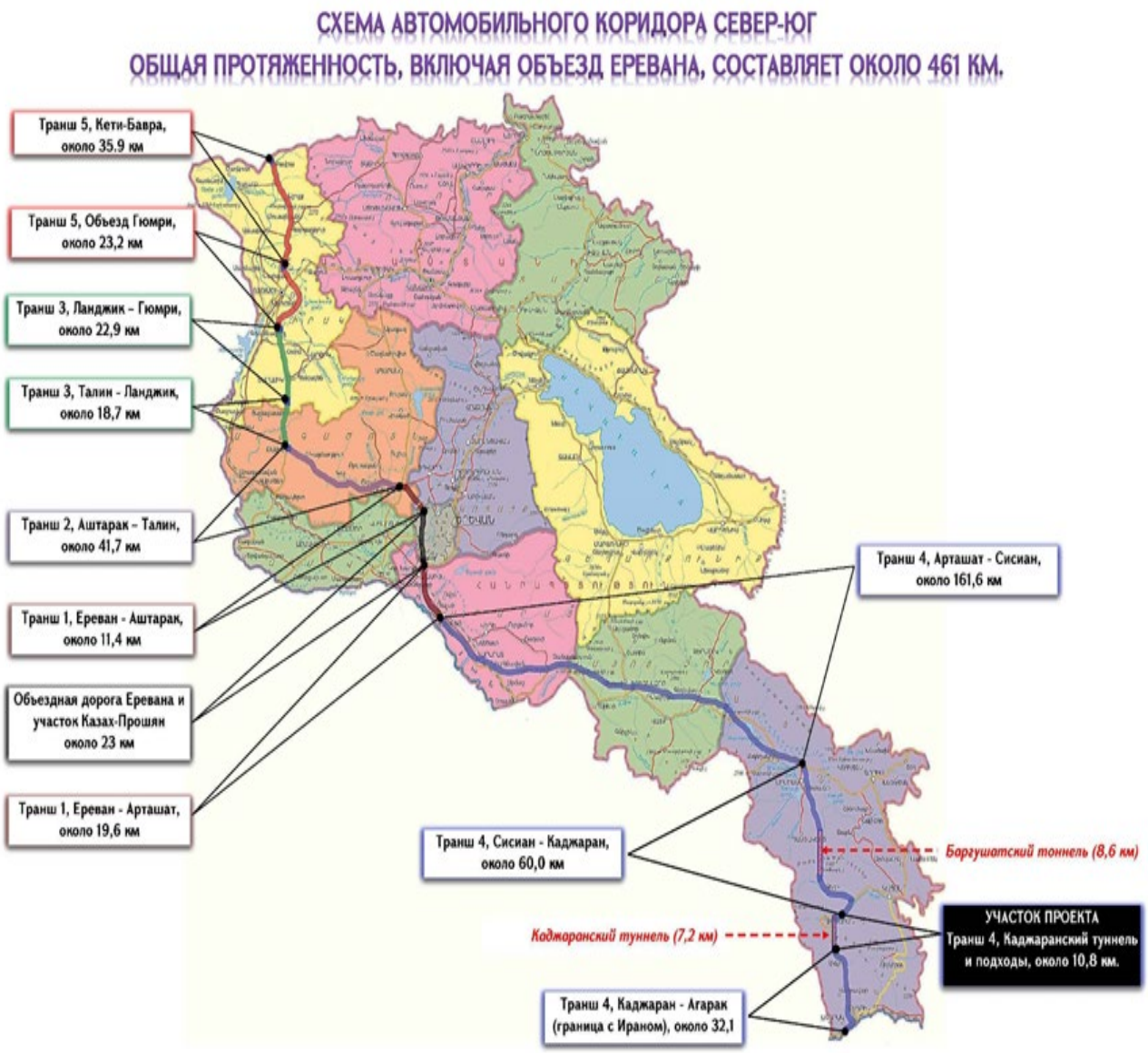


***Figure 1. Location of the Project site in country scale***

8. In Tranche 4, the section Kajaran-Agarak (section of M2 road from km 328+600 to km 384+000) is the most South one going from Kajaran city to the Iranian Border.

9. The project consists of two Lots (Lot 1 and Lot 2) for a total length of about 45 km:

- Lot 1 includes about 21 km (5km+16km) road from Agarak to Vardanidzor and about 11 km road from Vardanidzor to tunnel exit
- Lot 2 includes about 7 km road from tunnel entrance to Kajaran and about 4 km of the tunnel and access roads.

10. A short description (based on the detailed design) of the Kajaran Tunnel planned for construction is given below:

- Kajaran Tunnel is a single-bore bi directional tunnel about 7.2 km long.
- The road alignment inside tunnel is mainly on a straight road, with the exception of a curve inside the tunnel and with portals on curves.
- The tunnel has a mean longitudinal slope of about 3,8 %.
- The tunnel has a circular cross section. The cross-section area is about 74 $m^2$.

11. Expected Project implementation outcomes are.

- Increase in throughput capacity and road safety in RA
- Creation of conditions for smooth movement of trucks and passenger cars
- Improving access to sales markets, reducing logistics costs
- Increase in the transit traffic across the territory of the RA, including toward destinations in EurAsEC countries
- Creation of good traffic conditions offered to residents of adjacent communities.

## 2.2. Project Contracts and Management

12. The Executing Agency is the Ministry of Territorial Administration and Infrastructure of the Republic of Armenia. The Implementing Agency is the RD, responsible for the day-to-day management of project execution and management of all environmental aspects of the projects.

13. No Supervision Consultant (Engineer) was selected within reporting period. Engineer will carry out all construction supervision activates and reporting of the project.

14. Contractor was selected within reporting period. RD signed a contract with the «Abad Rahan Pars International Group and Tunnel Sadd Ariana» Joint Venture on June 27, 2026 for the implementation of construction works. Contractor's Environmental Unit will be responsible for preparation and implementation of Contractors' SSEMPs, monitoring of the implementation of environmental safeguards requirements in construction phase and regular reporting.

15. Summary of civil works contracts and works' progress is presented in Table 1 below.

*Table 1: Summary of Civil Works Contracts and works' progress*

| Package | Scope | Contractor | Signed | Approval Date | | Environmental personnel | | Civil Work | | Progress as of | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SSEMP | ERP | Environmental officer | Health and Safety officer | Start (Q) | End (Q) | 31 Jan 2026 | 30 Jun 2026 |
| **Lot 2** | About 7 km road from tunnel entrance to Kajaran and about 4 km of the tunnel and access roads. | Selected | 27.06.2026 | n/a | n/a | no | no | n/a | n/a | 0% | 0% |

ERP = Emergency Response Plan, SSEMP = site-specific environmental management plan

## 2.3. Project Environmental Management

16. EFSD is implementing monitoring of safeguard compliance; supervision of the project, initiating and reviewing EIA, incorporation of environmental safeguards considerations to the bidding documents and contracts, and providing clearance to contract awards and signing/initiation of civil works to the Project.

17. RD hired an Environmental specialist, Ms. Inesa Zargaryan, whose responsibilities include the management of all environmental aspects of the project, compliance with the national environmental legislation of the RA and safeguard policies of financing donor during the preparation and implementation of the Project.

18. No Engineer was selected within reporting period. The Engineer will provide Technical Assistance to the RD in the management and reporting of the project. Environmental Specialist of the Engineer will be responsible for supervising the construction works in relation to environmental and archaeological impacts and, in particular, for review of Contractor's SSEMP, supervising and reporting on the Contractor's performance in the implementation of the EMP/SSEMPs.

19. Contractor was selected within reporting period.

20. The Contractor and Engineer should hire environmental specialists, and appoint health and safety specialists.

21. The scheme of project environmental management is presented in Figure 2 below.

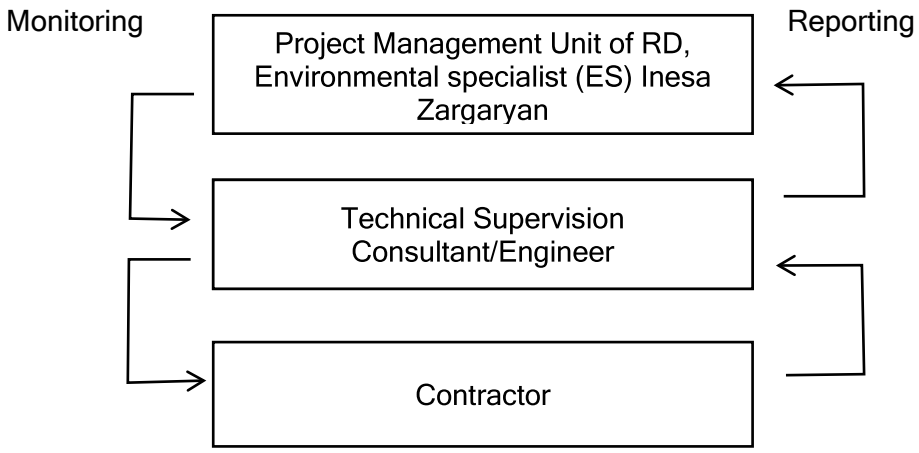


***Figure 2. Project environmental management arrangements***

## 2.4 Project Activities During Current Reporting

22. N/A- no civil works commenced.

## 2.5 Description of Any Changes to Project Design

23. No any changes to Project design

## 2.6 Description of Any Changes to Agreed Construction methods

24. Construction works did not start in the reporting period.

# III. ENVIRONMENTAL SAFEGUARD ACTIVITIES

## 3.1. General Description of Environmental Safeguard Activities

25. The Project has been screened with the ADB's Rapid Environmental Assessment Checklist (REA). The classification was based on the most environmentally sensitive component of the project, which means that if one part of a project has the potential for significant adverse environmental impacts, then the project is to be classified as environmental category "A" regardless of the potential environmental impacts of other aspects of the project. Based on the REA Checklist, the project is classified as a Category "A".

26. According to the Armenian legislation a proposed project is classified as a Category "A" also and EIA state expertise conclusion according to Armenian legislation is needed. As already mentioned, this project is funded by the EFSD, and the preparation of the EIA report was based on the requirements of the ADB SPS (2009) policy and Armenian legislation. EIA and EMP were prepared by IRD engineering S.R.L. and submitted MoE for getting a positive conclusion.

27. A positive conclusion was given on the Project on 22 February 2022 by SNCO "Environmental Impact Assessment and Expertise" under the MoE (*Annex 1*).

28. To ensure that the contractor comply with the requirements of the EIA, EMP, RD prepared and provided the following specification clauses into the bidding documentation and into the contract:

- List of environmental management requirements to be budgeted by the bidders in their proposals.
- Environmental clauses for contractual terms and conditions.
- EIA and EMP.

## 3.2.Grievance Redress mechanism functioning

29. In order to receive and facilitate the resolution of affected peoples' concerns, complaints, and grievances about the project's environmental performance a Grievance Redress Mechanism was established for the project. When and where the need arises, this mechanism will be used for addressing any complaints that may arise during the implementation of project. The grievance mechanism is scaled to the risks and adverse impacts of the project. It addresses affected people's concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the affected people at no costs and without retribution. The mechanism is not impeding access to the judicial or administrative remedies. The project proponent will appropriately inform the affected people about the mechanism before start of commencement of any civil works. According to the EMP, at the initial phase of the Project implementation, affected persons submit their complaints on environmental issues to the RD. All complaints are registered in the complaints log (the format was provided by the EFSD).

30. The process for solving environmental complaints that may arise in the project is the Grievance Redress Mechanism, which was established at each community in which the various project components will be implemented.

31. The following are the procedural steps to file a complaint, pose an inquiry on matters relating to project implementation, environmental concerns and other issues regarding the Project.

***Pre-construction stage:***

**Step 1.** The person affected by the Project could raise their suggestions/concerns/complaints first of all to the RD. The RD receives and resolves/replies the APs' grievances. If an AP is not satisfied with the response or RD responsible staff needs additional capacity to response the APs' grievance, the Grievance Review Group (GRG) can be formed to ensure comprehensive, equitable and transparent discussion of the case. To establish legitimacy of the GRG to review and judge on the substantive
merit of the AP's complaint, the composition of the GRG should be balanced and include an independent observer to ensure the impartiality and transparency of the complaint review process.

**Step 2.** If AP is not satisfied with RD's decision even after GRG review of the grievance, then he can lodge the grievance to the RA Ministry of Territorial Administration and Infrastructure. The MTAI follows Public Administration RA law for registration, revision and resolving the case.

***Construction Stage:***

**Step 1.** The person affected by the Project could raise their suggestions/concerns/complaints first of all to the Contractor's dedicated grievance staff that is an attempt will be made to resolve complaints at the local level. In order to maintain transparency and accountability to affected communities and to make information, assistance and grievance resolution services accessible to the Affected Persons, the Contractor will establish the following GRM as a part of the Project's integral GRM:

(i) AP's could approach Contractor's representative (construction foreman, engineer, social or environmental specialist) on-site and/ or register their suggestion /complain into the grievance register book kept by Contractor at the field office established in the construction camp located nearby the RoW. The template for recording grievance, content and format of the application shall be specified in the Contractor's SEMP and agreed with Engineer.

(ii) Contractor ensures the provision of contact information (field office location, operating hours, names of responsible contact persons, phone numbers, regular mail and email addresses, etc.) via posters and Project informational boards.

Contractor should immediately inform the Engineer and RD if AP lodged the grievance and should send the copy of written complaint to them. Contractor should implement appropriate mitigation measures to solve the issue and send the written response/reply to the AP with cc Engineer and RD.

**Step 2.** Should the AP be not satisfied with the Contractors' solution of his/her complaint, the further opportunities are available. AP could next apply to the Engineer via lodging the complaint within one month after receiving/not receiving the response from the Contractor. The incoming suggestions/complains shall be considered and classified into environmental and social/land acquisition and resettlement items. The social/land acquisition and resettlement safeguard related complains shall be handled in the scope of Engineer and RD

social specialists. The environmental specialists of the Engineer in collaboration with the Contractor(s) shall establish an office at the Project site where environmental complaints of Projects' AP regarding EMP and project operations' impacts can be lodged. This Project site office will be used for: supervision of construction, including monitoring of the Contractor's compliance to the EMP to ensure the mitigation measures are timely and properly implemented; disclosing all safeguard documents; and receiving and responding to the comments/feedbacks from the community. The Engineer shall respond to the complaint within 15 days.

**Step 3.** Should the Engineer fail to satisfy the complaint, AP could apply to RD, MTAI and ADB. The complaint in the Construction stage at the RD level will be preceded with the same scheme as in the pre-construction stage. All the contact information shall be provided by Contractor on posters and on the Project informational board. Contractor shall serve as an entry point in this stage and provide the necessary explanations and assistance in application to the mentioned entities, if needed through the personal contact with AP.
Finally, the AP can always seek attention and interference of the court. However, all the efforts will be made to settle the issues at the Contractor's, the Engineer and RD level. If not possible, attempts will be made to resolve the issues at the MTAI level to avoid/minimize litigation as much as possible.

All complaints regardless of the outcome and solutions will be properly documented in relevant unit of PIU or community administration and made available for review, monitoring and evaluation purposes.

The GRM scheme is presented in Figure 3 below.

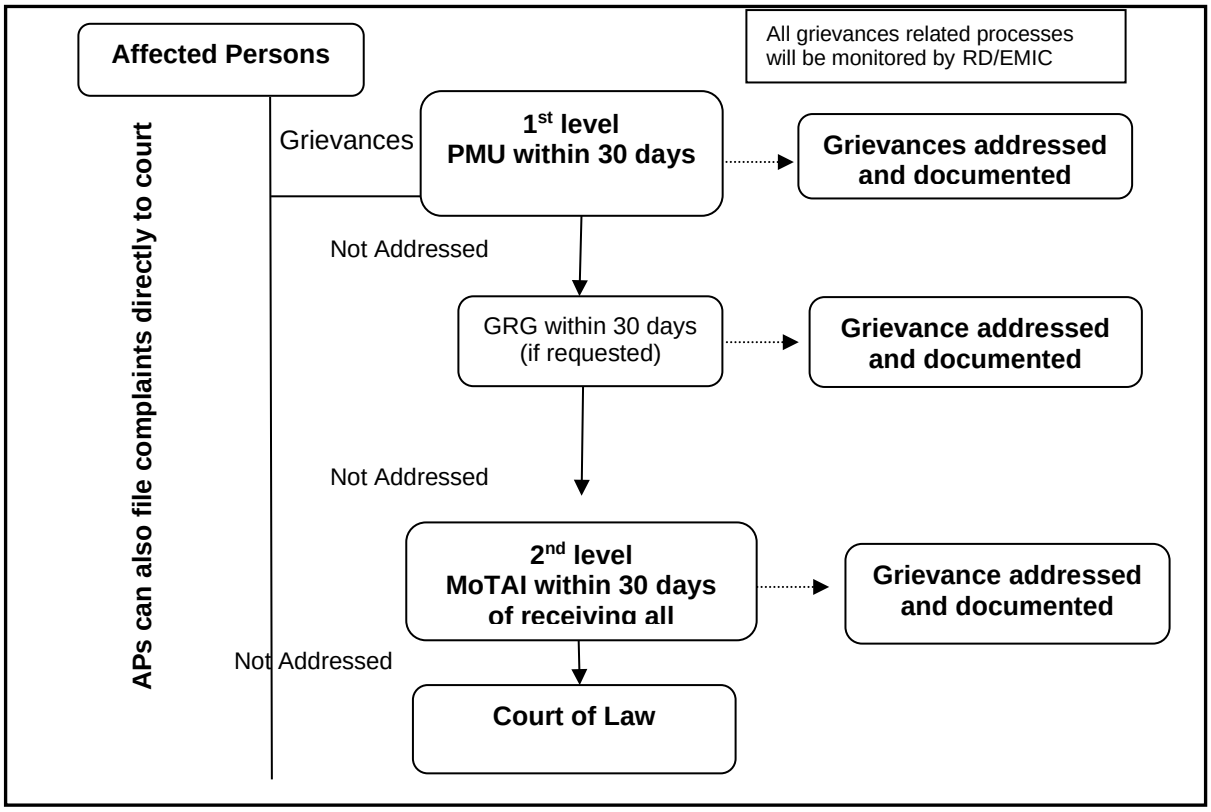


***Figure 3. Institutional Structure of Grievance Redress Mechanism***

### 3.3. Site Audits

32. N/A: No inspections and field visits were carried out by the Environmental specialist of PIU within current reporting period, as no construction works were started.

### 3.4. Issues Tracking (Based on Non-Conformance Notices)

33. N/A: Due to the fact that no any construction activities were carried out, no issues were tracked within current reporting period.

### 3.5. Trends

34. N/A: No trends can be revealed now.

### 3.6. Unanticipated Environmental Impacts or Risks

35. N/A: Due to the fact that no construction activities were carried out, no any unanticipated environmental impacts and risks were identified so far.

# IV. RESULTS OF ENVIRONMENTAL MONITORING

## 4.1. Overview of Monitoring Conducted during Current Period

36. N/A: Due to the fact that no construction activities were carried out, no environmental measurements have been undertaken within current reporting period.

## 4.2. Trends

37. N/A: Due to the fact that no construction activities were carried out, no trends can be revealed.

## 4.3. Material Resources Utilization

### 4.3.1. Current Period

38. N/A: No any construction activities were carried out during reporting period.

### 4.3.2. Cumulative Resource Utilization

39. N/A: No construction activities were carried out during reporting period, no resources yet utilized.

## 4.4. Waste Management

40. N/A: No construction activities were carried out during reporting period; no waste was generated.

### 4.4.1. Current Period

41. N/A: No construction activities were carried out during reporting period; no waste was generated.

### 4.4.2. Cumulative Waste Generation

42. N/A: No construction activities were carried out during reporting period; no waste was generated.

## 4.5. Health and Safety

### 4.5.1. Community Health and Safety

43. N/A: Due to the absence of construction works, there are no issues.

### 4.5.2. Worker Safety and Health

44. N/A: No construction activities were carried out during reporting period.

## 4.6. Training

45. N/A: No trainings conducted within reporting period.

## 4.7. Summary of Monitoring Outcomes

46. N/A: No civil works commenced within reporting period.

## V. FUNCTIONING OF THE SSEMP

47. The site-specific environmental management plans will be developed by the Contractors after their selection. No civil works will be commenced before the review, verification of SSEMP quality and approval by technical supervision consultant (Engineer) and PIU.

# VI. GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

## 6.1. Good Practice

48. N/A: No construction works were commenced.

## 6.2. Opportunities for Improvement

49. N/A: No construction works were commenced.

# VII. SUMMARY AND RECOMMENDATIONS

## 7.1. Summary

50. No construction works have been started in reporting period.

51. Establishment of environmental management teams in process. PIU hired Environmental specialist.

52. Incorporation of environmental and social safeguards considerations to the bidding documents for Contractors and Engineers was done.

53. GRM was established within reporting period, no complaints were received so far.

## 7.2. Recommendations

54. 30 days before the commencement of construction works Contractors shall submit a detailed SSEMP for the Engineer's and RD's no objection showing how they intends to comply with environmental laws and regulations and other specific requirements prescribed in the Contract, addressing all the monitoring and mitigation measures set forth in the EIA and the EMP. The SSEMP should include specific Health and Safety plan and other thematic plans in accordance with the requirements of EMP.

55. The Contractor and Engineer should hire environmental specialists, and appoint health and safety specialists.

56. Other permits/agreements regarding the disposal of any hazardous waste, topsoil sites, siting of Contractor's office etc. should be taken/concluded as per national environmental legislation requirements and should be submitted to Consultant (Engineer) and RD.