

## Semi-Annual Environmental Monitoring Report

Project No: 41116-033 Loan Number: 2925 IND

Period:July 2019 to Dec 2019

Tranche 2

IND: Jammu and Kashmir Urban Sector Development Investment Program

Submitted By:

Economic Reconstruction Agency, Government of Jammu and Kashmir



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#### 1. INTRODUCTION

#### 1.1. Overall Project Description:

- 1. The State of Jammu and Kashmir lies in the northernmost part of the country and shares international border with Pakistan and China. This physiographic situation attaches strategic importance to the region as well as the infrastructural development in the state. The state has three main geographical regions namely Jammu, Kashmir valley and highlands of Ladakh. As per details from Census 2011, Jammu and Kashmir has population of 1.25 Crores, an increase from figure of 1.01 Crore in 2001 census. The population forms 1.04% of India in 2011, compared to 0.99% in 2001. As per census 2011, the Sex Ratio of female is 889 per 1000 male, which is below national average of 940. While, in 2001 the sex ratio of female was 900 per 1000 males. The literacy rate has seen an upward trend at 67.16% as per 2011 census as compared to the national literacy rate of 64.80%, while in 2001 literacy rate stood at 55.52%.
- 2. Jammu and Srinagar are the two major cities where majority of urban population is concentrated while other smaller towns share the rest. Urban infrastructure in these places for long has been neglected and hence, is subject to severe urban infrastructure problems. Although, at least, majority of population in Jammu and Srinagar cities have been provided with piped water supplies, the other urban amenities remain neglected. This is mainly due to meager investments made in the urban infrastructure either by private or by public sector.
- 3. The Government of Jammu and Kashmir (GoJK), apart from the ADB financed Multi-Sector Project for Infrastructure Rehabilitation (MPIR) in Jammu and Kashmir, again approached ADB for assistance in urban sector development for more development works and studies so as to implement comprehensively the urban sector reforms. The GoJK through Jammu and Kashmir Economic Reconstruction Agency has conceived the Jammu and Kashmir Urban Sector Development Investment Program (JKUSDIP) in its effort to boost economic growth in Jammu and Kashmir State. The primary objective of JKUSDIP is to promote economic development in Jammu and Kashmir State through expansion of basic services such as water supply, sewerage, sanitation, drainage, solid waste management, urban transport and other municipal functions in Jammu, Srinagar and other important urban centers of the State. JKUSDIP will also strengthen the service delivery capacity of the responsible state urban agencies and urban local bodies through management reforms, capacity building and training.

#### 1.2. Project Objectives:

- 4. The proposed JKUSDIP will foster the economic growth in Jammu and Kashmir State. The long term Project objectives are to contribute to the economic development of Jammu and Kashmir through enhanced and sustainable growth in the main urban areas with emphasis on promoting commerce and on improvement of livelihood for the poor.
- 5. The urban sector sub-projects are aimed at expansion of basic services such as



water supply, sanitation, waste management, urban transport and other municipal functions in Jammu and Srinagar cities and other urban centers in order to cater to the demands and requirements of the increasing population. The overall program envisages the following broad benefits:

- i. Improved water supply system
- ii. Improved sewerage/drainage systems
- iii. Improved solid waste management
- iv. Improved road and traffic (urban transport) conditions
- v. Other municipal facilities

#### 1.3. Environmental Category:

6. The Project 2 under JKUSDIP was categorized as Environmental Category "B", according to ADB's Safeguard Policy Statement (SPS) 2009. All the subprojects under execution in Srinagar and Jammu have been categorized as Category "B".

#### 1.4. Environmental Performance Indicators, if any:

- 7. For effective monitoring, selected environmental parameters have been identified as indicators which may be qualitatively and quantitatively measured and compared over a period of time in order to assess/ensure the compliance to environmental management plans (EMPs). The environmental performance indicators selected are physical, biological and social characteristics identified as most important in affecting the environment at critical locations all along the sub-project corridors. The parameters identified as performance indicators are:
  - i. Compliance with environmental management and monitoring plan.
  - ii. Compliance to State/National environmental regulations.
  - iii. Monitoring of ambient air quality, water quality and noise levels and comparison with baseline environmental quality and State/National standards.

#### 1.5. Overall project progress, agreed milestones and implementation schedules:

- 8. In Srinagar, construction work for the following sub-projects are Completed
  - i. Construction of Elevated Expressway Corridor from Jehangir Chowk to Rambagh- Natipora in Srinagar City (100 % Physical progress).
  - ii. Construction of Multi-storied mechanized Parking Facility at KMDA Stand in Srinagar city (Physical progress of 100%).
  - iii. Construction of Storm Water Drainage in the adjoining areas of NH-Bypass in Srinagar (Physical progress of 100%).
  - iv. Procurement of Works for Up gradation and Upliftment of existing drainage pumping stations in Srinagar City (Lot A & B: Pumping Stations of left/ right Bank of River Jhelum). Physical progress: Lot-A: 100% and Lot-B: 100%.
  - 9. In Jammu, construction work for following six sub-projects are complete:
    - i. Construction of Bikram Chowk Flyover and Widening /Strengthening of Road from Bikram Chowk to Govt. Women's Degree College on Bikram Chowk—Satwari Chowk Road Corridor, Jammu Under Contract Package JKUSDIP Jammu/UT-01 (Physical progress of 100%).
    - ii. Rehabilitation and Channelization of Storm Water Drains at Channi Himmat in Jammu City, Under Contract Package JKUSDIP Jammu/SWD-02 (Physical progress of 100%).



- iii. Construction of Tube wells, Installation Water Supply Rehabilitation Programme (19 Nos, tube well) (lot-1 =12 Nos. & lot-2=7) Under Contract Package JKUSDIP Jammu/ WS-01 (Physical progress of Lot-1: 100% and Lot-2:100%)
- iv. Replacement of Worn-out pipe lines, laying of new pipelines in distribution network and Construction of OHT at Jammu city Under Contract Package JKUSDIP Jammu/ WS-02 (Physical progress of 100%)
- v. Rehabilitation and Channelization of Storm Water drain at Gangyal and Digiana areas in Jammu City JKUSDIP Jammu / SWD-01 (Physical progress of 100%).
- vi. Replacement of Worn-out machineries and electrical equipment including essential civil works in Tube wells and Central Pumping Station (CPS) at Jammu City Water Supply Rehabilitation Programme under Contract Package JKUSDIP Jammu / WS 03 Physical progress of 100%).

## 1.6. Any other information useful for assessing environmental performance of the project:

#### **Institutional Arrangement:**

10. A full-fledged safeguard section has been created in the PMU to facilitate the implementation of the safeguards policy, headed by Director Safeguards, who is responsible for providing overall guidance. This position is always held by a Chief Engineer ranked officer of the GoJK. Currently two environmental experts - one each at Jammu and Srinagar are working in PMU under Director Safeguards. Mr. Yadullah Shah is currently working as Environmental Expert, Srinagar (Mob. 9419063525) and Mr. Charanjeet Singh as Environmental Expert, Jammu (Mob. 9419893392). However, one Social expert is looking after both the regions. Usually the PMC and the DSC of the project has position of the environmental experts, who are mobilized on intermittent basis assisted by full-time environmental support staff. The contractual tenure of Project Management Consultancy (PMC) was over in Sept 2017, since then no PMC service is available for the projects. The DSC in Srinagar region has a fulltime support staff to look after the environmental related issues. As for the DSC in Jammu, it is working with minimum staff and currently no environmental staff is available in it.

#### Public consultation and grievance redressal:

- 11. Public consultation has evolved as a useful tool in addressing the issues and rectification of the same wherever possible. The public consultation is the ongoing and continuous process, which is conducted on regular basis in Srinagar and Jammu subprojects under execution, with local residents to ensure that they are fully engaged in the project and have the opportunity to participate in its implementation. Formal consultation as well as adhoc regular discussions with the local residents which forms part of the meaningful public consultation process.
- 12. Communication with the local residents is always open and views of the residents are taken into consideration during planning of the work programs under JKUSDIP, so that the people suffer least disturbance and inconvenience as the work is executed.
- 13. Various common issues were discussed during formal consultation which includes:
  - a) Removal of surplus and waste material



- b) Restoration of roads and lanes
- c) Inconvenience with regard to access disruption
- d) Dust and noise problems faced during execution of work
- e) Use of proper barricading to ensure the safety of public and workers.
- 14. Mitigation measures discussed during formal consultation includes:
  - i. Clearing passageways and roads of surplus waste material on priority
  - ii. Speedy restoration of all the utilities
  - iii. Simultaneous road restorations after execution of work
  - iv. Provision of alternate access routes till restoration is achieved
  - v. Using appropriate dust suppression measures and proper noise/air monitoring. Frequent water sprinkling and removal of left over soil arising due to the excavation activities.
  - vi. Barricading of the site under construction to ensure safety of pedestrians etc..

#### **Grievance Redressal Mechanism**

- 15. Project specific redressal of grievances is handled by the ERA and in this regard an efficient "Grievance Redressal Mechanism" as agreed with ADB in IEEs of tranche 2 projects has been kept in place that assist the affected persons in resolving queries and complaints. The Grievance Redressal Mechanism have following approach:
  - If the affected person has any complaint or grievance, he/she is free to lodge his/her complaint with the Project Manager, PIU, JKUSDIP, ERA who will make efforts to address the complaint on ground level itself. The Project Manager will make efforts to redress the grievance within 1 week from the receipt of the grievance.
  - In case the affected person is not satisfied or his grievance is not redressed he can take the matter to Director Central/ Safeguards who will ensure that grievance is redressed within 2 weeks.
  - If Director Safeguards cannot resolve the compliant or the affected person is not satisfied with resolution/ decision, he/she can take the matter to the Chief Executive Officer of ERA.
  - Affected persons, at any moment of time are free to approach the court of law at their own will and expenses.
- 16. Besides the grievance redressal mechanism of the subproject, state has online grievance monitoring system known as Awaz-e-Awam' through which affected persons can also lodge their complaints. The affected persons can also lodge their complaints online at <a href="http://www.ikgrievance..in">http://www.ikgrievance..in</a>. and is linked with the official website of the ERA.
- Apart from the above detailed mechanism for the grievances received at the level of ERA, the provision is already kept in the EMP of the subprojects wherein the contractor will depute one Environmental Safeguard Officer who shall be responsible for implementation EMP. reporting and grievance redressal on day-to-day grievances/complaints received at the level of contractor shall be recorded on the Complaints Register and the same shall be forwarded to the DSC (Engineer of the Contract) within 48 hours along with the details of action taken to redress the grievance. The Team Leader of DSC shall immediately try to resolve the issues and forward the details to the Project Manager of PIU. If the action taken by Contractor and DSC is found to be inadequate, then necessary instructions shall be issued by the Project Manager, PIU for implementation of rectification measures. Project Manager PIU shall report the matter to Director Safeguards along with the details on action taken. In order to facilitate the public in general to approach the authorities in case of grievances/complaints,



information boards with contact details of Contractor, Team Leader of DSC, Assistant Project Manager of PIU, Deputy Project Manager of PIU and Project Manager of PIU shall be displayed at all the sub-project sites.

#### **Information Disclosure**

18. Electronic version of this "Semi-Annual Environmental Monitoring Report (SAEMR)" will be placed/ uploaded in the official website of the PMU-JKERA immediately after approval of the SAEMR by ADB.



#### 2. COMPLIANCE STATUS WITH NATIONAL /STATE /LOCAL STATUTORY ENVIRONMENTAL REQUIREMENTS

19. **Table-1:**Status of statutory environmental requirements is shown in the following table:

S. N.	Name of Sub- project	Statutory Environmental Requirements	Status of Compliance	Actions Required
Srina	gar			
1.	Construction of Flyover/Expressway Corridor from Jehangir Chowk to Rambagh–Natipora in Srinagar.	Environmental clearance under EIA Notification, 2006.	Not Required.	Sub project completed
		Approval for tree cutting	Permission obtained from the concerned authority PIU for cutting of 13 no's Chinar trees (all trees cleared by concerned department)	
		Consent to establish/ operate Batch Mix Plant	Batch Mix Plant: 2 No's installed at Kralpora, Budgam.  Consent to Establish details:  • 60 RDK of 2013 Dated: 30/10/2013 (Capacity-216000 m³/A)  • 61 RDK of 2013 Dated: 30/10/2013 (Capacity-216000 m³/A)  Consent to Operate details: (Old Consents)  • 108 RDK of 2014 Dated: 29/03/2014 (Capacity-216000 m³/A)  • 112 of RDK of 2014 Dated: 29/03/2014 (Capacity-216000 m³/A)  Consent to Operate details: (Consents-2015/2016)	



Consent to operate for stone crusher	<ul> <li>172 of 2015 Dated: 10/11/2015 (Capacity-216000 m³/A each) Valid upto March 2016</li> <li>Consent to Operate details: (New Renewed Consents-2016/2017)</li> <li>24 RDK of 2016 Dated: 05/07/2016 (Capacity-216000 m³/A) Valid upto 04/07/2017.</li> <li>25 RDK of 2016 Dated: 05/07/2016 (Capacity-216000 m³/A) Valid upto 05/07/2017</li> <li>Consent to Operate details: (Consents-2017/2018)</li> <li>Contractor has Submitted Consent to operate 2 no of batching plants Vide Consent No 61/ldk of 287 dated 21/12/2017 valid till 21/12/2018</li> <li>Stone Crusher Plant (Outsourced):</li> <li>Contractor has submitted consent to operate Stone Crusher certificates and are valid till May 2019</li> <li>The stone aggregate material is being procured from approved Stone Crusher Plant.</li> </ul>	
Consent to establish & operate Hot Mix Plant	Submitted vide consent no 578 of SPCB /Digital/1806126713 of 2018 dated 03/2018 valid till 2021	
Consent to establish and operate DG Sets	D.G Sets: Consent of Operate (Old Consents):  • 109 RDK of 2014 Dated: 29/03/2014 (1 No-125KVA)  • 110 RD of 2014 Dated: 29/03/2014 (1 No- 82.5 KVA)  • 111 RDK of 2014 dated: 29/03/2014 (1 No- 250 KVA)  • 97 of 2014 Dated: 22/05/2014 (2 No's- 125 & 82.5 KVA)	



Consent of Operate (New Renewed Consents for 7 no's submitted): • 173 of2015(250 KVA) • 174 of 2015 (125 KVA) • 175 of 2015(200, 62.5 & 40 KVA) • 176 of 2015 (250 KVA) • 177 of 2015(125 KVA) New Renewed DG Consents to Operate (2017) 8 No submitted • 26 RDK of 2016 (2 No. DG Sets- 125 KVA & 125 KVA) • 27 RDK of 2016 (1No. DG Set- 250 KVA) • 28 RDK of 2016 (2 No. DG Sets-200 KVA & 40 KVA) • 29 RDK of 2016 (3 No. DG Sets- 125 KVA, 75 & 40 KVA) Consent to Operate (Consents submitted for 10 no DG sets- 2018: Vide consent no 63 & 64 RPK of 2017 dated 21/12/2017 Valid up to 21/12/2018 for following capacity DG sets • 75 KVA • 40 KVA • 250 KVA • 200 KVA • 125 KVA (6 No's) PUC certificates for Submitted by the contractor contractor's vehicles.



2.	storied mechanized parking facility on M A Road near LalChowk Srinagar.  Approval for tree cutting Consent to establish/operate Stone Crusher Plant from SPCB Consent to establish/operate for Batching Plant Consent to establish/operate DG Sets from		No clearance was required for the subproject  Subproject Completed	
3.	Construction of Surface Water Drainage System in	SPCB. PUC certificates for contractor's vehicles. Environmental clearance under EIA Notification, 2006.	Not Required.	
	Athwajan catchment	Approval for tree cutting.	Not required	Sub project Completed
	on national Highway Bypass at Srinagar.	Consent to operate for Stone Crusher Plant from SPCB.		



		Consent to operate for	HMM Plant	
		HMM Plant from SPCB.	Consent to Operate: (Old) Consent No: 1593 of 2015, Valid up to January	
			2016 Consent to Operate: (Renewed-New)	
			Consent No: 300 of 2016, Dated: 20-05-2016 Valid up to April 2018	
			New renewed consent to operate submitted: SPCB/Digital/1906706329 of 2019 Dated: 25/02/2019 Valid till: 2023	
		Consent to establish/ operate DG Sets from SPCB.	D.G operated by the contractor during the reporting period falls in white category	
		PUC certificates for contractor's vehicles.	Submitted by the Contractor.	
4.	Procurement of Works for Up gradation and Upliftment of existing drainage pumping stations in Srinagar City (Lot A & B:	Stone Crusher Plants	Stone aggregate material is being procured from approved Stone Crusher Plants. Consent to Operate: Consent No. 1147/7/C/91/3571-74 Dated: 29/9/2016 Valid till June 2017	Sub Projects Completed
	Pumping Stations of left/ right Bank of River Jhelum)		Fresh Consents submitted Consent No.: 508 of 2016 dated 27/08/2016 valid up to October 2019	
		PUC Certificates for Contractor's Vehicle	Submitted by the contractor	
Ja	mmu			
5.	Construction of Bikram Chowk Flyover and Widening/		Approval for tree cutting obtained from the concerned department.	



	Strengthening of Road from BikramChowk to Govt. Women's Degree College on Bikram Chowk – Satwari Chowk Road Corridor, Jammu Under Contract Package JKUSDIP Jammu/UT-01	Consent to establish and operate stone crusher	Stone aggregate material is being procured from approved Stone Crusher Plant. Copy of consent certificate from utility owner obtained and submitted by contractor.  Consent to operate (Renewal):  Consent No. 212 of 2016 Dated: 30-04-2016 valid up to November 2016.	Subproject Completed
		Consent to establish and operate concrete batching plant	Consents to Establish / Operate (Old Consents) Consent no: 190 of 2014 dated 05-03-2014 valid upto March 4, 2015. Consent to Operate: (Fresh Renewed Consents submitted) Consent No. 721 of 2015 Dated: 11/07/2015 valid upto February 2018	
		Consent of D.G. set	Contractor using 4 DG Sets- (Obtained and submitted by the Contractor.)  To establish / operate DG Sets: Consent No. 191 of 2014 Dated 05-03-2014 valid upto March 4, 2017.  •35KVA (1 No.) Consent No. 722 of 2015 Dated: 11-07-2015 valid upto 10-07-2016  • 20 KVA (1 No.)  • 25 KVA (1 No.)  • 65 KVA (1 No.)	
		PUC certificates for contractor's vehicles	Stands submitted by the Contractor.	
6.	Rehabilitation and Channelization of Storm	Approval for tree cutting.	Approval for tree cutting obtained from the concerned department.	Subproject Completed



	Water Drains at Consent to establish and operate stone crusher Contract Package JKUSDIP Jammu/SWD-02		Stone aggregate material is being procured from approved Stone Crusher Plant.  Consent to Operate (Old Consent- 2015): Consent No. 1563 of 2014, Dated 24-03-2014.  Consent to Operate (Old Consent- 2016): Consent No. 212 of 2016 Dated: 30-04-2016 Valid upto November 2016.  Consent to Operate (New Renewed Consent- 2017): Consent No. 212 of 2016 Dated: 04-04-2016 Valid up to March 2017.	
		PUC certificates for contractor's vehicles.	Obtained and submitted by the contractor	
7.	Construction of Tube	Approval for tree cutting	Cutting of Forest tree or any other schedule tree not required	
	wells, Installation Water Supply Rehabilitation Programme (19 Nos, tube well) (lot-1 = 12 Nos. & lot-2=7) Under Contract Package JKUSDIP Jammu/ WS-01	Consent to establish and operate stone crusher	Stone aggregate material is being procured from approved Stone Crusher Plant.  Consent to Operate (Old): Consent No: 110 of 2015 Dated: 18/04/2015 Validity upto March 2016.  Consent to Operate (Renewed): Consent No: 14 of 2016, Dated: 04-04-2016 - Validity: Mar. 2017	Subproject Completed.
		PUC certificates for contractor's vehicles	Stands submitted by the Contractor	
8.	Replacement of Worn- out pipe lines, laying of new pipelines in distribution network	Approval for tree cutting	Cutting of Forest tree or any other schedule tree not required	Subproject Completed.



	and Construction of OHT at Jammu city Under Contract Package JKUSDIP Jammu/ WS-02	Consent to establish and operate stone crusher  PUC certificates for contractor's vehicles	Stone aggregate material is being procured from approved Stone Crusher Plant.  Consent to Operate (Old): Consent No: 110 of 2015 Dated: 18/04/2015 Validity upto March 2016  Consent to Operate (CTO) (Renewed): Consent No: 223 of 2016 Dated: 30-04-2016 Validity upto March 2019 Obtained and submitted by the Contractor.	
9.	Rehabilitation and Channelization of Storm Water drain at Gangyal and Digiana areas in Jammu City JKUSDIP Jammu/	Approval for tree cutting  Consent to establish and operate stone crusher	Cutting of Forest tree or any other Schedule tree not required.  Stone aggregate material is being procured from approved Stone Crusher plant.  Consent to Operate: (Old)  Consent No. 179 of 2014 Dated: 15-12-2014 Valid upto 14-12- 2015.  Consent to Operate: (Renewed)  Consent No. 170 of 2016 Dated: 30-04-2016 Valid upto March 2017.	Subproject Completed.
	SWD-01	Consent to establish and operate for Batch Mixplant	Consent to Establish/Operate (Old Consent): Consent No. 1317 of 2014 Dated: 18-11-2014 Valid upto 17-11-2015.  Consent to Operate (Renewed): Consent No. 1673 of 2015 Dated: 29-12-2015 Valid upto: November 2016	



		Consent of D.G set.	Consent to Operate (New Renewed- 2017-18): Consent No. 619 of 2017 Dated: 19-01-2017 Valid upto: March, 2018 Consents to establish / operate of DG Sets obtained from SPCB and submitted by the Contractor. D.G set (125 KVA) — Consent No: 1674 of 2015 Dated: 29/12/2015 Valid upto: Dec. 2016.	
		PUC certificates for contractor's vehicles	Stands submitted by the Contractor	
10.	out machineries and electrical equipment including essential civil works in Tube wells and Central Pumping Station (CPS) at Jammu City Water Supply Rehabilitation	Approval for tree cutting	Cutting of Forest tree or any other schedule tree not required	
		Consent to establish and operate stone crusher	Stone aggregate material is being procured from approved Stone Crusher plant. Consent to Operate: Consent No. 229 of 2016 Dated: 30-04-2016 Valid upto March 2017.	Subproject Completed
	Programme under Contract Package JKUSDIP Jammu / WS – 03.	PUC certificates for contractor's vehicles	Stands submitted by the contractor	



# 3. Compliance Status with the Environmental Covenants as Stipulated in the Loan Agreement

20. Table-2: The status of compliance with environmental loan covenants of Tranche-2 is presented below;

Loan Covenants	Compliance status
The Borrower shall ensure, or cause the EA to en	sure that;
the preparation, design, construction, implementation, operation and decommissioning of the project, and all subproject facilities comply with; (i)all applicable laws and regulations of the Borrower and the State relating to environment, health, safety; (ii) the Environmental Safeguards;(iii) EARF; and (iv) all measures and requirements set forth in the respective IEE and EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	Being complied with.
All bidding documents and contracts for Works contain provisions that require contractors to:- Comply with the measures and requirements relevant to the contractor set forth in the IEE and EMP; and any corrective or preventive actions set out in a Safeguards Monitoring Report.	The bidding documents and contract agreements for work are incorporated with the provisions set forth in the IEE and EMP and are being complied with.
Make available a budget for all such environmental measures.	Environmental monitoring and mitigation costs allocated/ incorporated in contract agreements.
Provide the EA with a written notice of any unanticipated environmental impacts that arise during construction, implementation or operation of the project that were not considered in the IEE and in the EMP.	Being complied with
Adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction.	The existing condition of roads and other infrastructure has been recorded in the form of photographs and video recording as well.
Fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.	All the areas that if disturbed by construction activities will be cleared and restored to preproject condition.
Submit semi-annual Safeguards Monitoring to ADB and disclose relevant information from such reports to affected persons promptly upon submission;	Semi-annual reports are prepared and submitted to ADB as per the guidelines.
If any unanticipated environmental risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE and EMP as applicable, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;	In case of any unanticipated environmental risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE and EMP as applicable that shall be immediately informed to ADB with detailed description of the event and proposed corrective action plan.
Report any breach of compliance with the measures and requirements set forth in the EMP, promptly after becoming aware of the breach.	Breach will be reported to ADB immediately after becoming aware of it.



# 4. COMPLIANCE STATUS WITH ENVIRONMENTAL MANAGEMENT AND MONITORING PLANS AS STIPULATED IN THE ENVIRONMENTAL DOCUMENTATION AS AGREED WITH ADB.

21. **Table-3:** The compliance status with environmental management and monitoring plan is shown in the following table;

S. No	Sub-project Name <sup>1</sup>	EMP Part of Contract Documents	EMP Being Implemented	Appointment of the Environmental Safeguards Officer (ESO)/ Safety Engineer by Contractor	Status of EMP Implementation	Actions Proposed/ Additional Corrective Measures Required
		(Yes/No)	(Yes/No)	(Yes/No)	(Excellent/ Satisfactory/ Partially Satisfactory/ Below Satisfaction)	
1.	Construction of Flyover/ Expressway Corridor from Jehangir Chowk to Rambagh - Natipora in Srinagar.	Yes	Yes	Yes Er.Owais Mir Er. Budev Kyal Buwinder Singh Santosh Kumar Razik Khan Ranbir Kumar Pandit	Satisfactory	Subproject Completed
2.	Construction of Multi-storied mechanized parking facility on M A Road near Lal Chowk Srinagar.	Yes	Yes		Subproject Completed	

 $<sup>^{\</sup>rm 1}$  The photographs of completed contract packages appended at appendix 5.



3.	Construction of Surface Water Drainage System in Athwajan catchment on national Highway Bypass at Srinagar.	Yes	Yes	Yes Mr. Syed Umer Mr. Afaq Ahmad <sup>2</sup> (Till August 2018)	Subproject Completed.
4.	Upgradation and Upliftment of existing drainage pumping stations in Srinagar (Lot A & B)	Yes	Yes	Yes Mrs. Peerzada Masarat Shah	Sub Projeect Completed
Já	ammu.				
5.	Construction of Bikram Chowk Flyover, Jammu	Yes	Yes		Subproject Completed
6.	Rehabilitation and Channelization of Storm Water Drains at Channi-Himmat in Jammu City	Yes	Yes	Subproject Completed	
7.	Rehabilitation and Channelization of Storm Water drain at Gangyal and Digiana areas in Jammu.	Yes	Yes	Subproject Completed	
8.	Construction of Tube wells, Installation Water Supply Rehabilitation Programme (19 Nos, tube well) (lot-1 =12 Nos. & lot-2=7).	Yes	Yes	Subproject Completed	
9	Replacement of Worn-out pipe lines, laying of new pipelines in distribution network and Construction of OHT at Jammu	Yes	Yes		Subproject Completed

<sup>&</sup>lt;sup>2</sup> Environmental Safeguard Officer (ESO) will be immediately mobilized once new contract (for balance work of SWD Athwajan) is awarded for the efficient implementation EMP which also form part of new Contract Agreement.



10.	Replacement of Worn-out machineries and electrical equipment including essential civil works in Tube wells and Central Pumping Station (CPS) at Jammu.	Yes	Yes	Subproject Completed
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## 5. APPROACH AND METHODOLOGY ENGAGED FOR ENVIRONMENTAL MONITORING OF THE PROJECT

- 22. In Srinagar and Jammu City, all sub-projects now stands completed.
- 23. In compliance to Environmental Management Plan (EMP), all the contracting firms had mobilized their designated Environmental Safeguard Officers during the execution of the respective subprojects ensuring EMP implementation at site and reporting thereof. Site visit/ inspections were carried out on regular basis to assess the EMP implementation of Tranche-2 subprojects during execution.

#### 6. MONITORING OF ENVIRONMENTAL RECEPTORS/ ATTRIBUTES

#### 6.1 Monitoring basis:

24. Air quality, water quality and noise levels were required to be monitored to check if any adverse impact is being caused by the construction activities. The monitoring of these variables was carried out in construction areas at sensitive locations within 100m impact zone of the subproject during the construction and post construction phases of the sub-projects.

#### 6.2 Type of environmental receptor/attribute monitored(for each type):

25. The environmental attributes which were monitored included the air, noise and water quality parameters at the construction sites in sub-project corridors. The air quality parameters monitored included RSPM (PM<sub>10</sub>) and (PM<sub>2.5</sub>), SO<sub>2</sub> and NO<sub>2</sub>. The water quality parameters included temperature, pH, electrical conductivity (EC), dissolved oxygen (DO), biochemical oxygen demand (BOD<sub>5</sub>), chemical oxygen demand (COD), total suspended solids (TSS), total dissolved solids (TDS), Turbidity, Total Alkalinity, Total hardness, Calcium Hardness, Magnesium Hardness. In case of noise quality assessment, the day time Leq values were monitored.

## 6.3 Methodology, Regulatory Standards of monitoring and equipment's adopted for Environmental Monitoring Laboratory (EML):

1. **Table-4:** The Assessment Methodology, Acceptable Standards and Equipment's adopted for monitoring:

S.No	Parameters	Assessment Methodology	<sup>3</sup> Acceptable Standards	Cause for rejection	Equipment's in Use
A.	Ambient Air Quali	hodology Adopted			
1.	RSPM–particulate matter PM <sub>10</sub>	Gravimetric High Volume Sampler method (attached with cyclone).	100 μg/m³ 60 μg/m³		Respirable Dust Sampler, Envirotech - APM 460 BL Digital Balance, Schimadzu – BL-220H
2	Fine particulate matter PM <sub>2.5</sub> ,	Gravimetric method. Beta Attenuation	60μg/m³ 40μg/m³		Ambient Fine Dust Sampler, Instrumex-IPM-FDS
3.	SO <sub>2</sub>	Modified West and Gaeke Method.	80 μg/m³		High Volume Air Sampler, Envirotech – APM 460BL. Thermo-electrically cooled gaseous sampling attachment, Envirotech –APM 411TE

<sup>&</sup>lt;sup>3</sup>CPHEEO Manual, MoUD, GOI, May 1999; and MoEF, Act and Rules, 1986 & Amendments 2000

<sup>&</sup>lt;sup>4</sup> National Ambient Air Quality Standards (NAAQS)



					Digital Spectrophotometer, EI-305.			
4.	NO <sub>2</sub>	Modified Jacob & Hochheiser Method.			High Volume Air Sampler, Envirotech – APM 460BL. Thermo-electrically cooled gaseous sampling attachment, Envirotech –APM 411TEDigital Spectrophotometer, El-305.			
B.	<sup>5</sup> Ambient Noise Level							
1.	Residential Area	Direct Reading in Decibel Sound Level Meter.	55dB(A) L <sub>eq</sub> (Day time)		Digital Sound Level Meter, AZ-8928			
2.	Commercial Area	Direct Reading in Decibel Sound Level Meter.	65 dB(A) L <sub>eq</sub> (Day time))		Digital Sound Level Meter, AZ-8928			
C.	<sup>6</sup> Ambient Water Quality <i>(For Drinking / Ground Water)</i>							
1.	Temp (in ºC)	Digital/Mercury Thermometer Method.	>20 °C		Digital/Mercury Thermometer			
2.	Color (Hazen units)	Hazen Method	5 Platinum cobalt scale	25	-			
3.	Taste and Odour		Unobjectionable	Objectionable	-			
4.	pH value	Electrometric Method.	6.5-8.5	>8.5	Digital pH Meter, HANNA – HI98127,			
5.	Electrical Conductivity (EC) µs/cm	Electrometric Method.	≤ 500 µs/cm	1000 μs/cm	Digital TDS/EC Meter, HANNA – HI-96311			
6.	Dissolved Oxygen (DO) mg/l	Winkler's Method Using Azide Modification (APHA 2005)	> 6 mg/l		Winkler's Method			
7.	Total Suspended Solids (TSS) mg/l	Gravimetric (Filtration and Drying at 105°C) APHA 2005	<100 mg/L		Hot Air Oven, Digital Balance, Schimadzu-BL-220H			
8.	Total Dissolved Solids (TDS) mg/l	Digital Meter Method. APHA 2005	_	2000 mg/l	BOD Incubator			
9.	Turbidity (NTU)	Nephelo Turbidity Method. APHA 2005	1mg/l	10 mg/l	Nephelo Turbidity Meter, Systronics – 132			
10.	Total Hardness (as CaCO₃) mg/l	EDTA Titrimetric APHA 2005	300 mg/l	600 mg/l	-			
11.	Total Alkalinity (as CaCO₃) mg/l	Titrimetric (Methyl Orange) APHA 2005	200 mg/l	600 mg/l	•			
12.	Calcium Hardness (Ca) mg/l	EDTA Titrimetric APHA 2005	75 mg/l	200 mg/l	-			
13.	Magnesium Hardness (Mg) mg/l	Calculation from total Hardness and Calcium APHA 2005	30 mg/l	150 mg/l	-			
D.	-	(Treated Leachate (Efflu		rater, dry weather				
1.	Temp	Digital/Mercury	Up to <sup>8</sup> 5°C		Digital/Mercury			

<sup>&</sup>lt;sup>5</sup> Standards specified in the schedule of <u>Noise Pollution (Regulation And Control) Rules, 2000 of Government of India</u> The Principal Rules were published in the Gazette of India, vide S.O. 123(E), dated 14.2.2000 and subsequently amended vide S.O. 1046(E), dated 22.11.2000, S.O. 1088(E), dated 11.10.2002, S.O. 1569 (E), dated 19.09.2006 and S.O. 50 (E) dated 11.01.2010 under the Environment (Protection) Act, 1986.

<sup>&</sup>lt;sup>6</sup> Drinking water Specifications, IS-10500

<sup>&</sup>lt;sup>7</sup> General Standards for Discharge of Environmental Pollutants, Part-A Schedule-VI



	(in <sup>o</sup> C)	Thermometer Method. APHA 2005			Thermometer		
2.	Color (Hazen units) Platinum cobalt scale	APHA 2005	5	25	-		
<i>3</i> .	Odour	Objectionable/ Non- objectionable APHA 2005	Non- objectionable		-		
4.	pH value	Electrometric Method. APHA 2005	5.5-9.2		Digital pH Meter, HANNA – HI98127,		
5.	Electrical Conductivity (EC) μs/cm	Electrometric Method. APHA 2005	< 2000		Digital TDS/EC Meter, HANNA – HI-96311		
6.	Dissolved Oxygen (DO) mg/l	Winkler's Method Using Azide Modification APHA 2005	> 6 mg/L		Winkler's Method (APHA 2005)		
7.	Biochemical Oxygen Demand (BOD₅)mg/l	Five Days BOD method as per APHA 2005	30 mg/l		BOD Incubator		
8.	Chemical Oxygen Demand (COD) m/l	Dichromate Method (APHA 2005)	250 mg/l				
9.	Total Dissolved Solids (TDS) mg/l	Digital Meter Method. APHA 2005	≤500 mg/L	2100 mg/L	Digital TDS/EC Meter, HANNA – HI-96311		
10.	Total Suspended Solids (TSS) mg/l	Gravimetric (Filtration and Drying at 105°C) APHA 2005	<100 mg/L		Hot Air Oven, Digital Balance, Schimadzu-BL-220H		
11.	Turbidity (NTU)	Nephelo Turbidity Method. APHA 2005	5 mg/L	10 mg/L	Nephelo Turbidity Meter, Systronics – 132		
12.	Total Alkalinity (as CaCO₃) mg/l	Titrimetric (Methyl Orange) APHA 2005	200	600			
Ε	Surface Water Quality Standards (IS: 2296) (Class- A,B,C,D,E)						

Annotation: BOD= biochemical oxygen demand; DO= dissolved oxygen; EC= electrical conductivity;  $NO_2$ = nitrogen dioxide;  $PM_{10}$ = particulate matter with particle size less than 10 $\mu$ ; RSPM= respirable suspended particulate matter;  $SO_2$ =Sulphur dioxide; TDS= total dissolved solids; TSS= total suspended solids.

## 6.4 Monitoring results and comparison with statutory requirements at National levels and Baseline Data.

26. As the execution of the all sub-projects was over, no monitoring activity was carried out during the reporting period. The post construction phase monitoring of Jammu based sub-projects was reported and discussed in the last report.

<sup>&</sup>lt;sup>8</sup> The discharge of treated effluent shall not exceed 5°Cabove the receiving water temperature



## 7 ANY OTHER ENVIRONMENTAL ASPECTS, IMPACTS OBSERVED DURING IMPLEMENTATION WHICH WERE NOT COVERED EARLIER

- 27. No such aspect/impacts observed during this period.
  - 8 DETAILS OF COMPLAINTS RECEIVED FROM PUBLIC AND ACTIONS TAKEN THEREOF TO RESOLVE
- 28. No such complaints received during this period.
  - 9 FOLLOW-UP ACTIONS AND CONCLUSIONS
- 29. Environmental monitoring of the sub-projects was carried out regularly during the execution of the Sub-projects. Objective of monitoring was to ensure that environmental impacts are adequately mitigated and compliance with statutory regulations was made as required by laws, loan covenants, safeguard measures. The contractors were regularly guided and instructed to adhere to the provisions of EMP and contractual conditions.

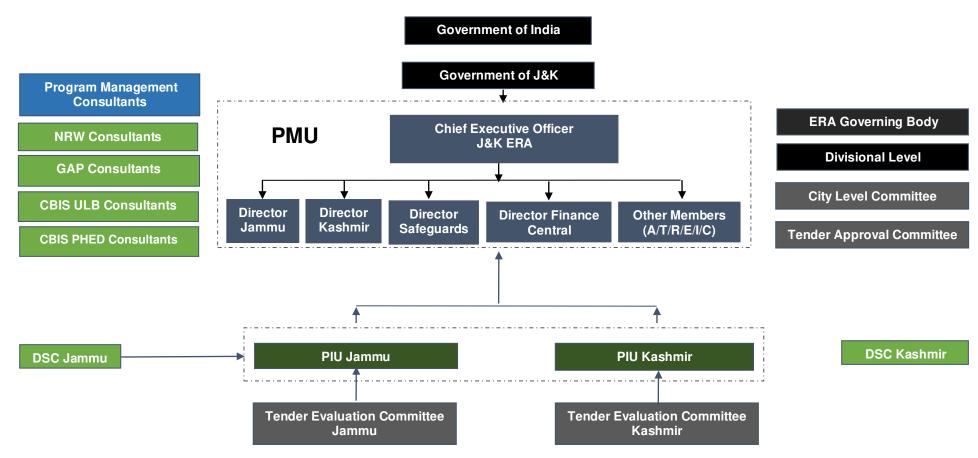
#### Signed by:

Authorized signatory from implementing agency/ executing agency

(Naim Ahmad Naim)
Director Safeguards
J&K ERA



#### **Appendix-1: Institutional Arrangement for the Project Implementation**



ERA= Economic Reconstruction Agency; J&K=Jammu and Kashmir; PIU=Project Implementation Unit; PMU=Project Management Unit; A= Accounts; T= Technical; R= Resettlement; E= Environment; I= Institutional; C= Communications/Public Relation); DSC=Design and Supervision Consultant; NRW=Non-Revenue Water; GAP = Implementation of Gender Action Plan and Community Awareness Program; CBIS ULB =Capacity Building and Institutional Support for SMC and JMC; CBIS PHED =Capacity Building and Institutional Support for PHED



### **Appendix 2- Photographs of completed contract Packages**

## Construction of Bikram Chowk Flyover, Jammu



Landing point at Tawi bridge



In front of Kala Kendra





Takeoff point in front of Women College



Landing point in front of Women College



### Rehabilitation of Storm Water drain at Gangyal areas in Jammu.



Storm Water Drain Thanger Nallah



Storm Water Drain Gangyal Nallah



### **Construction of Tube wells Jammu City**



Tubewell at Malik market, Bathindi



Tubewell at Channi Himmat Sec 2





Tubewell at PHE complex , Channi Himmat



Tubewell at Channi Himmat Sec 1

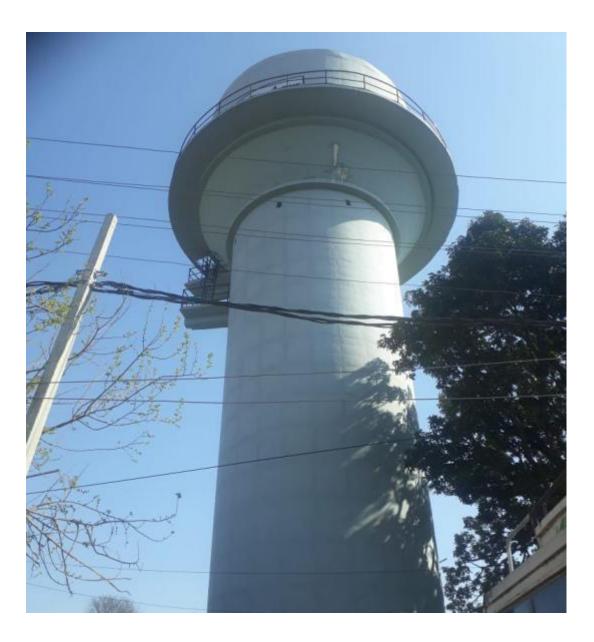


### Replacement of Worn-out pipe lines, and Construction of OHT at Jammu



1.0 lac gallons OHT at Fruit Market





1.0 lac gallons OHT at Dilli





OHT at Gandhi Nagar



Replacement of Worn-out machineries and electrical equipment including essential civil works in Tube wells and Central Pumping Station (CPS) at Jammu.



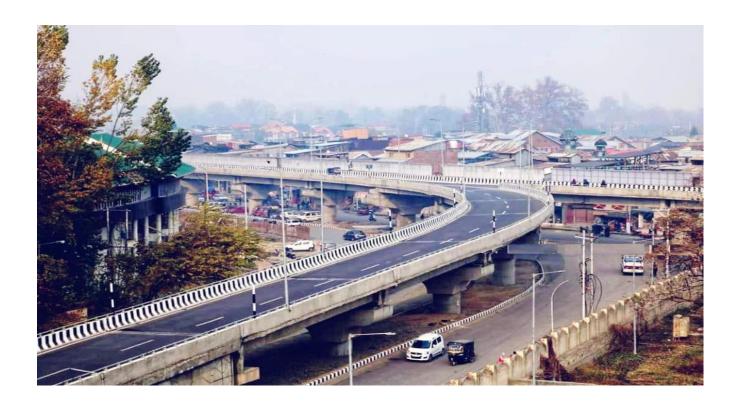


Horizontal Centrifugal pump at Langer

Horizontal Centrifugal pump at Gujjar Nagar



### Constrcution of Jehangir Chowk – Rambagh Flyover at Srinagar Kashmir







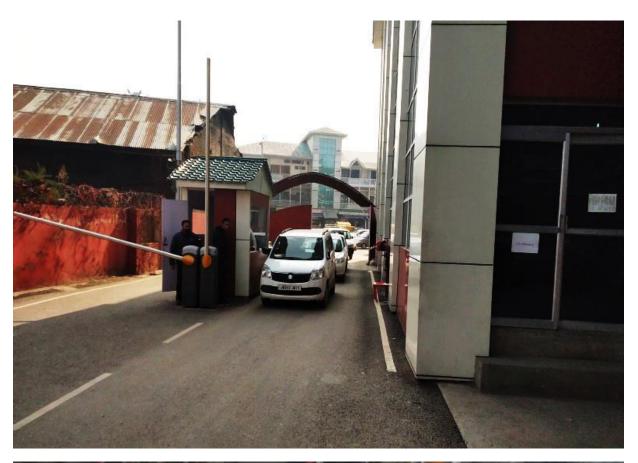


### Construction of Multi-Storied Mechanized Parking Facility on M A Road Near Lal Chowk Srinagar













## Upgradation and Upliftment of Existing Drainage Pumping Stations in Srinagar (Lot A & B)









## Construction of Storm Water Drainage in the adjoining areas of NH-Bypass in Srinagar











## SAUW Semi-Environmental Monitoring Report Review – Information Log

<u>Instructions:</u> Provide information based on SEMR submitted by Project Management Unit (PMU). This log sheet will serve as record of the review findings, comments, and/or further actions. A copy of the SEMR log sheet should be (i) provided to PMU for their record; (ii) attached to the SEMR to be disclosed on ADB website; (iii) used as reference for review of next SEMRs; and (iv) inputted in the SARD Safeguards Compliance Tracking System.

Project title:	IND: Jammu and Kashmir Urban Sector Development Investment Program – Tranche 2							
Loan Number:	2925	Project Number:	41116-033					
Overall Project and Objectives	The proposed JKUSDIP will foster the economic growth in Jammu and Kashmir State. The long-term project objectives are to contribute to the economic development of Jammu and Kashmir through enhanced and sustainable growth in the main urban areas with emphasis on promoting commerce and on improvement of livelihood for the poor.  In Srinagar, there are 3 subprojects (with civil works):  (i) Construction of Elevated Expressway Corridor from Jehangir Chowk to Rambagh- Natipora in Srinagar City; (ii) Construction of Multi-storied mechanized Parking Facility at KMDA Stand in Srinagar city; and (iii) Construction of Storm Water Drainage in the adjoining areas of NH-Bypass in Srinagar.  In Jammu, there are 6 subprojects:							
	<ul> <li>(i) Construction of Bikram Chowk Flyover and Widening /Strengthening of Road from Bikram Chowk to Govt. Women's Degree College on Bikram Chowk–Satwari Chowk Road Corridor, Jammu Under Contract Package JKUSDIP Jammu/UT-01;</li> <li>(ii) Rehabilitation and Channelization of Storm Water Drains at Channi Himmat in Jammu City, Under Contract Package JKUSDIP Jammu/SWD-02;</li> <li>(iii) Construction of Tube wells, Installation Water Supply Rehabilitation Programme (19 Nos, tube well) (lot-1 =12 Nos. &amp; lot-2=7) Under Contract Package JKUSDIP Jammu/ WS-01;</li> <li>(iv) Replacement of Worn-out pipelines, laying of new pipelines in distribution network and Construction of OHT at Jammu city Under Contract Package JKUSDIP Jammu/ WS-02;</li> <li>(v) Rehabilitation and Channelization of Storm Water drain at Gangyal and Digiana areas in Jammu City JKUSDIP Jammu / SWD-01; and</li> <li>(vi) Replacement of Worn-out machineries and electrical equipment including essential civil works in Tube wells and Central Pumping Station (CPS) at Jammu City Water Supply Rehabilitation Programme under Contract Package JKUSDIP Jammu / WS – 03.</li> <li>Note: Loan closing was on 30 May 2017 and financial closing on 8 February 2018. Per submitted SEMR, all subprojects now</li> </ul>							
Annual	stand completed in Srinagar and Jammu City. implementation should still be reported to ADB until the Project Completion Report (PCR) is issued.							
Approved		Category A		Category C				
Categorization	X	Category B	Francisco of Deposition					
Loan Effectivity Date:	19 August 2013		Frequency of Reporting	Semi-annual				
Project Officer	Momoko Tad	a Project Analys	Susai	n Francisco				

Reporting Year	2019	Coverage Period			1st SEMR of the year
				(	2 <sup>nd</sup> SEMR of the year
Date of PMU submission	on to ADB	08 June 2020	Date of ADB's		XX October 2020
			feedback/com	ment to PMU	

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
A. Project Safeguards Team (check	loan agreement and PAM requi	irements)		-
PMU <sup>1</sup>	Two (2) safeguards personnel (environment) are engaged (para 10) under the Director Safeguards: Yadullah Shah – Srinagar Charanjeet Singh – Jammu		None	
PIU <sup>2</sup>	No available information	PAM does not mention any safeguard officer at the PIU level.	None	
Consultants	No PMC services engaged since Sept 2017 (fulltime support provided by DSC)		None	
Others (e.g. auditor, external monitoring team, etc)				
B. Overall Project and Subproject D	Description (summarize number			
Number of Packages with civil works (check if consistent with latest procurement plan)	9 (3 in Srinagar, 6 in Jammu)	Loan closing was 30 May 2017 and financial closing on 08 Feb 2018	Continue submission of SEMR until PCR is issued	
Number of DB/DBO packages and status (see footnote 3)	None		None	
Number of civil works packages and status (see footnote 3)	Srinagar: 3 package – 100% completed  Jammu: 6 packages – 100% completed.		Continue reporting on the progress of the ongoing packages in the SEMR	
IEEs cleared for awarded packages?	Yes	IEEs for all awarded packages are disclosed on ADB website	None	
Safeguard documents disclosed on project website?	Para 18 indicates that electronic versions will be uploaded and made	Previous SEMR available via project website (jkera.org)	None	

PMU – project management unit
 PIU – project implementation unit (For DWSNIP – project coordination units are PIUs
 DB/DBO – design-build or design, build, and operate or where contractor will finalize the detailed engineering design; civil works contract – enough details of the package is known and used as basis for bid/contract's Technical Specification

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
	available on the PMU-			
	JKERA official website after			
OFME: (	ADB approval		D III II I	
SEMR information on package-wise	All subprojects stand		Provide the status of EMP	
implementation phase (bidding, on-	completed in Srinagar and Jammu City.		implementation during the operation and maintenance	
going, construction, completed, under operation, others)	Janinu City.		phase of completed	
dider operation, others)			subprojects.	
C. Status of compliance with statut	orv clearances (check IEE for	the complete list, summarize the		btained/under application and
if obtained, specify validity period)	,		7 7	• •
Environmental Clearance (EC)	Not required	Clear in the EARF and IEEs	None	
		that EC is not required per		
		1994 EIA Notification		
Forest Clearance	None			
No Objection Certificate/Letter	None			
Site location clearance	None			
Permit/Consent to Construct (or	None			
equivalent) Permit/Consent to Operate (or	All subprojects stand		None	
equivalent)	All subprojects stand completed in Srinagar and		None	
equivalent)				
Dood outling a second	Jammu City.			
Road-cutting permit Utilities shifting permit	None required			
Tree-cutting permit	None required Obtained			
Others (specify)	Obtained			
D. Status of Compliance with loan of	Covenants (verify items in SEM	l R with the project's loan agreen	nent)	<u> </u>
EA to ensure the preparation,	Being complied with.	EA shall comply with this for	Continue monitoring of	
design, construction,	Bonig complica mini	all subprojects (partially or	compliance with this loan	
implementation, operation and		fully completed). Monitoring	covenant and report status	
decommissioning of the project, and		should continue until ADB	in the next SEMR.	
all subproject facilities comply with;		issues PCR.		
(i) all applicable laws and				
regulations of the Borrower and the				
State relating to environment,				
health, safety; (ii) the Environmental				
Safeguards;(iii) EARF; and (iv) all				
measures and requirements set forth in the respective IEE and EMP,				
and any corrective or preventative				
actions set forth in a Safeguards				
Monitoring Report.				
EA to ensure all bidding documents	The bidding documents and	All contracts have been	None	
and contracts for Works contain	contract agreements for	issued.		

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
provisions that require contractors to:-  Comply with the measures and requirements relevant to the contractor set forth in the IEE and EMP; and any corrective or preventive actions set out in a Safeguards Monitoring Report.	work are incorporated with the provisions set forth in the IEE and EMP and are being complied with.			
EA to ensure all bidding documents and contracts for Works contain provisions that require contractors to:-  make available a budget for all such environmental measures.	Environmental monitoring and mitigation costs allocated/incorporated in contract agreements.	All contracts have been issued.	None	
EA to ensure all bidding documents and contracts for Works contain provisions that require contractors to:-  provide the EA with a written notice of any unanticipated environmental impacts that arise during construction, implementation or operation of the project that were not considered in the IEE and in the EMP.	Being complied with.	EA shall comply with this for all subprojects (partially or fully completed). Monitoring should continue until ADB issues PCR.	Continue monitoring of compliance with this load covenant and report status in the next SEMR.	
EA to ensure all bidding documents and contracts for Works contain provisions that require contractors to:-  adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction	The existing condition of roads and other infrastructure has been recorded in the form of photographs and video recording as well.	EA shall comply with this for all subprojects (partially or fully completed). Monitoring should continue until ADB issues PCR.	Continue monitoring of compliance with this load covenant and report status in the next SEMR.	
EA to ensure all bidding documents and contracts for Works contain provisions that require contractors to:-	All the areas that if disturbed by construction activities will be cleared and restored to pre-project condition.	EA shall comply with this for all subprojects (partially or fully completed). Monitoring should continue until ADB issues PCR.	Continue monitoring of compliance with this load covenant and report status in the next SEMR.	

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.				
The Borrower shall ensure or cause the EA to submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission.	Semi-annual reports are prepared and submitted to ADB as per the guidelines.	EA shall comply with this for all subprojects (partially or fully completed). Monitoring should continue until ADB issues PCR.	Continue monitoring of compliance with this load covenant and report status in the next SEMR.	
The Borrower shall ensure or cause the EA to ensure that if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, the RP or the IPP as applicable, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan	In case of any unanticipated environmental risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE and EMP as applicable that shall be immediately informed to ADB with detailed description of the event and proposed corrective action plan.	EA shall comply with this for all subprojects (partially or fully completed). Monitoring should continue until ADB issues PCR.	Continue monitoring of compliance with this load covenant and report status in the next SEMR.	
The Borrower shall ensure or cause the EA to report any breach of compliance with the measures and requirements set forth in the EMP, the RP or the IPP promptly after becoming aware of the breach.	Breach will be reported to ADB immediately after becoming aware of it.	EA shall comply with this for all subprojects (partially or fully completed). Monitoring should continue until ADB issues PCR.	Continue monitoring of compliance with this load covenant and report status in the next SEMR.	
E. Contractors Compliance with En				
Appointment of Environment, Health and Safety (HSE) and/or nodal person	Environmental Safeguards Officer (ESO) / Safety Engineer appointees are identified in para 21 Table 3	IEEs state that Contractor has responsibility to appoint its own full-time environmental safeguards officer.	None	
Submission of site-specific EMPs	None required	This has not been required in the loan agreement, PAM or IEEs.	None	
Submission of SEMP implementation report (specify in comments frequency – daily, weekly, monthly or quarterly basis)	None required	This has not been required in the loan agreement, PAM or IEEs.	None	
Site verification by PMU, PIU, or consultants (verification report	All subprojects stand completed in Srinagar and	Full verification report should be attached to support the	None	

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
should be attached to the SEMR)	Jammu City.	results of the environmental monitoring activities and sampling done.	Action, o Hoganica	noopenee by 1 me
SEMR compliance matrix on mitigation measures implementation (matrixes are based on approved SEMPs)	All subprojects stand completed in Srinagar and Jammu City.		None	
Other information			-	
F. Environmental Monitoring based	on EMP			
Rationale	No information provided			
Parameters to be monitored are commensurate to the impacts, mitigation measures, and project/subproject/package	As the execution of the all sub-projects was over, no monitoring activity was carried out during the reporting period. The post construction phase monitoring of Jammu based sub-projects was reported and discussed in the last report.	Complies with parameters in the IEEs.	None	
Sampling locations identified and appropriate	Sampling locations provided and appropriate		Continue monitoring until ADB issues PCR	
Sampling frequency identified and appropriate	One sampling for each identified location during the reporting period.			
Sampling collection and analysis are in accordance with internationally-accepted practices	Sampling collection and analyses are based on national standards.	This is consistent with the provision in the IEEs and EMPs.	Continue monitoring of compliance with the method of analysis and samples collected. Include certificates of laboratory analyses.	
Standards and performance indicators are compliant with ADB SPS requirements <sup>4</sup> (provide justification if less stringent standards are used)	Standards are presented in the SEMR.	It is clear in the documents that the project will comply with the national standards.	Continue monitoring of compliance with the method of analysis and samples collected. Include certificates of laboratory analyses.	
G. Environmental monitoring result		ed results)		
Visual inspection (refer to EMP tables in the IEE where visual	Not provided			

<sup>4</sup> ADB SPS (Appendix 1 para 33) requires projects to apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines (<a href="https://www.ifc.org/ehsguidelines">https://www.ifc.org/ehsguidelines</a>). These standards contain performance levels and measures that are normally acceptable and applicable to projects. When host country regulations differ from these levels and measures, the borrower/client will achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project circumstances, the borrower/client will provide full and detailed justification for any proposed alternatives that are consistent with the requirements presented ADB SPS.

Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
inspections are required to determine if there are environmental impacts)				
Air quality results	As the execution of the all sub-projects was over, no monitoring activity was carried out during the reporting period. The post construction phase monitoring of Jammu based sub-projects was reported and discussed in the last report.		None	
Water quality results	As the execution of the all sub-projects was over, no monitoring activity was carried out during the reporting period. The post construction phase monitoring of Jammu based sub-projects was reported and discussed in the last report.		None	
Noise level results	As the execution of the all sub-projects was over, no monitoring activity was carried out during the reporting period. The post construction phase monitoring of Jammu based sub-projects was reported and discussed in the last report.		None	
Others				
H. Consultations and/or FGDs during				
Number	0		N	
Reason/s for consultations/FGDs	No FGDs or consultations conducted		None	
Number of participants	No FGDs or consultations conducted		None	
Number of <b>female</b> participants	No FGDs or consultations conducted		None	-

Litarings Workshops, Seminars during the reporting period   None	Item	Findings in the SEMR	Comments	Action/s Required	Response by PMU
Number   No trainings conducted   None   Number of participants   No trainings conducted   None    J. Grievance Redress Mechanism  GRM notified via publication or notice boards   GRM members identified   No information provided   GRM members identified   No information provided   GRM members have capacity to address project-related complaints (detailed information as required in the SEMR)   GRM members have capacity to address project-related complaints (detailed information as required in the SEMR)   GRM members have capacity to address project-related complaints (detailed information on capacity development of GRM members such as trainings, workshops, briefings, etc should be attached in the SEMR]   Number of meetings conducted (attach minutes of the meeting)   Number of meetings conducted (attach minutes of the meeting)   Number of meetings conducted (attach minutes of the meeting)   Number of complaints   None   Number of complaints   None   None   None   Number of complaints   None   None   None   Nature (provide summary of   None   None					
Number of participants   No trainings conducted   None				None	
Number of female participants  J. Grievance Redress Mechanism  GRM per PAM or IEE/EARF established  GRM notified via publication or notice boards  GRM members identified  No information provided  GRM members identified  No information provided  GRM members have capacity to address project-related complaints (detailed information provided and trainings, workshops, briefings et c should be attached in the SEMR)  Well pament of the meeting workshops, briefings et c should be attached in the SEMR)  No information provided  R. Complaints Received (detailed information on nature of complaints, summary and status of resolution)  No information in No information on nature of complaints, summary and status of resolution)  No information in No information on nature of complaints, summary and status of resolution)  Number of complaints  No information on nature of complaints, summary and status of resolution)  Number of complaints  No information on nature of complaints, summary and status of resolution)  Number of complaints  No information on nature of complaints, summary and status of resolution)  None	Topics	No trainings conducted		None	
J. Carevance Redriess Mechanism GRM per PAM or IEE/EARF established State has online grievance system "Awaz-e-Awam" Complainants file complaints online via online on nature online on nature on companite online via online	Number of participants	No trainings conducted		None	
J. Grevance Redress Mechanism GRIM per PAM or IEE/EARF established Sustem "Awaz-e-Awam" Complainants file complaints onlice boards  GRIM molified via publication or online via http://www.lkgrievance.in  GRIM members identified  No information provided  Remarks file information is requested to be included in this ESEMR Please include details on GRIM members have capacity to address project-related complaints (detailed information or provided  GRIM members have capacity to address project-related complaints (detailed information or provided  GRIM members have capacity to address project-related complaints (detailed information or provided  GRIM members bave capacity to address project-related complaints (detailed information on capacity development of GRIM members such as trainings, workshops, breifings, etc should be attached in the SEMR) Please include details on GRIM members because the secure attack of the meetings conducted (attach minutes of the meeting)  Number of meetings conducted (attach minutes of the meeting)  K. Complaints Received (detailed information on nature of complaints, summary and status of resolution)  Number of complaints None mentioned  No None  N	Number of <b>female</b> participants	No trainings conducted		None	
established system "Awaz-e-Awam" GRM notified via publication or notice boards  GRM members identified  No information provided  Regular members identified  No information provided  Regular members in the system	J. Grievance Redress Mechanism				
GRM members identified  GRM members identified  No information provided  No information provided  Regression of the via private and in the state of the meeting of the meeting of the meeting of the meeting of the state of the meeting of	GRM per PAM or IEE/EARF	State has online grievance		None	
online via http://www.jkgrievance.in  GRM members identified  No information provided  No information provided  Ref previous SEMR, this information is requected to encuded in this SEMRI, Please include details on GRM members to ensure that grievances can be addressed as described.  GRM members have capacity to address project-related complaints (detailed information on pagaity development of GRM members such as trainings, workshops, briefings, etc should be attached in the SEMR)  Number of meetings conducted (attach minutes of the meeting)  Number of meetings conducted (attach minutes of the meeting)  No information on nature of complaints, summary and status of resolution)  Number of complaints Received (detailed information on nature of complaints, summary and status of resolution)  Number of complaints Received (detailed information on nature of complaints, summary and status of resolution)  Number of complaints Received (detailed information on nature of complaints, summary and status of resolution)  None	established	system "Awaz-e-Awam"			
http://www.jkgrievance.in				None	
GRM members identified  No information provided  Reprevious SEMR, this information is requised to be included in this SEMR. Please include details on GRM members to ensure that grievances can be addressed as described.  GRM members have capacity to address project-related complaints (detailed information on capacity development of GRM members such as trainings, workshops, briefings, etc should be attached in the SEMR)  Number of meetings conducted (attach minutes of the meeting)  Number of meetings conducted (attach minutes of the meeting)  K. Complaints Received (detailed information on nature of complaints, summary and status of resolution)  Number of complaints  None  None	notice boards				
Information is requested to be included in this SEMR Please include details on GFM members to ensure that grievances can be addressed as described.  GRM members have capacity to address project-related complaints (detailed information on capacity development of GFM members such as trainings, workshops, briefings, etc should be attached in the SEMR)  Number of meetings conducted (attach minutes of the meeting)  K. Complaints Received (detailed information on nature of complaints, summary and status of resolution)  Number of complaints  None mentioned  None mentioned  None					
GRM members have capacity to address project-related complaints (detailed information on capacity development of GRM members such as trainings, workshops, briefings, etc should be attached in the SEMR)  Number of meetings conducted (attach minutes of the meeting)  Number of complaints Number of summary of issues/concerns)  Status of resolution  Na  L. Summary of Issues and Corrective Actions  Major issues/concerns (specify)  None	GRM members identified	No information provided		information is requested to be included in this SEMR. Please include details on GRM members to ensure that grievances can be	
Number of meetings conducted (attach minutes of the meeting)  K. Complaints Received (detailed information on nature of complaints, summary and status of resolution)  Number of complaints None mentioned Nature (provide summary of issues/concerns)  Status of resolution NA  L. Summary of Issues and Corrective Actions  Major issues/concerns (specify) None  Corrective Action to be implemented, timeline, responsible person/s, and budget are clearly specified  M. Status of Corrective Action Plan from Previous Reporting Period (list all and provide status)  N. Appendixes	address project-related complaints (detailed information on capacity development of GRM members such as trainings, workshops, briefings,	No information provided		information is requested to be included in this SEMR. Please include details on GRM members to ensure that grievances can be	
K. Complaints Received (detailed information on nature of complaints, summary and status of resolution)  Number of complaints None mentioned Nature (provide summary of issues/concerns)  Status of resolution L. Summary of Issues and Corrective Actions  Major issues/concerns (specify) None  Corrective Action to be implemented, timeline, responsible person/s, and budget are clearly specified M. Status of Corrective Action Plan from Previous Reporting Period (list all and provide status)  N. Appendixes		No information provided		Record meetings conducted on GRM and minutes of the	
Number of complaints None mentioned Nature (provide summary of issues/concerns) Status of resolution NA L. Summary of Issues and Corrective Actions Major issues/concerns (specify) None  Corrective Action to be implemented, timeline, responsible person/s, and budget are clearly specified M. Status of Corrective Action Plan from Previous Reporting Period (list all and provide status)  N. Appendixes	K. Complaints Received (detailed in	formation on nature of complaints	s, summary and status of reso		
Nature (provide summary of issues/concerns)  Status of resolution  L. Summary of Issues and Corrective Actions  Major issues/concerns (specify)  None  Corrective Action to be implemented, timeline, responsible person/s, and budget are clearly specified  M. Status of Corrective Action Plan from Previous Reporting Period (list all and provide status)  N. Appendixes			, , , , , , , , , , , , , , , , , , , ,		
L. Summary of Issues and Corrective Actions  Major issues/concerns (specify)  Corrective Action to be implemented, timeline, responsible person/s, and budget are clearly specified  M. Status of Corrective Action Plan from Previous Reporting Period (list all and provide status)  N. Appendixes		NA			
Major issues/concerns (specify)  Corrective Action to be implemented, timeline, responsible person/s, and budget are clearly specified  M. Status of Corrective Action Plan from Previous Reporting Period (list all and provide status)  N. Appendixes	Status of resolution	NA			
Corrective Action to be implemented, timeline, responsible person/s, and budget are clearly specified  M. Status of Corrective Action Plan from Previous Reporting Period (list all and provide status)  N. Appendixes	L. Summary of Issues and Corrective	ve Actions			
implemented, timeline, responsible person/s, and budget are clearly specified  M. Status of Corrective Action Plan from Previous Reporting Period (list all and provide status)  N. Appendixes	Major issues/concerns (specify)	None			
N. Appendixes	implemented, timeline, responsible person/s, and budget are clearly specified				
	M. Status of Corrective Action Plan	trom Previous Reporting Perio	od (list all and provide status	<mark>S)</mark>	
	N. Appendixes				
The completed contact	Photos included?	Yes – completed contact		Suggestion: Provide the date	

Item	Findings in	the SEMR	Comments	Action/s Required	Response by PMU
	packages			on when the photos were taken for proper documentation.	
Summary of consultations included?	No consultation	ns conducted			
Copies of environmental clearances and permits included?	No				
Site EMPs (attach sample?)	Not required				
Checklists?	No				
Others					
O. Review and clearance for disclos	sure				
Reference					
Status/Remarks		1. Report clear	ed for disclosure in the ADB v	website	