



Environmental Monitoring Report

Project Number: 40031-023 & 40031-033
November 2014

Period: July 2013 – December 2013

IND: Rajasthan Urban Sector Development Investment Program (Tranche 1 & Tranche 2)

Submitted by

Local Self Government Department, Government of Rajasthan

This report has been submitted to ADB by the Local Self Government Department, Government of Rajasthan and is made publicly available in accordance with ADB's public communications policy (2011). It does not necessarily reflect the views of ADB.

Asian Development Bank



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Date : 29/9/14

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Subject:- Compliance of ADB's Environmental Safeguard policy-
Submission of **Revise Bi-annual Environmental Monitoring**
Report from July 2013 to December 2013 for - Tranche - I
& II (ADB loan no. 2366 & 2506)

Ref:- (1) Discussion with ADB Senior Safeguard Specialist
during ADB Mission (1-5 Sept 2014)
(2) ADB mail dated 13.08.2014

Please find attached herewith the modified Bi-annual Environmental
Monitoring Report (EMR) for the subprojects Tranche - I & II (ADB loan no.
2366 & 2506) under RUSDIP Incorporating the ADB comments received vide
referred mail dated 13.08.2014 for the period from July 2013 to December
2013.

Kindly acknowledge the receipt.

Attachment: (i) Two Files (word format)
(ii) Comment Response Matrix (Tr-I & Tr-II)


(S K Goyal)
Addl. Project Director
RUIDP, Jaipur



Response matrix on ADB comments dated 13.08.2014 on Environment Monitoring Report - Tr-01

SN	Comments	Reply
1	<p>All subprojects under Project I appear to consistently have some of the same compliance issues; especially with regard to monitoring of surface water, air pollution and noise, sprinkling to prevent dust pollution, and occupational health and safety as well as conditions in some labor camps. These are of course chronically non-compliant safeguards aspects in other sectors and projects as well. The question is whether these can be remedied in a prompt and sustainable manner. In chapter V the EMR states that provisions have been made to carry out monitoring of ambient conditions in January and February 2014. We hope this has been accomplished. How will you ensure that the monitoring schedule in annex 3 is followed consistently? How will you ensure consistent implementation of safety measures and improved labor camp conditions or prevention of dust pollution? Instructing the contractor may be insufficient to achieve compliance. Are you providing training to contractors under Project 1 as under Project 2 (EMR Project 2 para 9, chapter 4 para 28)? Are you applying sanctions? Please ensure that progress can be shown in the next EMR or adequate explanations are provided for lack of progress.</p>	<p>Environmental monitoring for air, noise and surface water quality has been completed in Jan-Feb 2014 as per schedule provided in Annex 3. The results of the same has been explained in EMR (Jan – June 2014) which is being submitted to ADB shortly</p> <p>Onsite training is being provided to the contractors and other project staff for improvement in occupational health and safety and condition in labor camps. New para 8 and 9 has been added in the report.</p> <p>We at RUIDP understand the concern shown by ADB and these issues can only be resolved by inculcating the concern in the mind sets. We also understand that issuing instructions is never going to be sufficient so we at RUIDP have adopted three types of training on regular basis, first training by CAPP staff, second by DSC Env. Expert and training and review of IPMC are organized for each/critically identified site.</p> <p>We will sum up the trainings provided on these issue in next EMR and will try to create an environment of self-responsibility so that they inculcate the habit of being safe.</p> <p>We also aware the labours of the project (regularly) so that they should demand for minimum safety/hygiene at site from contractor.</p>
2	<p>Table 4, preconstruction, row 3 (Jaisalmer WS): there is no mention of monitoring of surface water quality. If there are no water courses nearby, the nearest well needs to be monitored.</p>	<p>There is no surface water body nearby sub-project area. In view of the fact no water monitoring was conducted. The water table in the town is very deep in absence of perennial streams. The well source the water from aquifers, the construction activities in the package will not likely impact the aquifers. So the ground water sampling was not considered.</p> <p>As per your suggestion and discussion during ADB mission held in September 2014, we will monitor nearby well water during next environment monitoring, where there are no surface water courses</p>
3	<p>Table 5, construction, row 3 (Jaisalmer 'WW): it is stated that surface water quality monitoring has not been done, but compliance is indicated as complied'. Please change to 'partially complied' and indicate which requirements have been complied with. If there are no water courses nearby, the nearest well needs to be monitored.</p>	<p>There is no surface water body nearby sub-project area. In view of the fact no water monitoring was conducted. The water table in the town is very deep in absence of perennial streams. The well source the water from aquifers, the construction activities in the package will not likely impact the aquifers. So the ground water sampling was not considered.</p> <p>As per your suggestion and discussion during ADB mission held in September 2014, we will monitor</p>

		<p>nearby well water during next environment monitoring.</p> <p>The statement has been changed in table 5, row 3</p>
4	Table 6, construction, row 4 (Jhalawar SW): although there may be no sensitive locations, monitoring of noise levels is nevertheless a requirement (see annex 3); if not done, state so and change to partially complied	Noise monitoring at Jhalawar SW site has been done in February 2014. Compliance status in Table 6 has been revised.
5	Table 8: Some of the projects listed seem not to be consistent with the projects under review (chapter II, tables 2-6). Status of clearance is reviewed for Alwar WW 01 and 02, while the EMR reports compliance with EMP for Alwar 03 and 05. Please check all projects in table 8 and revise according to projects actually under review.	The Table 8 has been revised accordingly.
6	There continues to be no information on actual grievance received by the GRM during the reporting period and on how these are resolved. If unresolved, information about the reasons needs to be provided as well as a plan to pursue resolution.	Chapter III, Section E has been revised
7	In annex 5, please indicate clearly who is environmental safeguards staff or consultants.	Annex 5 has been revised

Response matrix on comments on Environment Monitoring Report - Tr-02 (July-Dec 2013)

SN	Comments	Reply
1	<p>The subprojects under Project 2 also appear to consistently have some of the same compliance issues with regard to monitoring of surface water, air pollution and noise, sprinkling to prevent dust pollution, and occupational health and safety as well as conditions in some labor camps. These are of course chronically non-compliant safeguards aspects in many sectors and projects. The question is whether these can be remedied in a prompt and sustainable manner. In chapter V the EMR states that provisions have been made to carry out monitoring of ambient conditions in January and February 2014. We hope this has been accomplished. How will you ensure that the monitoring schedule in annex 3 is followed consistently? How will you ensure consistent implementation of safety measures and improved labor camp conditions or prevention of dust pollution? Instructing the contractor may be insufficient to achieve compliance. The training to contractors under Project 2 (EMR Project 2 para 9 and chapter IV para 28) does not seem to motivate EMP compliance sufficiently. Are you applying sanctions? Please ensure that progress can be shown in the next EMR or adequate explanations are provided for lack of progress.</p>	<p>Environmental monitoring for air, noise and surface water quality has been completed in Jan-Feb 2014 as per schedule provided in Annex 3. The results of the same has been explained in EMR (Jan – June 2014) which is being submitted to ADB shortly</p> <p>Onsite training is being provided to the contractors and other project staff for improvement in occupational health and safety and condition in labor camps. New para 8 and 9 has been added in the report.</p> <p>We at RUIDP understand the concern shown by ADB and these issues can only be resolved by inculcating the concern in the mind sets. We also understand that issuing instructions is never going to be sufficient so we at RUIDP have adopted three types of training on regular basis, first training by CAPP staff, second by DSC Env. Expert and training & review of IPMC are organized for each/critically identified site.</p> <p>We will sum up the trainings provided on these issue in next EMR and will try to create an environment of self-responsibility so that they inculcate the habit of being safe.</p> <p>We also aware the labours of the project (regularly) so that they should demand for minimum safety/ hygiene at site from contractor.</p>
2	<p>The first Table in chapter II on page 3 does not have a number. Please assign a number and change all subsequent tables' numbers accordingly and do the same for the references to tables in the text.</p>	<p>Table numbers has been revised accordingly</p>
3	<p>It is repeatedly stated in the tables on EMP compliance (as for example in Karauli WS under construction, row 3) that surface water monitoring is not required, without explaining why. In some other subprojects it is stated that there are no surface water bodies near the project. If there are no water courses nearby, the nearest well needs to be monitored.</p>	<p>The related statements have been corrected.</p> <p>As per ADB suggestion and discussion during ADB mission held in September 2014, we will monitor nearby well/tube-well water quality during next environmental monitoring, where there are no surface water courses</p>
4	<p>In several subprojects a statement about the neglect of monitoring obligations for air, water or noise is missing altogether, as for example for Bharatpur WS, construction, row 3. Please check for all subprojects and revise as necessary. Check whether 'complied' is the appropriate entry or only partial or non-compliance should be flagged.</p>	<p>The related statements have been corrected.</p>
5	<p>There are various occasions where it is stated that 'instructions have been given to contractor for complete compliance with EMP' but under the compliance column an entry of 'complied' is made. Is that not contradictory? (see for example Dholpur WS,</p>	<p>The related statements have been corrected.</p>

	construction, row 7).	
6	Dholpur WW, construction, row 4: it is assessed as 'complied', but no monitoring seems to have been done. Even if there is no noise producing machinery used at present, it will be used at some point and at least a baseline without project impact must be established. All ambient condition monitoring should follow the schedule as under annex 3.	The related statements have been corrected. The noise monitoring has been conducted in February 2014. The results will be addressed in next EMR (Jan-June 2014) being submitted shortly
7	Dholpur WW, construction, row 5: assessed as 'partially complied' but no information about compliance deficits is provided under explanation; please add.	Related section of the table has been revised
8	Sikar Road, construction, row 4: it appears that 'non-compliant' rather than 'partially complied' would be the correct assessment given that no noise protection and no monitoring is done.	Proper attention will be given for full compliance, however related section has been revised as 'not- complied '
9	Wherever there are no work camps established the entry under compliance should not be 'complied' but 'not applicable'.	Related section of the table has been revised
10	Bundi WS as well as Rajsamand WS, construction, row 2: air quality monitoring is flagged as being neglected, but the assessment is 'complied'; please correct.	Related section of the table has been revised
11	Chapter III section B and Table 21: It would be useful to provide a brief statement why for certain subproject types EC and Consent are not required.	As per suggestion, Chapter III section B new para 13, 14 & 15 has been added in Tranche 2 report and 12, 13 and 14 has been added in Tranche 1 report
12	The detail on actual grievance handled during the reporting period in chapter III E is much appreciated.	Noted
13	Annex 5: Please indicate who is staff or consultants.	Annex 5 has been revised
14	Annex 6: Information on training of consultants can be added.	Annex 6 include the training of consultants

Semi-annual Environmental Monitoring Report

Tranche 1 (Loan Number 2366 – IND)

Document Stage: Final

Project Number: 40031

Month Year: December 2013

IND: Rajasthan Urban Sector Development Investment Program

Prepared by Local Self Government Department

This report has been submitted to ADB by the Local Self-Government Department of the Government of Rajasthan and is made publicly available in accordance with ADB's public communications policy (2005), it does not necessarily reflect the views of ADB

TABLE OF CONTENTS

I.	INTRODUCTION	1
A.	BACKGROUND	1
B.	PROJECT PURPOSE	1
C.	PROJECT PROFILE	1
II.	APPLICATION OF EMP	3
III.	ENVIRONMENTAL PROCEDURE REVIEW	30
A.	ENVIRONMENTAL LEGAL REQUIREMENTS	30
B.	COMPLIANCE WITH ENVIRONMENTAL REGULATIONS	31
C.	COMPLIANCE OF ENVIRONMENTAL LOAN COVENANTS	32
D.	ENVIRONMENTAL ORGANIZATION AND MANAGEMENT	34
E.	GRIEVANCE REDRESSAL	34
IV.	ENVIRONMENTAL MONITORING AND EVALUATION	38
V.	CONSULTATIONS AND RECOMMENDATIONS	39

Tables, Figures and Annexure

TABLE 1: IMPLEMENTATION STATUS OF SUB-PROJECTS UNDER TRANCHE - 1	2
TABLE: 2 IMPLEMENTATION OF ENVIRONMENTAL MANAGEMENT PLAN	3
TABLE: 3 EMP COMPLIANCE STATUS OF ALWAR WASTE WATER SUBPROJECT	4
TABLE: 4 EMP COMPLIANCE STATUS OF JAISALMER WATER SUPPLY SUBPROJECT	10
TABLE: 5 EMP COMPLIANCE STATUS OF JAISALMER WASTE WATER SUBPROJECT	16
TABLE: 6 EMP COMPLIANCE STATUS OF JHALAWAR SOLID WASTE SUBPROJECT	23
TABLE 7: ACTION REQUIRED ENSURING SUBPROJECTS COMPLY WITH NATIONAL ENVIRONMENTAL LAWS	30
TABLE 8: PRESENT STATUS OF ENVIRONMENT, FOREST & OTHER CLEARANCES - (TR-1)	31
FIGURE 1: INSTITUTIONAL RESPONSIBLY- ENVIRONMENTAL ORGANISATION RUSDIP	36
FIGURE 2 GRIEVANCE REDRESS PROCESS	37

ANNEXURE - 1ENVIRONMENTAL LEGISLATION AND POLLUTION CONTROL ACTS.....	41
ANNEXURE – 2MAJOR WORKS AND PROGRESS.....	43
ANNEXURE – 3ENVIRONMENTAL MONITORING SCHEDULE.....	47
ANNEXURE - 4PUBLIC CONSULTATION ON ENVIRONMENTAL ISSUES.....	49
Annexure -5DETAILS OF MOBILIZATION SCHEDULE OF ENVIRONMENTAL SAFEGUARD PERSONAL	51
ANNEXURE-6	52

I. INTRODUCTION

A. Background

1. Rajasthan Urban Sector Development Investment Program (RUSDIP) is intended to optimize social and economic development in 15 selected towns in the State, particularly district headquarters and towns with significant tourism potential. This will be achieved through investments in urban infrastructure (water supply; sewerage and sanitation; solid waste management; urban drainage; urban transport and roads), urban community upgrading (community infrastructure; livelihood promotion) and civic infrastructure (art, culture, heritage and tourism; medical services and health; fire services; and other services). RUSDIP will also provide policy reforms to strengthen urban governance, management, and support for urban infrastructure and services. The assistance will be based on the State-level framework for urban reforms, and institutional and governance reforms recommended by the Government of India (GoI) through the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT).

2. RUSDIP Phase II to be implemented over a seven year period beginning in 2008, and will be funded by a loan via the Multitranchise Financing Facility (MFF) of the ADB. The Executing Agency (EA) is the Local Self-Government Department (LSGD) of the Government of Rajasthan (GoR); and the Implementing Agency (IA) is the Project Management Unit (PMU) of the Rajasthan Urban Infrastructure Development Project (RUIDP), which is currently in the construction stage (Tr-1, Tr-2 and Tr-3). Alwar, Jaisalmer and Jhalwar/ Jhalrapatan are the towns chosen to benefit from the first tranche of RUSDIP investment. In addition 12 other towns namely, Bharatpur, Karauli, Dholpur, Sawai Madhopur, Churu, Sikar, Barmer, Nagaur, Chittorgarh, Rajsamund, Bundi and Baran-Chabra are considered under tranche 2 and 3 (Tr-2 & 3).

3. This report presents environmental monitoring for only **Tranche-1 sub-projects**.

B. Project Purpose

4. RUSDIP will improve infrastructure through the development, design and implementation of a series of subprojects, each providing improvements in a particular sector (water supply, sewerage, solid waste etc) in one town. RUSDIP has been classified by ADB as environmental assessment category B (some negative impacts but less significant than category A) and the impacts of subprojects were assessed through Initial Environmental Examination (IEE) reports prepared according to ADB Environment Policy (2002) and Environmental Assessment Guidelines (2003).

5. The nature of the sub-projects may change during their subsequent development, particularly during detailed design. This report is the Environmental Monitoring Report (EMR) to describe the implementation of the mitigation measures and monitoring recommended in the IEE and summary Initial Environmental Examination (SIEE).

C. Project Profile

6. Till 31st December 2013, 16 environmental sensitive sub-projects under Tranche-1 have been awarded. Out of those 16 sub-projects, 08 packages in Alwar, 6 packages in Jaisalmer and 2 packages in Jhalwar-Jhalrapatan have been awarded. In this report period field work continued for 6 environmental sensitive sub-projects. One sub-project, "construction of sanitary landfill site" at Jaisalmer has been stopped due to non availability of environmental clearance. Construction of

sanitary landfill at Jhalawar is recommenced after getting environmental clearance. Seven (06) packages in Alwar (RUSDIP/TR-01/ALW/WW/01-Lot-2), (RUSDIP/TR-01/ALW/WS/02), (RUSDIP/TR-01/ALW/WW/02Lot-1), (RUSDIP/TR-01/ALW/WW/02Lot-2), (RUSDIP/TR-01/ALW/BR/01) and (RUSDIP/TR-01/ALW/SW/05), two packages (RUSDIP/TR-01/JSL/DR-01) and (RUSDIP/TR-01/JSL/WS-01) in Jaisalmer and one package (RUSDIP/TR-01/JHL/WS-02) in Jhalwar have completed previously. The work of one package at Jaisalmer (RUSDIP/TR-01/JSL/SW-07) has been stopped due to non availability of environmental clearance. The implementation status of sub-projects has been summarized in Table - 1.

Table 1: Implementation Status of Sub-projects under Tranche - 1

Town	Number of Sub-projects					
	Awarded	Under-implementation	Completed	Yet to be started	Work Stopped	Terminated/Dropped
Alwar	08	02	06	-	-	-
Jaisalmer	06	03	02	-	01	-
Jhalwar-Jhaleapatan	02	01	01	-	-	-
Total	16	06	09	-	01	-

II. APPLICATION OF EMP

7. This section presents the compliance status of Environmental Management and Monitoring Plans of tranche-1 subprojects under implementation. In this report period field work continued for 6 sub-projects under tranche-1 as presented in Table 1. The progress of implementation of the EMP has been monitored for each ongoing sub-project. The compliance with the EMP is presented for each sub-project in Table-3 to Table-6.

8. The EMP has been implemented in all ongoing sub-projects and status of the same is being monitored. Annexure 2 shows summary of the scope of works along with present work status. The expected changes from the approved objectives (if any), remedial measures for fulfillment of objective and key risks/ assumption for attainment of objectives are also presented in Annexure -2.

9. Training has been given to the contractors, DSC's monitoring specialist and IPIU representative on environmental safeguard requirement. The status/progress of EMP implementation is also being reviewed in quarterly review meetings and necessary training is being provided. The detail of quarterly review meetings is presented in Annexure-06. Moreover instruction is given to contractors to follow the specified clause of BID document to mitigate environmental and social impacts.

Table: 2 Implementation of Environmental Management Plan

Sr. No.	Project Town	Packages
1	Alwar	Waste Water: Supply, laying, jointing, testing and commissioning of various Main and arterial sewer Network connecting to outfall, along with road restoration and all necessary manholes appurtenances etc. at Alwar town. (RUSDIP/TR-01/ALW/WW/03)
2		Waste Water: Additional Sewerage System in UIT colonies at Alwar (RUSDIP/TR-01/ALW/WW/05)
3	Jaisalmer	Water Supply: Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the strengthening of distribution system and rising main pipeline; Construction and Commissioning of Elevated service reservoirs and providing pumping system and ancillary works; Package No: { RUSDIP/TR-01/ JSL/WS-02}
4		Waste Water – Sewerage and Waste stabilization Ponds in Phase-I in Jaisalmer; Package No: {RUSDIP/TR-01/ JSL/WW-01}
5		Waste Water : Providing, laying, jointing, testing and commissioning of main sewer, various intercepting sewer collecting lateral sewers house sewer connections, road restoration along with all appurtenances in Gandhi colony, Indira colony, RP colony, part of Gafur Bhatta and GAD colony, construction commissioning of civil, mechanical and and maintenance of intermediate sewage pumping stations in Gandhi Colony at Jaisalmer Town {RUSDIP/TR-01/ JSL/WW-09}
6	Jhalawar- Jhalrapatan:	Solid Waste Management: Development of Sanitary landfill Sites in Jhalawar {RUSDIP/TR-01/ JHL/SW-08}

Table: 3 EMP Compliance Status of Alwar Waste Water Subproject: {RUSDIP/TR-01/ALW/WW-03 & WW/05}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
Pre Construction Stage					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Consent to Establish is not required as scope include only laying of pipes in both of the package Tree cutting is not required	Nil	—
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved	Nil	—
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience	Complied	All the facilities related to construction are located within project site	Nil	—

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	the community. Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
Construction Stage					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially complied	Adequate sprinkling of water is required for arresting fugitive dust Air quality monitoring has not been conducted during report period	Adequate watering is required at work site Instruction has been given to contractor to use tarpaulins to cover fine material when transported Biannual Air quality monitoring is required immediately	Contractor/IPIU
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the	Complied	Excavated soil is being reused for backfilling and excess	Instruction has been given to contractor to	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>monsoon season unless covered by tarpaulins or plastic sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface water quality inspection according to the Environmental Management Plan (EMP).</p>		<p>material is being disposed in low line areas</p> <p>surface water quality inspection is not required as there is no surface water body near subproject site</p>	follow the EMP	
4	<p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially complied	<p>Activities with the greatest potential to generate noise have been planned in consultation with IPIU and are being conducted in day time</p> <p>Noise monitoring has not been conducted for reporting period</p>	Instruction has been given to contractor to conduct noise monitoring	IPIU
5	<p>Landscaping and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(iii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove</p>	Complied	Overburden and excavated materials from construction sites has been reused for backfilling and excess material has been disposed to designated areas	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (vi) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;				
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Locate entry and exit points in areas where there is low potential for traffic congestion; (iv) Keep the site free from all unnecessary obstructions; (vi) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours; and (vii) Notify affected sensitive receptors by providing sign boards informing nature and duration of construction works and contact numbers for concerns/complaints	Complied	Traffic diversions is not required at present it will be provided at necessary points and as per requirement Haulage activities are not significant at present Sign boards informing nature and duration of construction works and contact numbers for concerns/complaints has been provided	Nil	-
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	Planks/metal sheets is being provided across trenches whenever required for easy excess Nearby residents and businesspeople are informed about the nature of work in advance by public consultation Adequate workforce has provided at critical areas	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally which is more than 50%.	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas; (x) Ensure moving equipment is outfitted with audible back-	Partially complied	Contractor has not provided site-specific Health and Safety Plan Site specific PPE are not being used completely First-aid facility has been provided at each site Group insurance has been provided to workers Drinking water has been provided at all sites H&S training is being provided to workers by DSC regularly high visibility vests are provided to workers Back-up alarms are not provided in moving equipment Workers are not exposed to high noise for 8 hours	Contractor has been instructed for complete compliance of measure specified in EMP	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	<p>up alarms; (xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and (xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and (ix) Request IPIU/DSC to report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.</p>	Complied	At present most of the workers employed are local. Contractor has not constructed any camp	Nil	-

Table: 4 EIMP Compliance Status of Jaisalmer Water Supply subproject {RUSDIP/TR-01/JSL/WS-02}

SN	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
Pre-Construction Stage					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance	Complied	Consent to Establish is not required	Nil	—
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	Tree cutting is not required It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	—
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.	Complied	All the facilities related to construction are located within project site	Nil	—

SN	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
Construction Stage					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	Adequate sprinkling of water is required for arresting fugitive dust Air quality monitoring has not been conducted during report period	Adequate watering is required at work site A log register for watering is required to be maintained at site Instruction has been given to contractor to use tarpaulins to cover fine material when transported	Regularly by Contractor

SN	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
3	<p>Surface water quality</p> <p>(i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p>	Partially Complied	<p>Excess excavated soil will be reuse for backfilling</p> <p>No surface water body nearby sub-project area</p>	<p>Biannual Air quality monitoring is required immediately</p> <p>Nearest well/tube well water quality require to be monitor</p>	Contractor/IPIU
4	<p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially Complied	<p>Activities with the greatest potential to generate noise have been planned in consultation with IPIU and are being conducted in day time</p> <p>Noise monitoring has not been conducted for reporting period</p>	<p>Instruction has been given to contractor to conduct noise monitoring</p>	IPIU

SN	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
5	Landscape and Aesthetics (i) Prepare and implement Waste Management Plan; (ii) Avoid stockpiling of excess excavated soils; (iii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (vi) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and (vii) Request IPU/DSC to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.	Complied	The unusable extra excavated materials and over burdens are being disposed at low laying area	Nil	-
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Locate entry and exit points in areas where there is low potential for traffic congestion; (iv) Keep the site free from all unnecessary obstructions; (v) Drive vehicles in a considerate manner; (vi) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours; and (vii) Notify affected sensitive receptors by providing sign boards informing nature and duration of construction	Complied	The vehicles carrying materials to the work site follow only designated route to the site sign boards informing nature and duration of construction works and contact numbers for concerns/complaints has been provided	Nil	-

SN	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	works and contact numbers for concerns/complaints				
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	<p>The work schedule has been prepared as per consultation with local public</p> <p>Proper access across trenches for people and vehicles has been provided</p> <p>Significant work force has been provided</p>	Nil	–
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	–
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water;	Partially Complied	<p>Contractor has not provided site-specific Health and Safety Plan</p> <p>PPE are not being used completely</p> <p>First-aid facility has been provided at each site</p> <p>Group insurance has been provided to workers</p> <p>Drinking water has been provided at all sites</p> <p>H&S training is being provided to workers by DSC regularly</p> <p>contractor has provided drinking water at site</p>	<p>Contractor has been instructed complete compliance of measure specified in EMP</p> <p>Safety officer is required to be nominate by contractor immediately</p>	Contractor

SN	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>		<p>H & S training has been provided</p> <p>high visibility vests are provided to workers</p> <p>Back-up alarms are not provided in moving equipment</p> <p>Sign board are not provided at all site</p> <p>Workers are not exposed to high noise for 8 hours</p>		
10	<p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting</p>	Complied	<p>At present most of the workers employed are local.</p> <p>Contractor has constructed temporary camp at ESR sites which is now removed as work has completed</p>	NIL	-

SN	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove from the site;</p> <p>(vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>(viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and</p> <p>(ix) Request IPIU/DSC to report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.</p>				

Table: 5 EMP Compliance Status of Jaisalmer Waste Water subproject {RUSDIP/TR-01/JSL/WW-01 & WW-09}

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
1	<p>Environmental Clearances</p> <p>Site preparation work completed by IPIU including necessary clearance</p> <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	<p>Consent to Establish has been obtained from RPCB for STP under WW/01 package</p> <p>Tree cutting is not required in both of the packages</p>	Nil	-
2	<p>Social and Cultural Resources</p> <p>(i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site;</p>	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential	Nil	-

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.		Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved		
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.	Complied	All the facilities related to construction are located within project site	Nil	-
4	Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
Construction Stage					

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	Adequate sprinkling of water is required for arresting fugitive dust Air quality monitoring has not been conducted during report period	Adequate watering is required at work site A log register for watering is required to be maintained at site Instruction has been given to contractor to use tarpaulins to cover fine material when transported Biannual Air quality monitoring is required immediately	Regularly by Contractor
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;	Partially Complied	After refilling the tranches, excess excavated material is being disposed on designated areas in consultation with IPIU No Surface water body near the project site.	Nearest well/tube well water is required to be analyzed.	Contractor/IPIU

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<ul style="list-style-type: none"> (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP). 				
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach; (iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and (iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.	Partially Complied	Activities with the greatest potential to generate noise have been planned in consultation with IPIU and are being conducted in day time Noise monitoring has not been conducted for reporting period	Instruction has been given to contractor to conduct noise monitoring	IPIU
5	Landscape and Aesthetics (i) Prepare and implement Waste Management Plan; (ii) Avoid stockpiling of excess excavated soils; (ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to	Complied	The unusable extra excavated materials and over burdens are being disposed at low laying area as per direction of ULB of Jaisalmer town	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	designated areas; (vi) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and (vii) Request JPIU/DSC to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.				
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Locate entry and exit points in areas where there is low potential for traffic congestion; (iv) Keep the site free from all unnecessary obstructions; (v) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours; and (vi) Notify affected sensitive receptors by providing sign boards informing nature and duration of construction works and contact numbers for concerns/complaints	Complied	The trucks carrying materials to the work site follow only designated route to the site sign boards informing nature and duration of construction works and contact numbers for concerns/complaints has been provided	Nil	-
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature	Partially Complied	Proper access across trenches for people and vehicles has not been provided	Contractor has instructed to provide safe access across open trenches wherever required	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	and duration of construction works and contact numbers for concerns/complaints.				
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally		
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of	Partially Complied	Contractor has not provided site-specific Health and Safety Plan PPE are not being used completely First-aid facility has been provided at each site Drinking water has been provided at all sites H&S training is being provided to workers by DSC regularly high visibility vests are provided to workers Sign board are not provided at all site Workers are not exposed to high noise for 8 hours	Contractor has been instructed compliance of measure specified in EMP Contractor is required to nominate safety officer immediately	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>				
10	<p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove from the site;</p> <p>(vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>(viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and</p>	Partially Complied	<p>Work camp has been established in consultation with IPIU/DSC</p> <p>Labour camp has been established near STP site (Package WW/01)</p> <p>Poor water and sanitation facilities, use of firewood are observed in labour camp</p>	Contractor has instructed to provide proper water and sanitation facilities and cooking gas to the worker	Contractor

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(ix) Request IPIU/DSC to report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.				

Table: 6 EMP Compliance Status of Jhalawar Solid Waste subproject {RUSDIP/TR-01/JHL/SW-08}

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Environmental Clearance & Consent to Establish has been obtained. Tree cutting is not required	Nil	-
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	-
3	Construction work camps, hot mix plants, stockpile areas,	Complied	All the facilities related to	Nil	-

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.		construction are located within project site		
4	Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
Construction Stage					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPU/DSC on the designated areas for	Partially Complied	Water sprinkling is being done for construction of internal road	Adequate watering is required at work site	Regularly by Contractor

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.		Sand is transported in wet conditions other materials do not produce dust PUC are not taken for construction vehicles Air quality monitoring has not been conducted during report period. Monitoring will be conducted in Jan-Feb 2014	A log register for watering is required to be maintained at site contractors are instructed to take PUC of construction vehicles Biannual Air quality monitoring is required immediately	
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP)	Partially Complied	The unusable extra excavated materials and over burdens are being disposed at low laying area within site Surface water quality monitoring has not been conducted during report period	Instruction has been given to conduct Surface water quality monitoring	IPIU
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;	Partially Complied	There are no sensitive locations near site and generators are also not being used at work site Activities with the greatest	Noise monitoring at sub-project site is required	Contractor/IPIU

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.</p>		<p>potential to generate noise have been planned in consultation with IPIU and are being conducted in day time</p> <p>Noise monitoring has not been conducted in reporting period. Noise will be done in February 2014</p>		
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(iii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>(vi) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and</p> <p>(vii) Request IPIU/DSC to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work.</p>	Complied	Overburden and excavated material from working site is being used for filling of low lined area within site and construction of internal roads	Nil	-
6	<p>Accessibility</p> <p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>(ii) Schedule transport and hauling activities during non-</p>	Complied	No major transportation of materials is required and approach roads are not congested to have traffic congestion	Nil	-

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>peak hours;</p> <p>(iii) Locate entry and exit points in areas where there is low potential for traffic congestion;</p> <p>(iv) Keep the site free from all unnecessary obstructions;</p> <p>(v) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours; and</p> <p>(vi) Notify affected sensitive receptors by providing sign boards informing nature and duration of construction works and contact numbers for concerns/complaints</p>				
7	<p>Socio-Economic – Income</p> <p>(i) Leave spaces for access between mounds of soil;</p> <p>(ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles;</p> <p>(iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools;</p> <p>(iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and</p> <p>(v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.</p>	Complied	There are no inhabited areas or business areas nearby site	Nil	-
8	<p>Socio-Economic – Employment</p> <p>(i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and</p> <p>(ii) Secure construction materials from local market.</p>	Complied	At present most of the workforce is hired locally	Nil	-
9	<p>Occupational Health and Safety</p> <p>(i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c)</p>	Partially Complied	<p>PPE are not being used completely</p> <p>First-aid facility has been provided at site</p>	Contractor has been instructed complete compliance of measure specified in EMP	-

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>(ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than</p>		<p>Drinking water has been provided at all sites</p> <p>H&S training is being provided to workers by DSC regularly</p> <p>contractor has provided drinking water at site</p> <p>Sign board is provided at site</p> <p>Workers are not exposed to high noise for 8 hours</p>		

Sr. No	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.				
10	Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and (ix) Request IPIU/DSC to report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.	Complied	No tree cutting done for establishing camp Proper Sanitary and solid waste management is done at workers camp	Nil	-

III. ENVIRONMENTAL PROCEDURE REVIEW

A. Environmental Legal Requirements

10. **Annexure 1** lists those Acts; Rules, Policies and Regulations currently in force in India and deal with environmental issues that could apply to infrastructure development. However, because of the relatively minor negative impacts of most of the types of the subproject likely to be developed under RUSDIP, it is expected that most subproject should not fall within the scope of these legal instruments. Subprojects and activities that will need to comply with certain laws are:

- Any components that require the acquisition of forest land;
- Any construction activities located in areas covered by the Arvalli Range Notification in Alwar;
- Water Treatment Plants (WTP) and Sewage Treatment Plants (STP);
- Composting and landfill facilities;
- Common waste management facilities, including composting, landfills, transfer stations;
- Common waste management facilities within 10 km of the boundary of protected areas (such as National Parks, Sanctuaries, Notified areas and Biosphere Reserves);
- Mobile diesel generators

11. The specific requirements to ensure compliance by these components and subprojects are shown in **Table 7**.

Table 7: Action Required Ensuring Subprojects Comply with National Environmental Laws

Component	Applicable Legislation	Compliance	Action Required
1. All components that require acquisition of forest land	Forest (Conservation) Act 1980; Wildlife (protection) Act 1972	Approval from Ministry of Environment and Forests (MoEF)	Identify non- forest land and formulate an afforestation program
2. Water Treatment Plant (WTP) and Sewage Treatment Plant (STP)	Water (Prevention and Control of Pollution) Act 1974	Consent to Establish (CTE) and Consent to Operate (CTO) from RSPCB	Based on project review and site inspection RSPCB provides CTE before construction, and stipulate the disposal standards to be met during operation. After completion of construction, CTO is issued confirming compliance with the CTE conditions, if any
		Renewal of CTO during operation (STP)	Based on the performance of the STP and its compliance with the disposal standards CTO is renewed every year
3. All composting and landfill facilities	Municipal Solid Wastes (Management and handing) Rules 2000	Authorization of proposed site by RSPCB	Authorization is issued based on land use in and around the site and groundwater condition
	Water (Prevention and Control of Pollution) Act 1974; Air(Prevention and Control of Pollution) Act 1981	CTE and CTO from RSPCB	Same as for STPs (above)
4. Common waste	Environment (Protection)	Requires	Based on preliminary

Component	Applicable Legislation	Compliance	Action Required
management facilities including composting, landfills and transfer stations	Act 1986: Environmental Impact Assessment Notification 2006, amended in 2009 Category B	environmental clearance from State Environment Impact Assessment Authority (SEIAA)	information and site visits, if required, project will be categorized as B1 or B2. B1 projects require EIA study for approval
5. Common waste management facilities within or 10 km outside the boundary of protected areas such as National Parks, Sanctuaries, Notified Areas and Biosphere Reserve	Environmental Impact Assessment Notification, 2006 Category A	Requires environmental clearance from the federal Ministry of Environment and Forests (MoEF)	Conduct EIA study Category A and B1 projects require public consultation as part of EIA
6. Mobile diesel generators	Air (Prevention and Control of Pollution) Act 1981	CTE and CTO from RSPCB	CTO renewal every year based on performance

B. Compliance with Environmental Regulations

12. Table 8 shows present clearance status for different sub-projects under Tr-1. GoI EIA Notification of 2006 and its subsequent amendment (replacing the EIA Notification of 1994), sets out the requirement for Environmental Assessment in India. This states that Environmental Clearance (EC) is required for specified activities/projects. Projects are categorised as 'A' or 'B' depending on the scale of the project and the nature of its impacts. Categories 'A' projects require Environmental Clearance from the National Ministry of Environment and Forests (MoEF) and Category 'B' projects require environmental clearance from the State Environment Impact Assessment Authority (SEIAA).

13. The only type of infrastructure provided by the RUSDIP that is specified in the EIA Notification is Common Municipal Solid Waste Management facility (CMSWMF¹), where EC is required. Thus Environmental Clearance (EC) is not required for other sub-project under RUSDIP.

14. "Consent to Establish" for setting up Sewage Treatment Plant and Water Treatment Plant and "Consent to Operate" before the plant starts its operation is required from State Pollution Control Board (RPCB) under the Water (Prevention and Control of Pollution) Act. 1974.

15. As per the present status consent to establish obtained for all the running sub-projects under Tr-1. Environmental Clearance for sanitary landfill (RUSDIP/Tr-01/JSL/SW-01) is pending for Jaisalmer project locations because the air-force authorities has not yet provided no objection certificate (NOC) which is a requirement for environmental clearance. The construction work of STP (RUSDIP/Tr-01/ALW/WW-02) at Alwar has been completed, consent to operate has been obtained from Rajasthan pollution control board. Attention is required by respective PIUs for renewal of the CTE and obtaining Consent to Operate before commissioning as per the case.

Table 8: Present Status of Environment, Forest & Other Clearances - (Tr-1)

Town	Work (Package No.)	Applicable Legislation/ Type of clearance	Clearance given by and date	Subject / Issue	Remarks/ Action needed
Jaisalmer	Waste Water	Water	Consent to Establish		Complied

¹ For the purpose of EIA Notification, common municipal solid waste management facilities may be referred as centralized MSW facility for an given town, city, region. It is further to mention a common facility need not have surrounding ULBs included.(Technical EIA Guidance Manual for CMSWMF)

Town	Work (Package No.)	Applicable Legislation/ Type of clearance	Clearance given by and date	Subject / Issue	Remarks/ Action needed
(Tr-1)	(RUSDIP/TR-01/JSL/WW-01)	(Prevention and Control of Pollution) Act. 1974/ Consent to establish of 10 MLD STP from Pollution Control Board Consent to operate will be required before operation	obtained from Pollution Control Board – Order No. 2012-2013/MUID/1141 dated 03.12.2012 Consent valid upto 31.11.2015		Complied Before commissioning Consent to Operate is needed
	Jaisalmer Solid Waste (RUSDIP/Tr-01/JSL-/SW-07)	EIA notification 2006 EC applied on 01.10.08 (for categorization submitted to RPCB on 02.09.08)	Authorization issued from Rajasthan Pollution Control Board (RPCB)	Discussion in SEAC meeting held on 17.11.08 again it is discussed in 3 rd meeting of SEAC on 26.12.08. TOR issued by SEAC for EIA and Environmental Clearance	Environmental Clearance Pending
Jhalawar-Jhalrapatan (Tr-1)	Jhalwar Solid Waste (RUSDIP/Tr-01/JHL-/SW-08)	EIA notification 2006	Authorization issued from Rajasthan Pollution Control Board (RPCB). Environmental Clearance issued by SEIAA vide letter no. F1(4) SEIAA/SEAC Raj/Sectt/project/Cat 7(i)B1(123)/08-09 on 30.07.2012 Consent to Establish obtained by PCB order no 2012-2013/SWMC/1579 dated 15.10.2012 valid upto 31.07.2015		Complied

C. Compliance of Environmental Loan Covenants

16. The status of compliance of ADB's major Environmental Loan Covenants shown below:

Project Specific Covenants	Status / Issues
Environmental	
1.The EA shall ensure that: (LA Sched 5 Para 13) (a) the project is carried out and all subproject facilities designed, constructed, operated, maintained, and monitored in compliances	Under compliance in accordance with ADB's Environmental Assessment Guidelines

Project Specific Covenants	Status / Issues
with the environmental law and regulations of the Borrower, the state, ADB's Environmental Guideline (2002), and the EARF;	
2. (b) Subproject encroaching any National Park or its buffer zone shall not be included in the Project; however, Subproject in or close to the wildlife sanctuary or any other lower grade environmentally sensitive area may be allowed subject to the EA obtaining all statutory clearances;	No as such encroachment in sanctuaries or any other lower grade environmentally sensitive area recorded till date. If it happens in future, environmental clearance will be taken up as per Govt. procedure
3 (c) an IEE as required, including an EMP with budget identifying the cost of its implementation as incorporated in the related bid document if any, when adequate public consultation for each sub-project, in accordance with the EARF shall be submitted to ADB for review and approval before award of related contract. In case of any EIA or SIEE for sub-project classified as A or B sensitive, this shall be subject to the 120 day public disclosure requirement under ADB's Environmental Policy (2002, 2009)	An IEE have been prepared for each sub-project where EMP, budget for application of EMP and issues of public consultation are enclosed. Budget and EMP components are incorporated in the bid document All the reports approved by ADB. At present all the sub-projects are classified as class B (only IEE will be required) As per National rules EIA will be required for landfill site handling more than 50 MT/day municipal solid waste
4 (d) all mitigation measures identified in the IEE, SIEE, EIA or SEIA and the related EMP, as applicable, for each sub-project, shall be incorporated in sub-project design, and carried out during construction, and O & M, and disclosed to the stakeholders;	Under compliance: IEE screening of potential environmental impact and mitigation measures applied according to project location, specific sector development and associated design requirements. EMP's prepared and regularly monitored for compliance of stated mitigation measures. During construction process within the city consultation with local communities on environmental issues are considered Last EMP biannual Report (Jan to June 2013) submitted.
5 (e) if there are any changes in specific locations or alignments of any sub-project facilities after completion of the process of IEE (or EIA) or due to detailed design or implementation that has an impact on the environmental assessment carried out thus far, then additional environmental assessment shall be carried out in accordance with ADB's Environmental Policy (2002, 2009) and the EARF, and prior approval of ADB obtained before further physical implementation of the sub-project;	EMP already revised in case of change of scope/ location for few sub-projects under Tr-1. For minor change in location of project facilities EMP has been revised for monitoring purpose
6 (f) all environmental clearances required by applicable laws, and regulations at Borrower, State, or local levels shall be obtained in a timely manner, prior to commencement of civil works for the relevant subproject	Under compliance: All necessary clearances presently under pursuance. Specific clearance details are now compiled for appropriate contract packages. Clearance Plan prepared to a scheduled timeframe, which is monitored for submissions to the various agencies in obtaining the necessary clearances.
7 (g) semi-annual progress reports on the implementation of the EMPs, measures under the IEE/EIA, and the environmental monitoring shall be carried out as a part of the project. Implementation for review and disclosure in accordance with ADB's Public Communications Policy (2005)	Semi- annual progress report on application of EMP is being prepared regularly Field monitoring continued as per monitoring plan During construction process within the town limit consultation with local communities on

Project Specific Covenants	Status / Issues
	environmental issues is continued in most of the locations

D. Environmental Organization and Management

17. Environmental issues of the project coordinated by an Environmental Specialist within the IPMU/ IPMC, who ensures that all subprojects, comply with environmental safeguards. An Environmental Monitoring Specialist (EMS) who is part of the DSC team implement the Environmental Monitoring Plan from each IEE to ensure that mitigation measures are provided and protect the environment as intended. **Figure 1** shows institutional responsibility for implementation of environmental safeguard monitoring at different level. Details about the mobilization schedule of environmental safeguard personals are provided at **Annexure 5**

18. EMP shows that most of the mitigation activities are the responsibility of the Construction Contractors (CC) employed to build the infrastructure during the construction stage or the O&M Contractors employed to conduct maintenance or repair work when the system is operating. Responsibility for the relevant measures assigned to the Contractors via the contracts through which they are appointed, so they legally required taking the necessary action. There are also some actions that need to be taken by LSGD in their role as project proponent, and some actions related to the design that would be implemented by the DSC.

19. Monitoring is being conducted to ensure that all parties take the specified action to provide the required mitigation, to assess whether the action has adequately protected the environment, and to determine whether any additional measures may be necessary. This is being conducted by a qualified Environmental Monitoring Specialist (EMS) from the DSC. The EMS responsible for all monitoring activities and reporting the results and conclusions to the IPMU, and recommend remedial action if measures are not being provided or are not protecting the environment effectively. The EMS may be assisted by environmental specialist in particular technical fields, and junior or medium-level engineers of IPIU (designated as environmental officer) who can make many of the routine observations on site. Post-construction monitoring will be conducted by the relevant Government Agency (GA) to whom responsibility for the infrastructure will pass once it begins to operate².

20. EMP shows that most of the mitigation measures are fairly standard methods of minimizing disturbance from building in urban areas (maintaining access, planning work to avoid sensitive times, finding uses for waste material, etc), and experienced Contractors should be familiar with most of the requirements. Monitoring of such measures normally involves making observations in the course of site visits, although some require more formal checking of records and other aspects. There are also be some surveys of residents, as most of the measures are aimed at preventing impacts on people and the human environment.

E. Grievance Redressal

21. The City Level Committee (CLC), acting as a grievance redress committee (GRC) is chaired by the District Collector with representatives from the ULB, state government agencies, IPIU, community-based organizations (CBOs) and NGOs. As GRC, the CLC meets at regular intervals based

² In the operational period some infrastructure will be the responsibility of the Municipal Boards/Councils, whilst others will be the responsibility of the appropriate branch of the State government (such as PWD, PHED, etc)

on the availability of the CLC /GRC members and also as per requirement or pending issues. The grievance redress mechanism is provided at Figure 2. The information w.r.t CLC/GRC is communicated to APs personally by the ACO in the concerned town. Further, the complete detail of the CLC meeting is also displayed at the IPIU notice board and the notice board of the collector's office too.

22. IPIUs along with ACOs and DSCs have been entrusted with the responsibility to maintain a proper register of the grievance (if any) which will be endorsed by the all three agencies involved in implementation. General directions for registering grievances of APs were communicated in the meeting organized on 26.12.2011 followed by minutes issued vide letter no. 32060-67 dated 30.12.2011. GRC registers are in place at all the towns. Further ACOs have been given instructions to arrange more public consultations and register all the grievances (including verbal) in writing whether substantial or non substantial and put them up for the perusal of IPIU for proper disposal.

23. It is important to mention that total 45 numbers of grievances were received in towns under tranche-01 i.e Alwar, Jaisalmer and Jhalwar. Out of total 45 numbers of grievances, 11 in Alwar, 14 in Jaisalmer and 01 complaint in Jhalawar was related to EMP compliance. The grievances received were related issues like water line damages, road restoration, excess / accumulation of soil moulds, to save the standing crops etc. These grievances are resolved by the IPIUs as and when received. But grievances like demand of water or sewerage connection/line etc. are resolved as per the scope of work through proper approval from RUIDP

Figure 1: Institutional Responsibility- Environmental Organisation RUSDIP

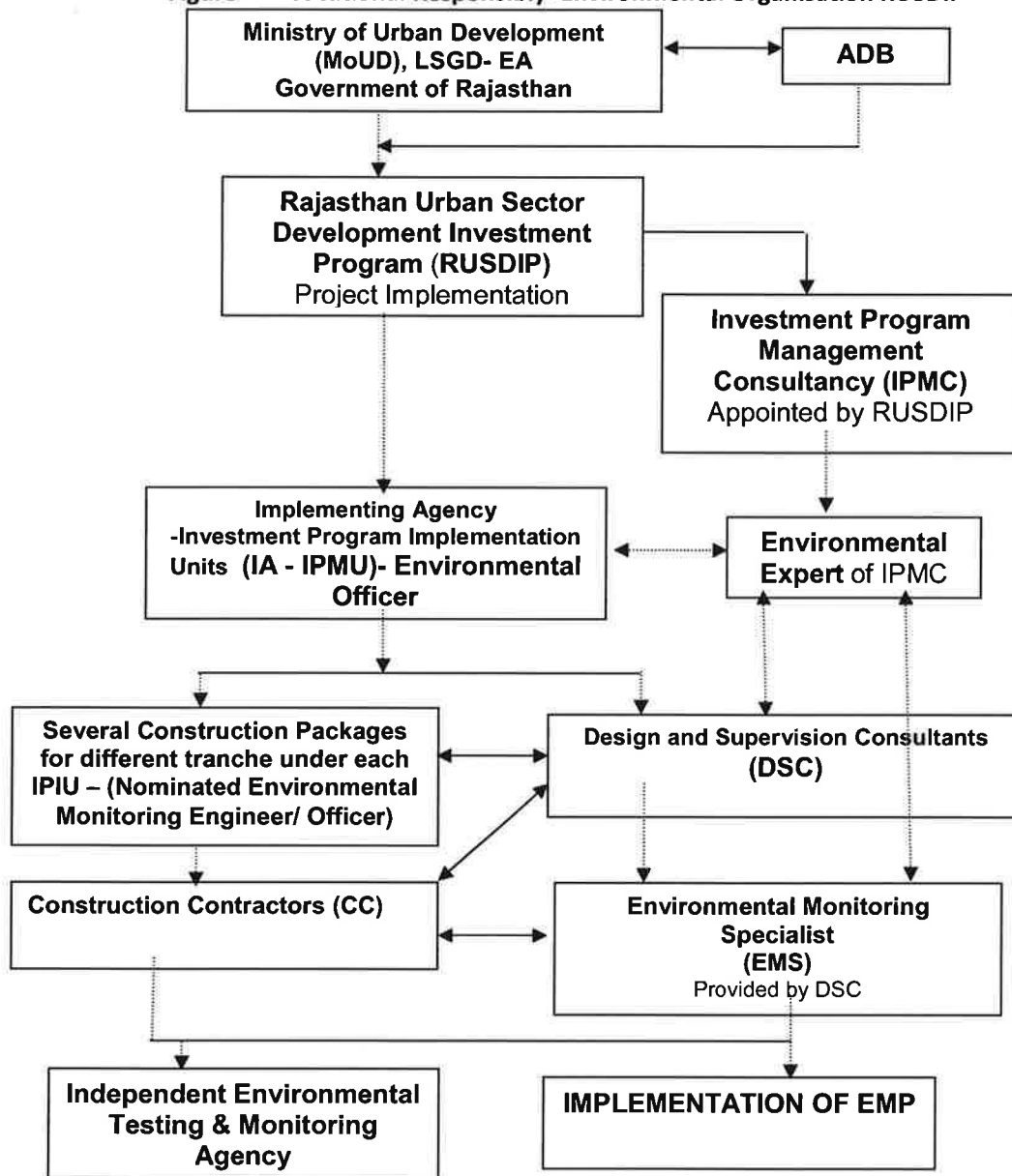
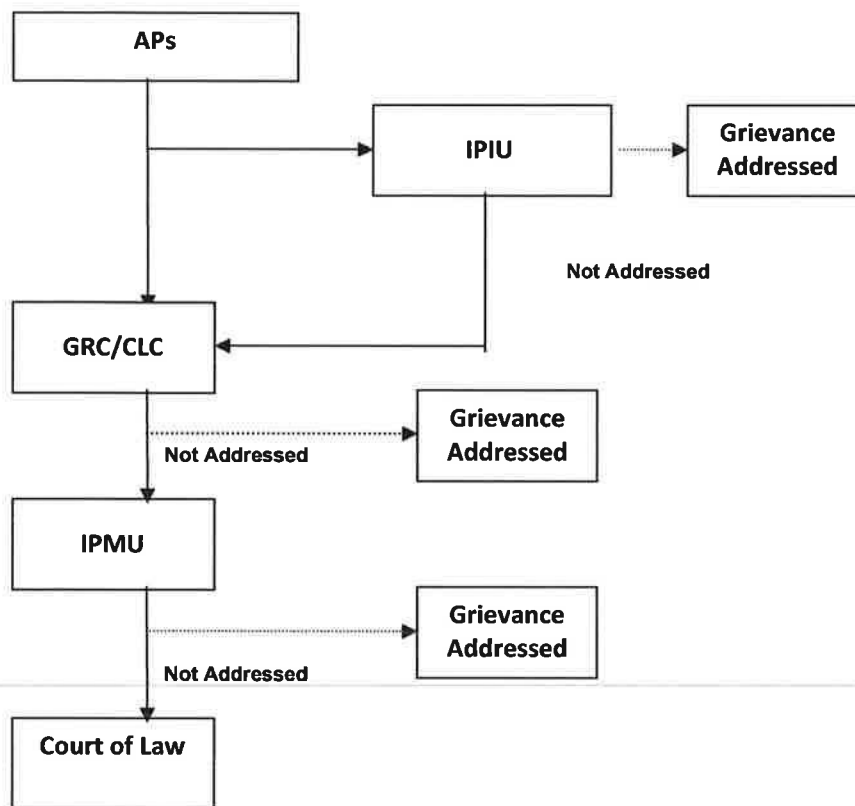


Figure 2 Grievance Redress Process



CLC = City Level Committee,
GRC = Grievance Redress Committee,
IPIU=Investment Program Implementation Unit,
IPMU = Investment Program Management Unit,
NGO = Nongovernmental organization,
SDS = Social Development Specialist.

IV. ENVIRONMENTAL MONITORING AND EVALUATION

24. 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 of EMP. The environmental performance indicators 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:

- Air, noise and water quality
- Compliance to EMP
- Compliance to local/state/national environmental regulations

25. After starting of construction work for STP, WTP air pollutants should be measure at core and buffer zone of the proposed STP/ WTP site. If any water body exists near the STP, WTP physico-chemical properties of the water should be measure as part of base line environment. Environment monitoring parameters are shown in Annexure 4.

26. Also during construction of landfill site monitoring in respect to air, noise, and water quality are required. Parameters are given in Annexure 4.

27. At pipe laying area air and noise quality monitoring should be done as per scope of work depicted in Annexure 4.

28. Air, water and noise quality monitoring for various sub projects is under progress. The results of the same will be discussed in next monitoring report (Jan to June 2014).

V. CONSULTATIONS AND RECOMMENDATIONS

29. For protection of local environment during construction phase application of mitigation measures continued as per specified EMP. Public consultation during construction/implementation phase have been carried out. The issues and public opinion are shown in Annexure 5.

30. The status of compliance with EMP for sub-project under tranche-1 has been discussed in Table 3 to Table 6 of Chapter II of the report including action required for lapses and responsibility for the same.

31. During the construction phase, impacts mainly arise from the need to dispose of large quantities of waste soil; and from the disturbance of residents, businesses, traffic and important buildings by the construction work. These are common impacts of construction in urban areas, and there are well developed methods for their mitigation. These include:

- Finding beneficial uses for waste material;
- Covering soil and sand during transportation and when stored on site;
- Planning work to minimize disruption of traffic and communities;
- Providing temporary structures to maintain access across trenches where required.

32. Various non compliance of EMP activities are observed in the present report. These are related to management of excess excavated soil, incomplete use of Personal Protective Equipment (PPE), improvable condition of work/labour camp, provision of excess for people and vehicle through open trenches at few places and air quality monitoring. Recklessness at contractors' end has been observed to follow mitigation measure as per EMP for the same. The main area of concern has been summarized below

- ❖ **Environmental Statutory Clearance:** The consent to establish has been obtained from RPSC to establish STP at Jaisalmer and landfill site of Jaisalmer and Jhalawar. The work of STP and landfill at Alwar has been completed thus consent to operate has been obtained from RPCB. Consent to operate will be required for STPs and landfills before operation. Environmental Clearance (EC) is pending for Jaisalmer landfill site from SEIAA seeking NOC of Air force authority which is within 20 km of the site. It has observed that felling of tree is not required for any of the package under Tr-01.
- ❖ **Air, Water & Noise Quality:** The Environmental monitoring was scheduled in December 2013 for this reporting period. The work order to conduct monitoring has been placed to the agency and monitoring will be conducted in January and February 2014. The results of the same will be discussed in subsequent report.
- ❖ **Landscape and Aesthetics:** The unusable extra excavated materials are being disposed at low laying area in consultation with ULBs. However excavated soil management is required to be prepared.
- ❖ **Socio-Economic – (Income & Employment):** It was observed in few cases that proper access across open trenches for people and vehicles has not been provided. In this regard contractor has instructed to provide walkways and metal sheets where required to maintain access. However in all cases more than 50% of the work force has been appointed locally.

- ❖ **Occupational Health and Safety:** Safety measures during work execution are the main issue of concern. A very limited use of personal protective equipments (PPE) was observed. The First-aid facility is partially available at sites. It should be ensured that qualified first-aid facilities are available at all sites all the time without fail. The safety officer is required to be appointed for all packages by the contractor.
 - ❖ **Work Camps:** The basic facilities in worker camp needs to be improved as per EMP. Proper Sanitary and solid waste management facilities is required in all work camps. Cooking gas is required to supply in camps to avoid cutting of trees for firewood.
33. Apart from the these common lapses to achieve full EMP compliance, sub-project wise status of EMP compliance and mitigation measure for lapses have been discussed in Chapter II of the report.
34. Necessary instructions have been given to the contractor by concerned DSC/IPIU for improvement in compliance level.

Annexure - 1

The Government of India has formulated various policy guidelines; acts and regulations aimed at the sustenance of environment in general, which are briefly summarized and applicable acts with the projects, are described in the following sub-sections.

Environmental Legislation and Pollution Control Acts

Sl. No.	Sources	Legislation
1	Water Pollution	The Water (Prevention and Control of Pollution) Act, 1974, as amended in 1988
2	Air Pollution	The Air (Prevention and Control of Pollution) Act, 1981, as amended by Amendment Act, 1987
3	Noise Pollution	The Noise Pollution (Regulation and Control) Rules, 2000
4	Environment	The Environment (Protection) Act, 1986
5	Public Liability	The Public Liability Insurance Act, 1991 The Public Liability Insurance Rules, 1991
6	Hazardous Waste	<ul style="list-style-type: none"> ➤ Hazardous Waste (Management and Handling) Rules, 1989 ➤ Batteries (Management and Handling) Rules, 2001 ➤ Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 ➤ Emergency Planning Preparedness and Response for Chemical Disasters Rules, 1995 ➤ Manufacturing, Use, Import, Export and Storage of Hazardous Microorganisms, Genetically Modified Engineered Organisms or Cell Rules, 1993 ➤ Hazardous Microorganisms and Genetically Modified Organisms (Manufacture, Use Import Export and Storage) Rules, 1999 ➤ Bio- Medical Waste (Management and Handling) Rules, 2000
7	Municipal Solid Waste	Municipal Solid Waste (Management and Handling) Rules, 2000 Recycled Plastics Manufacturing and Usage Rules, 1999
8	EIA Notification	The Ministry of Environment and Forests has revised the EIA notification, 1994, and issues the revised EIA notification on 14th September 2006
9	Use and Management of Explosive	The Explosives Act, 1884 and The Explosives Rules, 1983

■ The Environment Protection act, 1986 and the EIA Notification, 1994

The Environmental (Protection) Act, 1986 is the umbrella legislation providing for the protection of environment in the country. This Act provided for the Environment (Protection) Rules, which have been formulated under the act "The Environmental Impact Assessment Notification, 1994 and the Amendments / Revised EIA notification on 14th September 2006".and Year 2009.

■ The Forest (Conservation) Act, 1980

The Forest (Conservation) Act, 1980 pertains to the cases of diversion of forest area and felling of roadside plantation. Depending on the size of the tract to be cleared, clearances are applied for at the following levels in the governments:

- If the area of forests to be cleared or diverted exceeds 20 ha (or, 10ha in hilly area), the prior permission of the Central Government is required;
- If the area of forest to be cleared or diverted is between 5 to 20 ha, the Regional Office of Chief Conservator of Forests is empowered to approve;

- If the area of forest to be cleared or diverted is below or equal to 5 ha, the State Government can give permission;
- and If the area to be clear-felled has a forest density of more than 40%, permission to undertake any work is needed from the Central Government, irrespective of the area to be cleared.

▪ **The Wildlife (Protection) Act, 1972**

The Wildlife Protection Act has allowed the government to establish a number of National Parks and Sanctuaries over the past 25 years, to protect and conserve the flora and fauna of the state.

▪ **The Water and Air (Prevention and Control of Pollution) Acts 1974**

The water (Prevention and Control of Pollution) Act, 1974 resulted in the establishment of the Central and State level Pollution Control Boards whose responsibilities include managing water quality and effluent standards, as well as monitoring water quality, prosecuting offenders and issuing licenses for construction and operation of certain facilities. The SPCB is also empowered to set air quality standards and monitor and prosecute offenders under the air (Prevention and Control of Pollution) Act, 1981.

Annexure – 2

Major Works and Progress

35. On date project works continued in all the 3 towns under Tranche 1 for water supply, waste water and solid waste management sectors. Table below shows summary of the scope of works along with present work status. Also expected changes from the approved objectives, remedial measures for fulfillment of objective and key risks/ assumption for attainment of objectives are mentioned in the table.

36. Monitoring and reporting on Environmental and Social safeguard have been started. At present no as such adverse effect of project activities on social and environmental components.

Major works and progress- Tranche 1

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- remedial measures needed	Key assumptions and risks that affect attainment of the objectives
Alwar	Waste Water	Supply, laying, jointing, testing and commissioning of various Main and arterial sewer Network connecting to outfall, along with road restoration and all necessary manholes appurtenances etc. at Alwar town. (RUSDIP/TR-01/ALW/WW/03)	Pipe Line laid - 12.9 km(RCC - 12.9 km , uPVC-0 km) Procurement uPVC-3.432 km) Manhole- 232 nos. constructed. Line testing- 1.60 km Road Cutting • WBM =1270 Mtrs. • BT = 3000 Mtrs. • CC = 317.50Mtrs Road Restoration • WBM =700 Mtrs. • WBM below BT = 800 Mtrs. • BT = 1500 Mtrs. • CC = 300 Mtrs	No change expected	Effective monitoring and application of EMP	No risk
Alwar	Waste Sewerage System in UIT colonies at Alwar (RUSDIP/TR-01/ALW/WW/05)	Additional Testing & Commissioning of water pipe line for the strengthening of distribution system and rising	Confirmatory survey of all 11 colonies submitted and L section issued all 11 colonies to the contractor. RC pipe procured- 200mm- 4600m 600mm- 1400m Sewer line laid- 4 km Testing - 3.5 km Manhole - 120 nos	No change expected	Effective monitoring and application of EMP	No risk
Jaisalmer	Water Supply	Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the strengthening of distribution system and rising	Pipe line- 50.45 Km(DI-7.69 Km, uPVC- 42.82Km) Line commissioned: 15.305 km (DI- 7.305 km, uPVC- 8.00km). ESR- 02 Nos completed & 01 no. civil work	No change expected till date.	Effective monitoring and application of EMP	No risk

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2366 IND (Tr-1)

Page: 45 of 54

Date: December 2013

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment objectives- remedial measures needed	Key assumptions and risks that affect attainment of the objectives
	main pipeline; Construction and Commissioning of Elevated service reservoirs and providing pumping system and ancillary works {RUSDIP/TR-01/ JSL/WS-02}		completed. Domestic water Meter- 5000 nos procured, 3825nos installed. Line tested- 24.874 Km (DI- 7.305 Km, uPVC-17.569 Km) Road Cutting • WBM =2953 Mtrs. • BT = 10131 Mtrs. • CC = 1390Mtrs Road Restoration • WBM =697.81 Mtrs. • WBM below BT = 5010 Mtrs. • BT = 2860 Mtrs. • CC = 960Mtrs			
Jaisalmer	Waste water - Sewerage and Waste stabilization Ponds in Phase-I in Jaisalmer {RUSDIP/TR-01/ JSL/WW-01}		Sewer pipe 32.83km procured, 30.96 Km line laid, 30 km line tested. uPVC pipe 29.390Km procured, 15.28 Km laid and tested. 878 nos manhole has been completed and 266 manhole has been tested. STP: 1. Office cum lab building work 70 % completed. 2. Raw sewage pump house work 90 % completed. 3. Grit removal unit and Channel, DI pipe laying works 90 % completed. 4. Anaerobic/Facultative pond work 76.00	No change expected	○ Effective monitoring and application of EMP	No risk

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2366 IND (Tr-1)

Page: 46 of 54

Date: December 2013

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment objectives- remedial measures needed	Type of measures	Key assumptions and risks that affect attainment of the objectives
			% and screen work 85 % completed. In Anaerobic ponds lining work is in progress.				
Jaisalmer	Waste Water: Providing, laying, jointing, testing and commissioning of main sewer, various intercepting sewer collecting lateral sewers house sewer connections, road restoration along with all appurtenances in Gandhi colony, Indira colony, RP colony, part of Gafur Bhatta and GAD colony, construction commissioning of civil, mechanical and maintenance of intermediate sewage pumping stations in Gandhi Colony at Jaisalmer Town {RUSDIP/TR-01/JSL/VWV/09}		GRP pipe:- Procured- 3180 met, Laid- 2287 met PVC u Pipe lateral sewer- procured- 11000met, laid-10780met PVC u property connection- Procured- 26400 met, laid- 8630met Manholes- 422 Road cutting:- BT - 4111 met	No change expected	<ul style="list-style-type: none">Effective monitoring and application of EMP		No risk
Jaisalmer	Solid Waste- Development of sanitary landfill sites in Jaisalmer {RUSDIP/TR-01/ JSL/SW-07}		No field activities. Work will be resume after getting Environmental Clearance	-	-		Work will be delayed due to non availability of Environmental clearance
Jhalawar- Jhalrapatan	Solid Waste- Development of Sanitary landfill Sites in Jhalawar {RUSDIP/ TR-01/JHL/SW/08}		Exvation of landfill trenches has been completed. Internal road and boundary wall work are under progress. Tube well is completed.	No change expected	<ul style="list-style-type: none">Effective monitoring and application of EMP		No risk

Annexure – 3

Environmental Monitoring Schedule

Monitoring	Project Type	Parameters	Frequency	No. of location	Remarks
Ambient Air Quality Monitoring					
Air quality parameters	STP, WTP, pump house	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	4 days 24 Hrs basis Semi-annually	2 locations nearby STP, WTP, pump house site	
	Intake location	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	2 days 24 Hrs basis- Semi-annually	1 location nearby the project site	
	Bridge, Drainage	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	3 days 24 Hrs basis Semi-annually	2 locations nearby bridge	
	Landfill	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	3 days 24 Hrs basis Semi-annually	4 locations (one at center and rest at 3 locations 120 degree apart)	
	Pipe laying area	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	3 days 24 Hrs basis Semi-annually	3 locations nearby working zone	
	Heritage site	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , Ammonia, H ₂ S, NOx and CO	2 days 24 Hrs basis Semi-annually	2 locations nearby working zone	
	Fire Fighting station	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	2 days 24 Hrs basis Semi-annually	2 locations nearby working zone	
Ambient Noise Level Monitoring					
Sound Pressure Level	STP, WTP, pump house	L _{eq}	One time in six months (day & night)	3 nearby locations	
	Intake location	L _{eq}	One time in six months(day & night)	2 nearby locations	
	Bridge	L _{eq}	One time in six months(day & night)	5 nearby locations	
	Landfill	L _{eq}	One time in six months(day & night)	4 nearby locations	Preferably near air quality measuring sites
	Pipe laying area	L _{eq}	One time in six months(day & night)	3 nearby locations	
	Heritage site	L _{eq}	One time in six months(day & night)	3 nearby locations	

Monitoring	Project Type	Parameters	Frequency	No. of location	Remarks
			night)		
	Fire Fighting station	L_{eq}	One time in six months(day & night)	2 nearby locations	
Water Quality Monitoring					
Surface water Quality parameters	STP, WTP	General: Turbidity NTU, pH, Total Suspended Solid, TDS, Total Hardness as $CaCO_3$, DO, Organic Matters: BOD, COD, Nutrients: Nitrate, Metals: Chloride, Sulphate, Na, K, Ca, Mg, Fe, Mn, Cd, As, Cr, Cu, Mg, Pb, Selenium, Al, Zn, Bo, Fluorine, Cl (residual free), Other Organics: Phenolic Compound, Cyanide, Phosphate (mg/l)	one time in six months	2 locations (pond, river, nala)	(if location exist)
	Intake location	Turbidity in NTU, pH, Total Suspended Solid, TDS, Total Hardness as $CaCO_3$, DO, BOD, COD	One time in six months	2 locations unpstream and downstream	
	River bridge, Drainage channel	As above	One time in six months	At least 2 location (pond, river, nala)	upstream and downstream
	Landfill site	As above	One time in six months	At least 2 location (pond, river, nala)	if location exist
Ground water Quality parameters	Landfill site, STP	pH, Total Dissolved Solid, Total Hardness as $CaCO_3$, Dissolved Oxygen, Alkalinity as mg/l, Cl, Sulphate, Nitrate, Fe, Mg, Cd, As, Cr, Co, Mg, Pb, Zn, Fluoride Phenolic Compound, Phosphate (mg/l)	One time in six months	At least 3 location (tube well/ hand pump/ bore well)	

Annexure - 4

Public Consultation on Environmental Issues During Construction/ Implementation

Public Consultation meeting was conducted on 19th Nov, 2013 near Fort where laying work is under progress. The public consultation was aimed to understand the public opinion about the project and to identify the significant environmental issues encountered during the execution of works in order to address those unwanted issues properly and to record their suggestions and concerns to be taken care

1. Jaisalmer

1.1. Water Supply Project

Place of Consultation	Near Main Gate of Fort
Date of Consultation	19.11.2013
Project Name	Water Supply
Package no.	RUSDIP/TR-01/JSL/WS-02
Name of the Field Supervisors	Mr. Arvind Rajput & Peeyush Choudhary
Name of the Persons Consulted	Please see attendance sheet
Address	Fort main gate, Near Market, Jaisalmer


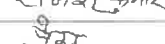

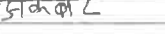

SL.NO.	Points Discussed	Yes	No	Opinion Expressed
01.	Whether dust control measures are taken up by contractor as and when required?	✓		The contractor is spraying water to control the dust.
02.	Whether traffic movement affected during construction?	✓		Alternate routes are available.
03.	Is there any problem due to influx of outside people (labourer)?		✓	Local labourers are engaged in work
04.	Is there any problem, if storage area is in public place?		✓	No such problem has arrived
05	Is there any problem during transportation of materials?	✓		Some problem is observed but this is manageable
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	✓		This is observed to some extent but proper safety precautionary measures are adopted by the contractor.
07	Whether construction work affects local drainage system/ water supply system?		✓	
08	Whether movement of locals/pedestrian affected during construction?		✓	No such problem is observed because alternate routes are there nearby our work site.
09	Whether generated noise affects the normal life of locals?		✓	No such effect is observed.
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)			Satisfactory


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Page 1 of 1

ATTENDANCE SHEET
PUBLIC CONSULTATION

Date	19/11/2013
Site Name	Fort main gate
Name of Project	waste water and water supply
Package No.	NW-6 and WS-02
Location	Fort main gate, Jaisalmer
Name of Person	Peeyush Choudhary

Sl. No.	Name	Profession	Signature
01	Santosh Pal	Serviceman	
02	Rajesh Kumar	labour	
03	Prem Gichlot	Shopkeeper	
04	Rajesh Chhangani	Shopkeeper	
05	Akbar Khan	Driver	
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			


(Arvind Rajput)
Support Engineer - Environment
DSC - II, RUIDP

ENVIRONMENTAL MONITORING

Page

Annexure -5

Details of Mobilization Schedule of Environmental Safeguard Personal

PMU				
Responsibility		Name	Designation	Duration
Overall supervision of Project and Environmental Compliance as per ADB Policy		Mr. D R Jangid	Project Officer Environment	Full Time
IPMC				
Responsibility		Name	Designation	Duration
Overall supervision of all 15 towns		Dr. Ardhendu Mitra	Environmental Expert	Intermittent
		Mr. Vikas Sharma	Support Engineer	Full time
Structure adopted at 15 towns				
Nodal Officer of IPIU		DSC Consultants		
Towns	Nodal Officer Designated by PMU	DSC I		
		Name	Designation	Duration
Alwar	-	Mr. Manoj Kumar	Research Associate	Intermittent
Bharatpur	Mr. SR Jatav			
Sawai Madhopur	Mr. S P Soni			
Dholpur	Mr. S M Meena	Dr. Sanjay Sharma	Environmental Monitoring Specialist	Full time
Karauli	Mr. Pradeep Goyal			
Towns	Nodal Officer Designated by PMU	DSCII		
		Name	Designation	Duration
Jaisalmer	Mr. Amit K. Kumawat	Dr. Amar Sarkar	Research Associate	Intermittent
Sikar	Mr. A K Gupta			
Churu	Mr. Ratan Singh			
Nagaur	Mr. Lalit Sharma	Mr. Arvind Rajput	Environmental Monitoring Specialist	Full time
Barmer	Mr. Sunil Kumar			
Towns	Nodal Officer Designated by PMU	DSC III		
		Name	Designation	Duration
Bundi	Ms. Jyoti Rani verma	Mr. Abhay Srivastav	Research Associate	Intermittent
Baran	Mr. K M Sharma			
Jhalawar	-			
Chhitorgarh	Mr. Arun Bakshi			
Rajsamand	Mr. Paritosh Gupta			

PMU; Project Management Unit; IPIU: Investment Program Implementation Unit; IPMC: Investment Program Management Consultant; DSC: Design Supervision Consultant

Note: Nodal officers are engineer from IPIU having additional duty of safeguard

Annexure-6**Environmental Safeguard Trainings and Reviews**

SN	Date	Place	Subject	Participants	Remarks
1	10.07.2013	Jaipur	Environmental & Social safeguard review and training	1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental experts 4. CAPP ACOs from all DSC-I towns	Training and review meeting on social and environment safeguard conducted by IPMC for Alwar, Dholpur, Bharatpur, Karauli and Sawai Madhopur towns
2	11.07.2013	Jaipur	Environmental & Social safeguard review and training	1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental experts 4. CAPP ACOs from all DSC-II towns	Training and review meeting on social and environment safeguard conducted by IPMC for Churu, Sikar, Nagaur, Barmer and Jaisalmer towns
3	12.07.2013	Jaipur	Environmental & Social safeguard review and training	1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental experts 4. CAPP ACOs from all DSC-III towns	Training and review meeting on social and environment safeguard conducted by IPMC for Baran, Bundi, Jhalawar, Chittorgarh and Rajsamand towns
4	18.10.2013	Jaipur	Environmental & Social safeguard review and training	1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental experts 4. CAPP ACOs from all DSC-III towns	Training and review meeting on social and environment safeguard conducted by IPMC for Baran, Bundi, Jhalawar, Chittorgarh and Rajsamand towns
5	23.10.2013	Jaipur	Environmental & Social safeguard review and training	1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental experts 4. CAPP ACOs from all DSC-I towns	Training and review meeting on social and environment safeguard conducted by IPMC for Alwar, Dholpur, Bharatpur, Karauli and Sawai Madhopur towns

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No.: 2366 IND (Tr-1)

Page: 53 of 54

Date: December 2013

6	24.10.2013	Jaipur	Environmental & Social safeguard review and training	<ol style="list-style-type: none"> 1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental experts 4. CAPP ACOs from all DSC-II towns 	Training and review meeting on social and environment safeguard conducted by IPMC for Churu, Sikar, Nagaur, Barmer and Jaisalmer towns
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Semi-annual Environmental Monitoring Report

Tranche 2 (Loan Number 2506 –IND)

Document Stage: Final

Project Number: 40031

Month Year: December 2013

IND: Rajasthan Urban Sector Development
Investment Program

Prepared by Local Self Government Department

This report has been submitted to ADB by the Local Self-Government Department of the Government of Rajasthan and is made publicly available in accordance with ADB's public communications policy (2005), it does not necessarily reflect the views of ADB

TABLE OF CONTENTS

I. INTRODUCTION	1
II. APPLICATION OF ENVIRONMENTAL MANAGEMENT PLAN.....	3
III. ENVIRONMENTAL PROCEDURE REVIEW	132
IV. ENVIRONMENTAL MONITORING AND EVALUATION.....	142
V. CONSULTATIONS AND RECOMMENDATIONS	143

TABLES & ANNEXURES

TABLE 1: SUB-PROJECT STATUS- TRANCHE 2	2
TABLE: 2 IMPLEMENTATION OF ENVIRONMENTAL MANAGEMENT PLAN.....	3
TABLE 3: COMPLIANCE OF EMP FOR ALWAR BRIDGE SUB-PROJECT {RUSDIP/TR-02/ALW/BR-02}.....	6
TABLE 4: COMPLIANCE OF EMP FOR KARALI WATER SUPPLY SUB-PROJECT {RUSDIP/TR-02/KRL/WS-01}.....	11
TABLE 5: COMPLIANCE OF EMP FOR SAWAI MADHOPUR WATER SUPPLY SUB-PROJECT {RUSDIP/TR-02/SMD/WS-02}	17
TABLE 6: COMPLIANCE OF EMP FOR SAWAI MADHOPUR WASTE WATER SUB-PROJECT {RUSDIP/TR-02/SMD/WW-02}	23
TABLE 7: COMPLIANCE OF EMP FOR BHARATPUR WATER SUPPLY SUB-PROJECT {RUSDIP/TR-02/BPR/WS-03 & WS/05}.....	29
TABLE 8: COMPLIANCE OF EMP FOR BHARATPUR ROAD SUB-PROJECT {RUSDIP/TR-02/BPR/ST/01}.....	34
TABLE 9: COMPLIANCE OF EMP FOR DHOLPUR WATER SUPPLY SUB-PROJECT {RUSDIP/TR-02/DLP/WS/03}.....	40
TABLE 10: COMPLIANCE OF EMP FOR DHOLPUR WASTE WATER SUB-PROJECT {RUSDIP/TR-02/DLP/WW/04, WW/05 & WW/08}	46
TABLE 11: COMPLIANCE OF EMP FOR SIKAR WATER SUPPLY SUB-PROJECT {RUSDIP/TR-02/SKR/WS/02, WS/03 & WS/04}.....	52

TABLE 12: COMPLIANCE OF EMP FOR SIKAR ROAD SUB-PROJECT {RUSDIP/TR-02/SKR/ST/02, ST/04 & ST/05}.....	57
TABLE 13: COMPLIANCE OF EMP FOR NAGAUER WATER SUPPLY SUB-PROJECT {RUSDIP/TR-02/NGR/WS/01}.....	63
TABLE 14: COMPLIANCE OF EMP FOR NAGAUER WASTE WATER SUB-PROJECT {RUSDIP/TR-02/NGR/WW/02-LOT-2 & WW/03}.....	69
TABLE 15: COMPLIANCE OF EMP FOR CHURU WATER SUPPLY SUB-PROJECT {RUSDIP/TR-02/CHU/WS/02}.....	75
TABLE 16: COMPLIANCE OF EMP FOR BARMER WATER SUPPLY SUB-PROJECT {RUSDIP/TR-02/BMR/WS/02}.....	80
TABLE 17: COMPLIANCE OF EMP FOR BARMER BRIDGE SUB-PROJECT {RUSDIP/TR-02/BMR/BR/02}.....	86
TABLE 19: COMPLIANCE OF EMP FOR BARAN ROB SUB-PROJECT {RUSDIP/TR-02/BRN/BR/02}.....	97
TABLE 20: COMPLIANCE OF EMP FOR BUNDI WATER SUPPLY SUB-PROJECT {RUSDIP/TR-02/BND/WS/02}.....	103
TABLE 21: COMPLIANCE OF EMP FOR BUNDI ROAD SUB-PROJECT {RUSDIP/TR-02/BND/ST/04}.....	109
TABLE 22: COMPLIANCE OF EMP FOR RAJSAMAND WATER SUPPLY SUB-PROJECT {RUSDIP/TR-02/RSM/WS/03}.....	114
TABLE 23: COMPLIANCE OF EMP FOR RAJSAMAND WASTE WATER SUB-PROJECT {RUSDIP/TR-02/RSM/WW/02 LOT-1 AND LOT-2}.....	120
TABLE 24: COMPLIANCE OF EMP FOR JHALAWAR WASTE WATER SUB-PROJECT {RUSDIP/TR-02/JHL/WW/02}.....	126
TABLE 25: ACTION REQUIRED ENSURING SUBPROJECTS COMPLY WITH NATIONAL ENVIRONMENTAL LAWS.....	132
TABLE 26: PRESENT STATUS OF ENVIRONMENT AND FOREST & OTHER CLEARANCES - (TRANCHE 2).....	134
TABLE 26: STATUS OF COMPLIANCE OF ADB'S MAJOR ENVIRONMENTAL LOAN COVENANTS.....	136
ANNEXURE – 1 ENVIRONMENTAL LEGISLATION AND POLLUTION CONTROL ACTS .	145
ANNEXURE – 2 MAJOR WORKS AND PROGRESS- TRANCHE 02.....	147

ANNEXURE – 3 ENVIRONMENTAL MONITORING SCHEDULE.....	159
ANNEXURE -4 PUBLIC CONSULTATION ON ENVIRONMENTAL ISSUES DURING CONSTRUCTION/ IMPLEMENTATION	161
ANNEXURE -5.....	175
ANNEXURE-6.....	176
<u>FIGURES</u>	
Figure 1: Institutional Responsibility- Environmental Organisation RUSDIP	140
Figure 2: Grievance Redress Process	141

I. INTRODUCTION

A). Background

1. Rajasthan Urban Sector Development Investment Program (RUSDIP) is intended to optimize social and economic development in 15 selected towns in the State, particularly district headquarters and towns with significant tourism potential. This will be achieved through investments in urban infrastructure (water supply; sewerage and sanitation; solid waste management; urban drainage; urban transport and roads), urban community upgrading (community infrastructure; livelihood promotion) and civic infrastructure (art, culture, heritage and tourism; medical services and health; fire services; and other services). RUSDIP will also provide policy reforms to strengthen urban governance, management, and support for urban infrastructure and services. The assistance will be based on the State-level framework for urban reforms, and institutional and governance reforms recommended by the Government of India (GoI) through the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT).

2. RUSDIP Phase II to be implemented over a seven year period beginning in 2008, and will be funded by a loan via the Multitranche Financing Facility (MFF) of the ADB. The Executing Agency (EA) is the Local Self-Government Department (LSGD) of the Government of Rajasthan (GoR); and the Implementing Agency (IA) is the Project Management Unit (PMU) of the Rajasthan Urban Infrastructure Development Project (RUIDP), which is currently in the construction stage (Tr-1 & Tr-2). Construction has also been started for Tr-3 sub-projects. Alwar, Jaisalmer and Jhalwar/ Jhalrapatan are the towns chosen to benefit from the first tranche of RUSDIP investment. While 12 other towns namely, Bharatpur, Karauli, Dholpur, Sawai Madhopur, Churu, Sikar, Barmer, Nagaur, Chittorgarh, Rajsamund, Bundi and Baran-Chabra are considered under tranche 2 and 3 (Tr-2 & 3).

3. This report presents environmental monitoring for only **Tranche 2** sub-projects.

B). Project Purpose

4. RUSDIP will improve infrastructure through the development, design and implementation of a series of subprojects, each providing improvements in a particular sector (water supply, sewerage, solid waste etc) in one town. RUSDIP has been classified by ADB as environmental assessment category B (some negative impacts but less significant than category A) and the impacts of subprojects were assessed through Initial Environmental Examination (IEE) reports prepared according to ADB Environment Policy (2002), SPS 2009 and Environmental Assessment Guidelines (2003).

5. The nature of the sub-projects may change during their subsequent development, particularly during detailed design. This report is the Environmental Monitoring Report (EMR) to describe the implementation of the mitigation measures and monitoring recommended in the IEE and summary Initial Environmental Examination (SIEE).

C). Project Profile

6. Till 31st December 2013, **41 environmental sensitive** sub-projects under **Tranche 2** have been awarded. Out of those **41 sub-projects**, 8 packages in Sikar; 5 packages in Barmer; 4 packages each in Bharatpur, Dholpur and Nagaur; 3 packages each in Sawai Madhopur, Bundi and Rajsamand; 2 packages in Churu and 1 package each in Alwar, Karauli, Baran, Jhalawar and Chittorgarh have been awarded. One package each in Sikar (SKR/WW/01), Nagaur (NGR/WW/01) and Barmer (RUSDIP/ TR-02/ BMR/WW/02) has

been terminated previously. One package in Bundi (RUSDIP/ TR-02/ BND/WW/04) has been terminated during report period (on 23.10.2013). The construction work for 5 packages one in Chittorgarh (RUSDIP/TR-02/CHT/BR/01) one in Bharatpur (RUSDIP/ TR-02/ BPR/DR/02), one in Sawai Madhopur (RUSDIP/TR-02/ SMD/BR/01), one in Churu (RUSDIP/TR-2/CHU/BR/01) and one in Sikar (RUSDIP/TR-2/SKR/DR/01) have completed previously whereas the work of Baran bridge package (BRN/BR/02) has completed on 30.11.13 in the report period, therefore, assessment of EMP compliance of Baran bridge package has been considered in this report. At present actual field work is continued in **31 sub projects**. The application of EMP in all ongoing sub-projects is shown in tables below in this chapter. The implementation status of sub-projects under **Tranche 2** has been summarized in Table -1.

Table 1: Sub-project Status- Tranche 2

SN	Town	Number of Sub-projects					
		Awarded	Under-implementation	Completed	Yet to be started	Work Stopped	Terminated/ Dropped
1	Alwar	1	1	-	-	-	-
2	Karauli	1	1	-	-	-	-
3	Sawai Madhopur	3	2	1	-	-	-
4	Bharatpur	4	3	1	-	-	-
5	Dholpur	4	3	-	1	-	-
6	Sikar	8	6	1	-	-	1
7	Nagaur	4	3	-	-	-	1
8	Churu	2	1	1	-	-	-
9	Barmer	5	4	-	-	-	1
10	Baran	1	1	-	-	-	-
11	Bundi	3	2	-	-	-	1
12	Chittorgarh	1	-	1	-	-	-
13	Rajsamand	3	3	-	-	-	-
14	Jhalawar	1	1	-	-	-	-
	Total	41	31	05	01	0	04

II. APPLICATION OF ENVIRONMENTAL MANAGEMENT PLAN

7. At present there are 41 environmental sensitive sub-projects under Tranche 2 have been awarded to the contractors. Major field activities are ongoing for 31 sub-projects whereas construction work of Jhalawar waste water package has recently started in November 2013 under Tranche-02. EMP has been implemented in 31 sub- projects as per IEE report. The detailed list of projects under review is presented in **Table 2**. Overall compliance status of EMP application and actions needed are discussed below and shown in **Table 3 to Table 24**.

8. The EMP has been implemented in all ongoing sub-projects and status of the same is being monitored. **Annexure 2** shows summary of the scope of works, present work status, expected changes from the approved objectives, remedial measures for fulfillment of objective and key risks/ assumption for attainment of objectives.

9. Training has been given to the contractors, DSC's monitoring specialist and IPIU representative on environmental safeguard requirement. The status/progress of EMP implementation is also being reviewed in quarterly review meetings and necessary training is being provided. The detail of quarterly review meetings is presented in Annexure-07. Moreover instruction is given to contractors to follow the specified clause of BID document to mitigate environmental and social impacts.

10. In this report period field work continued for 31 sub-projects under tranche-2 as presented in Table-1. The progress of implementation of the EMP has been monitored for each ongoing sub-project. For the purpose of monitoring of EMP and progress reporting project sector specific formats were developed according the expected activities. The compliance with the EMP are expressed below for each sub-project:

**Table: 2 Implementation of Environmental Management Plan
(July to December 2013)**

Sr. No.	Project Town	Packages
TR-2		
1	Alwar	Bridge: Widening of existing ROB near Bhagat Singh Circle at Alwar Package No: {RUSDIP/ TR-02/ ALW/BR/02}
2	Karauli	Water Supply: Construction of OHSRs and balancing reservoir including Providing, Laying, Jointing, Testing and Commissioning of DI pipelines in Distribution system and Transmission system; and replacing of existing leaking pipelines; Replacement of Water Meters for UWSS in Karauli town Package No: {RUSDIP/ TR-02/ KRL/WS/01}
3	Sawai Madhopur	Waste Water: Design, Construction, Supply, erection testing, commissioning and five years operation & maintenance of Sewage Treatment plant 10 MLD near Surwal Village including all civil, electrical, mechanical, pumping and other allied works and Supply, laying, joining, testing and commissioning of outfall sewer, various Trunk sewers and lateral sewers connecting to out fall, along with all necessary manholes, appurtenances, etc. at Sawai Madhopur Package No: {RUSDIP/ TR-02/ SMD/WW/02}
		Water Supply: Construction of OHSRs, CWRs, Pump houses and rising & distribution lines. Package No: {RUSDIP/TR-02/SMD/WS/02}
4	Bharatpur	Water Supply: Construction of CWRs & OHSRs including supply, laying and commissioning with testing of DI & uPVC pipelines and construction of pumping stations and replacing of leakaged pipeline etc. for UWSS Bharatpur. Package No: {RUSDIP/TR-02/ BPR/WS/03}

Sr. No.	Project Town	Packages
		Water Supply: Additional Works as requested by PHED for Strengthening of Distribution System at Bharatpur town. Package No.: (RUSDIP/TR-02/BPR/WS/05) Street: Widening and Strengthening of circular road at Bharatpur town {RUSDIP/TR-02/BPR/ST/01}
5	Dholpur	Water Supply: Design, Construction and Commissioning of 15 MLD capacity Water Treatment Plant including commissioning of equipments at Sagarpada; Construction of CWRs & OHSRs including supply, laying and commissioning with testing of DI & uPVC pipelines and replacing of leakaged pipeline etc. for UWSS Dholpur. Package No: {RUSDIP/ TR-02/ DLP/WS/03} Waste Water: Supply, Laying, Jointing, Testing and Commissioning of outfall sewer, trunk sewers, lateral sewers, lateral sewers along with construction of manholes, appurtenances etc. at Dholpur. Package No. : (RUSDIP/TR-02/DLP/WW/04) Waste Water: Design, construction, supply, erection, testing, commissioning and 5 year operation and maintenance of 10 MLD sewage treatment plant based on UASB process with sewage pumping/lifting station including all civil, electrical, mechanical, pumping and allied works in Dholpur town Package No.: (RUSDIP/TR-02/DLP/WW/05)
6	Sikar	Water Supply - Water Supply: Water pipelines, CWRs, OHSRs, tube wells, Chlorination, flow meter (RUSDIP/ TR-02/ SKR/WS/02) Water Supply: Additional work for augmentation of production of drinking water from newly proposed Intermediate pumping Stations to various reservoirs in Sikar town. (RUSDIP/ TR-02/ SKR/WS/03) Water Supply: Construction of 7 OHSRs at different places at Sikar {RUSDIP/TR-02/SKR/WS/04} Road: Widening & strengthening of existing roads at Sikar Town (RUSDIP/ TR-02/SKR/ST/02) Road: Improvement and widening of existing road from Jhunjhunu bye pass to Bus Stand to 4 lane at Sikar Town (RUSDIP/ TR-02/ SKR/ST/04) Road: Road & Drain Works at Sikar {RUSDIP/TR-2/SKR/ST/05}
7	Nagaur	Water Supply: Construction of OHSRs and CWRs including Providing, Laying, Jointing, Testing and Commissioning of uPVC and DI pipelines in Distribution system and Transmission system; Construction of Pumping stations and ancillary works; Replacement of Water Meters for UWSS in Nagaur town {RUSDIP/ TR-02/ NGR/WS/01} Waste water: STP 8 MLD {RUSDIP/TR-02/NGR/WW/02 (Lot-2)} Waste water: Supply, laying, Jointing, Testing and commissioning of outfall sewer, Trunk sewers and lateral sewers, along with Construction manholes, appurtenances tec. {RUSDIP/TR-02/NGR/WW/03}
8	Churu	Water Supply: Construction of OHSR including Supply, Laying, & Commissioning, Testing of DI and uPVC Pipe & Construction of Pumping Station etc for UWSS Churu Package No: {RUSDIP/TR-02/ CHU/WS/02}
9	Barmer	Water Supply: Construction of CWRs & OHSRs including Supply, Laying, and Commissioning with testing of Rising & Distribution pipelines and installation of Chlorination, Flow meter etc., for UWSS at Barmer. Package No: {RUSDIP/TR-02/BMR/WS-02} ROB: Construction of 2 lane ROB at level crossing no. 323 on NH-15 { Package No: {RUSDIP/TR-2/BMR/BR/01} Waste water: Supply, sewer line work {RUSDIP/TR-2/BMR/WW/03 (Lot-1)} Waste water: STP 10 MLD

Sr. No.	Project Town	Packages
		{RUSDIP/TR-2/BMR/WW/03 (Lot-2)}
10	Baran	ROB: Construction of 2 lane ROB at level crossing no. 37 on NH 76 at Baran Package No: {RUSDIP/ TR-02/ BRN/BR/02}
11	Bundi	Water Supply: Construction of OHSRs and CWRs including providing laying, jointing Testing and Commissioning of uPVC and DI pipelines in Distribution system and Transmission system; Construction of Tube wells; Construction of Pumping stations; Replacement of Water meters for UWSS in Bundi town. Package No: {RUSDIP/TR-02/ BND/WS/02}
		Roads: Widening and Strengthening of 13 different Roads in Bundi city. (RUSDIP/TR-02/BND/ST/04)
12	Rajsamand	Water Supply: Design, Construction and Commissioning of intake well & 17 MLD capacity Water Treatment Plant including commissioning of equipments; Construction of CWRs & OHSRs including supply, laying and commissioning with testing of DI & uPVC pipelines Package No: {RUSDIP/ TR-02/ RSM/WS/03}
		Waste Water: Supply, laying, jointing, testing and commissioning of out fall sewer, trunk main and lateral sewer along with construction of manholes, appurtenances etc. in Rajsamand town. Package No: {RUSDIP/TR-2/RSM/WW/ 02 (Lot-1)}
		Waste water: Design, Construction, Supply, erection testing, commissioning and first five years operation & maintenance of Sewage Treatment plant near village Bhawa including all civil, electrical, mechanical, pumping and other allied works in Rajsamand town Package No: {RUSDIP/TR-2/RSM/WW/ 02 (Lot-2)}
13	Jhalawar	Waste Water: Laying of Sewer line network at Jhalawar & Jhalapatan town{RUSDIP/TR-02/JHL/WW/02}

Table 3: Compliance of EMP for Alwar Bridge sub-project {RUSDIP/TR-02/ALW/BR-02}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	No clearances are required from Pollution Control Board. Tree cutting is not required	Nil	—
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	—
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct	Complied	All the facilities related to construction are located within project site	Nil	—

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	disposal to water body or in areas which will inconvenience the community. Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially complied	Water sprinkling is being done as and when it required The fine material carrying vehicles are covered Biannual Air quality monitoring not conducted	Biannual Air quality monitoring is required immediately Air quality monitoring will be carried out in Jan-Feb 2014	Contractor/IPIU
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic	Partially Complied	Presently the excavation is started and materials are dumped safely near the site premises and will be	Nearest well/tube-well water is required to be monitor	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p>		<p>utilized beneficially for backfilling.</p> <p>Surface water quality monitoring is not required as there is no water body nearby</p>		
4	<p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially complied	<p>Activities with the greatest potential to generate noise have been planned in consultation with IPIU and are being conducted in day time</p> <p>Noise monitoring has not been conducted for reporting period</p>	<p>Instructions are given to contractors for proper maintenance of equipments</p> <p>Instruction has been given to contractor to conduct noise monitoring.</p> <p>Noise monitoring will be carried out in Jan-Feb 2014</p>	Contractor/IPIU
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove</p>	Complied	Excavated materials are dumped safely near the site premises and will be utilized beneficially for backfilling.	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 9 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
6	from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;	Complied	Works is carried out without causing any congestion to the existing traffic condition Transportation is being carried out during non peak hours	Nil	—
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	All activities are within confined site premises and no hindrance for access to any residence or critical areas	Nil	—
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally which is more than 50%.	Nil	—
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a)	Partially complied	PPE are not being used completely First-aid has been provided	Ensure complete use of PPE	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>(ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day</p>		<p>Group insurance has been provided to workers</p> <p>Proper barricading has been provided to avoid unauthorized intrusion</p> <p>Drinking water has been provided at sites</p> <p>H&S training is being provided to workers by DSC regularly</p>		

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	without hearing protection. The use of hearing protection shall be enforced actively. Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and (ix) Request IPIU/DSC to report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work.	Not Applicable	At present most of the workers employed are local. Contractor has not constructed any camp	Nil	-

Table 4: Compliance of EMP for Karauli Water Supply sub-project {RUSDIP/TR-02/KRL/WS-01}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance • Consent to Establish under Water (Prevention and Control of Pollution) Act	Complied	No clearances are required from Pollution Control Board. Tree cutting is not required	Nil	Nil

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<ul style="list-style-type: none"> Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 				
2	<p>Social and Cultural Resources</p> <p>(i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site;</p> <p>(ii) Consider alternatives if the site is found to be of medium or high risk;</p> <p>(iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and</p> <p>(iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.</p>	Complied	<p>It was confirmed by consultations with various stakeholders that the site has no archaeological potential</p> <p>Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved</p>	Nil	-
3	<p>Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas</p> <p>(i) Prioritize areas within or nearest possible vacant space in the subproject sites;</p> <p>(ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems;</p> <p>(iii) Do not consider residential areas;</p> <p>(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.</p>	Complied	All the facilities related to construction are located within project site	Nil	-
4	<p>Sources of Materials</p> <p>(i) Prioritize sites already permitted by the Mining Department;</p> <p>(ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval</p>	Complied	All the material is being taken from approved mines	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 13 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.				
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially complied	Water sprinkling is being done as and when it required Material carrying vehicles are properly covered to avoid dust problem Biannual Air quality monitoring is not done during report period. Work order for the same has been issued. Monitoring will be done in Jan-Feb 2014	Biannual Air quality monitoring is required immediately.	Contractor/IPIU
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins	Partially Complied	Presently the excavation is started and materials are dumped safely near the site premises and will be utilized beneficially for backfilling. Surface water quality monitoring is not required. There is no surface water body near subproject area	Nearest well/tube-well water is required to be monitor	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).				
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach; (iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and (iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.	Partially complied	Activities with the greatest potential to generate noise have been planned in consultation with IPIU and are being conducted in day time Noise monitoring has not been conducted for reporting period; work order for the same has been issued.	Instructions are given to contractors for proper maintenance of equipments Monitoring will be conducted in Jan-Feb 2014	Contractor
5	Landscape and Aesthetics (i) Prepare and implement Waste Management Plan; (ii) Avoid stockpiling of excess excavated soils; (ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;	Complied	Excavated materials are dumped safely near the site premises and will be utilized beneficially for backfilling.	Nil	-
6	Accessibility	Complied	Works is carried out without causing	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;		any congestion to the existing traffic condition Transportation is being carried out during non peak hours		
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	All activities are within confined site premises and no hindrance for access to any residence or critical areas	Nil	–
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	–
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;	Partially complied	PPE are not being used completely First-aid box has not been provided at site Group insurance has been provided to workers	Ensure complete use of PPE Ensure qualified first-aid is available all time at site	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>(ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>		<p>Proper barricading has been provided to avoid unauthorized intrusion</p> <p>Drinking water has been provided at sites</p> <p>H&S training is being provided to workers by DSC regularly</p>		
10	<p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p>	Not Applicable	At present most of the workers employed are local. Contractor has not constructed any camp	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<ul style="list-style-type: none"> (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and (ix) Request IPIU/DSC to report in writing that the camp has been vacated and restored to pre-project conditions before acceptance of work. 				

Table 5: Compliance of EMP for Sawai Madhopur Water Supply sub-project {RUSDIP/TR-02/SMD/WS-02}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> • Consent to Establish under Water (Prevention and Control of Pollution) Act • Consent to Establish under Air (Prevention and Control of Pollution) Act • Tree-cutting Permit 	Complied	No clearances are required from Pollution Control Board. Tree cutting is not required	Nil	–
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain	Complied	It was confirmed by consultations with various stakeholders that the	Nil	–

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>an expert assessment of the archaeological potential of the site;</p> <p>(ii) Consider alternatives if the site is found to be of medium or high risk;</p> <p>(iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and</p> <p>(iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.</p>		<p>site has no archaeological potential</p> <p>Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved</p>		
3	<p>Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas</p> <p>(i) Prioritize areas within or nearest possible vacant space in the subproject sites;</p> <p>(ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems;</p> <p>(iii) Do not consider residential areas;</p> <p>(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.</p>	Complied	All the facilities related to construction are located within project site	Nil	—
4	<p>Sources of Materials</p> <p>(i) Prioritize sites already permitted by the Mining Department;</p> <p>(ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and</p> <p>(iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.</p>	Complied	All the material is being taken from approved mines	Nil	—
CONSTRUCTION STAGE					

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
1	<p>Sources of Materials</p> <p>(i) Use quarry sites and sources permitted by government;</p> <p>(ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU);</p> <p>(iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and;</p> <p>(iv) Submit to DSC on a monthly basis documentation of sources of materials.</p>	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	<p>Air Quality</p> <p>(i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>(ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather;</p> <p>(iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and</p> <p>(iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.</p>	Partially complied	<p>Water sprinkling is being done as and when it required</p> <p>Material carrying vehicles are properly covered to avoid dust problem</p> <p>Biannual Air quality monitoring is not done during report period</p>	<p>Biannual Air quality monitoring is required immediately</p>	Contractor
3	<p>Surface water quality</p> <p>(i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p>	Partially Complied	<p>Excavation works are almost completed and excess spoils have utilized for backfilling.</p> <p>Surface water quality monitoring is not required. There is no water body near project site</p>	<p>Nearest well/tube-well water is required to be monitor</p>	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	<p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially complied	<p>Activities with the greatest potential to generate noise have been planned in consultation with IPIU and are being conducted in day time</p> <p>Noise monitoring has not been conducted for reporting period. Work order to the monitoring agency has been issue monitoring will be conducted in Jan-Feb 2014</p>	<p>Instructions are given to contractors for proper maintenance of equipments</p> <p>Noise monitoring is required immediately</p>	Contractor/IPIU
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p>	Partially Complied	Excess excavated soil is required to remove to avoid hindrance to neighboring population	Coordination is required with IPIU/DSC for proper and immediate disposal of excess material	Contractor
6	<p>Accessibility</p> <p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>(ii) Schedule transport and hauling activities during non-peak hours;</p> <p>(iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak</p>	Complied	<p>Works is carried out without causing any congestion to the existing traffic condition</p> <p>Transportation is being carried out during non peak hours</p>	Nil	-

Date: December 2019

Sr. No.	Environmental activities	components related to project	Compliance	Explanation	Action Proposed	Responsibility
	hours;					
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	Work almost completed, all ongoing activities are within confined site premises and no hindrance for access to any residence or critical areas Sign board has been provided at site	Nil		–
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil		–
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not	Partially complied	PPE are not being used completely First-aid box has not been provided at site Group insurance has been provided to workers Proper barricading has not been provided to avoid unauthorized intrusion at Commerce college OHSR site Drinking water has been provided at sites	Ensure complete use of PPE Poor provision of safety during working at height Ensure qualified first-aid is available all time at site Proper barricading is required immediately at Commerce college OHSR site	Contractor	

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>		<p>H&S training is being provided to workers by DSC regularly</p> <p>Workers are not exposed to high noise level more than 8 hrs</p>		
10	<p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove</p>	Partially Complied	<p>At present most of the workers employed are local. Contractor has constructed a very small camp at site</p> <p>Sanitary, solid waste management is being carried but more attention in this regard is required</p>	Provide proper water and sanitation facilities to worker in the camp	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;				

Table 6: Compliance of EMP for Sawai Madhopur Waste Water sub-project {RUSDIP/TR-02/SMD/WW-02}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Consent to operate obtained from Pollution Control Board –File No. F(MUID)/ Sawai Madhopur / Sawai Madhopur / 1(1)/2012-2013/6584-6586 Order No. 2012-2013/MUID/1013 dated 25.10.2012 Consent valid upto 30.09.2015 Tree cutting is not required It was confirmed by consultations with various stakeholders that the site has no archaeological potential	Nil	–
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure	Complied	Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	–

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 24 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
3	that any chance finds are <input type="checkbox"/> ecognized and measures are taken to ensure they are protected and conserved. Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.	Complied	All the facilities related to construction are located within project site	Nil	-
4	Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPIU.	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality	Partially	Water sprinkling is being done as	Air monitoring will be	Contractor/IPIU

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 25 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>(i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>(ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather;</p> <p>(iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and</p> <p>(iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.</p>	Complied	<p>and when it required</p> <p>Air monitoring has not been conducted for reporting period.</p>	conducted in January/February 2014	
3	<p>Surface water quality</p> <p>(i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p>	Partially Complied	<p>Excavation works are almost completed and excess spoils have utilized for backfilling.</p> <p>No surface water body near sub-project. Water quality monitoring is not required</p>	Nearest well/ tube-well is required to be monitor	Contractor/IPIU
4	<p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing</p>	Partially complied	<p>Activities with the greatest potential to generate noise have been planned in consultation with IPIU and are being conducted in day time</p> <p>In general no proper enclosures are provided to noise producing machinery</p>	<p>Instructions are given to contractors for proper maintenance of equipments</p> <p>Instruction has been given to contractor to conduct noise monitoring and provide proper enclosures to noise producing</p>	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
5	<p>mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p> <p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>Accessibility</p> <p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>(ii) Schedule transport and hauling activities during non-peak hours;</p> <p>(iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</p>	Complied	<p>Noise monitoring has not been conducted for reporting period</p> <p>Excess excavated soil has been utilized for backfilling</p>	<p>machinery</p> <p>Air monitoring will be conducted in January/February 2014</p> <p>Nil</p>	-
6	<p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>(ii) Schedule transport and hauling activities during non-peak hours;</p> <p>(iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</p>	Complied	No significant hauling activities at present	Nil	-
7	<p>Socio-Economic – Income</p> <p>(i) Leave spaces for access between mounds of soil;</p> <p>(ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles;</p> <p>(iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools;</p> <p>(iv) Consult businesses and institutions regarding</p>	Complied	<p>Work almost completed, all ongoing activities are within confined site premises and no hindrance for access to any residence or critical areas</p> <p>Project area is away from sensitive places</p>	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.		Sign board has been provided at site		
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	–
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of	Partially complied	PPE are not being used completely First-aid box has been provided at site Group insurance has been provided to workers Proper barricading has been provided to avoid unauthorized intrusion. Drinking water has been provided at sites H&S training is being provided to workers by DSC regularly Workers are not exposed to high noise level more than 8 hrs	Ensure complete use of PPE	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	<p>high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove from the site;</p> <p>(vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>(viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p>	Not Applicable	At present most of the workers employed are local.	Nil	-

Table 7: Compliance of EMP for Bharatpur Water Supply sub-project {RUSDIP/TR-02/BPR/WS-03 & WS/05}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	No clearance is required from Pollution Control Board or other department. Tree cutting is not required	Nil	—
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	—
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct	Complied	All the facilities related to construction are located within project site	Nil	—

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	disposal to water body or in areas which will inconvenience the community.				
4	Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Complied	Significant sprinkling is not required, manual watering is being done when it required Air quality monitoring has been completed. Results for the same are awaited and will be discussed in next EMR Jan-June 2014	Nil	-
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the	Partially Complied	Excess earth is being utilized for backfilling and leveling of edges of	Nearest well/tube well water quality is required to	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	<p>monsoon season unless covered by tarpaulins or plastic sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p> <p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially complied	<p>CC road under package BPR/ST/01.</p> <p>No Surface water body near sub-project area</p> <p>Activities with the greatest potential to generate noise have been planned in consultation with IPIU and are being conducted in day time</p> <p>No enclosures are provided to generator set or other, noise producing machinery. However, at most of the location of construction site heavy machinery is not required.</p> <p>Noise monitoring has been completed. Results for the same are awaited and will be discussed in next EMR Jan-June 2014</p>	<p>be inspected</p> <p>Instructions are given to contractors for proper maintenance of equipments</p> <p>Instruction has been given to contractor to conduct noise monitoring and provide proper enclosures to noise producing machinery</p>	Contractor/IPIU
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to</p>	Complied	Overburden and excavated materials from construction sites are being utilized in backfilling of trenches and leveling of low lying area. Sometimes local communities	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 32 of 177
Date: December 2013

Sr. No.	Environmental activities	components related to project	Compliance	Explanation	Action Proposed	Responsibility
	designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;			also carry overburden to use it in their own low lying space		
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;		Complied	Transportation and hauling activities are being conducted in non peak hours, however no major such activities at present	Nil	—
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.		Complied	Metal sheets has been provided when it required Sign board has been provided at site	Nil	—
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.		Complied	At present most of the workforce is hired locally	Nil	—
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety		Partially complied	PPE are not being used completely	Ensure complete use of PPE	Contractor

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 33 of 177

Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>(H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>(ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than</p>		<p>First-aid box has been provided at site</p> <p>Group insurance has been provided to workers</p> <p>Proper barricading has been provided to avoid unauthorized intrusion.</p> <p>Drinking water has been provided at sites</p> <p>Training for health and safety measures have been given to contractor by DSC. Awareness is done by the ACO, CAPP. The contractor has nominated representative for H & S (safety of workers/public)</p> <p>Workers are not exposed to high noise level more than 8 hrs</p>		

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.				
10	Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;	Not Complied	A very small unmanaged worker camp has been established. No sanitary and solid waste management is done properly at workers camp.	Provide proper drinking water to worker Provide proper sanitation Improvement in housekeeping Contractor has instructed for compliance	Contractor

Table 8: Compliance of EMP for Bhratpur Road sub-project {RUSDIP/TR-02/BPR/ST/01}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act 	Complied	No clearance is required from Pollution Control Board or other department except for tree cutting. Tree cutting permission has been obtained from local administration. Compensatory plantation for cutting	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<ul style="list-style-type: none"> Tree-cutting Permit 		of trees is in progress		
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	-
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.	Complied	All the facilities related to construction are located within project site	Nil	-
4	Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and	Complied	All the material is being taken from approved mines	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.				
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	The proposed road is passing through the market and residential area of the town therefore dust control is important Inadequate sprinkling of water is observed Air quality monitoring has been completed. Results for the same are awaited and will be discussed in next EMR Jan-June 2014	Sufficient sprinkling is required to control the dust	Contractor
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from	Partially Complied	Excess spoils have been utilized for leveling of edges. Surface water monitoring is not required. There is no surface water body nearby the site	Nearest well/tube well is required to be monitor	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).				
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach; (iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and (iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.	Partially complied	Activities with the greatest potential to generate noise have been planned in consultation with IPIU and are being conducted in day time No enclosure for Concrete mixture and generator set has been provided. The work is almost within inhabited area so it is urgently required Noise monitoring has been completed. Results for the same are awaited and will be addressed in next EMR Jan-June 2014	Instructions are given to contractors for proper maintenance of equipments and enclosure for Concrete mixture and generator set	Contractor
5	Landscape and Aesthetics (i) Prepare and implement Waste Management Plan; (ii) Avoid stockpiling of excess excavated soils; (ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;	Partially Complied	No significant amount of overburden and excavated materials is generated from construction sites. Preparation of waste management plan is required	Instruction has been given to contractor to prepare waste management plan in advance and manage the same according to hierarchy (i.e. reuse, recycling and disposal to designated areas) as per EMP	Contractor
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not	Partially Complied	Route for material construction vehicle has been planned and	Traffic aids are required of smooth movement of both	Contractor in coordination

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;		instruction has been given to contractor to carry construction material mostly in late night. Temporary road diversion has been provided and construction of road at one side at a time has been planned	side traffic on single road	with municipal authority
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	Sign board has been provided at site Other mitigation measures will be followed when encountered with progress of work	Nil	–
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	–
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all	Partially complied	PPE are not being used completely First-aid box has not been provided at site Group insurance has been provided to workers Proper barricading has been	Ensure complete use of PPE and qualified first-aid	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>		<p>provided to avoid unauthorized intrusion.</p> <p>Drinking water has been provided at sites</p> <p>Training for health and safety measures have been given to contractor by DSC. Awareness is done by the ACO, CAPP. The contractor has nominated representative for H & S (safety of workers/public)</p> <p>Workers are not exposed to high noise level more than 8 hrs</p>		
10	<p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of</p>	Not Applicable	Workers camp is yet to be established. Instruction has been given to	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove from the site;</p> <p>(vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>(viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p>		contractor to discuss with IPIU/DSC before camp establishment and proper compliance of EMP		

Table 9: Compliance of EMP for Dholpur Water Supply sub-project (RUSDIP/TR-02/DLPWS/03}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	<p>Environmental Clearances</p> <p>Site preparation work completed by IPIU including necessary clearance</p> <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	<p>Consent to Establish obtained from Pollution Control Board</p> <p>Tree cutting is not required</p>	Nil	—
2	<p>Social and Cultural Resources</p> <p>(i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site;</p> <p>(ii) Consider alternatives if the site is found to be of medium or high risk;</p>	Complied	<p>It was confirmed by consultations with various stakeholders that the site has no archaeological potential</p> <p>Instruction has been given to the contractor to ensure that any</p>	Nil	—

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 41 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.		chance finds are recognized and measures are taken to ensure they are protected and conserved		
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.	Complied	All the facilities related to construction are located within project site	Nil	-
4	Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (Complied	All the material is being taken from government approved quarry sites	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.				
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	Sprinkling of water is being carried out as per requirement at site in order to arrest dust Fine material carrying vehicles are properly covered to avoid dust problem Biannual air quality monitoring has not been carried out during report period, however work order has been issued to agency by IPIU	Follow-up is required for biannual air quality monitoring	IPIU
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).	Partially Complied	Overburden and excavated materials from construction sites are being utilized in backfilling of trenches and remaining material is used for leveling of nearby low lying area Surface water sampling is not required. There is no water body nearby the sub-project site	Nearest well/tube well water quality inspection is required	Contractor/IPIU
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are	Partially complied	Enclosures are not provided to noise producing machinery, however as the site is away from	Instructions are given to contractors for proper maintenance of	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>		<p>inhabited area, significant impact is not anticipated to local community.</p> <p>Noise monitoring has not been conducted during report period</p>	<p>equipments and enclosure for Concrete mixture and generator set</p> <p>Instruction has been given to contractor to conduct noise monitoring.</p>	
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p>	Complied	Overburden and excavated materials from construction sites are being utilized in backfilling of trenches and remaining material is used for leveling of nearby low lying area	Nil	-
6	<p>Accessibility</p> <p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>(ii) Schedule transport and hauling activities during non-peak hours;</p> <p>(iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</p>	Complied	Easy access road is available for transportation of construction materials. Any inconvenience due to this is very unlikely.	Nil	-
7	<p>Socio-Economic – Income</p> <p>(i) Leave spaces for access between mounds of soil;</p>	Complied	Proper access is being provided as and when required	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.		Sign board has been provided at site		
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and	Partially complied	PPE are not being used completely Ladders that are in use required repair and maintenance First-aid box is available but not as per standard Group insurance has been provided to workers Proper arrangement has been provided to avoid unauthorized intrusion. Drinking water has been provided at sites Training for health and safety measures have been given to	Ensure complete use of PPE and qualified first-aid Inspection of all ladders and PPEs is required to ensure fitness and replace/repair if found unfit	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas; (x) Ensure moving equipment is outfitted with audible back-up alarms; (xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and (xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>		<p>contractor by DSC. More H&S training is required for contractor staff Workers are not exposed to high noise level more than 8 hrs</p>		
10	<p>Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p>	Partially complied	<p>A small worker camp cum construction yard has been established but the arrangement is inappropriate Proper water and sanitation facilities are required. Hygiene problem due to logging of domestic waste water in camp premises Use of firewood for cooking</p>	<p>Instruction has been given to contractor for proper compliance of EMP Proper sanitation facilities is required Mosquito control is required Cooking gas is required to provide for cooking purpose</p>	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;				

Table 10: Compliance of EMP for Dholpur Waste Water sub-project {RUSDIP/TR-02/DLP/WW/04, WW/05 & WW/08}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Consent to Establish obtained from Pollution Control Board for STP under package WW/05. No other clearance is required. Permission has been obtained for cutting of 3 tree for WW/04 package from local administration	Nil	—
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	—
3	Construction work camps, hot mix plants, stockpile	Complied	All the facilities related to	Nil	—

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	<p>areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.</p> <p>Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.</p>	Complied	<p>construction are located within project site</p> <p>All the material is being taken from approved mines</p>	Nil	-
CONSTRUCTION STAGE					
1	<p>Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.</p>	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	<p>Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p>	Partially Complied	Sprinkling of water is being carried out as per requirement at site in order to arrest dust	Follow-up is required for biannual air quality monitoring	IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<ul style="list-style-type: none"> (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly. 		<p>Fine material carrying vehicles are properly covered to avoid dust problem</p> <p>Biannual air quality monitoring has not been carried out during report period, however work order has been given to agency by IPIU</p>		
3	<p>Surface water quality</p> <ul style="list-style-type: none"> (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP). 	Partially Complied	<p>The contractor is stock piling the overburden excavated materials on nearby grounds for refilling activities.</p> <p>Surface water sampling is not required. There is no water body nearby the sub-project sites</p>	<p>Instruction has been given to contractor to disposed excess excavated soil to designated disposal areas in consultation with IPIU/DSC</p> <p>Work order has been issued for ground water sampling at STP site. It will be conducted in January 2014</p>	Contractor
4	<p>Noise Levels</p> <ul style="list-style-type: none"> (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach; (iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and 	Partially Complied	<p>No noise producing machinery is being used at present</p> <p>Noise monitoring has not been conducted during report period, however work order has been given to agency for the same by IPIU</p>	Noise monitoring is required	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.				
5	Landscape and Aesthetics (i) Prepare and implement Waste Management Plan; (ii) Avoid stockpiling of excess excavated soils; (ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;	Partially Complied	Overburden and excavated materials from construction sites are being stockpiled for utilization in backfilling of trenches Prompt disposal of surplus excavated material to designated area is required Waste management plan is required	Contractor has been instructed to follow EMP	Contractor
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;	Complied	Easy access road is available for transportation of construction materials.	Nil	-
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature	Partially Complied	Proper access is being provided as and when required No sign board has been provided at site	Instruction has been given to contractor for complete compliance of EMP	Contractor

Sr. No.	Environmental activities	components related to project	Compliance	Explanation	Action Proposed	Responsibility
	and duration of construction works and contact numbers for concerns/complaints.					
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.		Complied	At present most of the workforce is hired locally		
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;		Partially complied	PPE are not being used completely First-aid box is available but not as per standard Group insurance has been provided to workers No proper barricading and safety tape done at excavated site Drinking water has been provided at sites Training for health and safety measures have been given to contractor by DSC. More H&S training is required for contractor staff Workers are not exposed to high noise level more than 8 hrs	Ensure complete use of PPE and qualified first-aid Proper barricading is required immediately at excavated sites	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	<p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove from the site;</p> <p>(vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>(viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p>	Partially complied	<p>A small worker camp cum construction yard has been established but the arrangement is improper</p> <p>Sanitation facilities are poor.</p>	<p>Instruction has been given to contractor to discuss with IPIU/DSC before camp establishment and proper compliance of EMP</p> <p>Proper sanitation facilities is required</p> <p>Mosquito control is required</p>	Contractor

Table 11: Compliance of EMP for Sikar Water Supply sub-project {RUSDIP/TR-02/SKRWS/02, WS/03 & WS/04}

Sr. No.	Environmental activities	components related to project	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE						
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 		Complied	Consent from Pollution Control Board is not required. Permission for Chlorinization (storage of Chlorine cylinder) is also not required Permission has been obtained for cutting of tree for WS/03 package from local administration	Nil	-
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.		Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	-
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking		Complied	All the facilities related to construction are located within project site	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 53 of 177

Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	<p>water supply systems;</p> <p>(iii) Do not consider residential areas;</p> <p>(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.</p> <p>Sources of Materials</p> <p>(i) Prioritize sites already permitted by the Mining Department;</p> <p>(ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and</p> <p>(iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.</p>	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	<p>Sources of Materials</p> <p>(i) Use quarry sites and sources permitted by government;</p> <p>(ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU);</p> <p>(iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and;</p> <p>(iv) Submit to DSC on a monthly basis documentation of sources of materials.</p>	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	<p>Air Quality</p> <p>(i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>(ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather;</p> <p>(iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and</p> <p>(iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.</p>	Partially Complied	<p>Sprinkling of water is being carried out as per requirement at site in order to arrest dust</p> <p>Fine material carrying vehicles are properly covered to avoid dust problem</p> <p>Biannual air quality monitoring has not been carried out during report</p>	<p>Follow-up is required for biannual air quality monitoring</p> <p>Monitoring will be carried out in February 2014</p>	Contractor/IPIU

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 54 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
3	<p>Surface water quality</p> <p>(i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p>	Partially Complied	<p>period; however work order has been given to agency by IPIU</p> <p>Overburden and excavated materials from construction sites are being utilized in backfilling of trenches and leveling of low lying area as per direction of ULB of Sikar town</p> <p>No surface water body near the working area</p>	Inspection of nearest well/tube well water quality is required	Contractor/IPIU
4	<p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially Complied	<p>Enclosures are provided to generator set, concrete mixture and other noise producing machinery</p> <p>Biannual noise monitoring has not been carried out during report period; however work order has been issued to agency by IPIU</p>	<p>Follow-up is required for biannual noise monitoring.</p> <p>Monitoring will be carried out in February 2014</p>	IPIU
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p>	Complied	Overburden and excavated materials from construction sites are being utilized in backfilling of	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 55 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;		trenches and leveling of low lying area as per direction of ULB of Sikar town		
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;	Complied	Easy access road is available for transportation of construction materials. Traffic diversions are provided at necessary points and as per requirement The contractor has planned the alternate routes to avoid sensitive sites	Nil	-
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	Proper access is being provided as and when required Sufficient workforce has engaged Neighboring shopkeepers has been consulted Sign board has been provided at site	Nil	-
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and	Complied	At present most of the workforce is hired locally	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
9	<p>(ii) Secure construction materials from local market.</p> <p>Occupational Health and Safety</p> <p>(i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>(ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily</p>	Partially complied	<p>PPE are not being used completely</p> <p>First-aid box is available but not as per standard</p> <p>Group insurance has been provided to workers</p> <p>Barricading, safety tapes and delineators have been adequately provided at work fronts as public safety measures</p> <p>Drinking water has been provided at sites</p> <p>Training for health and safety measures have been given to contractor by DSC.</p> <p>Workers are not exposed to high noise level more than 8 hrs</p>	<p>Proper training for safe operation of chlorinator should be provided to its operating staff</p> <p>Ensure complete use of PPE and qualified first-aid</p>	IPIU/Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	<p>understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove from the site;</p> <p>(vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>(viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p>	Partially complied	<p>Package WS/02: Contractor has established labour camp, but facilities like housing, toilets and bath rooms, dust bins and other necessary facilities are not provided by the contractor.</p> <p>No camp has been establish in other water supply packages in sikar</p>	Instruction has been given to contractor to provide basic facilities to worker in camp	Contractor

Table 12: Compliance of EMP for Sikar Road sub-project {RUSDIP/TR-02/SKR/ST/02, ST/04 & ST/05}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	<p>Environmental Clearances</p> <p>Site preparation work completed by IPIU including necessary clearance</p> <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and 	Complied	<p>Consent from Pollution Control Board is not required.</p> <p>Package ST/04: Permission from</p>	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	Control of Pollution) Act <ul style="list-style-type: none"> Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 		Forest dept. for tree cutting coming in carriage way of road has been moved by PWD which is under process of approval. IPIU is monitoring for obtaining permission from forest dept. at earliest No cutting of tree is required for other 2 street package		
2	Social and Cultural Resources <ul style="list-style-type: none"> (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved. 	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	-
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas <ul style="list-style-type: none"> (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community. 	Complied	All the facilities related to construction are located within project site	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	Sprinkling of water is being carried out as per requirement at site in order to arrest dust Fine material carrying vehicles are properly covered to avoid dust problem Biannual air quality monitoring has not been carried out during report period, however work order has been given to agency by IPIU	Water sprinkling is more important in road work. Instruction has been given to contractor for proper watering and maintain logbook for the same Monitoring will be carried out in February 2014	Contractor/IPIU
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic	Partially Complied	Overburden and excavated materials from construction sites are being utilized in backfilling of	Inspection of nearest well/tube well water is required	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p>		<p>trenches and leveling of low lying area as per direction of ULB of Sikar town</p> <p>No surface water body near the working area</p>		
4	<p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>	Not-Complied	<p>No enclosures are provided to generator set, concrete mixture and other noise producing machinery</p> <p>Noise monitoring has not been carried out during report period, however work order has been given to agency by IPIU</p>	<p>Contractor has instructed to provide enclosure to all noise producing equipments immediately</p> <p>Monitoring will be carried out in February 2014</p>	IPIU
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p>	Complied	<p>Overburden and excavated materials from construction sites are being utilized in backfilling of trenches and leveling of low lying area as per direction of ULB of Sikar town</p>	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;				
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;	Complied	Traffic diversions are provided at necessary points and as per requirement	Nil	-
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	Proper access is being provided as and when required Contractor has provided sufficient workforce Sign board has been provided at site	Nil	-
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c)	Partially complied	PPE are not being used completely First-aid box is not available at each site	Ensure complete use of PPE and qualified first-aid	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>(ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>		<p>Group insurance has been provided to workers</p> <p>Barricading, safety tapes and delineators have been adequately provided at work fronts as public safety measures</p> <p>Drinking water has been provided at sites</p> <p>Training for health and safety measures have been given to contractor by DSC.</p> <p>High visibility vests has been provided</p> <p>Workers are not exposed to high noise level more than 8 hrs</p>		

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;	Not Applicable	No camp has been established in any road package in Sikar	Nil	—

Table 13: Compliance of EMP for Nagaur Water Supply sub-project {RUSDIP/TR-02/NGR/WS/01}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Consent from Pollution Control Board is not required. Permission for Chlorinization (storage of Chlorine cylinder) is not required	Nil	—
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain	Complied	No cutting of tree is required It was confirmed by consultations with various stakeholders that the	Nil	—

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>an expert assessment of the archaeological potential of the site;</p> <p>(ii) Consider alternatives if the site is found to be of medium or high risk;</p> <p>(iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and</p> <p>(iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.</p>		<p>site has no archaeological potential</p> <p>Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved</p>		
3	<p>Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas</p> <p>(i) Prioritize areas within or nearest possible vacant space in the subproject sites;</p> <p>(ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems;</p> <p>(iii) Do not consider residential areas;</p> <p>(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.</p>	Complied	All the facilities related to construction are located within project site	Nil	—
4	<p>Sources of Materials</p> <p>(i) Prioritize sites already permitted by the Mining Department;</p> <p>(ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and</p> <p>(iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.</p>	Complied	All the material is being taken from approved mines	Nil	—
CONSTRUCTION STAGE					

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 65 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	Sprinkling of water is being carried out as per requirement at site in order to arrest dust Fine material carrying vehicles are properly covered to avoid dust problem Biannual air quality monitoring has not been carried out during report period, however work order has been given to agency by IPIU	Monitoring will be carried out in Jan-Feb 2014	IPIU
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the	Partially Complied	Overburden and excavated materials from construction sites are being utilized in backfilling No surface water body near the working area thus surface water quality monitoring is not required	Inspection of nearest well/tube water is required	Contractor/IPIU

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 66 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	<p>Environmental Management Plan (EMP).</p> <p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially Complied	<p>No noise producing machinery is working at present</p> <p>Biannual noise monitoring has not been carried out during report period, however work order has been given to agency by IPIU</p>	Noise monitoring will be carried out in February 2014	IPIU
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p>	Complied	Overburden and excavated materials from construction sites are being utilized in backfilling of trenches and leveling of low lying area	Nil	-
6	<p>Accessibility</p> <p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>(ii) Schedule transport and hauling activities during non-peak hours;</p> <p>(iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if</p>	Complied	Traffic diversions are provided at necessary points and as per requirement	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	transportation activities cannot be avoided during peak hours;				
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	Proper access is being provided as and when required	Nil	-
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not	Partially complied	PPE are not being used completely First-aid box is not available at each site Group insurance has been provided to workers Barricading, safety tapes and delineators have been adequately provided at work fronts as public safety measures Drinking water has been provided at sites	Proper training for safe operation of chlorinator should be provided to its operating staff Ensure complete use of PPE and qualified first-aid	Contractor

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 68 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>		<p>Training for health and safety measures have been given to contractor by DSC.</p> <p>Workers are not exposed to high noise level more than 8 hrs</p>		
10	<p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove</p>	Not Applicable	No camp has been establish	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;				

Table 14: Compliance of EMP for Nagaur Waste Water sub-project {RUSDIP/TR-02/NGR/WW/02-Lot-2 & WW/03}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Consent to Establish for STP from Pollution Control Board has been obtained. There is no tree felling necessary till date	Nil	-
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
3	<p>taken to ensure they are protected and conserved.</p> <p>Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas</p> <p>(i) Prioritize areas within or nearest possible vacant space in the subproject sites;</p> <p>(ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems;</p> <p>(iii) Do not consider residential areas;</p> <p>(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.</p>	Complied	All the facilities related to construction are located within project site	Nil	—
4	<p>Sources of Materials</p> <p>(i) Prioritize sites already permitted by the Mining Department;</p> <p>(ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and</p> <p>(iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.</p>	Complied	All the material is being taken from approved mines	Nil	—
CONSTRUCTION STAGE					
1	<p>Sources of Materials</p> <p>(i) Use quarry sites and sources permitted by government;</p> <p>(ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU);</p> <p>(iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and;</p> <p>(iv) Submit to DSC on a monthly basis documentation of sources of materials.</p>	Complied	All the material is being taken from government approved quarry sites	Nil	—
2	<p>Air Quality</p> <p>(i) Consult with IPIU/DSC on the designated areas for</p>	Partially Complied	Sprinkling of water is being carried out as per requirement at site in	Monitoring will be carried out in February 2014	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.		order to arrest dust Fine material carrying vehicles are properly covered to avoid dust problem Biannual air quality monitoring has not been carried out during report period, however work order has been given to agency by IPIU		
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).	Partially Complied	Overburden and excavated materials from construction sites are being utilized in backfilling. No surface water body near the working area	Inspection of nearest well/tube well water quality is required	Contractor/IPIU
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach; (iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing	Partially Complied	No noise producing machinery is working at present Biannual noise monitoring has not been carried out during report period, however work order has been given to agency by IPIU	Noise monitoring will be carried out in February 2014	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and (iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.				
5	Landscape and Aesthetics (i) Prepare and implement Waste Management Plan; (ii) Avoid stockpiling of excess excavated soils; (ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;	Complied	Overburden and excavated materials from construction sites are being utilized in backfilling	Nil	—
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;	Complied	Traffic diversions are provided at necessary points and as per requirement	Nil	—
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and	Complied	Proper access is being provided as and when required Sign board has been provided at site	Nil	—

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.				
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through	Partially complied	PPE are not being used completely First-aid box is not available at each site Group insurance has been provided to workers Barricading, safety tapes and delineators have been adequately provided at work fronts as public safety measures Drinking water has been provided at sites Training for health and safety measures have been given to contractor by DSC. Workers are not exposed to high noise level more than 8 hrs	Ensure complete use of PPE and qualified first-aid	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	<p>heavy equipment operating areas; (x) Ensure moving equipment is outfitted with audible back-up alarms; (xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and (xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p>	Not Applicable	No camp has been establish	Nil	-

Table 15: Compliance of EMP for Churu Water Supply sub-project {RUSDIP/TR-02/CHUWS/02}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Consent from Pollution Control Board is not required. There is no tree felling necessary till date	Nil	—
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	—
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas;	Complied	All the facilities related to construction are located within project site	Nil	—

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community. Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	Sprinkling of water is being carried out as per requirement at site in order to arrest dust Fine material carrying vehicles are properly covered to avoid dust problem Air quality monitoring has not been carried out during report period, however work order has been given to agency by IPIU	Air monitoring will be carried out in February 2014	Contractor/IPIU

Sr. No.	Environmental activities	components related to project	Compliance	Explanation	Action Proposed	Responsibility
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).		Partially Complied	Overburden and excavated materials from construction sites are being utilized in backfilling. No surface water body near the working area	Inspection of nearest well/tube well water is required	Contractor/IPIU
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach; (iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and (iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.		Partially Complied	No noise producing machinery is working at present Noise monitoring has not been carried out during report period, however work order has been given to agency by IPIU	Noise monitoring will be carried out in February 2014	Contractor/IPIU
5	Landscape and Aesthetics (i) Prepare and implement Waste Management Plan; (ii) Avoid stockpiling of excess excavated soils; (ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to		Complied	Overburden and excavated materials from construction sites are being utilized in backfilling	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;				
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;	Complied	Traffic diversions are provided at necessary points and as per requirement	Nil	—
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	Proper access is being provided as and when required Sign board has been provided at site	Nil	—
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	—
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety	Partially complied	PPE are not being used completely	Ensure complete use of PPE and qualified first-aid	Contractor

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 79 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>(H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>(ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than</p>		<p>First-aid box is not available at each site</p> <p>Group insurance has been provided to workers</p> <p>No proper barricading for unauthorized intrusion</p> <p>Drinking water has been provided at sites</p> <p>Training for health and safety measures have been given to contractor by DSC.</p> <p>Workers are not exposed to high noise level more than 8 hrs</p>	<p>Proper barricading is required immediately to stop unauthorized intrusion</p>	

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.				
10	Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;	Not Applicable	No camp has been establish	Nil	-

Table 16: Compliance of EMP for Barmer Water Supply sub-project {RUSDIP/TR-02/BMR/WS/02}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act 	Complied	Consent from Pollution Control Board is not required. There is no tree felling necessary till date	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
2	<ul style="list-style-type: none"> Tree-cutting Permit <p>Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.</p>	Complied	<p>It was confirmed by consultations with various stakeholders that the site has no archaeological potential</p> <p>Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved</p>	Nil	-
3	<p>Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.</p>	Complied	All the facilities related to construction are located within project site	Nil	-
4	<p>Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction</p>	Complied	All the material is being taken from approved mines	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	is started, inform construction contractor to obtain a written approval from IPMU.				
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	Sprinkling of water is being carried out as per requirement at site in order to arrest dust Fine material carrying vehicles are properly covered to avoid dust problem Biannual air quality monitoring has not been carried out during report period.	Biannual air quality monitoring required immediately	Contractor/IPIU
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction	Partially Complied	Overburden and excavated materials from construction sites are being utilized in backfilling. No surface water body near the working area	Inspection of nearest well/tube well water quality is required	Contractor/IPIU

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 83 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	<p>activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p> <p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially Complied	<p>Activities with the greatest potential to generate noise are conducted during periods of the day in consultation with IPIU/DSC</p> <p>Biannual noise monitoring has not been carried out during report period</p>	Noise monitoring is required immediately	Contractor/IPIU
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p>	Complied	Overburden and excavated materials from construction sites are being utilized in backfilling	Nil	-
6	<p>Accessibility</p> <p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>(ii) Schedule transport and hauling activities during non-peak hours;</p>	Complied	Traffic diversions are provided at necessary points and as per requirement	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
7	<p>(iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</p> <p>Socio-Economic – Income</p> <p>(i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.</p>	Complied	<p>Proper access is being provided as and when required</p> <p>Contractor has provided sufficient workforce at site</p> <p>Sign board has been provided at site</p>	Nil	–
8	<p>Socio-Economic – Employment</p> <p>(i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.</p>	Complied	At present most of the workforce is hired locally	Nil	–
9	<p>Occupational Health and Safety</p> <p>(i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks;</p>	Partially complied	<p>PPE are not being used completely</p> <p>First-aid box is not available at each site</p> <p>Group insurance has been provided to workers</p> <p>No proper barricading for unauthorized intrusion</p> <p>Drinking water has been provided at sites</p>	<p>Ensure complete use of PPE and qualified first-aid</p> <p>Proper barricading is required immediately to stop unauthorized intrusion</p>	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	<p>(v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas; (x) Ensure moving equipment is outfitted with audible back-up alarms; (xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and (xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of</p>	Not Complied	<p>Training for health and safety measures have been given to contractor by DSC.</p> <p>Workers are not exposed to high noise level more than 8 hrs</p> <p>Contractor has established labour camp at Veenasar Nadi ESR site, Kuwa no.-3. The labour camp establishment is in poor condition.</p>	<p>Instruction has been given to contractor to provide bricks rooms with facility of drinking water, dust bins, and sanitation facility etc. for workers</p>	Contractor and monitoring by PIU/DSC

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;				

Table 17: Compliance of EMP for Barmer Bridge sub-project {RUSDIP/TR-02/BMR/BR/02}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IP/U including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Consent from Pollution Control Board is not required. Tree cutting is not required	Nil	—
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	—

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 87 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	that any chance finds are recognised and measures are taken to ensure they are protected and conserved.				
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.	Complied	All the facilities related to construction are located within project site	Nil	-
4	Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality	Partially	Sprinkling of water is not required	Air quality monitoring is	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Complied	as most of the work is completed Air quality monitoring is not conducted during report period	required	
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).	Complied	Overburden and excavated materials from construction sites has been removed. No surface water body near the working area	Nil	-
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach; (iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to	Partially Complied	No such activities with the greatest potential to generate noise are being conducted at present Noise monitoring is not conducted during report period	Monitoring of noise levels is required	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
5	<p>surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p> <p>Landscaping and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p>	Complied	Overburden and excavated materials from construction sites has reused and excess material has been disposed to designated areas	Nil	-
6	<p>Accessibility</p> <p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>(ii) Schedule transport and hauling activities during non-peak hours;</p> <p>(iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</p>	Complied	Traffic diversions are provided at necessary points and as per requirement	Nil	-
7	<p>Socio-Economic – Income</p> <p>(i) Leave spaces for access between mounds of soil;</p> <p>(ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles;</p> <p>(iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools;</p> <p>(iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and</p> <p>(v) Provide sign boards for pedestrians to inform nature</p>	Complied	<p>Easy access is available</p> <p>No critical areas near the site</p> <p>Sign board has been provided at site</p>	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 ND (Tr-2)

Page: 90 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	and duration of construction works and contact numbers for concerns/complaints.				
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;	Partially complied	PPE are not being used completely First-aid box is available at site Group insurance has been provided to workers Proper barricading for unauthorized intrusion has been provided Drinking water has been provided at sites Training for health and safety measures have been given to contractor by DSC. Workers are not exposed to high noise level more than 8 hrs	Ensure complete use of PPE	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	<p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove from the site;</p> <p>(vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>(viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p>	Complied	The contractor has established labour camp cum Site office near project site with all basic facilities.	Nil	-

Table 18: Compliance of EMP for Barmer Waste Water sub-project {RUSDIP/TR-02/BMR/WW/03 Lot-1 & Lot-2}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Consent to Establish has been obtained for STP under WW/03 Lot-2 package from Pollution Control Board. Tree cutting is not required	Nil	-
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	-
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct	Complied	All the facilities related to construction are located within project site	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 93 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	<p>disposal to water body or in areas which will inconvenience the community.</p> <p>Sources of Materials</p> <p>(i) Prioritize sites already permitted by the Mining Department;</p> <p>(ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and</p> <p>(iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.</p>	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	<p>Sources of Materials</p> <p>(i) Use quarry sites and sources permitted by government;</p> <p>(ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU);</p> <p>(iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and;</p> <p>(iv) Submit to DSC on a monthly basis documentation of sources of materials.</p>	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	<p>Air Quality</p> <p>(i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials;</p> <p>(ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather;</p> <p>(iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and</p> <p>(iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.</p>	Partially Complied	<p>Adequate sprinkling of water is required at all working locations</p> <p>Biannual air quality monitoring has not been conducted during reporting period</p>	<p>Instruction has been given to contractor to follow EMP</p> <p>Biannual monitoring will be carried out in March-April 2014, work order for the same has been issued</p>	Contractor/IPIU
3	<p>Surface water quality</p> <p>(i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic</p>	Partially Complied	Overburden and excavated materials from construction sites are being utilized in backfilling of	Inspection of nearest well/tube well water quality is required	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p>		<p>trenches and leveling of low lying area</p> <p>No surface water body nearby sub-project area</p>		
4	<p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dba) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially Complied	<p>Enclosures are provided to generator set and concrete mixture to avoid noise. Modern machinery is used in work to control noise during work in residential areas.</p> <p>Noise level monitoring is not conducted during reporting period</p>	Noise monitoring will be carried out in March-April 2014, work order for the same has been issued	Contractor/IPIU
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p>	Complied	Overburden and excavated materials from construction sites has been reused for backfilling and excess material has been disposed to designated areas	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 95 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
6	(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;	Complied	Traffic diversions are provided at necessary points and as per requirement	Nil	-
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Partially Complied	Easy access is available at most of the places. At few areas proper access has not provided to resident and shop Sign board has been provided at site	Contractor has instructed to ensure full compliance of EMP	Contractor
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c)	Partially complied	PPE are not being used completely First-aid box is available at site Group insurance has been provided	Proper training for safe operation of chlorinator is required for staff engaged in its operation	Contractor

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 96 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>(ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>		<p>to workers</p> <p>Proper barricading for unauthorized intrusion has been provided except few stretches of pipe laying areas</p> <p>Drinking water has been provided at sites</p> <p>Training for health and safety measures have been given to contractor by DSC.</p> <p>Workers are not exposed to high noise level more than 8 hrs</p>	<p>Ensure complete use of PPE</p> <p>Provide proper barricading at each site to avoid unauthorized intrusion</p>	

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;	Not Applicable	The contractor has not established any labour camp	Nil	-

Table 19: Compliance of EMP for Baran ROB sub-project {RUSDIP/TR-02/BRN/BR/02}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	All required permission has been obtained Permission for cutting of 23 nos. of trees has obtained from district administration. A total of 70 nos. of trees planted against 23 cut trees	Nil	-
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain	Complied	It was confirmed by consultations with various stakeholders that the	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>an expert assessment of the archaeological potential of the site;</p> <p>(ii) Consider alternatives if the site is found to be of medium or high risk;</p> <p>(iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and</p> <p>(iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.</p>		<p>site has no archaeological potential</p> <p>Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved</p>		
3	<p>Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas</p> <p>(i) Prioritize areas within or nearest possible vacant space in the subproject sites;</p> <p>(ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems;</p> <p>(iii) Do not consider residential areas;</p> <p>(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.</p>	Complied	All the facilities related to construction are located within project site	Nil	—
4	<p>Sources of Materials</p> <p>(i) Prioritize sites already permitted by the Mining Department;</p> <p>(ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and</p> <p>(iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.</p>	Complied	All the material is being taken from approved mines	Nil	—
CONSTRUCTION STAGE					

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Complied	Adequate sprinkling of water is done where and when required Biannual air quality monitoring done, results of the same awaited Monitoring results will be addressed in next EMR Jan-June 2014	Nil	-
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).	Partially Complied	All the excavation works has completed No surface water body near the sub-project area	Inspection of nearest well/tube well water quality is required	Contractor/IPIU
4	Noise Levels	Partially	Activities are planned in	Contractor has been	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>	Complied	<p>consultation with PIU</p> <p>Maintenance of construction equipment is required</p> <p>Noise level monitoring has been completed, results of the same awaited</p>	<p>instructed for proper maintenance of construction equipment</p> <p>Monitoring results will be addressed in next EMR Jan-June 2014</p>	
5	<p>Landscaping and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(iii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p>	Partially Complied	Unused and rejected construction materials/ debris have not been removed from construction site.	All unused/rejected debris shall be removed and disposed off at designated area	Contractor/IPIU
6	<p>Accessibility</p> <p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>(ii) Schedule transport and hauling activities during non-peak hours;</p> <p>(iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</p>	Complied	Traffic diversion for heavy vehicles has been done, only two wheelers and light vehicle etc are allowed to go through service roads, caution boards are displayed at necessary locations to aware the road users	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 101 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
7	<p>Socio-Economic – Income</p> <p>(i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.</p>	Complied	<p>Easy access is available at most of the places.</p> <p>Nearby community and shopkeepers of the affected area are informed in advance by CAPP, DSC, IPU and contractor</p> <p>Necessary work force is employed to finish the works quickly</p>	Nil	-
8	<p>Socio-Economic – Employment</p> <p>(i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.</p>	Complied	At present most of the unskilled workforce is hired locally	Nil	-
9	<p>Occupational Health and Safety</p> <p>(i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers</p>	Partially complied	<p>PPE are not being used completely</p> <p>First-aid box is available at site</p> <p>Group insurance has been provided to workers</p> <p>Proper barricading for unauthorized intrusion has been provided</p> <p>Drinking water has been provided at sites</p> <p>Training for health and safety measures have been given to contractor by DSC.</p> <p>Workers are not exposed to high</p>	<p>Ensure complete use of PPE</p>	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>		noise level more than 8 hrs		
10	<p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove from the site;</p> <p>(vii) Manage solid waste according to the following</p>	Complied	The temporary camps with adequate facilities has been established for outside labours	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;				

Table 20: Compliance of EMP for Bundi Water supply sub-project (RUSDIP/TR-02/BND/WS/02)

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	All required permission has been obtained Tree cutting is not required	Nil	-
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
3	<p>Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas</p> <p>(i) Prioritize areas within or nearest possible vacant space in the subproject sites;</p> <p>(ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems;</p> <p>(iii) Do not consider residential areas;</p> <p>(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.</p>	Complied	All the facilities related to construction are located within project site	Nil	—
4	<p>Sources of Materials</p> <p>(i) Prioritize sites already permitted by the Mining Department;</p> <p>(ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and</p> <p>(iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.</p>	Complied	All the material is being taken from approved mines	Nil	—
CONSTRUCTION STAGE					
1	<p>Sources of Materials</p> <p>(i) Use quarry sites and sources permitted by government;</p> <p>(ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU);</p> <p>(iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and;</p> <p>(iv) Submit to DSC on a monthly basis documentation of sources of materials.</p>	Complied	All the material is being taken from government approved quarry sites	Nil	—
2	<p>Air Quality</p> <p>(i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction</p>	Partially Complied	Sand and other material is transported in covered vehicles	Adequate sprinkling of water is required at each working site in order to	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.		Adequate sprinkling of water is not being done Biannual air quality monitoring has not been conducted	arrest dust Biannual air quality monitoring is required	
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).	Partially Complied	Overburden and excavated materials from construction sites are being utilized in backfilling of trenches and leveling of low lying area No surface water body near the working area	Inspection of nearest well/tube well water quality is required	Contractor/IPIU
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach; (iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and	Partially Complied	Activities are planned in consultation with PIU Maintenance of construction equipment is required Noise monitoring has not been conducting in reporting period	Contractor has been instructed for proper maintenance of construction equipment Noise monitoring is required immediately	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
5	<p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p> <p>Landscaping and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan; (ii) Avoid stockpiling of excess excavated soils; (iii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p>	Complied	Overburden and excavated materials from construction sites has been reused for backfilling and excess material has been disposed to designated areas	Nil	-
6	<p>Accessibility</p> <p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</p>	Complied	Traffic diversions are provided at necessary points and as per requirement	Nil	-
7	<p>Socio-Economic – Income</p> <p>(i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers</p>	Partially Complied	<p>Easy access is available at most of the places.</p> <p>Sign board has not been provided at all sites</p>	Contractor has instructed to ensure full compliance of EMP	Contractor

Sr. No.	Environmental activities	components related to project	Compliance	Explanation	Action Proposed	Responsibility
	for concerns/complaints.					
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent; local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.		Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas; (x) Ensure moving equipment is outfitted with audible		Partially complied	PPE are not being used completely First-aid box is available at site Group insurance has been provided to workers Proper barricading for unauthorized intrusion has been provided except few stretches of pipe laying areas Drinking water has been provided at sites Training for health and safety measures have been given to contractor by DSC. Workers are not exposed to high noise level more than 8 hrs	Ensure complete use of PPE Provide proper barricading at each site to avoid unauthorized intrusion	Contractor

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 108 of 177

Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	<p>back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove from the site;</p> <p>(vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>(viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p>	Not Applicable	The contractor has not established any labour camp	Nil	-

Table 21: Compliance of EMP for Bundi Road sub-project {RUSDIP/TR-02/BND/ST/04}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Consent from Pollution Control Board is not required. No cutting of tree is required	Nil	—
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved	Nil	—
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas;	Complied	All the facilities related to construction are located within project site	Nil	—

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community. Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	Sprinkling of water is being carried out as per requirement at site in order to arrest dust Fine material carrying vehicles are properly covered to avoid dust problem Biannual air quality monitoring has not been carried out during report period	Water sprinkling is more important in road work. Instruction has been given to contractor for keep on adequate watering and maintain logbook for the same Air quality monitoring is required immediately	Contractor/IPIU
3	Surface water quality	Partially	No huge excavation is required,	Inspection of nearest	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>(i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p>	Complied	<p>where ever excavation is being done, excavated soil is being reused for surface leveling</p> <p>Excavated soil is not being transported as per project need, rather it is being stored at site for reuse,</p> <p>No surface water body near the working area</p>	well/tube well water is required	
4	<p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially Complied	<p>DG sets are not being used currently near sensitive location.</p> <p>Concrete mixtures are not having enclosures</p> <p>Noise monitoring has not been carried out during report period,</p>	<p>Contractor has instructed to provide enclosure to all noise producing equipments immediately</p> <p>Monitoring is required immediately</p>	Contractor/IPIU
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p>	Complied	Overburden and excavated materials from construction sites are being utilized in backfilling of	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;		trenches		
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;	Partially Complied	Haulage of construction materials is done mostly at night hours to avoid disturbances Traffic diversion and traffic management plan is being implemented at construction site with consultation with local authority and traffic department, but more improvement is required in traffic signage boards and traffic diversion	Contractor has been instructed for complete compliance of EMP	Contractor/PIU /DSC
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Complied	Proper access is being provided as and when required Adequate work force is deployed to finish the work quickly specially in front of critical areas Nearby residents and businesspeople are informed about the nature of work and time of finishing in advance by public consultation by DSC and CAPP and by information boards	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted; (ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas; (x) Ensure moving equipment is outfitted with audible back-up alarms; (xi) Mark and provide sign boards for hazardous areas	Partially complied	PPE are not being used completely First-aid box is available at each site Group insurance has been provided to workers Barricading, safety tapes and delineators have been adequately provided at work fronts as public safety measures Drinking water has been provided at sites Training for health and safety measures have been given to contractor by DSC. High visibility vests has been provided Workers are not exposed to high noise level more than 8 hrs	Ensure complete use of PPE and qualified first-aid	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and (xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.				
10	Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;	Partially Complied	Most of workers are local, few workers live in construction camps where no proper sanitary and solid waste management is provided	Contractor has been instructed to improve the condition of labour camp	Contractor/DS C/IPIU

Table 22: Compliance of EMP for Rajsamand Water Supply sub-project {RUSDIP/TR-02/RSM/WS/03}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	<p>Consent to Establish for 18 MLD capacity Water Treatment Plant has been obtained from pollution control board</p> <p>Application has been submitted in pollution control board to obtain Consent to Operate</p> <p>Permission for cutting of 39 nos. trees from forest department has been obtained</p>	Nil	-
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.	Complied	<p>It was confirmed by consultations with various stakeholders that the site has no archaeological potential</p> <p>Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved</p>	Nil	-
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas;	Complied	All the facilities related to construction are located within project site	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community. Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPIU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	In dry season water sprinkling is done when required Biannual air quality monitoring is required to be done.	Instruction has been given to contractor to follow EMP Biannual monitoring will be carried out in January 2014	Contractor/IPIU
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the	Partially Complied	Excavated materials are being stored on the road side and being	Surface water quality monitoring will be carried	Contractor

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
4	<p>monsoon season unless covered by tarpaulins or plastic sheets;</p> <p>(ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas;</p> <p>(iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</p> <p>(iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</p> <p>(v) Dispose any wastes generated by construction activities in designated sites; and</p> <p>(vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).</p> <p>Noise Levels</p> <p>(i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</p> <p>(ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>	Partially Complied	<p>back filled after laying of pipes, excess material is removed regularly</p> <p>Surface water quality monitoring is required to be done at intake site</p> <p>Activities are planned in consultation with PUI</p> <p>Generator sets and concrete mixtures are provided with acoustic enclosures.</p> <p>Noise monitoring has not been conducted during reporting period</p>	<p>out in January 2014</p> <p>Noise monitoring will be carried out in January 2014</p>	Contractor/IPIU
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove</p>	Complied	Overburden and excavated materials from construction sites has been reused for backfilling and excess material has been disposed to designated areas	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 118 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
6	from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;	Complied	Traffic diversions are provided at necessary points and as per requirement	Nil	-
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Partially Complied	Easy access is available at most of the places. Sign board has not been provided at all sites	Contractor has instructed to ensure full compliance of EMP	Contractor
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are	Partially complied	PPE are not being used completely First-aid box is available at site	Ensure complete use of PPE Provide proper barricading	Contractor

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 119 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents;</p> <p>(ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</p> <p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection</p>		<p>Group insurance has been provided to workers</p> <p>Proper barricading for unauthorized intrusion has been provided except few stretches of pipe laying areas</p> <p>Drinking water has been provided at sites</p> <p>Training for health and safety measures have been given to contractor by DSC.</p> <p>Workers are not exposed to high noise level more than 8 hrs</p>	<p>at each site to avoid unauthorized intrusion</p>	

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	shall be enforced actively. Work Camps (i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants; (ii) Minimize removal of vegetation and disallow cutting of trees; (iii) Provide water and sanitation facilities for employees; (iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;	Not Applicable	The contractor has not established any labour camp	Nil	-

Table 23: Compliance of EMP for Rajsamand Waste Water sub-project {RUSDIP/TR-02/RSM/WW/02 Lot-1 and Lot-2}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance <ul style="list-style-type: none"> Consent to Establish under Water (Prevention and Control of Pollution) Act Consent to Establish under Air (Prevention and Control of Pollution) Act Tree-cutting Permit 	Complied	Consent to establish for STP under Lot-2 package has been obtained from Pollution Control Board. Validity of consent is up to 30.04.2015 Tree cutting is not anticipated presently.	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 121 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
2	<p>Social and Cultural Resources</p> <p>(i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site;</p> <p>(ii) Consider alternatives if the site is found to be of medium or high risk;</p> <p>(iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation forums as project stakeholders so that their expertise can be made available; and</p> <p>(iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.</p>	Complied	<p>It was confirmed by consultations with various stakeholders that the site has no archaeological potential</p> <p>Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved</p>	Nil	—
3	<p>Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas</p> <p>(i) Prioritize areas within or nearest possible vacant space in the subproject sites;</p> <p>(ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems;</p> <p>(iii) Do not consider residential areas;</p> <p>(iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.</p>	Complied	All the facilities related to construction are located within project site	Nil	—
4	<p>Sources of Materials</p> <p>(i) Prioritize sites already permitted by the Mining Department;</p> <p>(ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IP/UD, and</p> <p>(iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written</p>	Complied	All the material is being taken from approved mines	Nil	—

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	approval from IPMU.				
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPIU); (iii) If additional quarries will be required after construction has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.	Complied	All the material is being taken from government approved quarry sites	Nil	-
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Partially Complied	In dry season water sprinkling is done when required. Air quality monitoring will be carried out in January 2014. Work order has been issued to the monitoring agency. Monitoring will be conducted in January 2014	Timely monitoring is required	Contractor/IPIU
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the	Partially Complied	Excavated materials are being stored on the road side and being back filled after laying of pipes, excess material is removed regularly Water quality monitoring is not conducted during report period. Work order has been issued to the monitoring agency. Monitoring will be conducted in January 2014	Timely monitoring is required	Contractor/IPIU

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	Environmental Management Plan (EMP).				
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's approach; (iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and (iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.	Partially Complied	Activities are planned in consultation with PIU Noise producing equipments are seen in maintained conditions Presently generator sets are not being used at pipeline laying work and STP sites but concrete mixtures are being used at STP site, where no sensitive location exist, as the area is in remote place Noise monitoring will be done in Jan 2014.	Timely monitoring is required	Contractor/IPIU
5	Landscape and Aesthetics (i) Prepare and implement Waste Management Plan; (ii) Avoid stockpiling of excess excavated soils; (ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas; (iv) Recover used oil and lubricants and reuse or remove from the sites; (v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;	Complied	Overburden and excavated materials from construction sites has been reused for backfilling and excess material has been disposed to designated areas	Nil	-
6	Accessibility (i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites; (ii) Schedule transport and hauling activities during non-	Complied	Transportation of excavated soil is being done in night hours mostly Traffic diversion and traffic management plan is prepared in	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	peak hours; (iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;		consultation with local traffic authority and being implemented at construction site		
7	Socio-Economic – Income (i) Leave spaces for access between mounds of soil; (ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles; (iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Partially Complied	The work is very slow in inhabited areas like SPS Safe passage to people and vehicles is provided where ever required Businesspeople and residents of proposed worksite are informed in advance, DSC, PIU and CAPP person regularly contact the public of affected areas in this regard	Contractor has instructed to increase the work force in front of critical areas	Contractor
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;	Partially complied	PPE are being used completely First-aid box is available at site Group insurance has been provided to workers Proper barricading for unauthorized intrusion has been provided except few stretches of pipe laying areas	Provide proper barricading at each site to avoid unauthorized intrusion	Contractor

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 125 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>(iii) Provide medical insurance coverage for workers;</p> <p>(iv) Secure all installations from unauthorized intrusion and accident risks;</p> <p>(v) Provide supplies of potable drinking water;</p> <p>(vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</p> <p>(vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers;</p> <p>(viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p>		<p>Drinking water has been provided at sites</p> <p>Training for health and safety measures have been given to contractor by DSC.</p> <p>Workers are not exposed to high noise level more than 8 hrs</p>		
10	<p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p>	Complied	Proper Sanitary and solid waste management is done at workers camp	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood; (v) Train employees in the storage and handling of materials which can potentially cause soil contamination; (vi) Recover used oil and lubricants and reuse or remove from the site; (vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas; (viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;				

Table 24: Compliance of EMP for Jhalawar Waste Water sub-project {RUSDIP/TR-02/JHL/WW/02}

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
PRECONSTRUCTION STAGE					
1	Environmental Clearances Site preparation work completed by IPIU including necessary clearance • Consent to Establish under Water (Prevention and Control of Pollution) Act • Consent to Establish under Air (Prevention and Control of Pollution) Act • Tree-cutting Permit	Complied	No clearance is required from Pollution Control Board. Tree cutting is not anticipated presently.	Nil	-
2	Social and Cultural Resources (i) Consult Archaeological Survey of India (ASI) to obtain an expert assessment of the archaeological potential of the site; (ii) Consider alternatives if the site is found to be of medium or high risk; (iii) Include state and local archaeological, cultural and historical authorities, and interest groups in consultation	Complied	It was confirmed by consultations with various stakeholders that the site has no archaeological potential Instruction has been given to the contractor to ensure that any chance finds are recognized and measures are taken to ensure they	Nil	-

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 127 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	forums as project stakeholders so that their expertise can be made available; and (iv) Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognised and measures are taken to ensure they are protected and conserved.		are protected and conserved		
3	Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas (i) Prioritize areas within or nearest possible vacant space in the subproject sites; (ii) If it is deemed necessary to locate elsewhere, consider sites that will not promote instability and result in destruction of property, vegetation, irrigation, and drinking water supply systems; (iii) Do not consider residential areas; (iv) Take extreme care in selecting sites to avoid direct disposal to water body or in areas which will inconvenience the community.	Complied	All the facilities related to construction are located within project site	Nil	-
4	Sources of Materials (i) Prioritize sites already permitted by the Mining Department; (ii) If other sites are necessary, inform construction contractor that it is their responsibility to verify the suitability of all material sources and to obtain the approval of IPiU; and (iii) If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from IPMU.	Complied	All the material is being taken from approved mines	Nil	-
CONSTRUCTION STAGE					
1	Sources of Materials (i) Use quarry sites and sources permitted by government; (ii) Verify suitability of all material sources and obtain approval of Investment Program Implementation Unit (IPiU); (iii) If additional quarries will be required after construction	Complied	All the material is being taken from government approved quarry sites	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	has started, obtain written approval from PMU; and; (iv) Submit to DSC on a monthly basis documentation of sources of materials.				
2	Air Quality (i) Consult with IPIU/DSC on the designated areas for stockpiling of clay, soils, gravel, and other construction materials; (ii) Damp down exposed soil and any stockpiled on site by spraying with water when necessary during dry weather; (iii) Use tarpaulins to cover sand and other loose material when transported by trucks; and (iv) Fit all heavy equipment and machinery with air pollution control devices which are operating correctly.	Complied	The construction activities are started recently. Biannual air quality monitoring will be done in Jan-Feb 2014. Base line monitoring was done in December 2012 Air quality monitoring will be carried out in January- February 2014.	Nil	-
3	Surface water quality (i) Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets; (ii) Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with IPIU/DSC on designated disposal areas; (iii) Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies; (iv) Place storage areas for fuels and lubricants away from any drainage leading to water bodies; (v) Dispose any wastes generated by construction activities in designated sites; and (vi) Conduct surface quality inspection according to the Environmental Management Plan (EMP).	Partially Complied	Excavated materials are being stored on the road side and being back filled after laying of pipes, excess material is removed regularly There is no surface water body near sub-project area	Inspection of water quality of nearest well/tube well is required	Contractor/IPIU
4	Noise Levels (i) Plan activities in consultation with IPIU/DSC so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance; (ii) Require horns not be used unless it is necessary to warn other road users or animals of the vehicle's	Complied	Activities are planned in consultation with PIU Noise producing equipments are seen in maintained conditions Generator sets are not being use	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	<p>approach;</p> <p>(iii) Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street barriers the sound impact to surrounding sensitive receptor; and</p> <p>(iv) Maintain maximum sound levels not exceeding 80 decibels (dbA) when measured at a distance of 10 m or more from the vehicle/s.</p>		<p>presently</p> <p>The construction activities are started recently. Noise monitoring will be done in Jan-Feb 2014. Base line monitoring was done in December 2012.</p>		
5	<p>Landscape and Aesthetics</p> <p>(i) Prepare and implement Waste Management Plan;</p> <p>(ii) Avoid stockpiling of excess excavated soils;</p> <p>(ii) Coordinate with Municipal Board for beneficial uses of excess excavated soils or immediately dispose to designated areas;</p> <p>(iv) Recover used oil and lubricants and reuse or remove from the sites;</p> <p>(v) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p>	Complied	Overburden and excavated materials from construction sites has been reused for backfilling and excess material has been disposed to designated areas	Nil	-
6	<p>Accessibility</p> <p>(i) Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</p> <p>(ii) Schedule transport and hauling activities during non-peak hours;</p> <p>(iii) Coordinate with Municipal Traffic Office for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</p>	Complied	<p>Presently no work on roads is being done and contractors are instructed to use traffic diversion, barricade, caution boards etc. when working on road</p> <p>No major material transportation is being done at this time</p>	Nil	-
7	<p>Socio-Economic – Income</p> <p>(i) Leave spaces for access between mounds of soil;</p> <p>(ii) Provide walkways and metal sheets where required to maintain access across trenches for people and vehicles;</p> <p>(iii) Increase workforce in front of critical areas such as institutions, place of worship, business establishment,</p>	Complied	<p>Presently no work in inhabited areas</p> <p>Businesspeople and residents of proposed worksite are informed in advance, DSC, PIU and CAPP</p>	Nil	-

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
	hospitals, and schools; (iv) Consult businesses and institutions regarding operating hours and factoring this in work schedules; and (v) Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.		person regularly contact the public of affected areas in this regard		
8	Socio-Economic – Employment (i) Employ at least 50% of the labour force, or to the maximum extent, local persons within the 2-km immediate area if manpower is available; and (ii) Secure construction materials from local market.	Complied	At present most of the workforce is hired locally	Nil	-
9	Occupational Health and Safety (i) Develop and implement site-specific Health and Safety (H and S) Plan which will include measures such as: (a) excluding public from the site; (b) ensuring all workers are provided with and use Personal Protective Equipment; (c) H and S Training for all site personnel; (d) documented procedures to be followed for all site activities; and (e) documentation of work-related accidents; (ii) Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site; (iii) Provide medical insurance coverage for workers; (iv) Secure all installations from unauthorized intrusion and accident risks; (v) Provide supplies of potable drinking water; (vi) Provide clean eating areas where workers are not exposed to hazardous or noxious substances; (vii) Provide H and S orientation training to all new workers to ensure that they are apprised of the basic site rules of work at the site, personal protective protection, and preventing injuring to fellow workers; (viii) Provide visitor orientation if visitors to the site can gain access to areas where hazardous conditions or substances may be present. Ensure also that visitor/s do	Partially complied	PPE are not being used completely First-aid box is available at site Group insurance has been provided to workers Proper barricading for unauthorized intrusion has been provided except few stretches of pipe laying areas Drinking water has been provided at sites Training for health and safety measures have been given to contractor by DSC. Workers are not exposed to high noise level more than 8 hrs	Ensure complete use of PPE Provide proper barricading at each site to avoid unauthorized intrusion	Contractor

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No. 2506 IND (Tr-2)

Page: 131 of 177
Date: December 2013

Sr. No.	Environmental components related to project activities	Compliance	Explanation	Action Proposed	Responsibility
10	<p>not enter hazard areas unescorted;</p> <p>(ix) Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</p> <p>(x) Ensure moving equipment is outfitted with audible back-up alarms;</p> <p>(xi) Mark and provide sign boards for hazardous areas such as energized electrical devices and lines, service rooms housing high voltage equipment, and areas for storage and disposal. Signage shall be in accordance with international standards and be well known to, and easily understood by workers, visitors, and the general public as appropriate; and</p> <p>(xii) Disallow worker exposure to noise level greater than 85 dBA for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</p> <p>Work Camps</p> <p>(i) Consult with IPIU/DSC before locating project offices, sheds, and construction plants;</p> <p>(ii) Minimize removal of vegetation and disallow cutting of trees;</p> <p>(iii) Provide water and sanitation facilities for employees;</p> <p>(iv) Prohibit employees from poaching wildlife and cutting of trees for firewood;</p> <p>(v) Train employees in the storage and handling of materials which can potentially cause soil contamination;</p> <p>(vi) Recover used oil and lubricants and reuse or remove from the site;</p> <p>(vii) Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</p> <p>(viii) Remove all wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required;</p>	Not Applicable	The contractor has not established any labour camp yet	Nil	-

III. ENVIRONMENTAL PROCEDURE REVIEW

A). Environmental Legal Requirements

11. **Annexure 1** lists those Acts; Rules, Policies and Regulations currently in force in India and deal with environmental issues that could apply to infrastructure development. However, because of the relatively minor negative impacts of most of the types of the subproject likely to be developed under RUSDIP, it is expected that most subproject should not fall within the scope of these legal instruments. Subprojects and activities that will need to comply with certain laws are:

- Any components that require the acquisition of forest land;
- Any construction activities located in areas covered by the Arvali Range Notification in Alwar;
- Water Treatment Plants (WTP) and Sewage Treatment Plants (STP);
- Composting and landfill facilities;
- Common waste management facilities, including composting, landfills, transfer stations;
- Common waste management facilities within 10 km of the boundary of protected areas (such as National Parks, Sanctuaries, Notified areas and Biosphere Reserves);
- Mobile diesel generators

12. The specific requirements to ensure compliance by these components and subprojects are shown in **Table 25**.

Table 25: Action Required Ensuring Subprojects Comply with National Environmental Laws

Component	Applicable Legislation	Compliance	Action Required
1. All components that require acquisition of forest land	Forest (Conservation) Act 1980; Wildlife (protection) Act 1972	Approval from Ministry of Environment and Forests (MoEF)	Identify non- forest land and formulate an afforestation program
2. Water Treatment Plant (WTP) and Sewage Treatment Plant (STP)	Water (Prevention and Control of Pollution) Act 1974	Consent to Establish (CTE) and Consent to Operate (CTO) from RSPCB	Based on project review and site inspection RSPCB provides CTE before construction, and stipulate the disposal standards to be met during operation. After completion of construction, CTO is issued confirming compliance with the CTE conditions, if any
		Renewal of CTO during operation (STP)	Based on the performance of the STP and its compliance with the disposal standards CTO is renewed every year
3. All composting and landfill facilities	Municipal Solid Wastes (Management and handling) Rules 2000	Authorization of proposed site by RSPCB	Authorization is issued based on land use in and around the site and groundwater condition
	Water (Prevention and Control of Pollution) Act 1974; Air(Prevention and	CTE and CTO from RSPCB	Same as for STPs (above)

Component	Applicable Legislation	Compliance	Action Required
	Control of Pollution) Act 1981		
4. Common waste management facilities including composting, landfills and transfer stations	Environment (Protection) Act 1986: Environmental Impact Assessment Notification 2006, amended in 2009 Category B	Requires environmental clearance from State Environment impact Assessment Authority (SEIAA)	Based on preliminary information and site visits, if required, project will be categorized as B1 or B2. B1 projects require EIA study for approval
5. Common waste management facilities within or 10 km outside the boundary of protected areas such as National Parks, Sanctuaries, Notified Areas and Biosphere Reserve	Environmental Impact Assessment Notification, 2006 Category A	Requires environmental clearance from the federal Ministry of Environment and Forests (MoEF)	Conduct EIA study Category A and B1 projects require public consultation as part of EIA
6. Mobile diesel generators	Air (Prevention and Control of Pollution) Act 1981	CTE and CTO from RSPCB	CTO renewal every year based on performance

B). Compliance of Environmental Regulations

13. **Table 26** below shows present clearance status for different sub-projects under **Tr-2**. Gol EIA Notification of 2006 and its subsequent amendment (replacing the EIA Notification of 1994), sets out the requirement for Environmental Assessment in India. This states that Environmental Clearance (EC) is required for specified activities/projects. Projects are categorised as 'A' or 'B' depending on the scale of the project and the nature of its impacts. Categories 'A' projects require Environmental Clearance from the National Ministry of Environment and Forests (MoEF) and Category 'B' projects require environmental clearance from the State Environment Impact Assessment Authority (SEIAA).

14. The only type of infrastructure provided by the RUSDIP that is specified in the EIA Notification is Common Municipal Solid Waste Management facility (CMSWMF¹), where EC is required. Thus Environmental Clearance (EC) is not required for other sub-project under RUSDIP.

15. "Consent to Establish" for setting up Sewage Treatment Plant and Water Treatment Plant and "Consent to Operate" before the plant starts its operation is required from State Pollution Control Board (RPCB) under the Water (Prevention and Control of Pollution) Act. 1974.

16. As per the present status consent to establish has obtained for all the running sub-projects under Tr-2. Attention is required by respective PIUs to obtain Consent to Operate before commissioning of STP/WTP.

¹ For the purpose of EIA Notification, common municipal solid waste management facilities may be referred as centralized MSW facility for an given town, city, region. It is further to mention a common facility need not have surrounding ULBs included.(Technical EIA Guidance Manual for CMSWMF)

Table 26: Present Status of Environment and Forest & Other Clearances - (Tranche 2)

City	Work (Package No.)	Applicable Legislation/ Type of clearance	Clearance given by and date	Subject / Issue	Remarks/ Action needed
Sawai Madhopur (Tr-2)	Waste Water (RUSDIP/TR-02/SMD/WW-01) Package No. Changed as: RUSDIP/TR-02/SMD/WW-02	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 10 MLD STP from Pollution Control Board	Consent to Operate obtained from Pollution Control Board – Order No. 2012-2013/MUID/ 1013 dated 25.10.2012 Consent valid upto 33.04.2015 Consent to Operate for DG set at STP obtained from PCB- Order no. 2012-2013/MUID/1012 dated 25.10.2012. Consent valid upto 31.08.2015		Complied
Dholpur (Tr-2)	Water supply (RUSDIP/TR-02/DLP/WS-03)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 15 MLD WTP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2012-2013 /Bharatpur/ 885 dated 03.10.2012 Consent valid upto 31.05.2015		Complied
Dholpur (Tr-2)	Waste Water (RUSDIP/TR-02/DLP/WW/04 & RUSDIP/TR-02/DLP/WW/05)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 10 MLD STP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2012-2013/MUID/943 dated 19.09.2012 Consent valid up to 31.07.2015		Complied
Karauli (Tr-2)	Waste Water (RUSDIP/TR-02/KRL/WW-03)	Water (Prevention and Control of Pollution) Act. 1974/	Consent to Establish obtained from Pollution Control Board – Order No. 2012-		Complied

City	Work (Package No.)	Applicable Legislation/ Type of clearance	Clearance given by and date	Subject / Issue	Remarks/ Action needed
		Consent to establish of 5 MLD STP from Pollution Control Board Consent to operate will be required before operation	2013/MUID/883 dated 07.08.2012 Consent valid up to 31.03.2015		
Barmer (Tr-2)	Waste Water (RUSDIP/TR-02/BMR/WW-03) Lot-2	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 10 MLD STP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2012-2013/MUID/945 dated 19.09.2012 Consent valid upto 31.07.2015		Complied
Rajsamand (Tr-2)	Waste Water (RUSDIP/TR-02/RSM/WW-01) Package No. changed as RSM/WW/02 Lot-1 & Lot-2	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 5 MLD STP from Pollution Control Board Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2012-2013/MUID/877 dated 30.07.2012 Consent valid upto 30.04.2015		Complied
Rajsamand (Tr-2)	Water supply (RUSDIP/TR-02/RSM/WS-01) Package No. changed as RUSDIP/TR-02/RSM/WS-03	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 17 MLD WTP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. RPCB/ROU/Raj/W-4/6155 dated 27.11.08 received on 02.04.09 Validity of the consent is not written in the CTE received	-	Complied

City	Work (Package No.)	Applicable Legislation/ Type of clearance	Clearance given by and date	Subject / Issue	Remarks/ Action needed
Jhalawar	Water Supply (RUSDIP/TR-02/JHL/WS-02)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to Operate		Consent to Operate is to be taken by PHED Department	Pending Follow up and Coordination is required with PHED to obtain Consent to Operate at earliest

C). Compliance of Environmental Loan Covenants

Table 27: Status of compliance of ADB's major Environmental Loan Covenants

Project Specific Covenants	Status / Issues
Environmental	
1.The EA shall ensure that: (LA Sched 5 Para 13) (a) the project is carried out and all subproject facilities designed, constructed, operated, maintained, and monitored in compliances with the environmental law and regulations of the Borrower, the state, ADB's Environmental Policy (2002), and the EARF;	Under compliance in accordance with ADB Environmental Policy and Environmental Assessment Guidelines
2. (b) Subproject encroaching any National Park or its buffer zone shall not be included in the Project; however, Subproject in or close to the wildlife sanctuary or any other environmentally sensitive area may be allowed subject to the EA obtaining all statutory clearances;	No subproject will be taken up encroaching any National Park or its buffer zone. No sub-project in or close to the wildlife sanctuary or any other lower grade environmentally sensitive area recorded till date. If it happens in future, environmental clearance will be taken up as per Govt. procedure
3 (c) an IEE as required, including an EMP with budget identifying the cost of its implementation as incorporated in the related bid document if any, when adequate public consultation for each sub-project, in accordance with the EARF shall be submitted to ADB for review and approval before award of related contract. In case of any EIA or SIEE for sub-project classified as A or B sensitive, this shall be subject to the 120 day public disclosure requirement under ADB's Environmental Policy (2002, 2009)	An IEE have been prepared for each sub-project where EMP, budget for application of EMP and issues of public consultation are enclosed. Budget and EMP components are incorporated in the bid document All the reports approved by ADB. At present all the sub-projects are classified as class B (only IEE will be required) As per National rules EIA will be required for landfill site handling more than 50 MT/day municipal solid waste
4 (d) all mitigation measures identified in the IEE, SIEE, EIA or SEIA and the related EMP, as applicable, for each sub-project, shall be incorporated in sub-project design, and carried out during construction, and O & M, and disclosed to the stakeholders;	Under compliance: IEE screening of potential environmental impact and mitigation measures applied according to project location, specific sector development and associated design requirements. EMP's prepared and regularly monitored for compliance of stated mitigation measures. During construction process within the city

Project Specific Covenants	Status / Issues
	consultation with local communities on environmental issues are considered Last EMP semi-annual Report (January – June 2013) submitted.
5 (e) if there are any changes in specific locations or alignments of any sub-project facilities after completion of the process of IEE (or EIA) or due to detailed design or implementation that has an impact on the environmental assessment carried out thus far, then additional environmental assessment shall be carried out in accordance with ADB's Environmental Policy (2002, 2009) and the EARF, and prior approval of ADB obtained before further physical implementation of the sub-project;	EMP already revised in case of change of scope/ location for few sub-projects under Tr-2. In case of change in scope or location IEE will be revised. For minor change in location of project facilities EMP has been revised for monitoring purpose
6 (f) all environmental clearances required by applicable laws, and regulations at Borrower, State, or local levels shall be obtained in a timely manner, prior to commencement of civil works for the relevant subproject	Under compliance: All necessary clearances presently under pursuance. Specific clearance details are now compiled for appropriate contract packages. Clearance Plan prepared to a scheduled timeframe, which is monitored for submissions to the various agencies in obtaining the necessary clearances.
7 (g) semi-annual progress reports on the implementation of the EMPs, measures under the IEE/EIA, and the environmental monitoring shall be carried out as a part of the project. Implementation for review and disclosure in accordance with ADB's Public Communications Policy (2005)	Semi -annual progress report on application of EMP is being prepared regularly Field monitoring continued as per monitoring plan During construction process within the city consultation with local communities on environmental issues has already initiated and continued in most of the locations

D). Environmental Organization and Management

17. Environmental issues of the project coordinated by an Environmental Specialist within the IPMU/ IPMC, who ensures that all subprojects, comply with environmental safeguards. An Environmental Monitoring Specialist (EMS) who is part of the DSC team implement the Environmental Monitoring Plan from each IEE to ensure that mitigation measures are provided and protect the environment as intended. **Figure 1** shows institutional responsibility for implementation of environmental safeguard monitoring at different level. Details about the mobilization schedule of environmental safeguard personals are provided at **Annexure 5**.

18. EMP shows that most of the mitigation activities are the responsibility of the Construction Contractors (CC) employed to build the infrastructure during the construction stage or the O&M Contractors employed to conduct maintenance or repair work when the system is operating. Responsibility for the relevant measures assigned to the Contractors via the contracts through which they are appointed, so they legally required taking the necessary action. There are also some actions that need to be taken by LSGD in their role as project proponent, and some actions related to the design that would be implemented by the DSC.

19. A program of monitoring would be conducted to ensure that all parties take the specified action to provide the required mitigation, to assess whether the action has adequately protected the environment, and to determine whether any additional measures may be necessary. This would be conducted by a qualified Environmental Monitoring

Specialist (EMS) from the DSC. The EMS responsible for all monitoring activities and reporting the results and conclusions to the IPMU, and recommend remedial action if measures are not being provided or are not protecting the environment effectively. The EMS may be assisted by environmental specialist in particular technical fields, and junior or medium-level engineers of IPIU (designated as environmental officer) who can make many of the routine observations on site. Post-construction monitoring will be conducted by the relevant Government Agency (GA) to whom responsibility for the infrastructure will pass once it begins to operate².

20. EMP shows that most of the mitigation measures are fairly standard methods of minimizing disturbance from building in urban areas (maintaining access, planning work to avoid sensitive times, finding uses for waste material, etc), and experienced Contractors should be familiar with most of the requirements. Monitoring of such measures normally involves making observations in the course of site visits, although some require more formal checking of records and other aspects. There are also be some surveys of residents, as most of the measures are aimed at preventing impacts on people and the human environment.

E). Grievance Redressal

21. The City Level Committee (CLC), acting as a grievance redress committee (GRC) is chaired by the District Collector with representatives from the ULB, state government agencies, IPIU, community-based organizations (CBOs) and NGOs. As GRC, the CLC meets at regular intervals based on the availability of the CLC /GRC members and also as per requirement or pending issues. The grievance redress mechanism is provided at Figure 2. The information w.r.t CLC/GRC is communicated to APs personally by the ACO in the concerned town. Further, the complete detail of the CLC meeting is also displayed at the IPIU notice board and the notice board of the collector's office too.

22. IPIUs along with ACOs and DSCs have been entrusted with the responsibility to maintain a proper register of the grievance (if any) which will be endorsed by the all three agencies involved in implementation. General directions for registering grievances of APs were communicated in the meeting organized on 26.12.2011 followed by minutes issued vide letter no. 32060-67dated 30.12.2011. GRC registers are in place at all the towns. Further ACOs have been given instructions to arrange more public consultations and register all the grievances (including verbal) in writing whether substantial or non substantial and put them up for the perusal of IPIU for proper disposal.

23. It is important to mention that 135 grievance were received during reporting period related issues like water line damages, road restoration, excess / accumulation of soil moulds etc. these grievances are resolved by the IPIUs as and when received. But grievances like demand of water or sewerage connection/line etc. are resolved as per the scope of work through proper approval from RUIDP.

24. Out of 135 grievances received in this reporting period only 65 grievances are associated with EMP compliance. Out of these 65 grievances 11 complaints were received in Alwar related to road restoration, backfilling of open pits and removal of excess soil, 4 complaints related to repair of road and removal of excavated soil from the school front, 14 complaints were received in Jaisalmer which were related to removal of stone/soil from houses front and leveling of backfilled soil, 6 complaints were received in Nagaur related to drain reconstruction and backfilling, 2 complaints received in Sikar to repair the damaged water supply pipeline due to construction, 7 complaints were received in Churu related to removal of surplus soil, road restoration and repairing of water supply pipeline, one complainant in Jhalawar requested to postponed the excavation work for out fall 500mm dia

² In the operational period some infrastructure will be the responsibility of the Municipal Boards/Councils, whilst others will be the responsibility of the appropriate branch of the State government (such as PWD, PHED, etc)

till the corps swon gets cut, 14 grievances were received in Chittorgarh related to inconvenience due to mould of soil, choking of drain due to excavated soil and damage of water pipe due to construction activities and 6 complaints received in Bundi for removal of excess soil from house and school front. No compliant was received in Dholpur, Karauli and Baran town.

Figure 1: Institutional Responsibility- Environmental Organisation RUSDIP

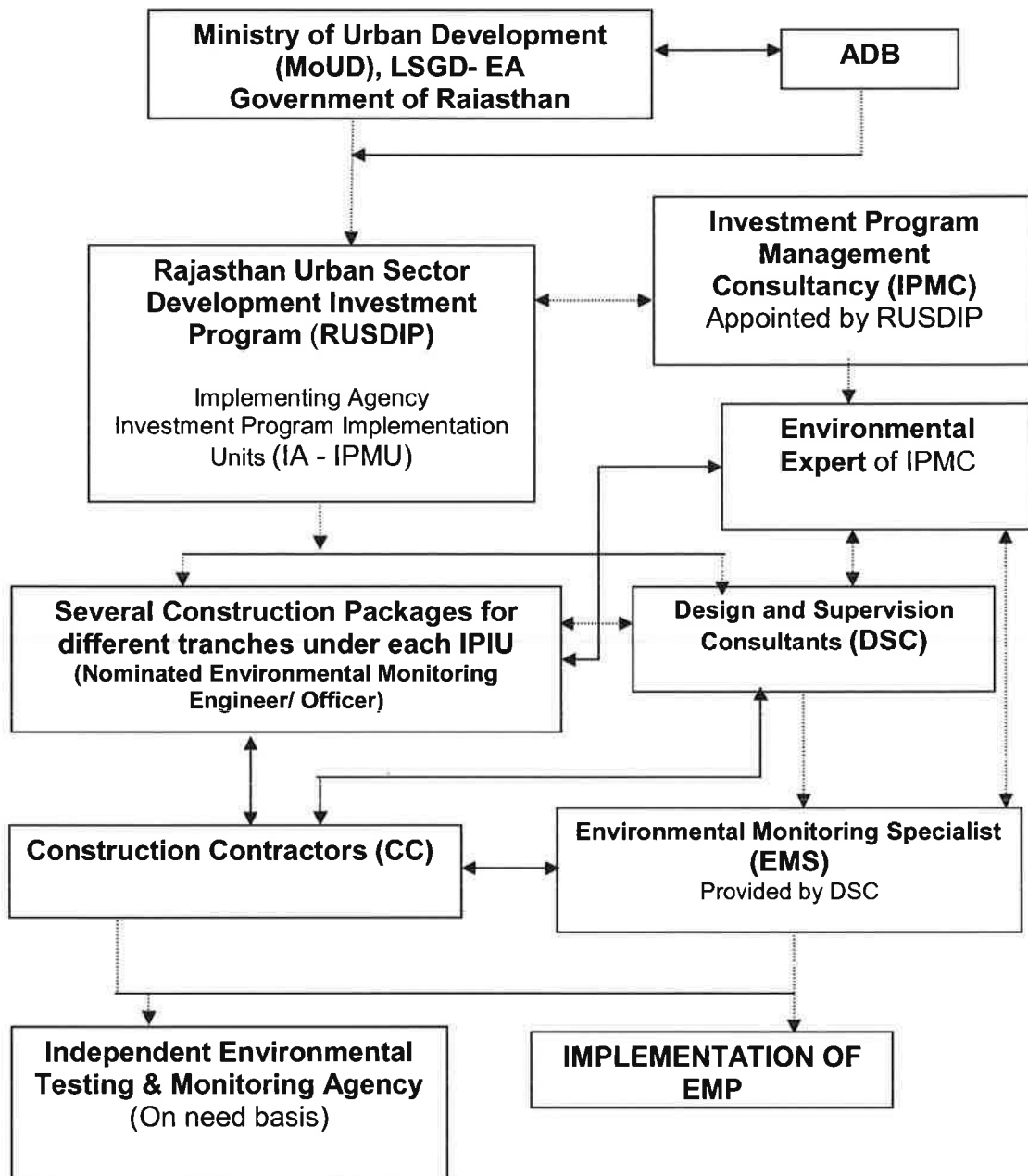
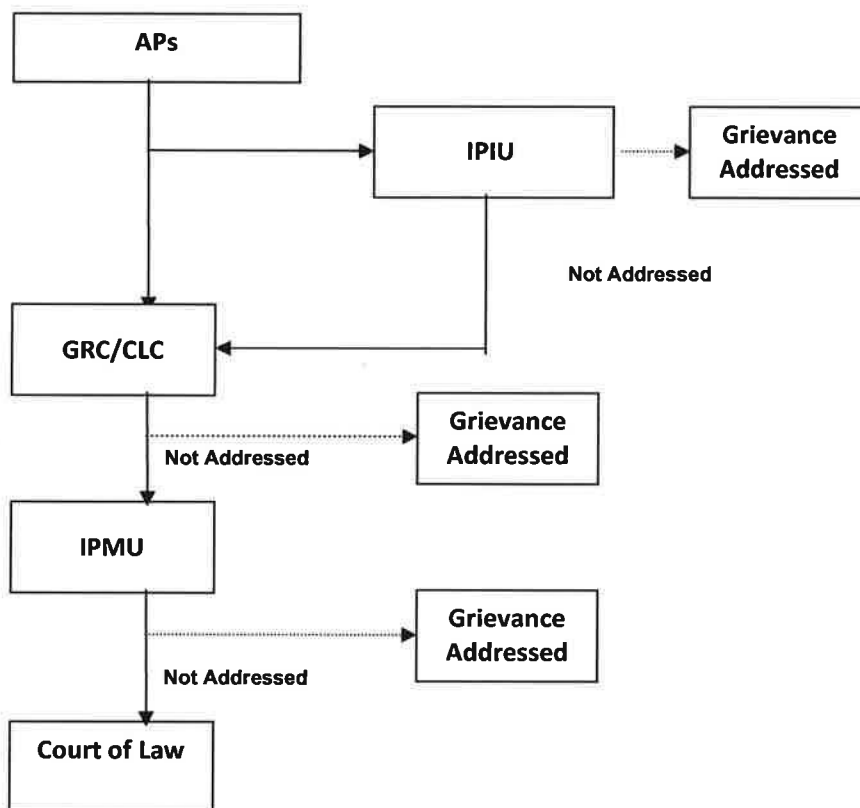


Figure 2: Grievance Redress Process



CLC = City Level Committee,
GRC = Grievance Redress Committee,
IPIU=Investment Program Implementation Unit,
IPMU = Investment Program Management Unit,
NGO = Nongovernmental organization,
SDS = Social Development Specialist.

IV. ENVIRONMENTAL MONITORING AND EVALUATION

25. 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 of EMP. The environmental performance indicators 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:

- Air, noise and water quality
- Compliance to EMP
- Compliance to local/state/national environmental regulations

26. After starting of construction work for Intake, STP, WTP air pollutants should be measure at core and buffer zone of the proposed STP. WTP site. If any water body exists near the STP, WTP physico-chemical properties of the water should be measure as part of base line environment. Environment monitoring parameters are shown in Annexure 4.

27. Also during construction of landfill site monitoring in respect to air, noise, and water quality are required. Parameters are given in Annexure 4.

28. At bridge construction site monitoring of ambient air quality are also necessary. Environment monitoring parameters are shown in Annexure 4.

29. At pipe laying area air and noise quality monitoring should be done as per scope of work depicted in Annexure 4.

30. Air, water and noise quality will be monitored at all of the project locations in January and February 2014. The results of monitoring will be submitted in next biannual environmental monitoring report (Jan-June 2014).

V. CONSULTATIONS AND RECOMMENDATIONS

31. For protection of local environment during construction phase application of mitigation measures started as per specified EMP. Public consultation during construction/implementation phase have been carried out. The issues and public opinion are shown in **Annexure 5**. The project specific lapses, corresponding recommendations with responsibility are presented in **Chapter II** of the report.

32. For proper implementation of EMP during various phases of project execution, review meeting and training are being organized by IPMC quarterly. The representative of all IPIUs (Nodal officers), environmental personal of DSCs and CAPP staff attended the same. The details of meetings are presented in **Annexure 6**.

33. The status of compliance with EMP for sub-project under tranche-2 has been discussed in Table 3 to Table 19 of Chapter II of the report including action required for lapses and responsibility for the same.

34. During the construction phase, impacts mainly arise from the need to dispose of large quantities of waste soil; and from the disturbance of residents, businesses, traffic and important buildings by the construction work. These are common impacts of construction in urban areas, and there are well developed methods for their mitigation. These include:

- Finding beneficial uses for waste material;
- Covering soil and sand during transportation and when stored on site;
- Planning work to minimize disruption of traffic and communities;
- Providing temporary structures to maintain access across trenches where required.

35. Various non compliance of EMP activities are observed in the present report. These are related to management of excess excavated soil, incomplete use of Personal Protective Equipment (PPE), improvable condition of work/labour camp, provision of excess for people and vehicle through open trenches at few places and air quality monitoring. Recklessness at contractors' end has been observed to follow mitigation measure as per EMP for the same. The main area of concern has been summarized below

- ❖ **Environmental Statutory Clearance:** The consent to establish has been obtained from Rajasthan Pollution Control Board (RPCB) to establish STP at Dholpur, Karauli, Nagaur, Barmer and Rajsamand and for WTP in Dholpur and Rajsamand. The work of STP at Sawaimadhopur has been completed thus consent to operate has been obtained from RPCB. Consent to operate will be required for STPs, and WTPs before operation. Therefore it is recommended to obtain consent to operate for STPs & WTPs in time. It has observed that felling of tree is required and permission for the same has been obtained from local administration for Bharatpur road package, Dholpur waste water, Sikar water supply packages and Rajsamand water supply package. Permission for cutting of trees for Sikar road package is under approval in forest department. Compensatory plantation is therefore recommended.
- ❖ **Air, Water & Noise Quality:** The Environmental monitoring was scheduled in December 2013 for this reporting period. The work order to conduct monitoring has been issued to the agency and monitoring will be conducted in January and February 2014. The results of the same will be discussed in subsequent report.

- ❖ **Landscape and Aesthetics:** The unusable extra excavated materials are being disposed at low laying area in consultation with ULBs. Some grievances related to removal of soil mounts and proper leveling of backfilled soil were received in towns which were resolved accordingly. However excavated soil management is required to be prepared.
- ❖ **Socio-Economic – (Income & Employment):** It was observed in few cases that proper access across open trenches for people and vehicles has not been provided. Some grievances were also received in this regard in towns. In this regard contractor has instructed to provide walkways and metal sheets where required to maintain access. As far as engagement of local labour is concern, in all cases more than 50% of the work force has been appointed locally.
- ❖ **Occupational Health and Safety:** Safety measures during work execution are the main issue of concern. A very limited use of personal protective equipments (PPE) was observed. The First-aid facility is partially available at sites. It should be ensured that qualified first-aid facilities are available at all sites all the time without fail. The safety officer is required to be appointed for all packages by the contractor.
- ❖ **Work Camps:** The basic facilities in worker camp needs to be improved as per EMP. Proper Sanitary and solid waste management facilities is required in all work camps. Cooking gas is required to supply in camps to avoid cutting of trees for firewood.

36. Apart from these common lapses to achieve full EMP compliance, sub-project wise status of EMP compliance and recommended mitigation measure have been discussed in Chapter II of the report.

37. Necessary instructions have been given to the contractor by concerned DSC/IPIU for improvement in compliance level.

ANNEXURE - 1

The Government of India has formulated various policy guidelines; acts and regulations aimed at the sustenance of environment in general, which are briefly summarized and applicable acts with the projects, are described in the following sub-sections.

Environmental Legislation and Pollution Control Acts

Sl. No.	Sources	Legislation
1	Water Pollution	The Water (Prevention and Control of Pollution) Act, 1974, as amended in 1988
2	Air Pollution	The Air (Prevention and Control of Pollution) Act, 1981, as amended by Amendment Act, 1987
3	Noise Pollution	The Noise Pollution (Regulation and Control) Rules, 2000
4	Environment	The Environment (Protection) Act, 1986
5	Public Liability	The Public Liability Insurance Act, 1991 The Public Liability Insurance Rules, 1991
6	Hazardous Waste	<ul style="list-style-type: none"> ➤ Hazardous Waste (Management and Handling) Rules, 1989 ➤ Batteries (Management and Handling) Rules, 2001 ➤ Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 ➤ Emergency Planning Preparedness and Response for Chemical Disasters Rules, 1995 ➤ Manufacturing, Use, Import, Export and Storage of Hazardous Microorganisms, Genetically Modified Engineered Organisms or Cell Rules, 1993 ➤ Hazardous Microorganisms and Genetically Modified Organisms (Manufacture, Use Import Export and Storage) Rules, 1999 ➤ Bio- Medical Waste (Management and Handling) Rules, 2000
7	Municipal Solid Waste	Municipal Solid Waste (Management and Handling) Rules, 2000 Recycled Plastics Manufacturing and Usage Rules, 1999
8	EIA Notification	The Ministry of Environment and Forests has revised the EIA notification, 1994, and issues the revised EIA notification on 14th September 2006
9	Use and Management of Explosive	The Explosives Act, 1884 and The Explosives Rules, 1983

THE ENVIRONMENT PROTECTION ACT, 1986 AND THE EIA NOTIFICATION, 1994

The Environmental (Protection) Act, 1986 is the umbrella legislation providing for the protection of environment in the country. This Act provided for the Environment (Protection) Rules, which have been formulated under the act "The Environmental Impact Assessment Notification, 1994 and the Amendments / Revised EIA notification on 14th September 2006".and Year 2009.

THE FOREST (CONSERVATION) ACT, 1980

The Forest (Conservation) Act, 1980 pertains to the cases of diversion of forest area and felling of roadside plantation. Depending on the size of the tract to be cleared, clearances are applied for at the following levels in the governments:

- If the area of forests to be cleared or diverted exceeds 20 ha (or, 10ha in hilly area), the prior permission of the Central Government is required;
- If the area of forest to be cleared or diverted is between 5 to 20 ha, the Regional Office of Chief Conservator of Forests is empowered to approve;
- If the area of forest to be cleared or diverted is below or equal to 5 ha, the State Government can give permission;
- and If the area to be clear-felled has a forest density of more than 40%, permission to undertake any work is needed from the Central Government, irrespective of the area to be cleared.

THE WILDLIFE (PROTECTION) ACT, 1972

The Wildlife Protection Act has allowed the government to establish a number of National Parks and Sanctuaries over the past 25 years, to protect and conserve the flora and fauna of the state.

THE WATER AND AIR (PREVENTION AND CONTROL OF POLLUTION) ACTS 1974

The water (Prevention and Control of Pollution) Act, 1974 resulted in the establishment of the Central and State level Pollution Control Boards whose responsibilities include managing water quality and effluent standards, as well as monitoring water quality, prosecuting offenders and issuing licenses for construction and operation of certain facilities. The SPCB is also empowered to set air quality standards and monitor and prosecute offenders under the air (Prevention and Control of Pollution) Act, 1981.

ANNEXURE – 2
Major works and progress- Tranche 02

Locations	Sub-projects Components (Package No.)	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
Alwar	Bridge: Widening of existing ROB near Bhagat Singh Circle at Alwar (RUSDIP/ ALW/BR02) TR-02/	Pile-122 nos. Pile cap- 20 Pier & Pier cap -19 nos. & 18 nos. Slab (Viaduct) - 06 nos. Drain work- 300 meter (work completed) Approach Road- Retaining wall foundation complete. Superstructure under progress.	No change expected	o Effective monitoring and application of EMP	No risk
Karauli	Water Supply - Construction of OHSRs and balancing reservoir including Providing, Laying, Jointing, Testing and Commissioning of DI pipelines in Distribution system and Transmission system; and replacing of existing leaking pipelines; Replacement of Water Meters (RUSDIP/ TR-02/ KRL/WS/01)	DI pipe line:- Procured= 93.13 km, Laid=93.08 km, 1. Behind Krishi Upaj Mandi OHSR- Work completed. and commissioned. 2. Behind RTO office OHSR- Work completed. Testing to be done. 3. Near Private Bus Stand OHSR- Work completed. Testing done. To be connected to existing sources of PHED in phased manner. 4. DIET campus OHSR- Work completed. tested. 5. Mandrail Road GLSR- Work completed. Testing done. Chlorinator room under progress. House connection with water meter- 3367 Nos.	No change expected	o Effective monitoring and application of EMP	No risk
Sawai Madhopur	Water supply: Construction of CWRs & OHSRs including supply, laying and commissioning with testing of DI & uPVC pipelines and construction of pumping	DI pipe line:- Procured= 29.54km, Laid=27.19 km, Testing = 23.98 km, Commissioned= 0 km uPVC pipe line:-Procured= 44.56 km, Laid=37.14 km, Testing = 20.42 km, Commissioned= 9.20 km Total DI+uPVC line :- Procured= 74.1 km, Laid=64.33km, Testing = 44.4 km, Commissioned= 9.20 km	Raigar OHSR- dropped in CLC by Collector	o Effective monitoring and application of EMP	No risk

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No.: 2506 IND (Tr-2)

Page: 148 of 177
Date: December 2013

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
	stations and replacing of leakaged pipeline etc. for UWSS Sawai Madhopur {RUSDIP/TR-02/SMD/WS/02}		OHSR- Civil work completed on 06 Nos OHSRs (Piping work balance) & work under progress on 01 no. OHSR (Commerce college) and 01 no. canceled in CLC. CWR - Civil work completed on both CWRs. Pumping Station- civil work of 2nos PHa have been almost completed and the work of CSNP pump is stand still since last 2 years.			
Sawai Madhopur	Waste Water: Design, Construction, Supply, erection testing, commissioning and five years operation & maintenance of Sewage Treatment plant 10 MLD near Surwal Village including all civil, electrical, mechanical, pumping and other allied works and Supply, laying, joining, testing and commissioning of outfall sewer, various Trunk sewers and lateral sewers connecting to out fall, along with all necessary manholes, appurtenances, etc. at Sawai Madhopur {RUSDIP/ TR-02/ SMD/WW/02}		RCC Pipe procured 77469 met , laid 74332 met, Testing- 73782 met uPVC Pipe procured 32000 met , laid 30950met, Testing- 29850 met Man hole construction - 2557nos Man Hole Testing- 2477Nos. STP: 1. Office cum Lab Building: 95 % work completed. 2. Raw Sewage PH: 100 % work completed and Pumps & piping work is completed. 3. Stilling Well: 100 % work completed & fixing of sluice gate is completed. 4. Grit removal unit: 100 % work completed. Fixing of unit work is in progress. 5. Screens: 100 % completed and fixing of screen work is in progress. 6. Anaerobic/Facultative Ponds: 100 % work completed. 7. Channels, DI pipe laying & mesc. works: 100 % work completed.	No change expected	Effective monitoring and application of EMP	No risk
Bharatpur	Water Supply: Construction of CWRs & OHSRs including supply, laying and commissioning with testing of DI & uPVC pipelines and construction of pumping stations and replacing of		DI pipe line:- Procured=16.92 km, Laid=16.92 km, Testing = 16.550 km, Commissioned= 16.550 km uPVC pipe line:-Procured= 8.55 km, Laid=8.25 km, Testing = 8.254 km, Commissioned= 8.254 km Total DI+uPVC line :- Procured= 25.47 km, Laid=25.17 km, Testing = 24.804 km, Commissioned= 24.804km	No change expected	Effective monitoring and application of EMP	No risk

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No.: 2506 IND (Tr-2)

Page: 149 of 177
Date: December 2013

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
	leakaged pipeline etc. for UWSS Bharatpur. {RUSDIP/TR-02/BPRWS/03}		OHSR- 4 no OHSR completed and 1 no OHSR in under progress. Pumping Station- Work under progress CWR- all work completed , painting work remaining. Electro magnetic flow meter- 05 nos			
Bharatpur	Additional Works requested by PHED for Strengthening of Distribution System at Bharatpur town. (RUSDIP/TR-02/BPRWS/05)	as for	DI pipe line:- Procured=9.289 km, Laid=7.59 km, Testing =7.59 km, Commissioned= 0 km uPVC pipe line:-Procured= 153.26 km, Laid=142.7km, Testing = 123.077 km, Commissioned=0 km Total DI+uPVC line :- Procured= 162.549 km, Laid=150.29km, Testing = 130.667 km, Commissioned=0 km Water meters: Installed- 5391 Nos. Service connection 5391nos. done. Extension of Pump House- Completed and commissioned and 6nos. Pump Installation completed	No change expected	Effective monitoring and application of EMP	No risk
Bharatpur	Road: Widening and Strengthening of Circular Road at Bharatpur Town (RUSDIP/TR-02/BPR/ST/01)	and	1. Circular Road C.C. - 10000m DLC and 10000m. M-30 conc. (One side) Completed, remaining on progress, Kerb stone(footpath+Median) laying 14000mtr. Complete, remaining on progress(Only one side). Pipe culvert near Mukherzi Nagar road on one side completed and ,Road painting and Cat's eye installed on road, Laying of paving block on progress, 9167 sqm done	No change expected	Shifting of utilities (water supply and electric line)	No risk
Dholpur	Water Supply: Design, Construction and Commissioning of 15 MLD capacity Water Treatment Plant including commissioning of equipments at Sagarpada; Construction of CWRs & OHSRs including supply, laying and commissioning with testing of DI & uPVC pipelines		DI pipe line:- Procured= 12.723 km, Laid=11.473 km, Testing = 9.138 km, Commissioned= 0 km uPVC pipe line:-Procured=75.492 km, Laid= 60.695 km, Testing = 48.350 km, Commissioned= 0 km Total DI+uPVC line :- Procured= 88.215 km, Laid=72.168 km, Testing = 57.488 km, Commissioned= 0 km OHSR -- 3 Nos. OHSR completed & 2 Nos. OHSR Hydro testing completed. 1 Nos OHSR at Maharana - Vertical wall full height completed & top dome reinforcement under progress.	No further change expected	Effective monitoring and application of EMP	No risk

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
		and replacing of leaked pipeline etc. for UWSS Dholpur. {RUSDIP/ TR-02/ DLP/WS/03}	CWR - Both CWR completed & Hydro testing has done on 1 CWR and painting of Bhogiram Nagar CWR completed. Pumping station -- Pump house at Sagarpada- top slab completed & Plastering under progress. PH at Bhogiram Nagar- Final lift of vertical wall under progress. Civil work at WTP also in progress			
Dholpur		Waste Water : Supply, Laying, Jointing, Testing and Commissioning of outfall sewer, trunk sewers, lateral sewers, lateral sewers along with construction of manholes, appurtenances etc. at Dholpur. {RUSDIP/TR-02/DLP/WW/04}	Sewer Line RCC- 62.975 km Sewer Line uPVC- 28.500 km Manholes- 1745 manholes constructed. Line tested -58.30 Km Manhole tested- 930 nos. Road Cutting: • CC Road = 9395 Mtrs. • WBM Road = 13380 Mtrs. • BT Road = 4300 Mtr. • Total Road cutting = 27075 Mtrs. Road Restoration: • CC Road = 9075 Mtrs. • WBM Road = 12390 mtrs. • BT Road = 3375 mtrs. up to WBM done. • BT Road = 1025 mtrs • Total Road restoration = 22490 Mtrs.	No change expected	Effective monitoring and application of EMP	No risk
Dholpur		Waste Water : Design, construction, supply, erection, testing, commissioning and 5 year operation and maintenance of 10 MLD sewage treatment plant based on UASB process with sewage pumping/lifting station including all civil, electrical, mechanical, pumping and allied works in Dholpur town	1. Sludge drying beds : Completed except media. 2. Staff Quarter completed except sanitary and electrical fittings. 3. Administrative building completed except finishing and sanitary and electrical fittings. 4. Reactors : (i) Reactor work completed upto reflector beam and work under progress. (ii) Fine screen structure is completed up to 2nd beam up to 170m level. (iii) Sump well, coarse screen & Inlet chamber Footing & tie-	No change expected	Effective monitoring and application of EMP	No risk

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
		{RUSDIP/TR-02/DLP/WW/05}	beam is in progress. 5. PCC work in sump completed but it is filled due to rain. Now dewatering completed and de-silting under progress.			
Sikar	Water Supply - Water pipelines, CWRs, OHSRs, tube wells, Chlorination, flow meter (RUSDIP/ SKRWS/02)	Water - Water pipelines, tube wells, meter TR-02/	DI pipe - Procurement-24586met, Laid- 20573 met, Tested- 17510 met, Commissioned- 9733 met uPVC - Procurement-8632met, Laid- 8576 met, Tested- 8281 met, Commissioned- 7057 met House connections- 1760 Nos. Domestic water meters - 2299 nos procured and 2299 nos installed Replacement of pumping machinery- 07 Nos. Metering:- EMF- 5 nos Bulk flow- 2 nos	No change expected	Effective monitoring and application of EMP	No risk
Sikar	Road: Widening & strengthening of existing roads at Sikar Town (RUSDIP/ SKR/ST/02)	TR-02/	1. Fetehpur road: GSB work completed and 130 m WMM and DBM work done in front portion of Dak Banglow and leakage DI pipe changed. One side drain in front of dak bunglaw in 185meter completed. 2. Beed Road: Casting of Drain is in under progress. 360m completed upto roof slab in which 330 m roof slab completed and remaining is under progress. 3. Devipura Road: DBM work completed from Ajmer bus stand to Dujod gate and Dujod gate to Pathan auto. SDBC pending. For drain work RCC box culvert laid in 528 meters and RCC Drain pipe work completed (402.90 meters) 4. Station Road: R.R. masonry Drain work completed. 2X1050 m drain completed. Road widening work is under progress. RCC box culvert in 348.75 meter has been completed. WBM-450 cum and DBM-1186 cum 5. Salasar Road: Box culvert at Bihari Marg under progress. Road side drain 255 m completed. & remaining in progress.	No change expected	Effective monitoring and application of EMP	No risk

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
Sikar	Road: Widening & strengthening of existing roads at Sikar Town (RUSDIP/ TR-02/ SKR/ST/04)		<p>a) Road construction work - 4110 meter</p> <p>b) C.C. pavement near Circuit House - 255 meter (7 meter wide both lane)</p> <p>c) C.C. Pavement Bus Depot Tiraha to Krishi mandi both lane - 345 meter</p> <p>d) Bituminous pavement - DBM & B.C work completed in Entire length.</p> <p>e) Cross drainage pipe culvert 500 mm NP 4 pipe -100 meter</p> <p>f) Fixing of Paving blocks in berms 1.5 m width.- 324 meter done both side road & work is in Progress</p> <p>g) Construction of Divider work - Completed in length of 3.500 Km has been done.</p> <p>h) Rainwater harvesting - Stone masonry & Earth work excavation work is in progress near Circuit House.</p> <p>i) Improvement of Junction -</p> <p>1. RICCO Tiraha - WMM Work is completed.</p> <p>2. Jhunjhnu bye pass tiraha - DBM work completed.</p> <p>3. Gokulpura tiraha - DBM work completed.</p>	No change expected	<p>o Permission of tree cutting in coming carriage way of road from Forest deptt. is required</p> <p>o For permission mater has been moved by PWD to forest which under process of approval.</p>	No risk
Sikar	Road: Road & Drain Works at Sikar {RUSDIP/TR-2/SKR/ST/05}		<p>Work in progress at road no. 3,5,8,10,12,13,14,17,22 and 24</p> <p>Work completed at road no. 1,2,6,7,9,11,15,16,23 and 25</p>	No change expected	<p>o Effective monitoring and application of EMP</p>	No risk
Sikar	Water Supply: Additional work for augmentation of production of drinking water from newly proposed Intermediate pumping Stations to various reservoirs in Sikar town. (RUSDIP/ TR-02/ SKR/WVS/03)		<p>Pipe line - 21.88km (DI-19.747km, uPVC-2.70 km)</p> <p>CWR- Civil work of CWR has been completed including painting work at both location (Nawalgarh Road & Fatehpur Road).</p> <p>Testing- 19.7km DI pipe and 2.7 km uPVC</p>	No change expected	<p>o Effective monitoring and application of EMP</p>	No risk

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
Sikar	Water Supply: Construction of 7 OHSRs at different places at Sikar {RUSDIP/TR-02/ISKR/WS/04}		ESR i) Shiv Colony (1000 KL):- Completed upto staging height & reinforcement work completed in Ring beam & bottom dome shuttering completed but reinforcement is yet to be place on bottom dome. ii) Hathi Tibba (700 KL):- Completed upto staging height & Ring beam is yet to be places. iii) Kabristan ESR (800 KL):- 3rd bracing column casting completed and column above completed on 13.01.2014. iv) Piparali Nadi (400 KL):- Completed upto staging height & shuttering cone wall is in progress. v) Transport Nagar (600 KL):- 2nd lift column casting is in progress above 4th bracing. vi) Dharmana (400 KL):- Land is not available. vii) Teja Colony (1000 KL):- Land is not available CWR	No change expected	Effective monitoring and application of EMP	Allotment of land for 3 sites of water tanks is pending with ULB. (A). Azad nagar, veer teja colony, nawalgarh road. (B). Dharmana, (C). Sanik Nagar
Nagaur	Water Supply: Construction of OHSRs and CWRs including Providing, Laying, Jointing, Testing and Commissioning of uPVC and DI pipelines in Distribution system and Transmission system; Construction of Pumping stations and ancillary works; Replacement of Water Meters for UWSS in Nagaur town {RUSDIP/ TR-02/NGRWS/01}		Pipe Procured: 92.814 Km (DI- 18.06 km, uPVC- 74.754 km) Pipe Laid: 87.401 Km (DI- 17.828 km, uPVC- 69.573 km) Testing: 61.575 Km (DI- 15.256 km, uPVC- 46.319 km) OHSR--6 Nos ESR is completed and 3 nos. out of 6 is commissioned and are being used for water supply in town area of Badli, Indira Colony and Pratap Sagar.1 no. ESR at Sanjay Colony at top dome level is in progress. CWR- Completed, hydrotesting to be done. Pump house- Civil, electrical & mechanical works completed. Pumps installed Pumping station- - No Domestic water meter- Procured 1000 nos, installed - 364	No change expected	Effective monitoring and application of EMP	No risk

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
Nagaur	Waste water: STP 8 MLD {RUSDIP/TR-02/NGR/WW/02 (Lot-2)}		Work of excavation in pond and Admn. Building completed. PCC lining work in progress in pond and foundation work completed. And super structure work in progress in Adm. building.	No change expected	o Effective monitoring and application of EMP	No risk
Nagaur	Waste water: Supply, laying, jointing, Testing and commissioning of outfall sewer, Trunk sewers and lateral sewers, along with Construction manholes, appurtenances tec. {RUSDIP/TR-02/NGR/WW/03}		RCC pipe - Procurement- 11000 mtr, laid 9773 mtr, Testing 8968 mtr uPVC pipe - Procurement- 4158mtr, Manhole construction- 180 Nos. Manhole tested- 152 Nos.	No change expected	o Effective monitoring and application of EMP	No risk
Churu	Water Supply: Construction of OHSR including Supply, Laying, & Commissioning, Testing of DI and uPVC Pipe & Construction of Pumping Station etc for UWSS Churu {RUSDIP/TR-02/CHU/WS/02}		Pipe Procured: 185.45 Km (DI- 8.51 km, uPVC- 176.94 km) Pipe Laid: 169.97 Km (DI- 7.26 km, uPVC- 162.71 km) Testing: 134.73 Km (DI- 5.54 km, uPVC- 129.19 km) Line Commissioned: 29.37 Km (DI- 2.93 km, uPVC- 26.44 km) PH- Work under progress. OHRS-- Civil work completed on 1 OHSR and remaining are under progress . CWR--01 CWR commissioned and civil work completed on another 01 CWR. work under progress on remaining. Pumping Station- - Nil	No change expected	o Effective monitoring and application of EMP	No risk
Barmer	Water Supply: Construction of CWRs & OHSRs including Supply, Laying, and Commissioning with testing of Rising & Distribution pipelines and installation of		DI pipe line:- Procured= 27.70 km, Laid=26.97 km, Testing = 26.97km, Commissioned= 26.97 km uPVC pipe line:-Procured= 112.82 km, Laid=111.50 km, Testing = 109 km, Commissioned= 109 km Total DI+uPVC line :- Procured= 140.52 km, Laid=136.29 km, Testing = 105.72 km, Commissioned= 54.6 km	No change is expected.	o Effective monitoring and application of EMP	No risk

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No.: 2506 IND (Tr-2)

Page: 155 of 177
Date: December 2013

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
		Chlorination, Flow meter etc., for UWSS at Barmer. {RUSDIP/TR-02/BMR/WS-02}	ESR:- 9 nos. completed GLSR - Dismantling of existing GLSR in progress. CWR- - Civil work and pipe fitting completed. Pumping Station- work completed. Installation of pump done.			
Barmer		Bridge: Construction of 2 lane ROB at level crossing no. 323 on NH-15 {RUSDIP/TR-2/BMR/BR/01}	ROB substantially completed except staircase etc. the central span is yet to be completed by Railway,	No change expected	<ul style="list-style-type: none"> Effective monitoring and application of EMP 	Health & Safety
Barmer		Waste water: Supply, sewer line work {RUSDIP/TR-2/BMR/WW/03 (Lot-1)}	RCC pipe:- Procurement 15888 met, laid-13200, tested-10701 uPVC pipe:- Procurement 2022 met, laid-769, tested-530 MH construction- 250, Tested- 232	No change expected	<ul style="list-style-type: none"> Effective monitoring and application of EMP 	No risk
Barmer		Waste water: STP 10 MLD {RUSDIP/TR-2/BMR/WW/03 (Lot-2)}	Adm building work upto plinth level STP- (Facultative pond) compl PCC lining work 1:3:6 - 100% done and 1:2:4 - 85% done. Boulder pitching - 85% done. (Anaerobic pond) - completed Pump house:- excavation of sump compl, pCC of raft done. Column in progress Wet chamber:- 90% compl Outlet chamber:- column work in progress	No change expected	<ul style="list-style-type: none"> Effective monitoring and application of EMP 	No risk
Baran		Bridge ROB: Construction of 2 lane ROB at level crossing no. 37 on NH 76 at Baran {RUSDIP/ TR-02/BRN/BR/02}	Viaduct Portion: 1.) Pile in Viaduct (400 mm dia) - 272 Nos. 2.) Footing/ Pile Cap - 17 Nos. 3.) Pier - 17 Nos. 4.) pier cap- 17 Nos 5.) Girders - Casting & launching 51 Nos. work completed. 6.) Bearing Fixing - 102 Nos	No change expected	<ul style="list-style-type: none"> Effective monitoring and application of EMP 	No risk

Locations	Sub-projects Components (Package No.)	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
		7.) Deck slab - 17 Nos 8.) Crash barrier - 1446.57mtr 9.) RE wall Casting & Erection - 3658 sqm (completed). Railway portion: 1.) Pile - 120 Nos 2.) Piles Cap - 06 Nos 3.) Pier Shaft - 06 nos. 4.) Pier Cap - 06 nos. 5.) Girder-16 nos. 6.) Deck slab- 4 nos. Diversion & service road work, Pipe line & electric utility shifting has been completed.			
Bundi	Water Supply: Construction of OHSRs and CWRs including Providing, Laying, Jointing, Testing and Commissioning of uPVC and DI pipelines in Distribution system and Transmission system; Construction of Tubewells; Construction of Pumping stations; Replacement of Water Meters for UWSS in Bundi town. {RUSDIP/ TR-02/ BND/WS/02}	DI pipe line:- Procured= 36.33 km, Laid=35.74km, Testing = 28.14 km, Commissioned= 17.03 km uPVC pipe line:-Procured= 10.04 km, Laid=9.96 km, Testing = 6.85 km, Commissioned= 4.35 km Total DI+uPVC line :- Procured= 46.37 km, Laid=45.7 km, Testing = 34.99 km, Commissioned= 21.38 km GLSR - 02 Nos. dropped by CLC due to NOC not given by Forest. work has dropped. ESR - 01 no. completed & 01 no. dropped due to forest objection and remaining are under progress. CWR- Work completed. pumping station- Work under progress. Metering Electromagnetic Flow Meter= 30 nos Bulk Flow Meter Domestic Meter(Procured) = 1500 nos Domestic Meter(Installed) = 1500 nos	One OHSR (Mahaveer nagar) and two GLSRs (Modipada & Balchandpada) has been dropped by CLC	Effective monitoring and application of EMP	No risk
Bundi	Roads: Widening of existing road from khoja gate to Bypass link road.Widening of existing road from petrol pump	Road No : 5 - NH-12 to khoja gate to Azad park via chatrapura village. - completed Road No : 6 - Unala ki dungri Road- 550m CC road Road No : 7 - Ambedkar circle to NH-12 via silor Road. -	One additional 135 m stretch of road (Muktidham)	Effective monitoring and application of EMP	No risk

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
	triangle Bypass to rotary club triangle via rani ji ki bawari and interlocking footpath. (RUSDIP/TR-02/BND/ST/04)		GSB, WMM 1km done Road No : 8 - Govt collage choraha to S.P. office. :- completed No : 9 - S.P. Office tiraha to murti nandan colony via dayanand colony - completed Road No : 10 - S.P. tiraha to New tehsil Bundi- completed Road No : 16 - Old Matunda Road to Housing board colony via vinus public school- 300m PCC done, 50m PQC done Road No : 17 - Link Road to Nainwa road to inderprasta colony.- completed	road) will be taken up in the original scope		
Rajsamand	Waste Water: Supply, laying, jointing, testing and commissioning of out fall sewer, trunk main and lateral sewer along with construction of manholes, appurtenances etc. in Rajsamand town. {RUSDIP/TR-2/RSM/WW/ 02 (Lot-1)}		Pipe Procurement — 52.37 km (RCC pipe- 28.28 km, DI pipe-4.6 km, uPVC pipe-19.49 km) Pipe Laid — 30.725 km (RCC pipe- 17.645km, DI pipe- 4.54 km, uPVC pipe-8.54 km) Pipe Tested - 28.606km (RCC pipe- 16.116km, DI pipe- 3.95 km, uPVC pipe-8.54 km) Man hole- 504 nos manholes constructed.	No change expected	Effective monitoring and application of EMP	No risk
Rajsamand	Waste Water: Design, Construction, Supply, erection testing, commissioning and first five years operation & maintenance of Sewage Treatment plant near village Bhawa including all civil, electrical, mechanical, pumping and other allied works in Rajsamand town {RUSDIP/TR-2/RSM/WW/ 02 (Lot-2)}		STP: Pretreatment unit: Column work Partly completed. UASB Reactor: Excavation & PCC 60 % completed. Oxidation Pond: Almost completed except Inlet work. Sludge Drying Beds: Filter bed pipe laying & Gravel filling work in progress Filterate Sump: Excavation & PCC completed. Office cum Laboratory building: Almost completed. MCC Panal Room: Finishing work partly completed. Intranal Road: WMM partly completed. Boundary wall:- Almost completed. Interanal Drainage system: Almost completd Tube well and pipe line:- tube well drilled, Pump to be installed. Horticuylture work:- Almost completed. SPS: Wet well Sump: RCC work upto full Vertical height of	No change expected	Effective monitoring and application of EMP	No risk

Locations	Sub-projects (Package No.)	Components	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
			wall completed. Inlet Chamber: RCC vertical wall partly completed. Boundary wall: Almost completed except gate work. Pump Machinery: pumps procured.			
Rajsamand	Water Supply: Design, Construction and Commissioning of intake well & 17 MLD capacity Water Treatment Plant including commissioning of equipments; Construction of CWRs & OHSRs including supply, laying and commissioning with testing of DI & uPVC pipelines {RUSDIP/ TR-02/ RSM/WS/03}		Pipe Line: 58.60 km (DI- 34.44 km, uPVC- 24.16 km) Testing: 56.23 km (DI- 32.57 km, uPVC- 23.66 km) Line Commissioned: 19.545 km (DI- 11.991 km, uPVC- 7.554 km) ESR—2 Nos completed & Tested. GLSR—2 Nos completed & one commissioned. CWR—3 Nos completed & tested.	No change expected	Effective monitoring and application of EMP	No risk
Jhalawar	Waste Water: Laying of Sewer line network at Jhalawar & Jhalapapatan town { RUSDIP/TR-02/JHL/WW/02}		Confirmatory survey in progress. L section and design sheet submitted and approved 500mm line- 215m laid	No change expected	Effective monitoring and application of EMP	No risk

ANNEXURE – 3

Environmental Monitoring Schedule

Monitoring	Project Type	Parameters	Frequency	No. of location	Remarks
Ambient Air Quality Monitoring					
Air quality parameters	STP, WTP, pump house	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	4 days 24 Hrs basis Semi-annually	2 locations nearby STP, WTP, pump house site	
	Intake location	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	2 days 24 Hrs. basis-Semi-annually	1 location nearby the project site	
	Bridge, Drainage	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	3 days 24 Hrs basis Semi-annually	2 locations nearby bridge	
	Landfill	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	3 days 24 Hrs basis Semi-annually	4 locations (one at center and rest at 3 locations 120 degree apart)	
	Pipe laying area	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	3 days 24 Hrs basis Semi-annually	3 locations nearby working zone	
	Heritage site	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , Ammonia, H ₂ S, NOx and CO	2 days 24 Hrs basis Semi-annually	2 locations nearby working zone	
	Fire Fighting station	SPM, RSPM (PM ₁₀ & PM _{2.5}), SO ₂ , NOx and CO	2 days 24 Hrs basis Semi-annually	2 locations nearby working zone	
Ambient Noise Level Monitoring					
Sound Pressure Level	STP, WTP, pump house	L _{eq}	One time in six months (day & night)	3 nearby locations	
	Intake location	L _{eq}	One time in six months(day & night)	2 nearby locations	
	Bridge	L _{eq}	One time in six months(day & night)	5 nearby locations	
	Landfill	L _{eq}	One time in six months(day & night)	4 nearby locations	Preferably near air quality measuring sites
	Pipe laying area	L _{eq}	One time in six months(day & night)	3 nearby locations	

Monitoring	Project Type	Parameters	Frequency	No. of location	Remarks
	Heritage site	L_{eq}	One time in six months(day & night)	3 nearby locations	
	Fire Fighting station	L_{eq}	One time in six months(day & night)	2 nearby locations	
Water Quality Monitoring					
Surface water Quality parameters	STP, WTP	General: Turbidity NTU, pH, Total Suspended Solid, TDS, Total Hardness as $CaCO_3$, DO, Organic Matters: BOD, COD, Nutrients: Nitrate, Metals: Chloride, Sulphate, Na, K, Ca, Mg, Fe, Mn, Cd, As, Cr, Cu, Mg, Pb, Selenium, Al, Zn, Bo, Fluorine, Cl (residual free), Other Organics: Phenolic Compound, Cyanide, Phosphate (mg/l)	one time in six months	2 locations (pond, river, nala)	(if location exist)
	Intake location	Turbidity in NTU, pH, Total Suspended Solid, TDS, Total Hardness as $CaCO_3$, DO, BOD, COD	One time in six months	2 locations unpstream and downstream	
	River bridge, Drainage channel	As above	One time in six months	At least 2 location (pond, river, nala)	upstream and downstream
	Landfill site	As above	One time in six months	At least 2 location (pond, river, nala)	if location exist
Ground water Quality parameters	Landfill site, STP	pH, Total Dissolved Solid, Total Hardness as $CaCO_3$, Dissolved Oxygen, Alkalinity as mg/l, Cl, Sulphate, Nitrate, Fe, Mg, Cd, As, Cr, Co, Mg, Pb, Zn, Fluoride Phenolic Compound, Phosphate (mg/l)	One time in six months	At least 3 location (tube well/ hand pump/ bore well)	

ANNEXURE -4

Public Consultation on Environmental Issues during Construction/ Implementation

Town	Sub project
• Nagaur	Water Supply, Waste Water
• Sikar	Road
• Churu	Water Supply
• Bundi	Water Supply, Road
• Baran	Bridge & Water Supply
• Jhalawar	Waste Water

1. Nagaur

1.1. Water Supply

Place of Consultation	Indira Colony
Date of Consultation	04.10.2013
Project Name	Water Supply
Package no.	RUSDIP/TR-02/NGR/WS/01
Name of the Field Supervisors	Arvind Rajput
Name of the Persons Consulted	Please see attendance sheet
Address	Indira Colony near Chauraha, Nagaur

SN	Points Discussed	Yes	No	Opinion Expressed
01.	Whether dust control measures are taken up by contractor as and when required?	√		The contractor is spraying water to control the dust.
02.	Whether traffic movement affected during construction?	√		Alternate routes are available.
03.	Is there any problem due to influx of outside people (labourer)?		√	Local labourers are engaged in work
04.	Is there any problem, if storage area is in public place?		√	No such problem has arrived
05	Is there any problem during transportation of materials?	√		Some problem is observed but this is manageable
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	√		This is observed to some extent but proper safety precautionary measures are adopted by the contractor.
07	Whether construction work affects local drainage system/ water supply system?		√	
08	Whether movement of locals/pedestrian affected during construction?		√	No such problem is observed because alternate routes are there nearby our work site.
09	Whether generated noise affects the normal life of locals?		√	No such effect is observed.
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)			Satisfactory

ATTENDANCE SHEET
PUBLIC CONSULTATION

Date	04/10/2013
Site Name	Indira colony, FSR
Name of Project	Water Supply
Package No.	RUSDIP/TR-02/NGR/WS-01
Location	Indira Colony, Nagaur
Name of Person	Arvind Rajput

Sl. No.	Name	Profession	Signature
01	Mukesh Tak	Tailor	
02	Navratan Surana	Business	
03	Suresh Kumar	Tailor	
04	Piyush Parasar	Tech shop	
05	Dhiraj Sharma	Medical shop	
06	Rajesh Asopa	Student	
07	Kamal Kishay	sweet corner	
08	Abhinandan	student	
09	Mani chandee	Jewellers shop	
10	Sunita	Jewellers shop	
11			
12			
13			
14			
15			

Arvind Rajput
(Arvind Rajput)
Support Engineer - Environment
DSC-D - RUIDP

1.2. Nagaur Waster Water

Place of Consultation	Badli, Nagaur
Date of Consultation	06.10.2013
Project Name	Waste Water
Package no.	RUSDIP/TR-02/NGR/WW/03
Name of the Field Supervisors	Arvind Rajput
Name of the Persons Consulted	Please see attendance sheet
Address	Badli, Nagaur

SN	Points Discussed	Yes	No	Opinion Expressed
01.	Whether dust control measures are taken up by contractor as and when required?	✓		The contractor is spraying water to control the dust.
02.	Whether traffic movement	✓		Alternate routes are available.

SN	Points Discussed	Yes	No	Opinion Expressed
	affected during construction?			
03.	Is there any problem due to influx of outside people (labourer)?		√	Local labourers are engaged in work
04.	Is there any problem, if storage area is in public place?		√	No such problem has arrived
05	Is there any problem during transportation of materials?	√		Some problem is observed but this is manageable
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	√		This is observed to some extent but proper safety precautionary measures are adopted by the contractor.
07	Whether construction work affects local drainage system/ water supply system?		√	
08	Whether movement of locals/pedestrian affected during construction?		√	No such problem is observed because alternate routes are there nearby our work site.
09	Whether generated noise affects the normal life of locals?		√	No such effect is observed.
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)			Satisfactory

ATTENDANCE SHEET
PUBLIC CONSULTATION

Date	06/10/2013
Site Name	Beedle
Name of Project	Waste water
Package No.	RUSDIP/TR-02/NGR/WW/03
Location	Beedle Nagar
Name of Person	Arvind Rajput

Sl. No.	Name	Profession	Signature
01	Gopal vyas	shop	
02	Jamuna Lal	shop	
03	Bejrang Lal	shop	
04	Om Prakash Pyrohit	Par Shop	
05	Ujjwal Ujjwal	worker	
06	Mohan	worker	
07	Ashish Soni	Cyber Cafe	
08	Bhaskar Lal	worker PHED	
09	Rakesh	shop	
10	Pawan Soni	shop	
11	Ravi	worker	
12	Nagix Ahmad	shop Regional cement	
13	Akshay K. Parasar	Student	
14			
15			

Arvind Rajput
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Support Engineer - Environment
DSC-II - RUIDP
ENVIRONMENTAL MONITORING

Page

2. Sikar

2.1. Sikar Road

Place of Consultation	Lohar Basti
Date of Consultation	30.12.2013
Project Name	Road Project
Package no.	RUSDIP/TR-02/SKR/ST/02
Name of the Field Supervisors	Arvind Rajput
Name of the Persons Consulted	Please see attendance sheet
Address	Lohar basti Near Beed Road, Sikar

S N	Points Discussed	Yes	No	Opinion Expressed
01.	Whether dust control measures are taken up by contractor as and when required?	✓		The contractor is spraying water as per requirement, when dust problem exist
02.	Whether traffic movement affected during construction?	✓		Alternate routes are available.

S N	Points Discussed	Yes	No	Opinion Expressed
0 3.	Is there any problem due to influx of outside people (labourer)?		√	Local labourers are engaged in work
0 4.	Is there any problem, if storage area is in public place?		√	No such problem has arrived
0 5	Is there any problem during transportation of materials?	√		Some problem is observed but this is manageable
0 6.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?		√	All Material is prepared outside of locality, so no problem occurs.
0 7	Whether construction work affects local drainage system/ water supply system?		√	No, all the utilities are diverted before start of work.
0 8	Whether movement of locals/pedestrian affected during construction?		√	No such problem is observed because alternate routes are there nearby our work site.
0 9	Whether generated noise affects the normal life of locals?		√	No such effect is observed.
1 0	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)			Satisfactory

PUBLIC CONSULTATION

Date	30/12/2013
Site Name	Lohar Bashi near Beed Road
Name of Project	Road Project
Package No.	ST-02
Location	Lohar Bashi, Sikar
Name of Person	Arvind Rajput

Sl. No.	Name	Profession	Signature
01	Mr. Suresh	Sheltering mstrn' (labour)	for 22
02	Mr. Sahoo	"	
03	Mr. Ajay Singh	Student	for 22
04	Mrs. Babli	House wife	
05	Mr. Bhajan Lal	Steel fitter	
06			
07			
08	Mr. Ram Kumar	Shop keeper	
09			
10	Mr. Jagdish Lohar	labour	
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Arvind Rajput
(Arvind Rajput)
Support Engineer - Environment
DSC-II, RUIDP

3. Churu

3.1. Churu Water Supply

Place of Consultation	ESR, CWR, PUMP HOUSE, Goyanka
Date of Consultation	30.10.2013
Project Name	Water Supply
Package no.	RUSDIP/ TR-02/ CHU/ WS/02
Name of the Field Supervisors	Mr. Arvind Rajput, Naresh Aswal and Mr. Ratan Singh
Name of the Persons Consulted	Please see attendance sheet
Address	Pump House, Near Goyanka School, Churu

SN	Points Discussed	Yes	No	Opinion Expressed
01.	Whether dust control measures are taken up by contractor as and when required?	√		The contractor is spraying water as per requirement, when dust problem exist
02.	Whether traffic movement affected during construction?		√	No such problem has arrived
03.	Is there any problem due to influx of outside people (labourer)?		√	No such problem has arrived
04.	Is there any problem, if storage area is in public place?		√	No such problem has arrived
05	Is there any problem during transportation of materials?		√	Some problem is observed but this is manageable
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?		√	This is observed to some extent but proper safety precautionary measures are adopted by the contractor.
07	Whether construction work affects local drainage system/ water supply system?	√		During construction work soil will fall in the sewer line, cleaned it after completion of work
08	Whether movement of locals/pedestrian affected during construction?	√		Provided wooden plank on the tranches
09	Whether generated noise affects the normal life of locals?		√	No such effect is observed.
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	√		Satisfactory

ATTENDANCE SHEET
 PUBLIC CONSULTATION

Date	30/10/2013
Site Name	ESR, CWR, Pump house, Goyanka
Name of Project	Water supply
Package No.	RUSDIP/TR-02/CHU/WS-02
Location	Goyanka Churu.
Name of Person	Mr. Naresh Aswal, Mr. Ratan Singh

Sl. No.	Name	Profession	Signature
01	Deek Pal	Serviceman	[Signature]
02	Kalla	Labour	[Signature]
03	Nare Nankh	Labour	[Signature]
04	Gopal	Serviceman	[Signature]
05	Manoj Saini	Serviceman	[Signature]
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Arvind Rajput

(Arvind Rajput)
 Support Engineer - Environment
 DSC - II, RUIDA

4. Bundi

4.1. Bundi Water Supply

Place of Consultation	Road no.9, SP. Office Tiraha to Bibanwa road, Bundi
Date of Consultation	26.08.2013
Project Name	Bundi road works
Package no.	RUSDIP/TR-2/ BND/ST/ 04
Name of the Field Supervisors	Abhay Srivastava, Jyotidhari Singh
Name of the Persons Consulted	Soni, Munia, Shanti, Amita
Address	Workers employed in road project, nearby residents



Public consultation at Holi Ka Khoot ESR site

SN	Points to be Discussed	Remarks
01.	Whether dust control measures are taken up by contractor as and when required?	No dust problem due to construction activities, water sprinkling is done were required.
02.	Whether traffic movement affected during construction?	Yes, half of the road is temporarily blocked for construction works
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the construction labors.
04.	Is there any problem, if storage area is in public place?	No concrete is prepared in concrete plant in construction camp, no storage is done on the project road side
05.	Is there any problem during transportation of materials?	No such problem exist at site
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	No use of concrete mixture at site, concrete is prepared in concrete plant in construction camp
07.	Whether construction work affects local drainage system/ water supply system?	No such impacts to drainage and water supply systems
08.	Whether movement of locals/pedestrian affected during construction?	Yes, but people ready to bear it as passage for them was left
09.	Whether generated noise affects the normal life of locals?	Noise is generated but not causing any problem to nearby habitants
10.	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

4.2. Bundi Road

Place of Consultation	Biwanwan Road, Bundi
Date of Consultation	17.12.2013
Project Name	Bundi Road Works
Package no.	RUSDIP/TR-2/ BND/ST/ 04
Name of the Field Supervisors	Abhay Srivastava
Name of the Persons Consulted	Neeraj Sharma, Nand Kishor
Address	Local Residents and Road users, Bundi



Public consultation at Biwanawa Road, road works



Public consultation at road works, S.P. tiraha to Biwanwa road

SN	Points to be Discussed	Remarks
01.	Whether dust control measures are taken up by contractor as and when required?	Yes, Dust control measures are being taken up by contractors, where required
02.	Whether traffic movement affected during construction?	No, half of the road is closed for construction and traffic being moved smoothly as no much traffic exist at this road
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the construction labors.
04.	Is there any problem, if storage area is in public place?	No, all the material is stored on the sides of road and there is sufficient space for materials
05.	Is there any problem during transportation of materials?	No such problem noticed
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	No use of concrete mixture and hot mix plant JCB and road compactor operation cause some problem but people are ready to bear it
07.	Whether construction work affects local drainage system/ water supply system?	No such impacts to drainage and water supply systems
08.	Whether movement of locals/pedestrian affected during construction?	No, half of the road is closed for construction and other half is used for smooth movement of locals/pedestrians
09.	Whether generated noise affects the normal life of locals?	Noise is generated in construction works but people have no problem due to noise
10.	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

4.3. Bundi Road

Place of Consultation	Dev Nagari, Bundi
Date of Consultation	17.12.2013
Project Name	Bundi Road works
Package no.	RUSDIP/TR-2/ BND/ST/ 04
Name of the Field Supervisors	Abhay Srivastava
Name of the Persons Consulted	Hem Raj
Address	Tea Shopkeepers, Rotary circle to Circuit house main road, Bundi



Public consultation at Dev Nagari, road works

SN	Points to be Discussed	Remarks
01.	Whether dust control measures are taken up by contractor as and when required?	No, dust control measures are not being taken up at this time
02.	Whether traffic movement affected during construction?	No, traffic movement is not affected due to construction works
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the construction labors.
04.	Is there any problem, if storage area is in public place?	No, all the material is stored beside the road
05.	Is there any problem during transportation of materials?	No such problem noticed
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	Presently road widening work is being carried out and concrete mixture/hot mix plant is not being used but movement of JCB cause some temporary and short term disturbance to traffic movement
07.	Whether construction work affects local drainage system/ water supply system?	No such impacts to drainage and water supply systems
08.	Whether movement of locals/pedestrian affected during construction?	No
09.	Whether generated noise affects the normal life of locals?	Noise is generated in construction works but normal life of locals is not affected due to it
10.	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

5. Baran

5.1. Bridge

Place of Consultation	Near LC 37, Kota Road, Baran end
Date of Consultation	23.08.2013
Project Name	Construction of ROB at LC 37
Package no.	RUSDIP/TR-02/BRN/BR/03
Name of the Field Supervisors	Abhay Srivastava, Pradeep Kashyap, J.D Singh
Name of the Persons Consulted	Sitaram Prajapati, Auto repairing works
Address	Kota Road (Baran End) near LC 37



Public Consultation near ROB works at Kota Road, Baran end

SN	Points to be Discussed	Remarks
01.	Whether dust control measures are taken up by contractor as and when required?	Yes dust control measures are taken up, when dust problems exist
02.	Whether traffic movement affected during construction?	Yes, heavy vehicles entry is restricted but light vehicles are allowed on service road
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to construction labors, labours reside in labour camps are good in behavior
04.	Is there any problem, if storage area is in public place?	No, all materials stored inside the construction site and sufficiently away from road
05	Is there any problem during transportation of materials?	No problems noticed due to the transportation of construction materials, mostly construction materials are carried in non peak hours or in night
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	Hot mix plant is not being used and concrete is prepared in construction camp, therefore no problem occurs
07	Whether construction work affects local drainage system/ water supply system?	No such impacts to the existing systems, all the utilities are diverted before start of work
08	Whether movement of locals/pedestrian affected during construction?	No any, locals/pedestrian movement is not affected during construction as the service road is already provided
09	Whether generated noise affects the normal life of locals?	Noise is generated but people do not get disturbed due to it
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

5.2. Water Supply

Place of Consultation	Dolmela Talab ESR site
Date of Consultation	23.08.2013
Project Name	Water Supply
Package no.	RUSSIP/TR-03/BRN/WS/01

Name of the Field Supervisors	Abhay Srivastava, Pradeep Kashyap
Name of the Persons Consulted	Arvind Kashyap, Shantilal Soni
Address	Shopkeepers near Dolmela ESR site



Public consultation near PHED Headworks



Public consultation near Dhol Mela Talab, ESR works

SN	Points to be Discussed	Remarks
01.	Whether dust control measures are taken up by contractor as and when required?	No any dust control measures are taken by contractor and dust problem exists due to construction works
02.	Whether traffic movement affected during construction?	No, traffic movement is not affected
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the construction labors.
04.	Is there any problem, if storage area is in public place?	No problem due to storage of materials, all the materials are stored in the sufficient space available at Dolmela ground
05.	Is there any problem during transportation of materials?	No problems noticed due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	Yes, Concrete mixtures create noise and smoke but people are ready to avoid it for improved water supply
07.	Whether construction work affects local drainage system/ water supply system?	No, construction work does not affect local drainage or water supply system
08.	Whether movement of locals/pedestrian affected during construction?	No, movement of locals/pedestrians is not affected during construction works
09.	Whether generated noise affects the normal life of locals?	Yes, noise is generated but people are ready to bear
10.	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

6. Jhalawar

6.1. Waste Water

Place of Consultation	Near Radi Ke Balaji, Jhalawar
Date of Consultation	20.12.2013
Project Name	Jhalawar sewerage project
Package no.	RUSDIP/TR-2/JHL/WW/02
Name of the Field Supervisors	Abhay Srivastava, Piyush Dixit, Jyotidhari Singh
Name of the Persons Consulted	Ram Charan Das, Radhey Mohan
Address	Villagers and farmers near Radi Ke Balaji



Public consultation with villagers near Radi Ke Balaji, sewer pipe laying works

SN	Points to be Discussed	Remarks
01.	Whether dust control measures are taken up by contractor as and when required?	No dust problem exists during pipe laying works
02.	Whether traffic movement affected during construction?	No, traffic movement is not affected during construction works as the pipes are being laid in abandoned nallah
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the construction labors.
04.	Is there any problem, if storage area is in public place?	No such problems and all materials stored at the place with consultation of villagers.
05.	Is there any problem during transportation of materials?	No problems noticed due to the transportation of construction materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	Concrete mixtures and hot mix plant are not being used, JCBs are in use and cause no problem
07.	Whether construction work affects local drainage system/ water supply system?	No effect on drainage and water supply systems instead drainage system is improved with construction of new sewer lines

08	Whether movement of locals/pedestrian affected during construction?	No any, there is enough space for proposed construction works
09	Whether generated noise affects the normal life of locals?	No
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

ANNEXURE -5

Details of Mobilization Schedule of Environmental Safeguard Personal

PMU				
Responsibility		Name	Designation	Duration
Overall supervision of Project and Environmental Compliance as per ADB Policy		Mr. D R Jangid	Project Officer Environment	Full Time
IPMC				
Responsibility		Name	Designation	Duration
Overall supervision of all 15 towns		Dr. Ardhendu Mitra	Environmental Expert	Intermittent
		Mr. Vikas Sharma	Support Engineer	Full time
Structure adopted at 15 towns				
Nodal Officer of IPIU		DSC Consultants		
Towns	Nodal Officer Designated by PMU	DSC I		
		Name	Designation	Duration
Alwar	-	Mr. Manoj Kumar	Research Associate	Intermittent
Bharatpur	Mr. S R Jatav			
Sawai Madhopur	Mr. S P Soni			
Dholpur	Mr. S M Meena	Dr. Sanjay Sharma	Environmental Monitoring Specialist	Full time
Karauli	Mr. Pradeep Goyal			
Towns	Nodal Officer Designated by PMU	DSCII		
		Name	Designation	Duration
Jaisalmer	Mr. Amit K. Kumawat	Dr. Amar Sarkar	Research Associate	Intermittent
Sikar	Mr. A K Gupta			
Churu	Mr. Ratan Singh			
Nagaur	Mr. Lalit Sharma	Mr. Arvind Rajput	Environmental Monitoring Specialist	Full time
Barmer	Mr. Sunil Kumar			
Towns	Nodal Officer Designated by PMU	DSC III		
		Name	Designation	Duration
Bundi	Ms. Jyoti Rani verma	Mr. Abhay Srivastav	Research Associate	Intermittent
Baran	Mr. K M Sharma			
Jhalawar	-			
Chhitorgarh	Mr. Arun Bakshi			
Rajsamand	Mr. Paritosh Gupta			

PMU; Project Management Unit; IPIU: Investment Program Implementation Unit; IPMC: Investment Program Management Consultant; DSC: Design Supervision Consultant

Note: Nodal officers are engineer from IPIU having additional duty of safeguard

Annexure-6**Environmental Safeguard Trainings and Reviews**

SN	Date	Place	Subject	Participants	Remarks
1	10.07.2013	Jaipur	Environmental & Social safeguard review and training	1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental experts 4. CAPP ACOs from all DSC-I towns	Training and review meeting on social and environment safeguard conducted by IPMC for Alwar, Dholpur, Bharatpur, Karauli and Sawai Madhopur towns
2	11.07.2013	Jaipur	Environmental & Social safeguard review and training	1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental experts 4. CAPP ACOs from all DSC-II towns	Training and review meeting on social and environment safeguard conducted by IPMC for Churu, Sikar, Nagaur, Barmer and Jaisalmer towns
3	12.07.2013	Jaipur	Environmental & Social safeguard review and training	1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental experts 4. CAPP ACOs from all DSC-III towns	Training and review meeting on social and environment safeguard conducted by IPMC for Baran, Bundi, Jhalawar, Chittorgarh and Rajsamand towns
4	18.10.2013	Jaipur	Environmental & Social safeguard review and training	1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental experts 4. CAPP ACOs from all DSC-III towns	Training and review meeting on social and environment safeguard conducted by IPMC for Baran, Bundi, Jhalawar, Chittorgarh and Rajsamand towns
5	23.10.2013	Jaipur	Environmental & Social safeguard review and training	1. IPIU staff 2. PMU Social & Environment staff 3. DSC Social and Environmental	Training and review meeting on social and environment safeguard conducted by IPMC for Alwar, Dholpur, Bharatpur, Karauli and

Rajasthan Urban Sector Development Investment Program

Project Number: 40031

ADB Loan No.: 2506 IND (Tr-2)

Page: 177 of 177

Date: December 2013

				experts	Sawai Madhopur towns
6	24.10.2013	Jaipur	Environmental & Social safeguard review and training	<p>4. CAPP ACOs from all DSC-I towns</p> <p>1. IPIU staff</p> <p>2. PMU Social & Environment staff</p> <p>3. DSC Social and Environmental experts</p> <p>4. CAPP ACOs from all DSC-II towns</p>	<p>Training and review meeting on social and environment safeguard conducted by IPMC for Churu, Sikar, Nagaur, Barmer and Jaisalmer towns</p>

