



# Environmental Monitoring Report

---

Project Number: 42267-031  
Semestral Report: April 2021 – September 2021  
February 2022

## India: Rajasthan Secondary Towns Development Sector Project

Prepared by Rajasthan Urban Drinking Water Sewerage and Infrastructure Corporation Limited,  
Government of Rajasthan for the Asian Development Bank.

This environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area..

## Asian Development Bank



**Office of Project Director**  
**Rajasthan Urban Infrastructure Development Project (RUIDP)**

AVS Building, Jawahar Circle, JLN Marg, Jaipur - 302017

Tel No.: 141 2721966, Fax No.: 141 2721919,

email : mailruidp@gmail.com, mail.ruidp@rajasthan.gov.in

web site : [www.ruidp.rajasthan.gov.in](http://www.ruidp.rajasthan.gov.in)

No. F3 (301)(72)/RUIDP/PMU/Env/ 12575

Date: 4.02.2022

Country Director,  
India Resident Mission,  
Asian Development Bank,  
4, San Martin Marg,  
Chanakyapuri, New Delhi- 110021

Recd. 4 feb 22  
SFG Log: 4963

**Sub:** Submission of Updated Semi-annual Environmental Monitoring Report for the period April 2021 to September 2021 for RUIDP Phase-IV (RSTDSP- Loan no. 3972-IND)

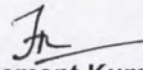
**Ref:** This office letter no. F3(301)(72)/RUIDP/PMU/Env/9710 dtd. 07.12.2021

Dear Sir,

In the matter of above cited subject, we are submitting herewith Updated Semi-annual Environmental Monitoring Report (SEMR) for the period of April 2021 to September 2021 for Rajasthan Secondary Towns Development Sector Project (RSTDSP) for your perusal and approval.

Kindly send approval and link of website where this SEMR will be disclosed.

**Enclosure** – Soft Copies (M.S. Word and pdf) of SEMR (April-September 2021)

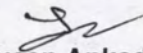
  
(Dr. Hemant Kumar Sharma)  
Additional Project Director, RUIDP

No. F3 (301)(72)/RUIDP/PMU/Env/ 12576

Date: 4.02.2022

Copy to following for information and necessary action-

1. Mr. Bhavesh Kumar, Project Officer, INRM, Asian Development Bank, New Delhi

  
(Praveen Ankodia)  
Deputy Project Director (T)

# **Semi-Annual      Environmental      Monitoring Report**

**PROJECT NO: 42267-031  
Loan No.: 3972-IND**

## **India: Rajasthan Secondary Towns Development Sector Project (RSTDSP)**

### **Implementation of Environmental Management and Monitoring Plan**

**Reporting Period: April 2021 to September 2021**

**Rajasthan Urban Drinking Water, Sewerage and Infrastructure  
Corporation Limited- External Aided Project (RUDSICO-EAP)**

**{Erstwhile Rajasthan Urban Infrastructure Development Program (RUIDP)}**

**Prepared by: Local Self Government Department, Govt. of Rajasthan**



**ABBREVIATIONS**

ACM	–	Asbestos Containing Materials
ADB	–	Asian Development Bank
CMSC	–	Construction Management and Supervision Consultant
CPCB	–	Central Pollution Control Board
CTE	–	Consent to Establish
CTO	–	Consent to Operate
DI	–	Ductile Iron (Pipe)
DWC	–	Double Walled Corrugated (Pipe)
EA	–	Executing Agency
EHS	–	Environmental Health & Safety
EMP	–	Environmental Management Plan;
ESS	–	Environmental Safeguard Specialist
FSSM	–	Faecal Sludge and Septage Management
FSTP	–	Faecal Sludge Treatment Plant
GoR	–	Government of Rajasthan
HDPE	–	High Density Poly Ethylene
IA	–	Implementing Agency
IEC	–	Information, Education and Communication
IEE	–	Initial Environmental Examination;
KLD	–	Kilolitre/Day
LSGD	–	Local Self Government Department
MLD	–	Million Liters per Day
NOC	–	No Objection Certificate
NTP	–	Notice to Proceed
PCC	–	Plain Cement Concrete
PHED	–	Public Health Engineering Department
PIU	–	Project Implementation Unit;
PMCBC	–	Project Management and Capacity Building Consultant
PMU	–	Project Management Unit
PO	–	Project Officer
RoW	–	Right of Way
RPCB/RSPCB	–	Rajasthan State Pollution Control Board
RSTDSP	–	Rajasthan Secondary Towns Development Sector Project
RUIDP	–	Rajasthan Urban Infrastructure Development Project
(RUDSICO-EAP)	–	Rajasthan Urban Drinking Water, Sewerage And Infrastructure Corporation- External Aided Project
SEMP	–	Site Specific Environment Management Plans
SIP	–	Service Improvement Plan
SBR	–	Sequential Batch Reactor
SPM	–	Suspended Particulate Matters
SPS (ADB)	–	Safeguard Policy Statement, 2009
SPS	–	Sewage Pumping Station
SSO	–	Safeguard and Safety Officer
STP	–	Sewage Treatment Plant
ULB	–	Urban Local Body
WTP	–	Water Treatment Plant



**TABLE OF CONTENTS**

<b>1. INTRODUCTION .....</b>	<b>1</b>
<b>2. COMPLIANCE STATUS WITH NATIONAL/ STATE/ LOCAL STATUTORY ENVIRONMENTAL REQUIREMENTS .....</b>	<b>43</b>
<b>COMPLIANCE STATUS WITH ENVIRONMENTAL LOAN COVENANTS .....</b>	<b>56</b>
<b>3. COMPLIANCE STATUS WITH THE ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN .....</b>	<b>60</b>
<b>4. APPROACH AND METHODOLOGY FOR ENVIRONMENTAL MONITORING OF THE PROJECT .....</b>	<b>93</b>
<b>5. NATIONAL STANDARDS.....</b>	<b>95</b>
<b>6. MONITORING OF ENVIRONMENTAL PARAMETERS IN PROJECT LOCATIONS (AMBIENT AIR, WATER QUALITY, SOIL QUALITY AND NOISE LEVELS) .....</b>	<b>98</b>
<b>7. ENVIRONMENTAL MONITORING DURING REPORTING PERIOD .....</b>	<b>100</b>
<b>8. ASBESTOS MANAGEMENT .....</b>	<b>108</b>
<b>9. SITE VISITS FOR MONITORING OF CONTRACTORS PERFORMANCE FOR ENVIRONMENTAL SAFEGUARD COMPLIANCE.....</b>	<b>109</b>
<b>10. ORIENTATIONS FOR SAFEGUARDS.....</b>	<b>117</b>
<b>11. PUBLIC CONSULTATION &amp; GRIEVANCE REDRESS MECHANISM .....</b>	<b>122</b>
A. Public Consultation .....	122
B. project-specific grievance redress mechanism.....	124
<b>12. CONTRACTORS' ENVIRONMENTAL, HEALTH AND SAFETY (EHS) PERFORMANCES .....</b>	<b>130</b>
<b>13. SUMMARY OF KEY ISSUES AND REMEDIAL ACTIONS.....</b>	<b>131</b>
a. Findings and Key Issues.....	131
b. Remedial Measures .....	132
APPENDIX 1: PHOTOS OF SITE VISITS AND CONSTRUCTION WORKS.....	133
APPENDIX 2: SAMPLE PHOTOGRAPHS OF CONSULTATIONS .....	137
APPENDIX 3: COPIES OF ENVIRONMENTAL CLEARANCES AND PERMITS .....	142
APPENDIX 4: ENVIRONMENTAL SITE INSPECTION REPORTS .....	193
APPENDIX-5: COMPLIANCES OF ENVIRONMENTAL SELECTION CRITERIA.....	213
APPENDIX-6: PHOTOGRAPHS AND ATTENDANCE SHEETS OF SAGEGUARD ORIENTATIONS AND TRAININGS.....	219
APPENDIX 7: PHOTOS OF EHS ACTIVITIES BY DIFFERENT CONTRACTORS DURING REPORTING PERIOD .....	226
Appendix 8: SAFEGUARD TRAININGS CONDUCTED BY CONTRACTORS.....	231
Appendix 9: PREVENTION AND CONTROL MEASURES ADOPTED IN RSTDSP FOR COVID-19 .....	241
Appendix 10: ENVIRONMENTAL MONITORING RESULTS DURING APRIL 2021 -SEPTEMBER 2021 IN RSTDSP .....	246
APPENDIX 11: LETTER FROM PMU TO ESTABLISH GRM IN ALL PIUS .....	262
APPENDIX 12: ACCIDENT, INCIDENT, NEAR MISS AND FIRST AID CASES IN PROJECT TOWNS DURING REPORTING PERIOD .....	265

### Executive Summary

1. Rajasthan Secondary Towns Development Sector Project (RSTDSP), the fourth phase of investment projects financed by Asian Development Bank (ADB) and implemented by the Rajasthan Urban Drinking Water Sewerage and Infrastructure Corporation Limited (RUDSICO), previously known as Rajasthan Urban Infrastructure Development Project (RUIDP). RSTDSP will support the ongoing efforts of the Government of Rajasthan towards improving the water and wastewater services in about 14 towns.<sup>1</sup> RSTDSP seeks to improve water supply and sewerage (WSS) services in secondary towns with populations between 20,000-115,000 through a sector loan modality. The project is aligned with the following impact(s): (i) access to potable, affordable, reliable, equitable, and environmentally sustainable drinking water supply in all urban areas of Rajasthan improved; and (ii) health status of urban population, especially the poor and under-privileged improved. The policy-based loan will provide financial support to the state government to implement reforms and the project loan will introduce innovations in water supply and wastewater management, such as continuous pressurised water supply, and long-term O&M (10 years) embedded construction contracts for nonrevenue water (NRW) reduction and sustainability of operations, latest standards of treatment of waste water and reuse of treated effluent etc.

2. The desired output of this sector project are: 1) Water supply infrastructure in project towns improved with climate-resilient and inclusive features. By 2027, 2) Sanitation systems in project towns improved with climate-resilient, cost-effective and inclusive features.<sup>2</sup> By 2027, 3) Institutional and human capacities strengthened for service improvements, gender equality and sustainability.

3. As per preliminary examination and scope of works impact assessment for all the subprojects has been done and no significant impacts are envisaged as per ADB SPS 2009 and therefore all the subprojects under RSTDSP are categorized in Environmental Category B and Initial Environmental Examinations (IEEs) are prepared for all the subprojects accordingly. Environmental management and monitoring plan has been prepared for all the sub projects and included in respective draft IEEs and attached with bid documents of the contracts. Draft IEEs have been updated as per change in scope of works or change in locations; and submitted to ADB for approval.

---

<sup>1</sup> The project towns under consideration for the sector loan are: Abu Road, Banswara, Didwana, Fatehpur, Khetri, Kuchaman, Ladnu, Laxmangarh, Makrana, Mandawa, Pratapgarh, Ratangarh, Sardarshahar and Sirohi. Out of these towns, Khetri and Mandawa are heritage towns.

<sup>2</sup> Climate resilient and inclusive features included are: improvements in the distribution system to reduce losses; rainfall water harvesting; energy-efficient pumps; solar panels at project facilities; pressure control mechanisms in the water system to help avoid losses through pipe bursts; and wastewater reuse for productive uses.



4. This Semi-Annual Environmental Monitoring Report for the period of April to September 2021; analyses the project performance in respect to environmental safeguards and documents/monitors compliance status with National/ State/ Local Statutory Environmental Requirements along with compliance to approved IEE and EMPs as per ADB SPS 2009.

5. Up to September 2021, contracts for all 14 project towns have been awarded (Ratangarh, Laxmangarh and Fatehpur under single contract as package, no. RSTDIP/RTG-FTP-LXG/01, Sardarshahar – package no. RSTDIP/SRD/01, Abu Road and Sirohi under single contract as package no. RSTDIP/SHR-ABR/01, Pratapgarh; package no. RSTDIP/PRT/01, Banswara; package no. RSTDIP/BNS/04, Khetri; package no. RSTDIP/KTR/03, Mandawa; package no. RSTDIP/MDW/03, Kuchaman; package no. RSTDIP/KMN/02, Didwana, Makrana and Ladnu under single contract as package no. RSTDIP/LDN-DID-MKN/01. Work has started in all 14 towns (Ratangarh, Laxmangarh, Fatehpur, Sardarshahar, Abu Road, Sirohi, Pratapgarh, Banswara, Khetri, Mandawa, Kuchaman, Ladnu, Makrana and Didwana).

6. IEEs of 13 project towns excluding Ladnu town have been updated as per approved design status and changed scope of works/locations and submitted to ADB for further review and approval. Out of total IEE submitted, IEEs of 10 towns i.e. Ratangarh, Sardarshahar, Fatehpur, Laxmangarh, Abu Road, Sirohi, Pratapgarh, Kuchaman, Didwana, Makrana towns have been approved by ADB and uploaded on web portals of ADB and RUDSICO-EAP. Updated IEEs of 3 project towns of Khetri, Mandawa and Banswara towns were submitted to ADB in September 2021, which were reviewed by ADB and comments were given which are under compliance by RUDSICO-EAP.

7. During this reporting period, orientations for environmental safeguard requirements were done in 7 towns (Banswara, Laxmangarh, Fatehpur, Kuchaman, Ladnu, Makrana and Didwana) by PMCBC/CMSC-1&2 Environmental Safeguard Specialists. Participants in these orientation programs were PIU, contractor, CMSC engineers and supervisors. Onsite trainings were also conducted in these towns at different work sites to contractors' site supervisors, labours and operators.

8. Contractors have submitted the Site Specific Environment Management Plans (SEMP) in pre-construction phase of each sub project towns, which are approved and being followed in construction works. These SEMP also include Solid Waste and Spoil Management Plan, Traffic Management Plan, Health and Safety Plans, Workers camps plans, COVID-19 prevention and control plan, Asbestos Management Plan etc.

9. Sufficient staffs in PMU, PIUs, consultants (PMCBC/CMSC) and contractor are mobilized as suggested in EARF for the effective implementation and monitoring of compliance of EMP and ADB SPS.

10. Due diligence have been done in all towns, where construction works are started and it was verified that approved designs does not contain any additional areas or work components, as included in updated IEEs. Where ever project sites for Consumer Relations and Management Centres (CRMCs) are identified, impact assessments have been done and reported in respective towns' updated IEEs. Periodical monitoring is being conducted by environmental specialist/safeguard support of PMCBC and CMSCs through site visits which includes public consultations, consultations with labors and contractors' staff, documents verification and environmental monitoring for ambient air, ambient noise, water quality and soil quality analysis through third party monitoring agencies.

11. In compliance for country's legal requirements for STPs and WTPs; Consent to Establish (CTE) is being obtained from Rajasthan State Pollution Control Board (RSPCB) in all project towns. There are total 19 STPs and 3 WTPs proposed for new construction in all 14 towns, thus total 22 new WTPs/STPs required CTE. Up to September 2021, total 20 applications for CTEs were submitted out of which 18 CTEs have been issued by RSPCB. Apart from STPs, 1 new Faecal Sludge Treatment Plant is also proposed in Kuchaman, which will also require CTE before start of construction works. There are existing 3 STPs proposed for upgradation and 2 WTPs; proposed for rehabilitation; which will require consent to establish and consent to operate. Presently design for upgradation/rehabilitation is not done for these STPs/WTPs, therefore consents cannot be applied.

12. Under the prevailing conditions of COVID-19 pandemic in Rajasthan, RUIDP issued guidelines for COVID-19 to all contractors, in line with guidelines issued by Union and State governments. All contractors also prepared Standard Operating Procedures (SOPs) for COVID-19 and are implementing all the mitigation measures as required and instructed by State Government, Union Ministry of Health and Family Welfare and RUIDP.

13. This semi-annual environmental monitoring report presents progress of works, status of compliance of environmental safeguards requirements including legal compliance, EHS management at project sites and current practices at sites. The project (RSTDSP) is compliant with all the environmental statutory provisions of the Governments (National and Rajasthan) as well as ADB SPS 2009.

## **Semi-Annual Environmental Monitoring Report (April 2021 to September 2021)**

### **1. INTRODUCTION**

1. **Project Description:** Rajasthan Secondary Towns Development Sector Project (RSTDSP), the fourth phase of investment projects financed by Asian Development Bank (ADB) and implemented by the Rajasthan Urban Drinking Water Sewerage and Infrastructure Corporation Limited- External Aided Projects (RUDSICO-EAP)), previously known as Rajasthan Urban Infrastructure Development Project (RUIDP). RSTDSP will support the ongoing efforts of the Government of Rajasthan towards improving the water and wastewater services in about 14 towns.<sup>3</sup> RSTDSP seeks to improve water supply and sewerage (WSS) services in secondary towns with populations between 20,000-115,000 through a sector loan modality. The project is aligned with the following impact(s): (i) access to potable, affordable, reliable, equitable, and environmentally sustainable drinking water supply in all urban areas of Rajasthan improved; and (ii) health status of urban population, especially the poor and under-privileged improved. The project will have the following outcome: quality, reliability, equity and sustainability of WSS services in project towns of Rajasthan improved. The investments in WSS with 10-year O&M contracts, coupled with institutional strengthening of Rajasthan Urban Drinking Water, Sewerage and Infrastructure Corporation Limited (RUDSICO) and ULBs in district headquarters, heritage towns and other market centers are expected to ensure operational sustainability and improve quality of life in project towns, including for the poor and vulnerable. The project is also expected to build resilience of communities to manage health pandemics.

2. The loan will provide financial support to the state government to implement reforms and the project loan will introduce innovations in water supply and wastewater management, such as continuous pressurised water supply, and long-term O&M (10 years) embedded construction contracts for nonrevenue water (NRW) reduction and sustainability of operations, latest standards of treatment of waste water and reuse of treated effluent etc.

3. **Project Outputs:** The project will have three outputs-

**Output 1: Water supply system in at least eight project towns improved.** By 2027, at least eight project towns with approximately 100,000 households will have 5 (3 new and 2 rehabilitated) water treatment plants (WTPs) and 1,350 km distribution networks to provide safer, more reliable and more equitable water supply services. The systems are

---

<sup>3</sup> The project towns under consideration for the sector loan are: Abu Road, Banswara, Didwana, Fatehpur, Khetri, Kuchaman, Ladnu, Laxmangarh, Makrana, Mandawa, Pratapgarh, Ratangarh, Sardarshahar and Sirohi. Of these towns, Khetri and Mandawa are heritage towns.

designed for 24-hour supply and expected to provide 24-hour supply most of the time, except during prolonged dry spells; and GOR is continuously working to augment its water supply. Water safety plans will be implemented to ensure potable water at all times, including during intermittent supply. Distribution networks follow a district metered area approach allowing the network to be hydraulically isolated so water losses can be more easily identified and resolved and nonrevenue water (NRW) targets met; and so pressures can be managed for equitable distribution. All households will have a water meter allowing for volumetric billing. The water supply improvements are expected to benefit all, including the urban poor, by reducing water collection time from other sources, which may be costly or unhygienic; and by minimizing earning losses from missed work due to waterborne diseases.

**Output 2: Sanitation system in at least 13 project towns developed or improved.**

By 2027, at least 13 towns with approximately 103,000 households will have 19 sewage and 1 fecal sludge treatment plants, 1,300 km sewer networks, and desludging trucks for city-wide inclusive sanitation (CWIS) through a combination of onsite and sewerage solutions ensuring that everybody, including the urban poor, benefits from the improved services, better health and a cleaner and more hygienic environment. The approach is cost-effective as it (i) limits sewers to core areas with outer areas served through organized desludging and safe transportation and treatment of sludge; and (ii) prioritizes the rehabilitation of STPs to meet current effluent standards over construction of new assets. Household sewer connections are included, including for poor households living in sewer zones. As a climate adaptation measure, project consultants will provide support to ULBs in at least 5 project areas to identify users and structure agreements for wastewater reuse.

**Output 3: Institutional and human capacities strengthened for sustainable service delivery, gender equality and improved public health.** By 2027, the project will have strengthened the capacity and ensured readiness of project ULBs to manage water supply and/or sanitation services and recover O&M costs. The project will strengthen the skills of at least 500 staff and 500 elected representatives of 14 project ULBs in contract management to monitor contractor's performance and service levels; construct or improve an office space for new WSS divisions, and develop ULBs' standard operating procedures for O&M. A data platform with supervisory control and data acquisition (SCADA) and geographic information system (GIS) will be established in each of the 14

project ULBs to support decision-making and efficient service delivery. The project includes capacity strengthening of RUDSICO by making its financial management system certified by an accredited institution. To promote gender equity and community awareness, the project includes an internship program in RUDSICO so that at least 500 college-age women to gain professional experience in a technical field with broader objective.

4. **Environmental category of the sub-projects:** As per preliminary examination and scope of works; impact assessment for all the subprojects has been done and no major significant impacts are envisaged as per ADB SPS 2009 and therefore all the subprojects under RSTDSP are categorized in Environmental Category B and Initial Environmental Examinations (IEEs) are prepared for all the subprojects accordingly. As per national environmental categorization (EIA Notification 2006) none of the subproject activities comes under Category A or Category B, therefore Environmental Impact Assessment or Environmental Clearance is not required for any of the subprojects under RSTDSP.

5. **Details of site personnel and/or consultants responsible for environmental management:** Out of fourteen project towns (with 09 packages), contract for all 14 sub-projects are awarded and civil work are undergoing in seven towns. Necessary Orientation of the PIU, Consultants and Contractor staff is done by Social and environmental experts of PMCBC (assisted by safeguard support staff) and regular monitoring is being conducted by PIU and CMSC team at site. However to facilitate day to day monitoring, all PIUs have nominated one engineer from PIU as Safeguard and Safety Officer (SSO), who is responsible to coordinate for Safeguard activities in their respective towns. SSO, PIU ensures day to day monitoring of implementation and coordinates with PIU, CMSC/PMCBC Social/ Environmental Expert and Contractor for effective safeguard implementation. SSO is also responsible at town level to ensure that all the Grievances received are resolved as per Grievance Redress Mechanism (GRM) prescribed in IEE/RP & EARF/RF. Contractors of each town have also deputed one EHS officer to implement the mitigation measures as per EHS requirements in their respective towns.

6. Details of personnel responsible for safeguard implementation and monitoring at different levels are given in following **Table-1**.

**Table-1: Details of personnel responsible for environmental monitoring****A. PMU, PMCBC, CMSC and PIUs level**

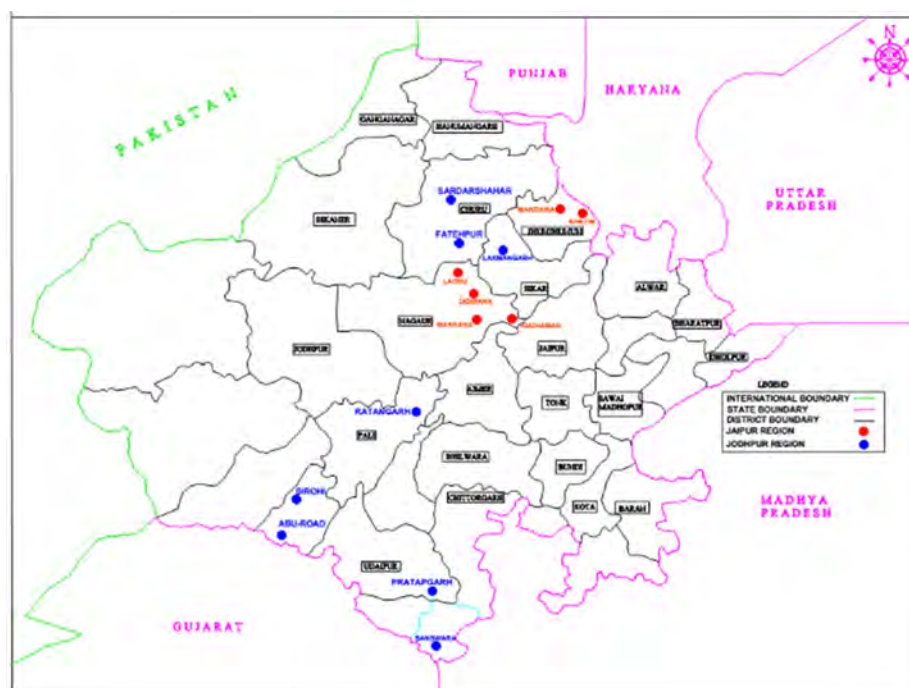
Name of Official	Location	Designation	Contact Details
<b>PMU &amp; PMCBC at Jaipur</b>			
Mr. Vijay Choudhary	PMU, Jaipur	Project Officer (Env)	9460553535
Mr. Rohit Kumar Jangid	PMU, Jaipur	Assistant Project Officer (Env)	96660642564
Mr. Abhay Srivastava	PMCBC, Jaipur	Environment Safeguard Specialist, PMCBC	Email: sse.pmcbc@rstdsp.com Mob.-9530014474
Dr. Priya Goyal	PMCBC, Jaipur	Safeguard Support-Environment, PMCBC	9549681594
<b>PIU Zonal Offices- Jodhpur and Jaipur</b>			
Dr. Mahavir Prasad Saini	CMSC-2 Jodhpur	Environmental Safeguard Professional, CMSC-2	Email: enviro.cmssc2@gmail.com Mob.-9509557249
Mr. Vardan Srivastava	CMSC-I, Jaipur	Environmental Safeguard Professional, CMSC-1	Email: srivastavavardan5@gmail.com Mob.-7986939303
Mr. Mani Sharma	CMSC-1, Jaipur	Environmental Safeguard Support, CMSC-1	Mob- 9501290109
<b>PIUs and CMSCs at towns</b>			
Sh. Hari Babu	PIU, Laxmangarh	SSO, PIU, Laxmangarh	9414084627
Mr. Deepak Mandan	PIU, Ratangarh	SSO, PIU, Ratangarh	9828117635
Mr. Dinesh Fogat	PIU, Sardarshahar	SSO, PIU, Sardarshahar	8949425829
Mr. Surendra Godra	PIU, Fatehpur	SSO, PIU, Fatehpur	-
Mr. Ashok Kadwasara	PIU, Sirohi	SSO, PIU, Sirohi	9929355255
Mr. Sunil Bishnoi	PIU, Abu Road	SSO, PIU, Abu Road	9783767531
Mr. Prabhulal Bhabor	PIU, Banswara	SSO, PIU, Banswara	9413306238
Mr. Madan Lohar	PIU, Pratapgarh	SSO, PIU, Pratapgarh	8949383811
Mr. Saurabh Tayal	PIU, Kuchaman	SSO, PIU, Kuchaman	9509139684
Mr. Jitendra.	PIU, Ladnun	SSO, PIU, Ladnun	9783433002
Mr. Jitendra Meena	PIU, Didwana	SSO, PIU, Didwana	9461307761
Mr. Gurtej Singh	PIU, Makrana	SSO, PIU, Makrana	9828529028
Mr. Devendra Saini	PIU, Mandawa	SSO, PIU, Mandawa	8005535181
Mr. Devendra Saini	PIU, Khetri	SSO, PIU, Khetri	8005535181
Mr. Mahesh Kumar Verma	Abu road/Sirohi	Safeguard Support Environment, CMSC-2	8058465413
Mr. Afzal Ansari	Ratangarh/Laxman garh/Sardarshahar/ Fatehpur	Safeguard Support Environment CMSC-2	8299562677
Ms. Deepali Pandey	Pratapgarh/Banswara	Safeguard Support Environment CMSC-2	7415323074

**B. Contractors' EHS personals**

S No.	Town	Name of EHS Engineer	Contract Details	Contractors' Firm
<b>CMSC-II Towns</b>				
1.	Sardarshahar	Mr. Rakesh Sahu	9412313638	Larsen & Toubro Ltd.
2.	Ratangarh	Mr. M. Mustafa	9995979964	Larsen & Toubro Ltd.
3.	Fatehpur	Mr. Mandeep Walia	8826068677	Larsen & Toubro Ltd.
4.	Laxmangarh	Mr. Vinayak	9412313638	Larsen & Toubro Ltd.
5.	Abu Road	Mr. Sachin Sharma	9587795895	Larsen & Toubro Ltd.
6.	Sirohi	Mr. Satish Vaniya	9983304779	Larsen & Toubro Ltd.
7.	Pratapgarh	Mr. Ashutosh Kumar	8861200971	Khiladi Infra Projects Ltd
8.	Banswara	Mr. Heera babu	8849682604	BIPL-SC-HP Joint Venture
<b>CMSC-I Towns</b>				
9.	Kuchaman	Mr. Anurag Behrwal	9119104582	M/s Larsen & Toubro Ltd.
10.	Ladnun	Mr. Jeevan Kumar	9446224558	M/s Larsen & Toubro Ltd.
11.	Didwana	Mr. Robin Mapnani	9895978165	M/s Larsen & Toubro Ltd.
12.	Makrana	Mr. Robin Mapnani	9895978165	M/s Larsen & Toubro Ltd.
13.	Mandawa	Mr. Manoj Kumar Joya	9785868515	M/s L N Agarwal
14.	Khetri	Mr. Raj Meena	9166949686	M/s Lahoty

7. **Description of sub-projects:** 14 project towns (Abu Road, Banswara, Didwana, Fatehpur, Khetri, Kuchaman, Ladnu, Laxmangarh, Makrana, Mandawa, Pratapgarh, Ratangarh, Sardarshahar and Sirohi) are selected under this loan. There are total 9 package in 14 project towns. Location of all 14 project towns in Rajasthan State map is shown in Figure 1.

**Figure 1: Sub-project Locations in Rajasthan State Map**



8. Sub-projects along with Contract Cost are described in the Table-2 below-

**Table-2: Description of sub-projects under RSTDSP (Project no. 42267-031)**

S No.	Town	Package No.	Name of Contractor	NTP Date	Contract Cost (INR)	Contract Cost (US\$)*	Description of works
1	Ratangarh	RSTDIP / RTG-FTP-LXG/01	M/s Larsen & Toubro Limited	15.6.2020	182,44,31,237.00	240,11,108.26	Construction of Sewer Network with House connections; Construction of Sewage Treatment Plant & Sewage Pumping Station; Allied works and operation services of the system for 10 Years
2	Laxmangarh		M/s Larsen & Toubro Limited	15.6.2020	49,45,94,511.00	650,92,95.66	Construction of Works of Water Supply Distribution Network Improvements with House service connections for non revenue water reduction; Continuous pressurized water supply and operation services of the entire system for 10 years
3	Fatehpur		M/s Larsen & Toubro Limited	15.6.2020	114,89,74,252.00	151,21,504.49	Construction of works of Sewer Network with House connections; Construction of Sewage Treatment Plant & Sewage Pumping Station; Allied works and operation services of the system for 10 Years
4	Sardarshahar	RSTDIP / SRD/01	M/s Larsen & Toubro Limited	15.6.2020	196,70,00,000.00	258,87,437.68	Design and construction of works of water supply and providing sewer network with house sewer connecting along with construction of Sewage Treatment Plant & Sewerage Pumping Station; all allied works and operation services of the entire system for 10 years
5	Abu Road		M/s Larsen & Toubro Limited	18.6.2020	263,77,98,830.00	345,87,823.18	Construction of works of water Supply production; Distribution Network improvements with house services connections for non-revenue water reduction and continuous water supply and providing Sewer network with house connections; Construction of



S No.	Town	Package No.	Name of Contractor	NTP Date	Contract Cost (INR)	Contract Cost (US\$)*	Description of works
		RSTDIP /SHR-ABR/01					Sewage Treatment Plant and all allied works and operation services of the entire system for 10 years
6	Sirohi		M/s Larsen & Toubro Limited	18.6.2020	213,92,01,170.00	280,50,020.71	Construction of works of water Supply production; Distribution Network improvements with house services connections for non-revenue water reduction and continuous water supply and providing Sewer network with house connections; Construction of Sewage Treatment Plant and all allied works and operation services of the entire system for 10 years
7	Pratapgarh	RSTDIP /PRT/01	M/s. Khilari Infrastructure Pvt. Ltd.	28.10.2020	190,60,00,255.00	257,45,696.51	Construction of Sewerage System including sewerage network, Sewage Treatment Plant, sewage pumping station and house sewer connection along with all allied works and operation services of the entire system for 10 years
8	Banswara	RSTDIP /BNS/04	M/s. BIPL-SC-HP Joint Venture	11.02.2021	320,74,60,597.00	435,81,759.39	Construction of Works of Water Supply production and Distribution Network improvements with house services connections for non-revenue water reduction and continuous water supply and providing Sewer network with house sewer connections along with construction of Sewage Treatment Plant & Sewerage Pumping Station and all allied works and operation services of entire system for 10 years
9	Khetri	RSTDIP /KTR/03	M/s. Lahoty-LNA (JV)	20.03.2021	79,63,81,137.50	109,93,392.45	Construction of works of Water Supply Production and Distribution Network Improvements with house service connections for nonrevenue water reduction and continuous water supply

S No.	Town	Package No.	Name of Contractor	NTP Date	Contract Cost (INR)	Contract Cost (US\$)*	Description of works
							and Providing Sewer Network with House connections, and construction of Sewage Treatment Plant and all allied Works and operation services of the entire system for 10 years
10	Mandawa	RSTDIP /MDW/03	M/s Larsen & Toubro Limited,	08.03.2021	106,12,15,221.40	14,502,032.35	Construction of Works of Water Supply production and distribution network Improvements with house service connections for nonrevenue water reduction and continuous water supply and Providing Sewer Network with House connections, and construction of Sewage Treatment Plant, Sewage Pumping Station and all allied Works and operation services of the entire system for 10 years at Mandawa (Jhunjhunu)
11	Kuchaman	RSTDIP /KMN/02	M/s Larsen & Toubro Limited,	05.05.2021	313,93,75,000.00	42,458,412.22	Construction of Works of Water Supply Production and Distribution Network Improvements with house service connections for nonrevenue water reduction and continuous water supply and Providing Sewer Network with House connections, and construction of Sewage Treatment Plant & Sewage Pumping Station and all allied Works and operation services of the entire system for 10 years at Kuchaman (Nagaur)
12	Didwana	RSTDIP /LDN-DID-MKN/01	M/s Larsen & Toubro Limited,	05.05.2021	87,39,66,167.00	11,819,457.78	Construction of Works of Sewer Network with House connections, and construction of Sewage Treatment Plant & Sewage Pumping Station and allied Works and operation services of the entire system for 10 years at Didwana

S No.	Town	Package No.	Name of Contractor	NTP Date	Contract Cost (INR)	Contract Cost (US\$)*	Description of works
							(Nagaur)
13	Makrana		M/s Larsen & Toubro Limited,	05.05.2021	142,98,18,867.00	19,336,771.12	Construction of Works of Sewer Network with House connections, and construction of Sewage Treatment Plant & Sewage Pumping Station and allied Works and operation services of the entire system for 10 years at Makrana (Nagaur)
14	Ladnun		M/s Larsen & Toubro Limited,	05.05.2021	174,40,93,122.00	23,586,994.33	Construction of Works of Sewer Network with House connections, and construction of Sewage Treatment Plant and all allied Works and operation services of the entire system for 10 years at Ladnun (Nagaur)

\* Calculated on the basis of US\$ rate on the date of Notice to Proceed of concerned contracts

9. **Overall status of sub-projects and cumulative progress of works:** Contracts are awarded for 14 project towns in (Ratangarh, Laxmangarh and Fatehpur under single contract as package, no. RSTDIP/RTG-FTP-LXG/01, Sardarshahar – package no. RSTDIP/SRD/01, Abu Road and Sirohi under single contract as package no. RSTDIP/SHR-ABR/01, Pratapgarh; package no. RSTDIP/PRT/01, Banswara; package no. RSTDIP/BNS/04, Khetri; package no. RSTDIP/KTR/03, Mandawa; package no. RSTDIP/MDW/03, Kuchaman; package no. RSTDIP/KMN/02, Didwana, Makrana and Ladnu under single contract as package no. RSTDIP/LDN-DID-MKN/01. Work has started in all 14 towns (Ratangarh, Laxmangarh, Fatehpur, Sardarshahar, Abu Road, Sirohi, Pratapgarh, Banswara, Khetri, Mandawa, Kuchaman, Makrana and Didwana). Overall status of the project and work progress is given in following **Table 3 & 4** -

**Table 3: Overall status of sub-projects (up to 30.09.2021)**

S. No.	Sub-Project Towns and Package Number	Status of Sub-Project				Type of Works*	Progress of Works**
		Design	Pre-Construction	Construction	Operation Phase		
1	Laxmangarh-RSTDIP/RTG-FTP-LXG/01			√		Water Supply	55.38%
2	Ratangarh-RSTDIP/RTG-FTP-LXG/01			√		Sewerage System	22.64%
3	Fatehpur-RSTDIP/RTG-FTP-LXG/01			√		Sewerage System	48.95%
4	Sardarshahar-RSTDIP/SRD/01			√		Sewerage System, Water Supply & Rehabilitation	33.95%
5	Sirohi-RSTDIP/SHR-ABR/01			√		Sewerage System, Water Supply & Rehabilitation	17.53%
6	Abu Road-RSTDIP/SHR-ABR/01			√		Sewerage System, Water Supply & Rehabilitation	13.3%
7	Pratapgarh-RSTDIP/PRT/01			√		Sewerage System	7.21%
8	Banswara-RSTDIP/BNS/04			√		Sewerage System, Water Supply & Rehabilitation	5.22%
9	Khetri-RSTDIP/KTR/03			√		Sewerage System, Water Supply & Rehabilitation	11.76%
10	Mandawa-RSTDIP/MDW/03			√		Sewerage System, Water Supply & Rehabilitation	22.98%
11	Kuchaman-RSTDIP/KMN/02		√			Sewerage System, Water Supply & Rehabilitation	0.88%
12	Ladnu-RSTDIP/LDN-DID-MKN/01		√			Sewerage System	0.07%
13	Didwana-RSTDIP/LDN-DID-MKN/01		√			Sewerage System	NIL
14	Makrana RSTDIP/LDN-DID-MKN/01		√			Sewerage System	NIL

\* For details of proposed works refer Table 4, \*\*As per P1 format received from respective town PIU

**Table 4: Cumulative Progress of Works up to 30.09.2021**

**Town: Ratangarh**

Contract description	Cumulative Progress of works up to 30.09.2021		
<b>Package no -</b> RSTDIP/RTG-FTP-LXG/01  <b>Works under package-</b> Construction of Works of Water Supply Distribution Network Improvements with House service connections for non revenue water reduction; Continuous pressurized water supply and operation services of the entire system for 10 years at Laxmangarh (Sikar)  <b>Name of Contractor-</b> M/s- Larsen & Toubro Limited  <b>Contract type-</b> Design, Build and Operate  <b>Date of Start-</b> 22.06.2020  <b>Cumulative Financial Progress-</b> 25.67 %  <b>Cumulative Physical Progress-</b> 22.64 %  <b>Stipulated Date of completion of Design Build-</b> 21.06.2023	<b>Sewerage Work:</b>		
	<b>Item</b>	<b>Scope</b>	<b>Progress</b>
	STP (2 No.)	6.1 MLD at Gaushala (6.75 % physical progress)  3.8 MLD Near NH-11 (14.40 % physical progress)	<ul style="list-style-type: none"> <li>• <b>6.1 MLD STP-</b> SBR- PCC completed, TEER-Raft concrete completed. Work stopped by High Court stay order. Next hearing date 04.10.2021.</li> <li>• <b>3.80 MLD STP</b> – SBR Wall A,B &amp; C upto 1<sup>st</sup> lift and A &amp; B wall upto 2<sup>nd</sup> lift casting completed. C Wall casting is in progress. Admin building raft &amp; footing casting and column work is in progress. L &amp; T is instructed to increase the manpower for speed up of works.</li> </ul>
	SPS (2 No.)	3.8 MLD BSNL Office (15.56% physical progress)  4.6 MLD near Main Ginani (5.16 % Physical progress)	<ul style="list-style-type: none"> <li>• <b>3.8 MLD SPS, BSNL Office:</b> Upto 9<sup>th</sup> lift completed and steel cutting work is in progress. L &amp; T is instructed to increase the labours for speed up of works.</li> <li>• <b>4.60 MLD SPS:</b> Cutting edge work done &amp; 3<sup>rd</sup> lift casting completed. L &amp; T is instructed to increase the manpower for speed up of works.</li> </ul>
	Lateral sewer (upto dia 300)	145.317 KM	<ul style="list-style-type: none"> <li>• Supply: 93.50 Km</li> <li>• Laid:-60.282 Km</li> <li>• Hydro Testing: 43.785 Km</li> </ul>
	Outfall RCC Pipe	1.82 KM	<ul style="list-style-type: none"> <li>• Supply: -Nil</li> <li>• Laid: -Nil</li> </ul>
	PVC-U pipe(110 & 160 mm dia)	143 KM	<ul style="list-style-type: none"> <li>• Supply: -35.576 km</li> <li>• Laid:-24.320 km</li> </ul>
	Manholes (All types)	10173 Nos	<ul style="list-style-type: none"> <li>• Installation: 2831 Nos</li> </ul>
	Inspection Chamber (A types)	14300 Nos	<ul style="list-style-type: none"> <li>• Supply: 3182 Nos</li> <li>• Installation:-2264 Nos</li> </ul>
	HDPE pipe (PE 100,PN 6) Trenchless	11.72 KM	<ul style="list-style-type: none"> <li>• Supply: 10.477 Km</li> <li>• Laid: - 7.326 Km</li> </ul>
	D.I K-9 Pipes (Pumping Main)	3.50 KM	<ul style="list-style-type: none"> <li>• Supply: - 2.80 Km</li> <li>• Laid: Nil</li> </ul>
	D.I K7 Pipes	3.50 KM	<ul style="list-style-type: none"> <li>• Supply: Nil</li> <li>• Laid: Nil</li> </ul>
	<b>For Road Cutting &amp; Restoration-</b>		

Contract description	Cumulative Progress of works up to 30.09.2021		
	Road cutting	Road restoration Base Layer	Road restoration Top Layer
	<ul style="list-style-type: none"> <li>Kuccha: -5.901 Km</li> <li>CC-12.361 Km</li> <li>BT-34.321 Km</li> <li>Interlock -7.698 Km</li> <li>Total -60.282 km</li> </ul>	<ul style="list-style-type: none"> <li>Kuccha: -5.811 Km</li> <li>CC-11.914 Km</li> <li>BT-32.479 Km</li> <li>Interlock -6.519 Km</li> <li>Total – 56.724 km</li> </ul>	<ul style="list-style-type: none"> <li>Kuccha: -5.811 Km</li> <li>CC-11.279 Km</li> <li>BT-30.270 Km</li> <li>Interlock -6.229 Km</li> <li>Total -53.590 km</li> </ul>
	Building and Miscellaneous work		
	Item Description	Scope of Work	Progress made so far
	CRMC Building	2 Nos. (Near Nagar Palika & Ginani)	<p><b>CRMC-1 (Nagar Palika):</b> Plinth Beam completed, columns and brickwork for wall is under construction. Work is very slow due to insufficient labour. L &amp; T is instructed to speed up of works.</p> <p><b>CRMC-2:</b> Work not started due to insufficient labour. L &amp; T is instructed to start the work immediately.</p>

## Town: Laxmangarh

Contract description	Cumulative Progress of works up to 30.09.2021		
<b>Package no -</b> RSTDIP/RTG-FTP-LXG/01  <b>Works under package-</b> Construction of Works of Providing Sewer Network with House sewer connections along with construction of Sewage Treatment Plant & Sewage pumping Station and all allied Work and operation services of the entire system for 10 years at Ratangarh (Churu).  <b>Name of Contractor-</b> M/s- Larsen & Toubro Limited  <b>Contract type-</b> Design, Build and Operate  <b>Date of Start-</b> 22.06.2020  <b>Cumulative Financial Progress-</b> 22.38 %  <b>Cumulative Physical Progress-</b> 55.38%	Water Supply:		
	Item	Scope	Progress
	CWR	100 KL at AEn Campus	GA Drawing and structural drawing approved, vetting from IIT/NIT is awaited
		250 KL at Bad ke Balaji	GA Drawing and structural drawing approved, vetting from IIT/NIT is awaited
	Distribution Network	150.303 KM	a) Supply: 107.236 Km b) Laid : 80.799 Km c) Hydro Testing: 42.931 Km d) Commissioning : NIL
	House Service Connection	12200 Nos	a) Laying/Installation: 3244 b) Testing: NIL c) Commissioning : NIL
	Domestic Water Meter	12200 Nos	a) Supply: 6250 Nos (15 mm size) b) Installation : 0 Nos c) Testing: NIL d) Commissioning : NIL
	Metering	EMFM -16	a) Supply: 0 Nos. b) Installation : 0 Nos c) Testing: NIL d) Commissioning : NIL
		BFM -31	a) Supply: 0 Nos. b) Installation : 0 Nos c) Testing: NIL d) Commissioning : NIL

Contract description	Cumulative Progress of works up to 30.09.2021		
<b>Stipulated Date of completion of Design Build- 21.06.2023</b>	Pressure Transmitters	55 Nos.	a) Supply: 0 Nos. b) Installation : 0 Nos c) Testing: NIL d) Commissioning : NIL
	No. of DMAs	14 Nos.	-
	<b>For Road Cutting &amp; Restoration-</b>		
	<b>Road cutting</b>	<b>Road restoration Base Layer</b>	<b>Road restoration Top Layer</b>
	<ul style="list-style-type: none"> <li>Kuccha: -54.808 Km</li> <li>CC-22.838 Km</li> <li>BT-0.774 Km</li> <li>Interlock -2.379 Km</li> <li>Total -80.799 km</li> </ul>	<ul style="list-style-type: none"> <li>Kuccha: -54.808 Km</li> <li>CC-19.939 Km</li> <li>BT-0.774 Km</li> <li>Interlock -2.379 Km</li> <li>Total -77.3 km</li> </ul>	<ul style="list-style-type: none"> <li>Kuccha: -54.808 Km</li> <li>CC-19.939 Km</li> <li>BT- NIL</li> <li>Interlock -2.379 Km</li> <li>Total -76.53 km</li> </ul>
	<b>Building and Miscellaneous work</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	CRMC Building opp to EE office	1 nos.	Structural Drawing approved. Vetting from IIT/NIT is awaited. RCC Completed upto roof slab i/c lintels. Brick works completed
	CRMC Building at AEn office	1 nos.	Structural Drawing approved. Vetting from IIT/NIT is awaited. RCC Completed upto roof slab i/c lintels. B/W completed. Plastering for internal and external walls in progress.
	MCC	1 Nos	Structural Drawing approved. Vetting from IIT/NIT is awaited 1) <b>Ground Floor:</b> RCC, soiling, PCC, B/W & plastering completed. <b>1<sup>st</sup> Floor:</b> RCC of roof slab completed. B/W completed.
	CWR 100 KL	1 Nos.	Structural Drawing approved. Vetting from IIT/NIT is awaited. RCC of raft foundation completed. RCC of 5 <sup>th</sup> lift of wall has been completed. Shuttering for dome is in progress.
	CWR 250 KL	1 Nos.	Structural drawing approved vetting from IIT/NIT is awaited. Excavation and PCC for foundation completed. RCC of wall completed upto bottom of raft slab.

## Town: Fatehpur

Contract description	Cumulative Progress of works up to 30.09.2021		
<b>Package no - RSTDIP/RTG-FTP-LXG/01</b>  <b>Works under package-</b> Construction of works of Sewer Network with House connections; Construction of Sewage Treatment Plant &	<b>Sewerage Work:</b>		
	<b>Item</b>	<b>Scope</b>	<b>Progress</b>
	STP (1 No.)	4.3 MLD at Nari Bari Road in existing STP Campus	<b>SBR:</b> - Inner wall 2 <sup>nd</sup> lift wall casting completed. 3 <sup>rd</sup> lift casting work is in progress. <b>TEER:</b> wall 4 <sup>th</sup> lift casting completed. Top dome steel work is in progress

Contract description	Cumulative Progress of works up to 30.09.2021		
<p>Sewage Pumping Station; Allied works and operation services of the system for 10 Years at Fatehpur (Sikar)</p> <p><b>Name of Contractor-</b> M/s- Larsen&amp; Toubro Limited</p> <p><b>Contract type- Design, Build and Operate</b></p> <p><b>Date of Start-</b> 22.06.2020</p> <p><b>Cumulative Financial Progress-</b> 30.44 %</p> <p><b>Cumulative Physical Progress-</b>48.95 %</p> <p><b>Stipulated Date of completion of Design Build-</b> 21.06.2023</p>			<b>Admin building:</b> Footing PCC work is in progress
	MPS	-	-
	SPS (3 No.)	3.5 MLD near dholi Sati Temple	<b>Wet Well:</b> 5 <sup>th</sup> lift wall casting completed.6 <sup>th</sup> lift shuttering and steel work is in progress
		0.60 MLD, Khasra no. 982, National Highway no. 52, Jahanghir ki kui	GAD not submitted by contractor
		1.1 MLD Near Railway underpass (Khasra no. 1806)	Revised Hydraulic design and GAD submitted.
	Lateral sewer (upto dia 250 mm)	93.494 Km	a) Supply: 87.102 Km b) Laid:-61.551 Km c) Testing: 61.43 Km d) Deflection Test: 19.93 Km e) Commissioning: NIL
	Outfall (above dia 315)	1.5 KM	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
	PVC-U pipe (110 & 160 mm dia)	66 KM	a) Supply: 33.998 Km b) Laid:-8.759 Km c) Testing: NIL d) Commissioning: NIL
	Manholes (All types)	7478 Nos	a) Supply: 2508 Nos (including shallow manhole 583 no.) b)Installation:-2403 Nos.(including shallow manhole 583 no.) c) Testing: NIL d) Commissioning: NIL
	Inspection Chamber (A types)	6600 Nos	a) Supply: 1550 Nos. b) Laid:-1352 Nos. c) Testing: NIL d) Commissioning: NIL
Population Benefitted due to commissioned	60000	-	
<b>For Road Cutting &amp; Restoration-</b>			
<b>Road cutting</b>	<b>Road restoration Base Layer</b>	<b>Road restoration Top Layer</b>	
<ul style="list-style-type: none"><li>• Kuccha: -45.415 Km</li><li>• CC-14.448 Km</li><li>• BT-0.00 Km</li><li>• Interlock -0.0Km</li><li>• Total -59.863km</li></ul>	<ul style="list-style-type: none"><li>• Kuccha: -45.415 Km</li><li>• CC-11.788 Km</li><li>• BT-0.0 Km</li><li>• Interlock -0.0 Km</li><li>Total -57.203 km</li></ul>	<ul style="list-style-type: none"><li>• Kuccha: -45.415 Km</li><li>• CC-11.515 Km</li><li>• BT- 0.0 km</li><li>• Interlock -0.0 Km</li><li>• Total -56.930 km</li></ul>	
<b>Building and Miscellaneous work</b>			



Contract description	Cumulative Progress of works up to 30.09.2021		
	<b>Building and Misc. Work</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	CRMC Building	1 Nos. (Nagar Palika)	Finishing work in progress
	CCC Building	-	-
	MCC Building	-	-
	PLC SCADA	-	-
	<b>Trenchless Work</b>		
	HDPE Pipe	10.24 Km	a) Supply: 10.178 KM b) Laid: 7.700 KM c) Testing: NIL d) Commissioning: NIL
	DI Pipe	3.2 Km	a) Supply: 1.705 Km b) Laid: -NIL c) Testing: NIL d) Commissioning: NIL
	MS Pipe	60 meters	a) Supply: NIL b) Laid: -NIL c) Testing: NIL d) Commissioning: NIL

**Town: Sardarshahr**

Contract description	Cumulative Progress of works up to 30.09.2021		
<b>Package no -</b> RSTDIP/SRD/01  <b>Works under package-</b> Design and construction of works of water supply and providing sewer network with house sewer connecting along with construction of Sewage Treatment Plant & Sewerage Pumping Station; all allied works and operation services of the entire system for 10 years at Sardarshahr (Churu).  <b>Name of Contractor-</b> M/s- Larsen & Toubro Limited  <b>Contract type-</b> Design, Build and Operate  <b>Date of Start-</b> 22.06.2020  <b>Cumulative Financial</b>	<b>Water Supply:</b>		
	<b>Item</b>	<b>Scope</b>	<b>Progress</b>
	Total Distribution Network	250.75 km	-
	HDPE Pipe	231.60 Km	a) Supply: 101.060 Km b) Laid: -56.47 Km c) Testing: 36.39 Km d) Commissioning: NIL
	DI Pipe K7	17.15 Km	a) Supply: NIL b) Laid: -NIL c) Hydro Testing: NIL d) Commissioning: NIL
	DI Pipe K9	2.100 Km	a) Supply: 1.677 Km b) Laid: -NIL c) Hydro Testing: NIL d) Commissioning: NIL
	House Service Connection	22000 Nos	a) Laying/Installation: -2206 Nos. b) Testing: 2135 Nos. c) Commissioning: NIL
	Domestic Water Meter	22000 Nos	a) Supply: NIL b) Installation: -NIL c) Testing: NIL d) Commissioning: NIL
	Metering	EMFM-17 Nos	a) Supply: NIL b) Installation: -NIL c) Testing: NIL

Contract description		Cumulative Progress of works up to 30.09.2021	
<b>Progress- 18.97 %</b>  <b>Cumulative Physical Progress-33.95 %</b>  <b>Stipulated Date of completion of Design Build- 21.06.2023</b>			d) Commissioning: NIL
		BFM- 51 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Pressure Transmitters	85 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	No. of DMAs	26 Nos.	-
	RWR	-	-
	WTP	-	-
	Pump House	1 Nos. at PHED Campus	GAD & Layout RC details of numeration approved by PMCBC, contractor yet to start the work at site
	CWR	1 No. (2400 KL PHED Campus)	Excavation completed, PCC completed. Raft concreting works is in progress
	OHSR	-	-
	Rehab Work (WTP,PH,CWR,OHSR etc)	-	-
	Population benefitted due to commissioned	1.09 lacs	
	<b>Waste Water</b>		
	STP	3.4 MLD at North Campus	<b>TEER 540 KL:</b> 2 <sup>nd</sup> lift over TB-2 completed & 3 <sup>rd</sup> lift is in progress <b>SBR-</b> Excavation & PCC completed & bar binding of bottom mesh has been completed and centre wall bar binding is in progress <b>Admin Building:</b> Excavation in Progress
		2.3 MLD at South Campus	<b>TEER 730 KL:</b> Upto TB-5 completed & 1 <sup>st</sup> lift of column over TB-5 is in progress. <b>SBR-</b> Outer wall completed, inner wall & centre wall shuttering and bar bending is in progress <b>PTU:</b> Excavation, PCC and footing completed. Columns upto plinth beam
		1.6 MLD at Gandhi Vidhya Mandir Campus	Private land identified. MOU of land is in progress
	MPS	-	-
	SPS	2.3 MLD at Gaushala Land near BSNL Office	GA & layout drawings approved and Arch. & Structural drawing submission pending at PMCBC level.

Contract description	Cumulative Progress of works up to 30.09.2021		
		0.65 MLD at IGNP Guest House	Layout done. Land handover under process at IGNP Secretary level
	Lateral Sewer (upto dia 315)	51.789	a) Supply: 30.300 Km b) Laid:-17.43 Km c) Testing: 8.267 Km d) Commissioning: NIL
	Outfall (above dia 315)	4.222 Km	a) Supply: 0.500 Km b) Laid:-0.163 Km c) Testing: NIL d) Commissioning: NIL
	PVC-U Pipe (110 & 160 mm dia)	76 Km	a) Supply: 23.988 Km b) Laid:-4.06 Km c) Testing: NIL d) Commissioning: NIL
	Manholes (All types)	4319 Nos.	a) Supply: 1352 nos. b) Installation:-646 Nos. c) Testing: 156 Nos. d) Commissioning: NIL
	Inspection Chamber (All types)	7600 Nos.	a) Supply: 1651 Km b) Installation:-670 Nos. c) Testing: NIL d) Commissioning: NIL
	Population benefitted due to commissioned	1.09 lacs	-
For Road Cutting & Restoration-			
	Road cutting	Road restoration Base Layer	Road restoration Top Layer
	<ul style="list-style-type: none"><li>• Kuccha: -19.330 Km</li><li>• CC-37.440 Km</li><li>• BT-0.00 Km</li><li>• Interlock -0.0Km</li><li>Total -56.47 km</li></ul>	<ul style="list-style-type: none"><li>• Kuccha: -19.330 Km</li><li>• CC PCC-11.788 Km</li><li>• CC PCC -3.47 km</li><li>• BT (GSB/WMW) -0.0 Km</li><li>• Interlock -0.0 Km</li><li>Total -52.857 km</li></ul>	<ul style="list-style-type: none"><li>• Kuccha: -19.330 Km</li><li>• CC-30.057 Km</li><li>• CC PCC-3.47 km</li><li>• BT Top- 0.0 km</li><li>• Interlock -0.0 Km</li><li>Total -52.857 km</li></ul>
Building and Miscellaneous work			
	Item Description	Scope of Work	Progress made so far
	CRMC -1	1. PHED Campus	• Structure completed. Finishing work in progress
	CRMC -1	Inside Fire Fighting Station	• Lad allotted by NP and site will be clear soon after shifting of dumped material.
	CCC Building (1 No.)	PHED Campus	• Structure completed. Finishing work in progress
	MCC Building (1 No.)	PHED Campus	• Structure completed. Finishing work in progress. vetting from IIT/NIT is awaited.
	PLC SCADA	1 No.	-
Trenchless Work			
	HDPE Pipe	11.866 Km	a) Supply: -9.571 Km b) Laid:-0.610 Km

Contract description	Cumulative Progress of works up to 30.09.2021		
			c) Testing: NIL d) Commissioning: NIL
	RCC Pipe	-	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
	MS Pipe	-	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL

## Town: Abu Road

Contract description	Cumulative Progress of works up to 30.09.2021		
<b>Package no -</b> RSTDIP/SHR-ABR/01  <b>Works under package-</b> Construction of works of water Supply production; Distribution Network improvements with house services connections for non revenue water reduction and continuous water supply and providing Sewer network with house connections; Construction of Sewage Treatment Plant and all allied works and operation services of the entire system for 10 years at Abu Road  <b>Name of Contractor-</b> M/s- Larsen& Toubro Limited  <b>Contract type- Design, Build and Operate</b>  <b>Date of Start-</b> 22.06.2020  <b>Cumulative Financial Progress-</b> 23.50 %  <b>Cumulative Physical Progress-</b> 13.3 %  <b>Stipulated Date of completion of Design Build-</b> 21.06.2024	<b>Water Supply</b>		
	<b>Item</b>	<b>Scope</b>	<b>Progress</b>
	HDPE Pipe	146.21 Km	a) Supply: 76.37 Km b) Laid:-22.590 Km c) Testing: 18.9 km d) Commissioning: NIL
	DI Pipe K7	18.09 Km	a) Supply: 18.09 Km b) Laid:-0 c) Hydro Testing: NIL d) Commissioning: NIL
	DI Pipe K9 (Transmission Mains)	33.4 Km	a) Supply: 29.3 Km b) Laid:-8.396 Km c) Hydro Testing: 7.28 km d) Commissioning: NIL
	House Service Connection	12800 Nos	a) Laying/Installation:-1689 Nos. b) Testing: 1678 c) Commissioning: NIL
	Domestic Water Meter	12800 Nos	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Metering	EMFM-13 Nos	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
		BFM- 59 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Pressure Transmitters	88 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	No. of DMAs	20 Nos.	-
	RWR	-	-
	WTP	1 No	<b>Clariflocculator</b> : Wall of completed upto slab level, reinforcement is in progress <b>Staff Quarters:</b> Work completed till plinth level

Contract description	Cumulative Progress of works up to 30.09.2021		
			<b>Guard Room-</b> Metering room: Work completed till plinth level
	Pump House	5 No	GA P&ID layout approved
	CWR	5 No.	<ul style="list-style-type: none"> <li>GA,P &amp; ID, Layout drawing approved for other CWRs</li> <li>Luniyapura CWR- Excavation done</li> </ul>
	Intake	1	<ul style="list-style-type: none"> <li>Online Forest permission application uploaded by consultant firm and permission awaited, GA P &amp; ID &amp; layout drawings approved.</li> </ul>
	<b>Waste Water</b>		
	STP	2	EMI Drawing under approval
	<b>6.9 MLD STP</b>		
	a) SBR		90% of raft work completed and wall concreting in progress
	b) PTU		Work completed upto plinth level
	c) Staff Quarter		Work has completed till ground floor column upto slab level
	d) Admin building		Raft work completed
	e) Blower room, Laboratory, MCC Room, Workshop, Chlorination Room		100% Raft work completed
	<b>2.3 MLD STP</b>		
	a) SBR		Raft reinforcement work in progress
	b) PTU and Guard Room		Footing-Reinforcement work under progress
	DWC Pipes	96.95 Km	a) Supply: 49.38 Km b) Laid:-21.383 Km c) Testing: 20.791 Km d) Deflection Test: 16.988 km e) Commissioning: NIL
	RCC Pipes	3.49 Km	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	PVC-U Pipe	130 Km	a) Supply: 38.78 Km b) Laid:-8.329 Km c) Testing: 8.290 Km d) Commissioning: NIL
	Manholes (All types)	6887 Nos.	a) Supply: 3034 nos. b) Installation:-910 Nos. c) Testing: 789 Nos. d) Commissioning: NIL
	Inspection Chamber (All types)	13000 Nos.	a) Supply: 4725 Km b) Installation:-1706 Nos. c) Testing: 1696 nos. d) Commissioning: NIL
	Population benefitted due to commissioned	66016	

Contract description	Cumulative Progress of works up to 30.09.2021		
	<b>For Road Cutting &amp; Restoration-</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	Road Cutting	95.35 Km	<ul style="list-style-type: none"> <li>• Kuccha/WMM: -4.7 Km</li> <li>• CC-13.56 Km</li> <li>• BT-3.10 Km</li> </ul>
	Road Restoration	95.35 Km	<ul style="list-style-type: none"> <li>• Kuccha/WMM: -4.7 Km (Only Kuccha)</li> <li>• CC Km (upto PCC-12.75 , Full CC-12.70</li> <li>• BT Km (upto WMM)-3.03 km, Full BT-0</li> </ul>
	<b>Building and Miscellaneous work</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	CRMC Building	1	Plinth Beam reinforcement work under progress
	CCC Building	1	Excavation work under progress
	MCC Building	1	Column reinforcement & shuttering work under progress
	PLC SCADA	11	Drawings under review
	<b>Trenchless Work</b>		
	HDPE Pipe	14.50 km	a) Supply: 13.88 Km b) Laid:- 0.860 Km c) Testing: 0.8 Km d) Commissioning: NIL
	RCC Pipe	30 mtrs	a) Supply: NIL b) Laid:- NIL c) Testing: NIL d) Commissioning: NIL
	MS Pipe	210 mtrs	a) Supply: NIL b) Laid:- NIL c) Testing: NIL d) Commissioning: NIL

**Town: Sirohi**

Contract description	Cumulative Progress of works up to 30.09.2021		
<b>Package no -</b> RSTDIP/SHR-ABR/01  <b>Works under package-</b> Construction of works of water Supply production; Distribution Network improvements with house services connections for non revenue water reduction and continuous water supply and providing Sewer network with house connections; Construction of Sewage Treatment Plant and all	<b>Water Supply</b>		
	<b>Item</b>	<b>Scope</b>	<b>Progress</b>
	HDPE Pipe	118 Km	a) Supply: 48.896 Km b) Laid:- 33.320 Km c) Testing: 30.977 Km d) Commissioning: NIL
	DI Pipe K7	5.4 Km	a) Supply: 5.00 Km b) Laid:-0.354 km c) Hydro Testing: NIL d) Commissioning: NIL
	DI Pipe K9	36.76 Km (as per BOQ) Revised -29.92 Km	a) Supply:22.408 Km b) Laid:-15.523 Km c) Hydro Testing: 14.207 Km d) Commissioning: NIL
	House Service	8900 Nos	a) Laying/Installation:-1596 Nos.

Contract description	Cumulative Progress of works up to 30.09.2021		
<p>allied works and operation services of the entire system for 10 years</p> <p><b>Name of Contractor-</b> M/s- Larsen &amp; Toubro Limited</p> <p><b>Contract type-</b> Design, Build and Operate</p> <p><b>Date of Start-</b> 22.06.2020</p> <p><b>Cumulative Financial Progress-</b> 12.57 %</p> <p><b>Cumulative Physical Progress-</b> 17.53 %</p> <p><b>Stipulated Date of completion of Design Build-</b> 21.06.2024</p>	Connection		b) Testing: 1411 Nos. c) Commissioning: NIL
	Domestic Water Meter	8900 Nos	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Metering	EMFM-10 Nos	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
		BFM- 11 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Pressure Transmitters	47 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	No. of DMAs	20 Nos. (with 7 Nos Zones)	As per advised scheme
	Intake	8.60 MLD Intake well at Angore	Exercise for soil investigation is progress
		3.90 MLD Intake well at Kalkaji	Source deleted (as per revised scheme)
	WTP	9 MLD WTP at Angore	Jungle cutting & Boundary wall work is going on
	Pump House (2 Nos)	1. At Teen Batti 2. At Kalkaji 3. At Sardulpura	1. Teen batti CWR-PH: Layout approved & design calculation etc. is under review
	CWR	Existing CWR (3 Nos.) 1. 200 KL at Teen Batti 2. 576 KL at Kalkaji 3. 100 KL at Sardulpura	-
		Proposed CWR (3 nos) 1. 470 KL at Teen Batti 2. 1450 KL at Kalkaji 3. 270 KL capacity at Sardulpura	1. Teen Batti CWR-PH; layout approved & design calculation etc. is under review. 2. Kalkaji CWR-PH: GAD approved & Layout, design calculation etc. is under review 3. Sardulpura CWR-PH: GAD and layout approved & design is under review
	GLSR	Existing GLSR (3 Nos.) 1. 567 KL at Tankariya on hillocks 2. 400 KL at Bhatakhera on hillocks 3. 200 KL at Bhatakhera hillocks	-

Contract description	Cumulative Progress of works up to 30.09.2021		
		Proposed GLSR 1. 270 KL at Bhatakhera on hillocks 2. 580 KL at Tankeria on hillocks	-
	Tube well & Open Well	12 nos of existing tube wells and open wells 6 nos. of existing open well 2. 6 nos. of existing tube well	-
	OHSR	Existing OHSR 2 nos of existing OHSR to be used 1. 200 KL capacity existing OHSR at RHB 2. 270 KL capacity existing OHSR at Sardulpura	-
		Proposed OHSRs	-
	Population benefitted due to commissioned	35000	-
	<b>Waste Water</b>		
	STP (2 nos.)	5 MLD	SBR raft completed excavation of TEER started & security room column above plinth beam, staff room column upto plinth beam and plastering on boundary wall is in progress.
		1.7 MLD	SBR Raft casting is in progress, excavation of TEER started, staff room column upto lintel levels is in progress and guard room slab completed
	MPS	-	Excavation at 1.7 MLD STP in progress
	SPS	-	-
	Lateral Sewer (upto dia 315)	88.76 Km	a) Supply: 44.810 Km b) Laid:-22.434 Km c) Testing: 20.183 Km d) Deflection Test: 20.183 km e) Commissioning: NIL
	Outfall (above dia 315)	3.9 Km	a) Supply: 0.800 km b) Laid:-0.742 km c) Testing: 0.517 km d) Commissioning: NIL
	PVC-U Pipe (110 & 160 mm dia)	90 Km	a) Supply: 16.406 Km b) Laid:-9.266 Km c) Testing: 9.00 Km d) Commissioning: NIL
	Manholes (All types)	5990 Nos.	a) Supply: 2466 nos b) Installation:-792 Nos.



Contract description	Cumulative Progress of works up to 30.09.2021		
			c) Testing: 719 Nos. d) Commissioning: NIL
	Inspection Chamber (All types)	9000 Nos.	a) Supply: 1400 nos b) Installation:-1298 Nos. c) Testing: 1272 Nos. d) Commissioning: NIL
	<b>For Road Cutting &amp; Restoration-</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	Road Cutting	Granular Course - 31585 cum BB- 20,980 cum BT -3170 cum	<ul style="list-style-type: none"> <li>• Kuccha/WMM: -28.930 Km</li> <li>• CC-11.80 Km</li> <li>• BT-1.65 Km</li> </ul>
	Road Restoration	Granular Course - 31585 cum BB- 20,980 cum BT -3170 cum	<b>a) CC:</b> 9.70 Km (upto PCC) 8.50 Km (upto CC) <b>b) BT:</b> 0.98 km (upto WBM) 0.45 km (upto BT) Kuccha/WMM: 28.390 Km
	<b>Building and Miscellaneous work</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	CRMC Building	1	Drawing is approved land is not finalized yet
	CCC Building	1	Drawing is approved land is not finalized yet
	MCC Building	1	Drawing approved
	PLC SCADA	-	-
	<b>Trenchless Work</b>		
	HDPE Pipes	10.8 Km	a) Supply: 9.069 Km b) Laid:-0.333 Km c) Testing: NIL d) Commissioning: NIL
	RCC Pipes	-	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
	MS Pipes	-	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
	<b>Trenchless Work</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	HDPE Pipe	10.8 Km	a) Supply: 9.069 Km b) Laid:-0.850 Km c) Testing: NIL d) Commissioning: NIL

## Town: Pratapgarh

Contract description	Cumulative Progress of works up to 30.09.2021		
<b>Package no -</b> RSTDIP/PRT/01  <b>Works under package-</b> Construction of Works of Water Supply production and Distribution Network improvements with house services connections for non revenue water reduction and continuous water supply and providing Sewer network with house sewer connections along with construction of Sewage Treatment Plant & Sewerage Pumping Station and all allied works and operation services of entire system for 10 years at Pratapgarh town  <b>Name of Contractor-</b> Khilari Infrastructure PVT.LTD.  <b>Contract type- Design, Build and Operate</b>  <b>Date of Start-</b> 02.11.2020  <b>Cumulative Financial Progress-</b> 7.03 %  <b>Cumulative Physical Progress-</b> 7.21 %  <b>Stipulated Date of completion -</b> 01.11.2024	<b>Waste Water</b>		
	<b>Item</b>	<b>Scope</b>	<b>Progress</b>
	STP (2 nos.)	7 MLD	Boundary wall work in progress and NOC awaited from Nagar Parishad
	MWP	0.1 MLD	In progress
	SPS	7 MLD	In Progress
	Lateral Sewer (upto dia 315)	93.745 Km	a) Supply: 58.675 Km b) Laid:-40.028 Km c) Testing: 40.028 Km d) Deflection Test: NIL e) Commissioning: NIL
	Outfall (above dia 315)	6.67 Km	a) Supply: 2.079 Km (RCC) b) Laid:-0.98 km c) Testing: 0.0 km d) Commissioning: NIL
	PVC-U Pipe (110 & 160 mm dia)	108 Km	a) Supply: 33.504 Km b) Laid:-20.813 km c) Testing: 20.813 km d) Commissioning: NIL
	Manholes (All types)	6884 Nos.	a) Supply: 2241 nos b) Installation: 2060 Nos. c) Testing: NIL d) Commissioning: NIL
	Inspection Chamber (All types)	10800 Nos.	a) Supply: 4505 nos b) Installation:-2761 nos. c) Testing: NIL d) Commissioning: NIL
	<b>For Road Cutting &amp; Restoration-</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	Road Cutting	a) CC: Km b) BT: Km c) Kuchha/WMM: Km	• CC-18.432 Km • BT-17.911 Km • Kuccha/WMM: -4.117 Km • Interlock tiles: 0.548 km
	Road Restoration	a) CC: Km b) BT: Km c) Kuchha: Km	<b>a) CC:</b> 17.409 km (upto PCC) 17.249 km (upto CC) <b>b) BT:</b> 16.661 km (upto WMM) 1.506 km (upto BT) 4.117 km Kuccha 0.548 km Interlock tiles
	<b>Building and Miscellaneous work</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	CRMC Building	2	80.20 % (work in progress)
	CCC Building	0	-
	MCC Building	2	-
	PLC SCADA	2	-
	<b>Trenchless Work</b>		

Contract description		Cumulative Progress of works up to 30.09.2021	
	HDPE Pipes	9.195 Km	a) Supply: 1.750 km b) Laid:-0.696 km c) Testing: NIL d) Commissioning: NIL
	RCC Pipes	0.060 Km	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
	MS Pipes	NIL	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
Contract description		Cumulative Progress of works up to 30.09.2021	
Town: Banswara			
<div>Package no - RSTDIP/BNS/04</div> <div>Works under package- Construction of Works of Water Supply Production and Distribution Network Improvements with house service connections for nonrevenue water reduction and continuous water supply and Providing Sewer Network with House sewer connections along with construction of Sewage Treatment Plant &amp; Sewerage Pumping Station and all allied Works and operation services of the entire system for 10 years at Banswara.</div> <div>Name of Contractor- BIPL-SC-HP Joint Venture</div> <div>Contract type- Design, Build and Operate</div> <div>Date of Start- 01.02.2021</div> <div>Cumulative Financial Progress- 3.24 %</div> <div>Cumulative Physical Progress- 5.22 %</div> <div>Stipulated Date of completion – 31.01.2025</div>	Water Supply		
	Item	Scope	Progress
	Total distribution network	338.690 km	-
	HDPE Pipe	443.220 km	a) Supply: 20.05 Km b) Laid:- 0.0 Km c) Testing: 0.0 Km d) Commissioning: 0.0 km
	DI Pipe K7	286.793 Km	a) Supply: 60.004 Km b) Laid:-16.79 km c) Hydro Testing: 0.0 km d) Commissioning: 0.0 km
	DI Pipe K9	8.677 km	a) Supply:7.952 Km b) Laid:-0.0 Km c) Hydro Testing: 0.0 Km d) Commissioning: 0.0 km
	House Service Connection	23600 Nos	a) Laying/Installation:-106 Nos. b) Testing: 0 Nos. c) Commissioning: NIL
	Domestic Water Meter	23600 Nos	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Metering	EMFM- 32 Nos	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
		BFM- 18 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Pressure Transmitters	0 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	No. of DMAs	28 Nos.	
	WTP	1 no.= 9.25 MLD (AEn Camppus)	Site Cleaning and Layout
	Pump House	1. At Existing AEn	-

Contract description	Cumulative Progress of works up to 30.09.2021		
		Campus 2. At Kagdi WTP Campus	
	CWR	CWR-1550 KL (AEn Campus, PHED main campus)	-
	OHSR	-	-
	Rehab work (WTP,PH,CWR, OHSR etc.)	-	-
	Population benefitted due to commissioned	-	-
	<b>Waste Water</b>		
	STP (1 nos.)	9.60 MLD (existing STP Campus)	Excavation of SBR & MPS is in progress
	SPS	SPS-1 : 0.60 MLD (Ward no. 21 near Nathelav Pond)	Site cleaning, layout and fenncing
		SPS-2: 1.7 MLD (Ward no. 1 near Pratapgarh Road)	NIL
	Lateral Sewer (upto dia 300 HDPE- DWC)	6.431 Km	a) Supply: 0 Km b) Laid:-0 Km c) Testing: 0 Km d) Commissioning: 0 km
	Outfall (above dia 300 RCC NP4)	3.9 Km	a) Supply: 0.800 km b) Laid:-0.742 km c) Testing: 0.517 km d) Commissioning: NIL
	PVC-U Pipe (110 & 160 mm dia)	138 Km	a) Supply: 5.496 Km b) Laid:-1.29 Km c) Testing: 0 Km d) Commissioning: NIL
	Manholes (All types)	6338 Nos.	a) Supply: 580 nos b) RCC Manhole Installation:-473 Nos. c) Shallow manhole:312 nos. Testing: 0 Nos. d) Commissioning: 0 nos.
	Inspection Chamber (All types)	13800 Nos.	a) Supply: 798 nos b) Installation:-242 Nos. c) Testing: 0 Nos. d) Commissioning: NIL
	HSC	11251 nos.	
	Population benefitted due to commissioned	-	-
	<b>For Road Cutting &amp; Restoration-</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	Road Cutting	-	<ul style="list-style-type: none"> <li>CC-14.79 Km</li> <li>BT-5.2 Km</li> <li>Kuccha/WMM: -12.74 Km</li> </ul>

Contract description	Cumulative Progress of works up to 30.09.2021		
	Road Restoration		<b>a) CC:</b> 0 km (upto PCC) 0 km (upto CC) 14.79 km (CC upto motorable) <b>b) BT:</b> 0 km (upto WMM) 0 km (upto BT) 5.2 km upto motorable <b>Kuccha/ WMW: 12.74 km</b>
	<b>Building and Miscellaneous work</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	
	CRMC Building	3 (At AEn Campus, at Dahod road, at Housing board colony)	Site cleaning
	CCC Building	1 at AEn Campus	Site cleaning and layout working in progress
	MCC Building	1 at AEn Campus	Site cleaning and layout working in progress
	PLC SCADA	-	-
	<b>Trenchless Work</b>		
	HDPE Pipes	4.576 Km	a) Supply: 0 km b) Laid:-0 km c) Testing: 0 km d) Commissioning: 0 km

**Town: Kuchaman**

Contract description	Cumulative Progress of works up to 30.09.2021		
<b>Package no -</b> RSTDIP/KMN/02  <b>Works under package-</b> Construction of Works of Water Supply Production and Distribution Network Improvements with house service connections for nonrevenue water reduction and continuous water supply and Providing Sewer Network with House sewer connections along with construction of Sewage Treatment Plant and all allied Works and operation services of the entire system for 10 years at Kuchaman  <b>Name of Contractor-</b> M/s. Larsen & Turbo Pvt. Ltd.	<b>Water Supply</b>		
	<b>Item</b>	<b>Scope</b>	<b>Progress</b>
	<b>Total distribution network</b>	<b>332.5 km</b>	-
	HDPE Pipe	327.7 km	a) Supply: 0.0 Km b) Laid:- 0.0 Km c) Testing: 0.0 Km d) Commissioning: 0.0 km
	DI Pipe K7	4.8 Km	a) Supply: 68.275 Km b) Laid:-16.991 km c) Hydro Testing: 0.0 km d) Commissioning: 0.0 km
	DI Pipe K9	11.34 km	a) Supply:0 Km b) Laid:-0 Km c) Hydro Testing: 0 Km d) Commissioning: 0 km
	House Service Connection	14900 Nos	a) Laying/Installation:-0 Nos. b) Testing: 0 Nos. c) Commissioning: NIL
	Domestic Water Meter	14900 Nos	a) Supply: NIL b) Installation:-NIL c) Testing: NIL

Contract description		Cumulative Progress of works up to 30.09.2021	
<b>Contract type- Design, Build and Operate</b>  <b>Date of Start-</b> 18.5 2021  <b>Cumulative Financial Progress-</b> 4.54 %  <b>Cumulative Physical Progress-</b> 0.88 %  <b>Stipulated Date of completion –</b> 31.10.2024			d) Commissioning: NIL
	Metering	EMFM	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
		BFM	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Pressure Transmitters	0 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	No. of DMAs	12 Nos.	-
	RWR	-	-
	WTP	NIL	
	Pump House	4 nos.	-
	CWR	4 nos.	-
	OHSR	-	-
	Rehab work (WTP,PH,CWR, OHSR etc.)	-	-
	Population benefitted due to commissioned	-	-
	<b>Waste Water</b>		
	STP (1 nos.)	7.60 MLD	Soil testing completed
	SPS		
	MPS		
	SPS	3.10 MLD	
		0.85 MLD	
	Lateral Sewer (upto dia 315)	148.942 Km	a) Supply: 20 Km b) Laid:-2.639 Km c) Testing: 0 Km d) Deflection Test: 0 Km d) Commissioning: 0 km
	Outfall (above dia 315)	3.62 Km	a) Supply: 0 km b) Laid:- 0 km c) Testing: 0 km d) Commissioning: 0 km
	PVC-U Pipe (110 & 160 mm dia)	108.0 Km	a) Supply: 14.94 Km b) Laid:-0 Km c) Testing: 0 Km d) Commissioning: NIL
	Manholes (All types)	10352 Nos.	a) Supply: 675 nos b) Installation:-36 Nos. c).Testing: 0 Nos. d) Commissioning: 0 nos.
	Inspection Chamber (All types)	10800 Nos.	a) Supply: 450 nos b) Installation:-0 Nos. c) Testing: 0 Nos. d) Commissioning: NIL
	Population	-	-

Contract description		Cumulative Progress of works up to 30.09.2021		
		benefitted due to commissioned		
		For Road Cutting & Restoration-		
		Item Description	Scope of Work	Progress made so far
		Road Cutting	a) CC: Km b) BT: Km c) Kuchha d) WMM: Km	• CC-0.390 Km • BT-0.740 Km • WMM: -4.117 Km • Kaccha: 18.50 km
		Road Restoration	a) CC: Km b) BT: Km c) Kuchha d) WMM: Km	a) CC: 0 km (upto PCC) 0 km (upto CC) b) BT: 0 km (upto WMM) 0 km (upto BT) c) WMM: NIL d) Kaccha: 18.30 km
		Building and Miscellaneous work		
		Item Description	Scope of Work	Progress made so far
		CRMC Building	2	NIL
		CCC Building	1	NIL
		MCC Building	1	NIL
		PLC SCADA	1	NIL
		Trenchless Work		
		HDPE Pipes	8.2 Km	a) Supply: 0 km b) Laid:-0 km c) Testing: NIL d) Commissioning: NIL
		RCC Pipes	3.620 Km	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
		MS Pipes	NIL	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
Contract description		Cumulative Progress of works up to 30.09.2021		
Town: Didwana				
Package no - RSTDIP/DID/01  Works under package- Construction of Works of Providing Sewer Network with House sewer connections along with construction of Sewage Treatment Plant & Sewage pumping Station and all allied Works and operation services of the entire system	Waste Water			
	Item	Scope	Progress	
	STP	1.30 MLD	• GA Drawing for inlet chamber, mechanical fine bar screen channel and mechanical grit separator units, sludge storage yard, Admin building yard, Admin building block submitted by contractor on dated 24.09.2021 and TL PMCBC review and returned with observation for compliance to contractor on dated 25.9.21 • Piping arrangement drawing of	

Contract description		Cumulative Progress of works up to 30.09.2021	
<b>for 10 years at Didwana</b>  <b>Name of Contractor-</b> M/s. Larsen & Turbo Limited  <b>Contract type-</b> Design, Build and Operate  <b>Date of Start-</b> 18.5.2021  <b>Cumulative Financial Progress-</b> 0 %  <b>Cumulative Physical Progress-</b> 0 %  <b>Stipulated Date of completion –</b> 16.05.2024			TEER, instrumentation, calculation and numeration of guard room & metering room submitted by contractor and PMCBC review and returned to resubmit the same incorporating the changes
	MPS	-	-
	SPS	SPS-1: 1.7 MLD (Salt area)	Court stay on SPS-1 land the EE sir is in continuous contact with Municipal authorities to get vacate the stay and meanwhile nearby alternative land is also being searched
		SPS -2: 1.3 MLD (RSEB Campus)	AEn RSVPNL issued vide letter no. 215 on dated 28.09.2021 to Nagar Palika Didwana for deposit amount Rs. 194580 in favour of account officer RSVPNL for land handing over over RSVPNL to Nagar Palika
	Lateral Sewer (upto dia 315)	57.47 Km	a) Supply: 200 mm (DWC): 10 km 250 mm (DWC): 0.42 km  b) Laid:-6.705 Km (200 mm DWC) c) Testing: 2.84 Km d) Deflection Test: NIL e) Commissioning: NIL
	Outfall (above dia 315)	3.52 Km	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
	PVC-U Pipe (110 & 160 mm dia)	44.0 Km	a) Supply: 17 Km (110 km) 1 km (160 Km) b) Laid:-0.181 km (110 mm) c) Testing: NIL d) Commissioning: NIL
	Manholes (All types)	4137 Nos.	a) Supply: 546 nos b) Installation: 72 Nos. c) Testing: NIL d) Commissioning: NIL
	Inspection Chamber (All types)	4400 Nos.	a) Supply: 306 nos b) Installation:-16 nos. c) Testing: NIL d) Commissioning: NIL
	Population benefitted due to commissioned	36184	-
<b>For Road Cutting &amp; Restoration-</b>			
<b>Item Description</b>		<b>Scope of Work</b>	<b>Progress made so far</b>
Road Cutting		a) CC: Km b) BT: Km c) Kuchha/WMM: Km	a) CC: 3.193 km b) BT: 1.69 km c) WBM : 0.52 km d) Kuccha: 1.57 km
Road Restoration		a) CC: Km	<b>a) CC:</b>



Contract description		Cumulative Progress of works up to 30.09.2021			
		b) BT: Km c) Kuchha: Km	0 km (upto PCC) 0 km (upto CC)  <b>b) BT:</b> 0 km (upto WBM) 0 km (upto BT)  <b>c) WBW: NIL</b> d) Kaccha: 1.57 km		
	<b>Building and Miscellaneous work</b>				
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>		
	CRMC Building	1	Land allotment letter issue by Nagar Palika Didwana on dated 10.09.2021 vide letter 2473 and directed to contractor for submission of designs & drawings for the same.		
	CCC Building	-	-		
	MCC Building	-	-		
	PLC SCADA	-	-		
	<b>Trenchless Work</b>				
	HDPE Pipes	10.0 Km	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL		
	RCC Pipes	NIL	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL		
	MS Pipes	NIL	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL		
	Contract description		Cumulative Progress of works up to 30.09.2021		
	Town: Ladnu				
<b>Package no</b> - RSTDIP/LDN/01  <b>Works under package-</b> Construction of Works of Providing Sewer Network with House sewer connections along with construction of Sewage Treatment Plant and all allied Works and operation services of the entire system for 10 years at Ladnu (Nagaur)  <b>Name of Contractor-</b> M/s.	<b>Waste Water</b>				
	<b>Item</b>	<b>Scope</b>	<b>Progress</b>		
	STP (2 nos.)	5.5 MLD & 2.4 MLD	-		
	Lateral Sewer (upto dia 315)	110.912 Km	a) Supply: 10.0 Km b) Laid:-0.082 Km c) Testing: 0 km d) Deflection Test: 0 km e) Commissioning: 0 km		
	Outfall (above dia 315)	2.554 km	a) Supply: 0 km b) Laid:-0 km c) Testing: 0.0 km d) Commissioning: 0 km		
	PVC-U Pipe (110 & 160 mm dia)	123.650 Km	a) Supply: 2.0 Km b) Laid:-0 km c) Testing: 0.0 km d) Commissioning: 0 km		

Contract description		Cumulative Progress of works up to 30.09.2021		
<div>Larsen &amp; Turbo Limited</div> <div>Contract type- Design, Build and Operate</div> <div>Date of Start- 18.5 2021</div> <div>Cumulative Financial Progress- 0 %</div> <div>Cumulative Physical Progress- 0.07 %</div> <div>Stipulated Date of completion – 16.5.2024</div>	Manholes (All types)	8778 Nos.	a) Supply: 72 nos b) Installation: NIL c) Testing: NIL d) Commissioning: NIL	
	Inspection Chamber (All types)	12365 Nos.	a) Supply: 0 nos. b) Installation:-0 nos. c) Testing: NIL d) Commissioning: NIL	
	Population benefitted due to commissioned	-	-	
	For Road Cutting & Restoration-			
	Item Description	Scope of Work	Progress made so far	
	Road Cutting	a) CC: Km b) BT: Km c) Kuchha/WMM: Km	CC: 0.15 km BT: km Kuccha/WMM: km	
	Road Restoration	a) CC: Km b) BT: Km c) Kuchha/WMM: Km	a) CC: 0 km (upto PCC) 0 km (upto CC)  b) BT: 0 km (upto WBM) 0 km (upto BT)  c) WBW/Kuccha: NIL	
	Building and Miscellaneous work			
	Item Description	Scope of Work	Progress made so far	
	CRMC Building	2	-	
	CCC Building	0	-	
	MCC Building	0	-	
	PLC SCADA	1	-	
	Trenchless Work			
	HDPE Pipes	13.63 Km	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL	
	RCC Pipes	2.55 Km	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL	
	MS Pipes	0.06 km	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL	
Contract description		Cumulative Progress of works up to 30.09.2021		
Town: Makrana				
Package no - RSTDIP/MKN /01	Waste Water			
	Item	Scope	Progress	
	STP	7.7 MLD	• The BEP of STP approved	

Contract description		Cumulative Progress of works up to 30.09.2021	
<b>Works under package-</b> Construction of Works of Providing Sewer Network with House sewer connections along with construction of Sewage Treatment Plant & Sewage pumping Station and all allied Works and operation services of the entire system for 10 years at Makrana  <b>Name of Contractor-</b> M/s. Larsen & Turbo Limited  <b>Contract type-</b> Design, Build and Operate  <b>Date of Start-</b> 18.5.2021  <b>Cumulative Progress-</b> NIL <b>Financial Cumulative Progress-</b> NIL  <b>Stipulated Date of completion –</b> 16.5.2024			<ul style="list-style-type: none"><li>GA of inlet chamber fine bar screen and mechanical grid separator approved on dated 24.9.2021</li><li>Instrumentation drawings submitted by contractor on dated 24.9.2021</li><li>GA Drawings of sludge storage yard submitted by contractor on dated 24.9.2021</li></ul>
		SPS-1: 2.3 MLD (Jhalana Road)	Designs & Drawings is in progress
	SPS	SPS-2: 1.80 MLD (Matabhar Road)	Designs & Drawings is in progress
	Lateral Sewer (upto dia 315)	90.616 Km	a) Supply: 12 Km (200 mm DWC) b) Laid:-3.927 Km (200 mm DWC) c) Testing: 1.405 Km d) Deflection Test: NIL e) Commissioning: NIL
	Outfall (above dia 315)	4.422 Km	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
	PVC-U Pipe (110 & 160 mm dia)	89.0 Km	a) Supply: 16.2 Km (110 mm) 1 km(160 mm) b) Laid:- NIL c)Testing: NIL d) Commissioning: NIL
	Manholes (All types)	6806 Nos.	a) Supply: 246 nos b) Installation: 47 Nos. c) Testing: NIL d) Commissioning: NIL
	Inspection Chamber (All types)	8900 Nos.	a) Supply: 436 nos b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Population benefitted due to commissioned	53777	-
	<b>For Road Cutting &amp; Restoration-</b>		
<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>	
Road Cutting	a) CC: Km b) BT: Km c) Kuchha/WMM: Km	<ul style="list-style-type: none"><li>CC-0.114 Km</li><li>BT-0 Km</li><li>Kuccha/WMM: -3.813 Km</li></ul>	
Road Restoration	a) CC: Km b) BT: Km c) Kuchha/WMM: Km	<b>a) CC:</b> 0.0 km (upto PCC) 0.0 km (upto CC)  <b>b) BT:</b> 0.0 km (upto WMM) 0.0 km (upto BT)  <b>c) Kuccha/WMM: 3.813 km</b>	
<b>Building and Miscellaneous work</b>			

Contract description	Cumulative Progress of works up to 30.09.2021		
	Item Description	Scope of Work	Progress made so far
	CRMC Building	1	Existing structure dismantled by Nagar parishad and directed to contractor for submission of design & drawings.
	CCC Building	-	-
	MCC Building	-	-
	PLC SCADA	-	-
	Trenchless Work		
	HDPE Pipes	11.610 Km	a) Supply: 0 km b) Laid:-0 km c) Testing: NIL d) Commissioning: NIL
	RCC Pipes	NIL	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
	MS Pipes	NIL	a) Supply: NIL b) Laid:-NIL c) Testing: NIL d) Commissioning: NIL
Contract description	Cumulative Progress of works up to 30.09.2021		
Town: Khetri			
<div>Package no - RSTDIP/KTR/03</div> <div>Works under package- Construction of Works of Water Supply Production and Distribution Network Improvements with house service connections for nonrevenue water reduction and continuous water supply and Providing Sewer Network with House sewer connections along with construction of Sewage Treatment Plant and all allied Works and operation services of the entire system for 10 years at Khetri.</div> <div>Name of Contractor- M/s. Lahoty-LNA (JV), Jaipur</div> <div>Contract type- Design, Build and Operate</div> <div>Date of Start- 22.03.2021</div>	Water Supply		
	Item	Scope	Progress
	Total distribution network	48.28 km	a) Supply: 8.932 Km b) Laid:- 2.783 Km c) Testing: 0.0 Km d) Commissioning: 0.0 km
	HDPE Pipe (Dia. 20,25 & 32 mm)	-	a) Supply: 0.0 Km b) Laid:- 0.0 Km c) Testing: 0.0 Km d) Commissioning: 0.0 km
	DI Pipe K7	44.113 Km	a) Supply: 8.932 Km b) Laid:-2.783 km c) Hydro Testing: 0.0 km d) Commissioning: 0.0 km
	DI Pipe K9	4.265 km	a) Supply:0 Km b) Laid:-0 Km c) Hydro Testing: 0 Km d) Commissioning: 0 km
	House Service Connection	4400 Nos	a) Laying/Installation:-0 Nos. b) Testing: 0 Nos. c) Commissioning: NIL
	Domestic Water Meter	4400 Nos	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Metering	EMFM-17 nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL

Contract description		Cumulative Progress of works up to 30.09.2021	
<b>Cumulative Financial Progress- 3.21 %</b>  <b>Cumulative Physical Progress- 11.76 %</b>  <b>Stipulated Date of completion – 20.03.2024</b>			d) Commissioning: NIL
		BFM – 13 nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	Pressure Transmitters	28 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	No. of DMAs	9 Nos.	-
	Pump House	2 nos.	-
	CWR (500 KI)	1 nos.	-
	Rehab work (WTP,PH, CWR, OHSR etc.)	OHSR/GLSR-07 nos.	
	Population benefitted due to commissioned	18917 souls	
	<b>Waste Water</b>		
	STP (1 nos.)	3.15 MLD	-
	Lateral Sewer (upto dia 315)	30.994 Km	a) Supply: 10.530 Km b) Laid:-6.142 Km c) Testing: 4.317 Km d) Deflection Test: 0 Km d) Commissioning: 0 km
	Outfall (above dia 315)	2.740 Km	a) Supply: 1.445 km b) Laid:- 0 km c) Testing: 0 km d) Commissioning: 0 km
	PVC-U Pipe (110 & 160 mm dia)	45.0 Km	a) Supply: 10.002 Km b) Laid:-0.122 Km c) Testing: 0 Km d) Commissioning: NIL
	Manholes (All types)	2231 Nos.	a) Supply: 164 nos b) Installation:-159 Nos. c).Testing: 0 Nos. d) Commissioning: 0 nos.
	Inspection Chamber (All types)	4500 Nos.	a) Supply: 87 nos b) Installation:-32 Nos. c) Testing: 0 Nos. d) Commissioning: NIL
	Population benefitted due to commissioned	18917 souls	
	<b>For Road Cutting &amp; Restoration-</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	Road Cutting	a) CC: 21.483 Km b) BT: 10.955 Km c) Kuchha/WMM: Km	● CC-6.748 Km ● BT-0.161 Km ● Kuccha/WMM: -2.042 Km
	Road Restoration	a) CC: Km b) BT: Km c) Kuchha: Km	<b>a) CC:</b> 0.0 km (upto PCC) 0.0 km (upto CC) <b>b) BT:</b> 0.0 km (upto WMM)

Contract description		Cumulative Progress of works up to 30.09.2021		
			0.0 km (upto BT)	
			c) Kuchha: 2.033 Km	
	Remark	1.681 km of CC cutting is for water supply & 5.067 km for sewer work.		
	Building and Miscellaneous work			
	Item Description	Scope of Work	Progress made so far	
	CRMC Building	1	-	
	CCC Building	1	-	
	MCC Building	1	-	
	PLC SCADA	1	-	
	Trenchless Work			
HDPE Pipes	0.331 Km	a) Supply: 0 km b) Laid:-0 km c) Testing: NIL d) Commissioning: NIL		
Contract description		Cumulative Progress of works up to 30.09.2021		
Town: Mandawa				
Package no - RSTDIP/MDW/03  Works under package- Construction of Works of Water Supply Production and Distribution Network Improvements with house service connections for nonrevenue water reduction and continuous water supply and Providing Sewer Network with House sewer connections along with construction of Sewage Treatment Plant and all allied Works and operation services of the entire system for 10 years at Mandawa.  Name of Contractor- M/s. LNA-R & B (JV), Jaipur  Contract type- Design, Build and Operate  Date of Start- 22.03.2021  Cumulative Financial Progress- 4.85 %	Water Supply			
	Item	Scope	Progress	
	Total distribution network	116.82 km	a) Supply: 68.781 Km b) Laid:- 29.521 Km c) Testing: 0.0 Km d) Commissioning: 0.0 km	
	HDPE Pipe (75 mm to 250 mm dia.)	108.40 km	a) Supply: 68.781 Km b) Laid:- 29.219 Km c) Testing: 0.0 Km d) Commissioning: 0.0 km	
	DI Pipe K7 (100 mm to 350 mm)	6.62 Km	a) Supply: 0 Km b) Laid:-0 km c) Hydro Testing: 0.0 km d) Commissioning: 0.0 km	
	DI Pipe K9 (100 mm to 150 mm dia)	1.89 km	a) Supply:0 Km b) Laid:-0 Km c) Hydro Testing: 0 Km d) Commissioning: 0 km	
	House Service Connection	5400 Nos	a) Laying/Installation:-0 Nos. b) Testing: 0 Nos. c) Commissioning: NIL	
	Domestic Water Meter	5400 Nos	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL	
	Metering	EMFM-1 nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL	
		BFM – 18 nos.	a) Supply: NIL b) Installation:-NIL	

Contract description		Cumulative Progress of works up to 30.09.2021	
<b>Cumulative Progress- 22.98 %</b>  <b>Stipulated Date of completion – 20.03.2024</b>			c) Testing: NIL d) Commissioning: NIL
	Pressure Transmitters	24 Nos.	a) Supply: NIL b) Installation:-NIL c) Testing: NIL d) Commissioning: NIL
	No. of DMAs	5 Nos.	-
	Pump House	1 nos.	-
	CWR (500 KI)	1 nos.	-
	Rehab work (WTP,PH, CWR, OHSR etc.)	OHSR- 1 no. CWR – 0 nos. Pump House- 1 nos.	
	Population benefitted due to commissioned	25610 souls	
	<b>Waste Water</b>		
	STP (2 nos.)	3.90 MLD and 0.40 MLD	-
	Lateral Sewer (upto dia 315)	47.4 Km	a) Supply: 18.078 Km b) Laid:-11.272 Km c) Testing: 0.108 Km d) Deflection Test: 0 Km d) Commissioning: 0 km
	Outfall (RCC NP-4, 400 mm dia)	1.0 Km	a) Supply: 0 km b) Laid:- 0 km c) Testing: 0 km d) Commissioning: 0 km
	PVC-U Pipe (110 & 160 mm dia)	43.50 Km	a) Supply: 11.994 Km b) Laid:-0 Km c) Testing: 0 Km d) Commissioning: NIL
	Manholes (All types)	3664 Nos.	a) Supply: 652 nos b) Installation:-427 Nos. c).Testing: 0 Nos. d) Commissioning: 0 nos.
	Inspection Chamber (All types)	4350 Nos.	a) Supply: 976 nos b) Installation:-174 Nos. c) Testing: 0 Nos. d) Commissioning: NIL
	Population benefitted due to commissioned	25610 souls	
<b>For Road Cutting &amp; Restoration-</b>			
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	Road Cutting	a) CC: Km b) BT: Km c) Kuchha/WMM: Km	<ul style="list-style-type: none"> <li>• CC-7.192 Km</li> <li>• BT-0.164 Km</li> <li>• Kuccha/WMM: -33.058 Km</li> </ul>
	Road Restoration	a) CC: Km b) BT: Km c) Kuchha: Km	<b>a) CC:</b> 0.0 km (upto PCC) 0.0 km (upto CC) <b>b) BT:</b> 0.0 km (upto WBM) 0.0 km (upto BT)

Contract description	Cumulative Progress of works up to 30.09.2021		
			c) Kuccha: 33.058 km
	<b>Building and Miscellaneous work</b>		
	<b>Item Description</b>	<b>Scope of Work</b>	<b>Progress made so far</b>
	CRMC Building	1	-
	CCC Building	1	-
	MCC Building	1	-
	PLC SCADA	1	-
	<b>Trenchless Work</b>		
	HDPE Pipes (PE-100 PN-6, 250 mm to 500 mm dia)	5.0 Km	a) Supply: 0 km b) Laid:-0 km c) Testing: 0 km d) Commissioning: 0 km
	RCC Pipes	0.0 Km	a) Supply: 0 km b) Laid:-0 km c) Testing: 0 km d) Commissioning: 0 km

Note- Photographs of Proposed works and safeguard compliance is shown in **Appendix 1**

10. **Change in Scope of works and/or Location of Project Components.** During review of design there occurred some changes in scope of works and/or location of project components. These changes are being reported through updated IEEs. Such changes up to reporting period are listed below-

**Table-5: Change in Scope of works and/or Locations of Project Components**

S. No.	Name of Town	Change in Scope		Change in Location	
		Original scope as per Updated IEE	Change in scope	Original location As per Draft IEE	Change in location
1.	Abu Road	-	-	WTP – 10 MLD, PHED headworks, behind ITI College, Santpur	WTP – 10 MLD near cremation ground at Santpur
		-	-	CWR (600 KL), existing campus of PHED in Gandhi Nagar	CWR (600 KL), village Kue
		No CRMC and CCC was included	A Consumer Relation Management Centre (CRMC) and Central Control Centre (CCC) proposed at Shantikunj Park	-	-



		Raw water main – 8.5 km	Raw water main – 9.512 Km  * For Raw water mains, total 11.312 kms length was considered but out of this, 1.80 kms is not approved as this area falls under Railway crossing, National Highway and Forest area hence 9.512 km has been taken into consideration for raw water mains and all is approved	-	-
		Clear water mains – 32.4 km	Length of Clear water mains has been increased from 32.4 km to 33.4 km	-	-
		Water Supply distribution Network- 134 km	Distribution network length increased from 134 km to 146.21 km		
		Sewage collection network including house connections – 105 km	Sewer network length has been decreased from 105 km to 100.90 kms	-	-
<b>2</b>	<b>Sirohi</b>	Intake of 3.9 MLD at Kalka ji Dam	Due to non availability of water in Kalkaji dam, only One intake well (at Angore Dam) to draw 7.4 MLD from Anore dam is in scope another Intake well at Kalkaji dam has been dropped	-	-
		Raw water main - 13.191 km  2.49 km and 400mm (dia.) from Angore Dam to WTP  10.70 km (L) and 300mm (Dia.) from	Total Length of Raw water mains has been decreased from 13.191 km to 2.132 km (from Angore Dam to WTP) as One raw water mains from		

		Kalkaji Dam to WTP	Kalkaji dam to WTP has been dropped		
		CWR and pump house in Kalkaji HW, Capacity-580 KL	CWR and pump house in Kalkaji HW, Capacity-1450 KL	CWR & PH, Existing PHED Campus, Rampura	CWR & PH, Existing PHED Campus, Kalka Ji
		-	-	WTP, CWR Pump house-PHED Headwork, Angore	Additional land (pasture land) adjacent to the existing Angor Headworks has been allotted for WTP, CWR Pump house
		Transmission mains - 35.62km	Length of Transmission mains has been decreased from 35.62 km to 22.84 km		
		Water Supply distribution network-117.4 km	Water supply network length has been increased from 117.4 km to 122.95 kms	-	-
		Sewer collection network-93 km	Sewer network length has been decreased from 93 km to 89 kms	-	-
<b>3</b>	<b>Laxmangarh</b>	-	-	Master control center and consumer relation management center, Bad ke balaji PHED campus	Master control centre and consumer relation management centre in EE, PHED office premises
		Water supply distribution networks (162.64 Km) including House service connection of 12200	Distribution network length increased from 162.64 km to 167.73 km		
<b>4</b>	<b>Ratangarh</b>	1. TESR - 470 KL 2. TESR- 270 KL 3. TEER -240 KL 4. TEER- 140 KL	1. TESR - 300 KL 2. TESR- 190 KL 3. TEER -610 KL 4. TEER- 380 KL	-	-
		No CRMC reported in Draft IEE	(CRMC-2 nos.)- CRMC-1 at Nagar Palika Office Campus CRMC-2 at proposed SPS at Main Ginani in	-	-

			Kadwaria Bas location added in updated IEE		
5	Sardarshahar	-	-	CWR (2400 KL)- North west corner of the campus of Public health engineering department (PHED) at Hanumangarh Road	CWR- South west direction in the campus of PHED Office
		Water supply distribution networks - 193 km	Length increased from 193 km to 267.65 kms (including 16.90 km of existing pipelines of the town)  Scope changed due to new developments (colonies) in the town	-	-
		One CRMC building behind main building of PHED office	One additional CRMC building, Fire station office campus	-	Location of CRMC-2 Changed within existing PHED campus
		Sewer Networks- 68 km	Network length decreased from 68 km to 59.4 km		
6	Fatehpur	-	-	CRMC- SPS campus, behind Dholi Sati temple	CRMC- In the campus of Municipality
				SPS (1.1 MLD): Near Railway underpass (Khasra no. 1818)	SPS-1.1 MLD: Near Railway underpass (Khasra no. 1806)
				SPS (0.6 MLD): Near Fatima Masjid	SPS (0.6 MLD): Khasra no. 982, National Highway no. 52, Jahanghir ki kui
7	Pratapgarh	Sewage collection network -104.68 km	Network length decreased from 104.68 km to	-	-

			102.09 km		
				STP (7 MLD) near Mukti Dham, village Talabkeda	STP (7 MLD) near Kila Road, near Jain Gausala
		-	-	SPS (7 MLD) near Bhatpura Gate, Deepeshwar Talab	SPS (7 MLD) near Jain Gausala, Kila road
		No manhole with pumping was included	Newly added- One manhole with pumping (MWP) 0.10 MLD	Manhole (0.10 MLD) at Ward no. 19, , near Govt. Secondary School, Gautam Nagar	Manhole (0.10 MLD) at Manpur
		No CRMC was included	1 CRMC has been added at Nagar Parishad Old Office premises	-	-
8	Banswara	No any Change in scope of works		No any change in location	
9	Didwana	No any Change in scope of works		No any change in location	
10	Khetri	Water Supply Distribution network-44 km	Distribution network length increased from 44 km to 48.28 km	-	-
		Sewage collection network – 34.06 km	Sewer network length increased from 34.06 km to 34.45 km	-	-
11	Kuchaman	Transmission Mains-8 Km	Length of Transmission mains has been increased from 8 km to 8.65 km	-	-
		Water Supply Distribution network-321 km	Distribution network length increased from 321 km to 332.41 kms	-	-
		Sewage collection network Length: 160 km	Sewage collection network Length has been decreased from 160 km to 152.56 Km	-	-
12	Makrana	No any Change in scope of works		No any change in location	
13	Mandawa	Water Supply Distribution network-108.4km	Distribution network length increased from 108.4 km to 116.82 km	-	-

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

11. Under RSTDSP all the statutory compliance are being fulfilled. Environmental regulatory compliances including consents for STP/WTP/Batching plant/ crushers/hot mix plants etc. from Rajasthan State Pollution Control Board (RSPCB) and clearances from other statutory authorities are being obtained before start of construction work. None of the project or its component fall within criteria set under EIA Notification 2006 therefore EIA clearance is not required in any project. Wild Life Act is also not applicable in any subproject in all the 14 project towns. Other statutory requirements include forest clearance, tree cutting permissions, permission from Central/State Archaeological Department etc. Status of environmental statutory requirements and their compliances are given in **Table 6** below-

**Table-6: Compliance of Sub-Projects with Statutory Requirements Applicable**

S.N.	Package number	Name of Town and type of projects	Forest Clearance	Tree Cutting Permission	Permission from State/ National Archaeological dept.	Permission for NH/Highways/ Railways for crossing	Labor License of contractor and Workmen Compensation (WC) Policy	Permissions for Road Cutting	Permission for utility shifting
	1	2	3	4	5	6	7	8	9
1.	RSTDIP/RTG-FTP-LXG/01	Ratangarh Sewerage	Not required	Tree cutting is required in 2 STPs and CRMC sites, permission is under process	Not required	Applied for Railway crossing- Permission awaited No any NH/ Highway crossing is required	Labor License- Valid up to 31/12/2021 WC Policy- Valid up to 30/03/2022	Not required	No Utility shifting is required up to this reporting period
2.		Fatehpur Sewerage	Not required	No tree cutting is required	Not required	Applied for Railway crossing- Permission awaited  Applied for National Highway (NH-11,NH-58) /State Highway (SH-41) crossing - Permission awaited	Labor License- Valid up to 31/12/2021 WC Policy- Valid up to 31/03/2022	PWD Road cutting near churu bus stand is required and it is under process with PWD Department	No Utility shifting is required up to this reporting period
3.		Laxmangarh Water Supply	Not required	4 tree cutting is required at CWR site at Bad Ke Balaji, PHED campus, permission is taken and attached in <b>Appendix-3</b>	Not required	No any Permission required for Railway Crossing/National/ State Highway crossing	Labor License- Valid up to 31/12/2021 WC Policy- Valid up to 30/03/2022	Not required	No Utility shifting is required up to this reporting period
4.	RSTDIP/SRD/01	Sardarshahar Water Supply	Not required	5 Trees cutting is required at	Not required	Permission received for	Labor License-	Not required	No Utility shifting is

S.N.	Package number	Name of Town and type of projects	Forest Clearance	Tree Cutting Permission	Permission from State/ National Archaeological dept.	Permission for NH/Highways/ Railways for crossing	Labor License of contractor and Workmen Compensation (WC) Policy	Permissions for Road Cutting	Permission for utility shifting
		and Sewerage		CWR and CRMC site at PHED campus, permission is taken and attached in Appendix-3		Railway crossing  No any NH/ Highway crossing is required	Valid up to 31/12/2021 WC Policy-Valid up to 30/03/2022		required up to this reporting period
5.	RSTDIP/SHR-ABR/01	Abu Road Water Supply and Sewerage	Permission required for Intake well Construction and Transmission main line (400mm Dia DI) - under process	Presently not required for any site except for pipe laying and intake at Bhainsa Singh Dam, which is covered under forest clearance	Not required	Applied for National Highway (NH-27) crossing and Railway crossing - Permissions awaited	Labor License-Valid up to 31/12/2021 WC Policy-Valid up to 31/03/2022	Not required	No Utility shifting is required up to this reporting period
6.		Sirohi Water Supply and Sewerage	Not required	1 tree at STP (1.7 MLD) at Revdar Road-permission under process	Not required	No National Highway crossing and Railway Crossing permission is required	Labor License-Valid up to 31/12/2021 WC Policy-Valid up to 30/03/2022	Applied to PWD and Nagar Parishad for Road cutting – Permission awaited	No Utility shifting is required up to this reporting period
7.	RSTDIP/PRT/01	Pratapgarh Sewerage	Not required	1 tree at STP site and 3 trees at CRMC sites-permission is taken and attached in	Not required	Applied for National Highway crossing-Permission awaited  No Railway crossing is required	Labor License-Valid up to 31/12/2021 WC Policy-Valid up to	Road cutting permission for 3 roads received from PWD	No Utility shifting is required up to this reporting period

S.N.	Package number	Name of Town and type of projects	Forest Clearance	Tree Cutting Permission	Permission from State/ National Archaeological dept.	Permission for NH/Highways/ Railways for crossing	Labor License of contractor and Workmen Compensation (WC) Policy	Permissions for Road Cutting	Permission for utility shifting	
				Appendix-3			01/11/2021	Road cutting Permission required for another road cutting is awaited from PWD and RSRDC		
8.	RSTDIP/BNS/04	Banswara Water Supply and Sewerage	Not required	10 nos. of trees are required to be cut at WTP site at PHED campus-permission taken and attached in Appendix-3	Not required	No Highway and Crossing permission required	National Railway crossing is required	Labor License-Valid up to 31/12/2021 WC Policy-Applied	Applied to get permission from PWD, RSRDC and RVUNL for Road cutting – Permission awaited	No Utility shifting is required up to this reporting period
9.	RSTDIP/KTR/03	Khetri Water Supply and Sewerage	Not required	Not required	Not required	There is State highway crossing. Prior Permission for the same shall be obtained from concerned department before start of work	Labor License-Valid up to 31/12/2021 WC Policy-Valid up to 30-03-2022	Letter Submitted as Per requirement	No Utility shifting is required up to this reporting period	
10.	RSTDIP/LDN-DID-MKN/01	Ladnu Sewerage	Not required	To be assessed after SIP	Not required	To be assessed after SIP	Labor License-Valid up to 31/12/2021 WC Policy-Valid up to 30-03-2022	Not required	To be assessed after SIP	



S.N.	Package number	Name of Town and type of projects	Forest Clearance	Tree Cutting Permission	Permission from State/ National Archaeological dept.	Permission for NH/Highways/ Railways for crossing	Labor License of contractor and Workmen Compensation (WC) Policy	Permissions for Road Cutting	Permission for utility shifting
11.		Didwana Sewerage	Not required	Presently no tree cutting required	Not required	Presently Not required	Labor License- Valid up to 31/12/2021 WC Policy- Applied	Not required	To be assessed after SIP
12.		Makrana Sewerage	Not required	Presently no tree cutting required	Not required	Presently Not required	Labor License- Valid up to 31/12/2021 WC Policy- Applied	Not required	To be assessed after SIP
13.	RSTDIP/KMN/02	Kuchaman Water Supply and Sewerage	Not required	Presently no tree cutting required	Not required	Presently Not required	Labor License- Valid up to 31/12/2021 WC Policy- Applied	Not required	To be assessed after SIP
14.	RSTDIP/MDW/03	Mandawa Water Supply and Sewerage	Not required	Presently no tree cutting required	Not required	Presently Not required	Labor License- Valid up to 31/12/2021 WC Policy- Valid up to 30-03-2022	Not required	To be assessed after SIP

**Note:** As ULB is part of the project and asset owner of all municipal roads and all the DPRs are also approved by ULB, there is general acceptance of road cutting for RSTDSP project works in all towns. For any specific requirement, approval from ULB shall be taken and reported in SEMR.

**Table 6A: Status of Consents from State Pollution Control Board for STPs/WTPs**

S. No.	Town	STP	WTP	Location	Status of CTE
<b>New Construction</b>					
1	Ratangarh	3.8 MLD		Johad	CTE issued and valid from 03.12.2020 to 30.11.2025 under Air Act and valid from 12.02.2021 to 30.01.2026 under Water Act.
2	Ratangarh	6.10 MLD		Near Gaushala	CTE issued and valid from 03/12/2020 to 30.11.2025 under Air Act and valid from 12.02.2021 to 30.01.2026 under Water Act
3	Fatehpur	4.3 MLD		Naribari village road	CTE issued and valid from 07/9/2020 to 31.08.2025 under Air Act and valid from 16.02.2021 to 31.01.2026 under Water Act.
4	Sardarshahar	2.30 MLD		STP South Campus	CTE issued for 2.3 and 3.4 MLD STPs and valid from 15.10.2020 to 30.09.2025 under Air Act and valid from 13.02.2021 to 31.01.2026 under Water Act
5	Sardarshahar	3.40 MLD		STP North Campus	
6	Sardarshahar	1.60 MLD		Near Ashok Circle in land of GVM	CTE is on hold due to land issue
7	Abu Road	6.9 MLD		Santpur	CTE issued for 2.3 MLD and 6.9 MLD STP and 10 MLD WTP under Water Act and valid from 15.02.2021 to 31.01.2026
8	Abu Road	2.3 MLD		Manpur near Hawai Patti	
9	Abu Road		10 MLD	Santpur PHED campus	
10	Sirohi	5 MLD		Near Nehru Nagar	CTE issued for 1.7 and 5.0 MLD STPs under Water Act and valid from 11.02.2021 to 31.01.2026
11	Sirohi	1.7 MLD		Near Revdar Road	
12	Sirohi		9 MLD	Angore PHED campus	CTE Issued Valid from 31.03.2021 to 28.02.2026
13	Banswara	9.6 MLD		At Udaipur Road	CTE issued and Valid from 08.07.2021 to 30.06.2026
14	Banswara		9.25 MLD	PHED AEN Campus	CTE has been applied in RSPCB on 08.09.2021
15	Pratapgarh	7 MLD		Talabkhera	CTE issued and valid from 16/03/2021 to 28/02/2026
16	Didwana	3MLD		Near Mela Maidan	CTE issued and valid from 11.02.2021 to 31.03.2026
17	Kuchaman	7.6 MLD		Near Dashahara Ground	CTE issued and valid from 17.02.2021 to 31.01.2026
18	Ladnu	5.50 MLD		Asota Village	CTE issued and valid from 27.01.2021 to

					31.12.2025
19	Ladnu	3.50 MLD		Vishwanathpura	CTE for 3.5 MLD STP is on hold due to land issue
20	Makrana	7.70 MLD		Existing campus of STP	CTE issued and valid from 08.02.2021 to 31.01.2026
21	Khetri	3.15 MLD		Near Kharia kua	CTE issued and valid from 17.02.2021 to 31.01.2026
22	Mandawa	3.9 MLD		Bissau Road	CTE issued and valid from 16.02.2021 to 31.01.2026
<b>Upgradation/Rehabilitation works</b>					
23	Sardarshahar	5 MLD WSP		South campus	Shall be applied after design is finalized
24	Sardarshahar	2 MLD WSP		North Campus	Shall be applied after design is finalized
25	Banswara		6.75 MLD	WTP at Kagdi Pickup weir	Shall be applied after design is finalized
26	Banswara		10.40 MLD	AEN Campus	Shall be applied after design is finalized
27	Banswara	6.34 MLD WSP		Udaipur Road	Shall be applied after design is finalized

**Table 7: Compliance of Clearance Conditions**

Name of plant and locations	Conditions of Clearance / Permission	Status of Compliance
<b>A. RSPCB consents</b>		
<b>General conditions included in Consent to Establish of STPs</b>		
<b>All STPs</b>	In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/l.	Complied in design- Total suspended solids in the treated effluent before disposal shall not exceed 20 mg/l.
	That no treated/untreated waste water shall be discharged into any river or water body and entire treated sewage shall be utilized in plantation/horticulture and other gainful purposes.	To be complied during operation- No treated/untreated waste water shall be discharged into any river or water body and entire treated sewage shall be utilized in plantation/horticulture and other gainful purposes, plan will be prepared by contractor for reuse of treated effluent in beneficial uses.
	That the Sludge will be properly digested de-watered & the treated sludge will be used as manure or will be disposed in a scientific manner.	Complied in design- sludge drying units have been proposed in STPs. Sludge will be properly digested de-watered & the treated sludge will be used as manure or will be disposed in a scientific manner.
	That the unit shall undertake spray of insecticides time to time to control fly/mosquito growth in the area	To be complied during operation- Regular spray of insecticides shall be done during operation in premises of STP to control fly/mosquito growth in the area
	That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.	To be complied before operation- Plantations are proposed in two rows all along the periphery of the site of the STP to control foul smell
	That above stated effluent standards is subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.	Complied- treated effluent parameters meets the standards as per given NGT orders in all STP designs
	That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilization.	To be complied- Treated sewage shall be reused in beneficial purposes to the maximum possible extent, reuse plan for treated effluent and sludge shall be prepared by DBO contractor
	That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.	To be complied- Adequate measures such as dense plantations around STPs shall be taken to avoid foul odour during treatment and disposal of sewage and sludge before start of operation of STPs
<b>TOWN WISE SPECIFIC CONDITIONS FOR BELOW MENTIONED CONSENTS OF STPS</b>		
2.3 MLD STP, Sardarshahar	That fee for this consent to establish has been deposited on the basis of estimated	Noted and shall be complied if there is any change in project cost-

Name of plant and locations	Conditions of Clearance / Permission	Status of Compliance
	project cost of Rs.1341 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	presently not applicable
3.4 MLD STP, Sardarshahar	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs.1564 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
1.7 MLD STP, Sirohi	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs.1180.4 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 160 KVA	Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
5 MLD STP, Sirohi	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs.2290 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 300 KVA	Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
2.3 MLD STP, Abhu Road	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs.1564 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 225 KVA	Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
6.9 MLD STP, Abhu Road	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs.2536 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 585 KVA	Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
4.3 MLD, Fatehpur	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 2064 lacs and in case of	Noted and shall be complied if there is any change in project cost- presently not applicable

Name of plant and locations	Conditions of Clearance / Permission	Status of Compliance
	any increase in the project cost, the project proponent shall be liable to deposit balance amount	
3.8 MLD, Ratangarh Town	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 1663 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
6.10 MLD, Ratangarh Town	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 2177.7 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
7 MLD STP, Pratapgarh	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 1440 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 125 KVA	Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
3.1 MLD STP, Khetri	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 850 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 180 KVA	Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
3.9 MLD STP, Mandawa	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 1625 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 180 KVA	Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
7.6 MLD STP, Kuchaman	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 2697 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention &	Application for DG set under Air Act shall be done before installation of

Name of plant and locations	Conditions of Clearance / Permission	Status of Compliance
	Control of Pollution), Act, 1981 for D.G. Set of 365 KVA	DG set- presently DG set is not being installed
5.5 MLD STP, Ladnu	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 2475 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 300 KVA	Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
7.7 MLD STP, Makrana	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 2726 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 365 KVA	Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
3 MLD STP, Didwana	That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 2230 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount	Noted and shall be complied if there is any change in project cost- presently not applicable
	That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 180 KVA	Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
<b>General conditions included in Consent to Establish of WTPs</b>		
<b>All WTPs</b>	That the provisions of EIA notification 14/09/2006 by MoEF shall be strictly followed and the unit shall obtain Environmental Clearance under 8(a) of the aforesaid notification if required and the sole responsibility of the same shall lie on the project proponent.	Not applicable
	That this consent to establish is issued to the unit on the basis of documents submitted by the applicant, if any discrepancy is found in the document/facts submitted by the unit then the applicant shall be liable for legal action in accordance with provisions of law.	Noted
	That no industrial trade effluent i.e. wastewater from water re-circulation system, shall be discharged inside/outside the premises. The entire process water shall be re-circulated with the processes through proposed settling tanks	Complied- The entire process water shall be re-circulated with the processes through proposed settling tanks, no any discharge from WTP shall be done
	That the back-wash water shall be treated	Complied- The entire process water

Name of plant and locations	Conditions of Clearance / Permission	Status of Compliance
	through adequately design treatment system and should be completely recycled into the process thus maintaining zero discharge inside and outside the premises	shall be re-circulated with the processes through proposed settling tanks, no any discharge from WTP shall be done
	That the domestic effluent shall be disposed off in soak pits through properly designed septic tanks	Noted and shall be complied with during detail design
	That no source of air emission shall be permitted under this consent, unit shall apply for separate consent to establish under the provisions of Air Act-1981 if there is proposal for any source of air emission	DG set may be only source of air pollution in WTP. Application for DG set under Air Act shall be done before installation of DG set- presently DG set is not being installed
	All the conditions and instructions as provided in the General conditions for Consent to establish/consent to operate under Water (Prevention & Control of Pollution) Act -1974 shall be complied with strictly	Noted and shall be complied with
	That rain water harvesting system shall be provided to harness rain water for domestic purposes & that the industry shall not dig new well / tube well without prior permission from the competent authority	Provision for rain water harvesting system is taken in project cost- shall be complied during detail design
	That the industry shall ensure that noise from the unit does not exceed the prescribed noise standards for industrial area i.e. 75 dB(A) Leq during day time and 70 dB(A) Leq during night time to meet the prescribed ambient noise standards. Day time is reckoned in between 6 A.M. and 9 P.M. and night time is reckoned between 9 P.M. to 6 A.M.	Being Complied- Quarterly environmental monitoring is proposed at WTP premises. Recent noise quality measurements shows that noise level is within prescribed limits
	That the unit shall maintain plantation at least in the 33% of total area within the unit premises	Noted and shall be complied during detail design
	That the consent is valid subject to fulfillment of all the other statutory requirements in other Laws/Acts/Rules as applicable.	Noted
	That this consent is not an evidence for ascertaining the title of land	Noted
	That this consent is only for environment purpose not be liable for any other purpose.	Noted
	That unit shall comply with standards, with respect to drinking water, as prescribed by the Bureau of Indian Standards in IS 10500-2012 as amended till date.	Design standards of WTP are as per applicable norms of CPHEEO
	That the unit shall apply for renewal of consent at least 120 days in advance prior to expiry date of this consent letter else additional fee shall have to be deposited in accordance with the Rajasthan Water & Air	Noted and shall be complied with



Name of plant and locations	Conditions of Clearance / Permission	Status of Compliance
	(Prevention & Control of Pollution) (Amendment) Rules 2016	
<b>TOWN WISE SPECIFIC CONDITIONS FOR BELOW MENTIONED CONSENTS OF WTP</b>		
10 MLD WTP, Abu Road	That this consent is being issued to EE, PHED for Operating of Water Treatment Plant of capacity 10.0 MLD at Near Moksh Dham, Santpur, Abu Road, Sirohi. In case of any increase in capacity or addition/ modification/ alteration/ or change in product mix or process or raw material or fuel, the project proponent is required to obtain fresh consent to establish from the Board.	Noted and shall be complied if there is any change in capacity or addition/ modification/ alteration/ or change in product mix or process or raw material or fuel- not applicable at present
	That this Consent to Establish is valid for Water Treatment Plant (with recycling system) for a investment of 1247 lakh under 'Orange' category. any change in production & its capacity unit has to seek prior consent to establish/operate from the State Board	Noted and shall be complied if there is any such change- not applicable at present
	That this consent is subject to any order or direction from any Court of the competent jurisdiction	Noted
9 MLD WTP, Sirohi	That this consent is being issued to EE, PHED for Operating of Water Treatment Plant of capacity 9.0 MLD at near Angore Sirohi. In case of any increase in capacity or addition/ modification/ alteration/ or change in product mix or process or raw material or fuel, the project proponent is required to obtain fresh consent to establish from the Board.	Noted and shall be complied if there is any change in capacity or addition/ modification/ alteration/ or change in product mix or process or raw material or fuel- not applicable at present
	That this Consent to Establish is valid for Water Treatment Plant (with recycling system) for a investment of Rs. 336.3 lakh under 'Orange' category. any change in production & its capacity unit has to seek prior consent to establish/operate from the State Board	Noted and shall be complied if there is any such change- not applicable at present
<b>B. Tree cutting permission</b>		
Office Premises and Bad ke Balaji Campus, Laxmangarh	Tree Cutting permission given without any terms & condition.	Kindly refer Appendix 3 for copy of the same
PHED Campus, Sardarshahar	<ul style="list-style-type: none"> <li>Number of new trees to be grown under Rule 24 J (2)- total 25 trees</li> </ul>	Complied- contractor has planted 50 trees in STP campus of Sardarshahar
	Wood of cut trees shall be used for cremation and after planting 25 new trees on Government land/Public place, a physically verified report by Local revenue Officer (Patwari) shall be submitted.	Only 2 trees cut till now and efforts are being taken to save other trees. Wood of cut trees are kept at site and shall be handed over to Nagar Palika, when all trees are cut as per design requirement

Name of plant and locations	Conditions of Clearance / Permission	Status of Compliance
Aaraji No.3035/3026 and 1135 Pratapgarh (STP site)	<ul style="list-style-type: none"> <li>Applicant shall cut the trees on his own expenses and within the stipulated duration.</li> <li>Applicant shall be responsible for his own for any damage/public loss</li> <li>After bidding of wood of cut trees, the amount shall be deposited in treasury</li> <li>Applicant shall plant 5 trees in place of 1 tree.</li> </ul>	Tree is cut at site and wood of tree is kept at site for further process Tree plantation shall be done by contractor by December 2021
PHED Campus, Banswara	<ul style="list-style-type: none"> <li>Due to the presence of electricity line, trees should be cut with proper protective measures.</li> <li>There should be no issue in transportation on road area</li> <li>There should be no damage/public loss</li> <li>After bidding of wood of cut trees, the amount shall be deposited in treasury</li> </ul>	No tree cutting done

### COMPLIANCE STATUS WITH ENVIRONMENTAL LOAN COVENANTS

**Table-8: Compliance with Environmental Loan Covenants**

Section	Loan Covenants	Compliance Status	Action Required
<b>LA. Schedule 4. Execution of Project</b>			
Implementation Arrangements	3. The Borrower shall ensure or cause the EA to ensure that its PMU, Zonal Project Offices, and its PIUs within the Project ULBs, employ sufficient staff including increasing the number of adequate staff as included in the PAM, with relevant expertise in the fields of project management, financial management, engineering, procurement, operations and management, and environmental and social safeguards implementation. The EA will ensure that the PMU, Zonal Offices, and the PIUs housed in the Project ULBs, are equipped with the necessary staff, office space, facilities, equipment, support staff and management information systems for the entire duration of the Project and thereafter.	Complied- Sufficient staff is mobilized in PMU, Zonal PIUs, and town PIUs as per PAM and equipped with required office, facilities, equipment and support staff	Nil
	4. The Borrower shall ensure or cause the EA to ensure that towards smooth implementation of the Project, grievances if any from stakeholders relating to the Project implementation or use of funds are addressed effectively and efficiently.	Being Complied, Grievance Redress Mechanism is functional	Nil

Section	Loan Covenants	Compliance Status	Action Required
Counterpart Support	5. (c) As necessary, respective counterpart staff, land facilities, and implementation and monitoring of respective EMPs, RPs and RPPs as applicable (including unforeseen expenses beyond the estimates), utility shifting, operations and maintenance of Project facilities, and general Project management expenses in a timely manner through approved annual budget allocations or other means; and	Being complied- annual budget for expenses for project management is being allocated by Government	Nil
	(d) Sufficient funds to satisfy the EA's liabilities arising from any Works, Goods and/or Consulting Services contract under the Project.	Being complied- sufficient budget is allocated by Government	Nil
Subproject Selection Criteria	6. The Borrower shall ensure or cause the EA to ensure that:  (a) All Subprojects are selected and approved in accordance with the agreed Subproject Selection Criteria and approval process stipulated in the PAM;	Being complied- all Subprojects are selected and approved in accordance with the agreed Subproject Selection Criteria	Nil
	(b) All documents forming the basis for screening, selection and processing of Subprojects are made available to ADB upon request and are kept for such purposes for a minimum period of five years after submission of the Project completion report.	Being complied- all documents as required by ADB are being provided by PMU	Nil
Condition award for of contracts	11. The Borrower shall ensure, or cause the EA to ensure, that no Works contract is awarded which involves environmental impacts until the EA has:  (a) Prepared, submitted and obtained final approval of the relevant IEE from ADB and the relevant forest and environment clearances from statutory authorities of the Borrower and the State as applicable;	Being Complied- all works are awarded after draft IEEs are approved by ADB, IEEs are being updated as per approved designs	Nil
	(b) Incorporated the relevant provisions from the respective EMP into the related Works contract;	Being Complied, IEE and EMP is part of works contracts	Nil
	(c) Prepared and submitted to ADB a groundwater sustainability report for each Subproject that involves ground water extraction.	Complied- Ground water sustainability report is included in IEEs, where ground water extraction is required	Nil
Safeguards-Environment	13. The Borrower shall ensure or cause the EA to ensure that the preparation, design, construction, implementation, operation and decommissioning of Subprojects and Project facilities comply with (a) all applicable laws and regulations of the Borrower and the State relating to environment, health, and safety; (b)	Being Complied- only category B projects are considered in RSTDSP, all the applicable laws and regulations are being complied, environmental	Nil

Section	Loan Covenants	Compliance Status	Action Required
	the Environmental Safeguards; (c) the EARF; and (d) all measures and requirements set forth in the IEE (including the heritage impact assessment wherever applicable) and EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report. No Category A subprojects will be financed under the Project.	safeguards as per EARF are being complied	
	17. Notwithstanding the stipulation that no Category A Subprojects under environment, involuntary resettlement or indigenous people, will be financed under the Project, in the unforeseen situation of change in categorization of a Subproject that is under implementation, to Category A, the Borrower shall ensure or cause the EA to ensure, in consultation with ADB that such Subproject shall be completed in full compliance of the ADB Safeguard Policy requirements and applicable laws and regulations of the Borrower and the State.	Being Complied, all sub-projects are under Category B and not fulfilling the criteria of Category A	Nil
Human and Financial Resources to Implement Safeguards Requirements	18. The Borrower shall ensure or cause the EA to ensure that all necessary budgetary and human resources to fully implement the EMPs, the RPs and any RIPPs (as applicable) are made available on a timely basis.	Being Complied- required budget and staff is provided in all project towns	Nil
Safeguards – Related Provisions in Bidding Documents and Works Contracts	19. The Borrower shall ensure or cause the EA to ensure that all bidding documents and contracts for Works contain provisions that require contractors to:  (a) Comply with the measures and requirements relevant to the contractor set forth in the IEE, the EMP, the RP(s) and any RIPP, if any (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report;	Being Complied- IEE and EMP is part of bid and contract documents of each project and being complied at site	Nil
	(b) Make available a budget for all such environmental and social measures;	Being complied- EMP cost is included in contract bids	Nil
	(c) Provide the EA with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, the RP/RIPP (as applicable);	Being Complied- any unanticipated environmental impacts are being reported to ADB through IEE updates, QPRs and SEMRs	Nil
	(d) Adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and	Being Complied- conditions of condition of roads, agricultural	Nil

Section	Loan Covenants	Compliance Status	Action Required
	construction; and	land and other infrastructure are being recorded before start of construction works	
	(e) Fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.	Will be Complied after construction is completed	Shall be complied after completion of physical works
Safeguards Monitoring and Reporting	20. The Borrower shall ensure or cause the EA to ensure the following: (a) submit semiannual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;	Being complied- Semiannual Safeguards Monitoring Reports are being submitted to ADB	Nil
	(b) If any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEEs, the EMPs, the RPs or any RIPP (as applicable), promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and	Being Complied- any unanticipated environmental impacts are being reported to ADB through IEE updates, QPRs and SEMRs	Inform to ADB about any unanticipated environmental and/or social risks and impacts raised during construction works
	(c) Report any breach of compliance with the measures and requirements set forth in the relevant EMP, the RP or RIPP (as applicable) promptly after becoming aware of the breach.	Will be Complied- any breach of compliance with the measures and requirements set forth in the relevant EMP, the RP or RIPP (as applicable) shall be reported to ADB	Inform to ADB about any breach of EMP, RP or RIPP
Prohibited List of Investments	21. The Borrower shall ensure or cause the EA to ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities	Complied- no any prohibited investment activities are being considered in RSTDSP	Nil
Labor Standards	22. The Borrower shall ensure or cause the EA to ensure that Works contracts under the Subprojects and the Project follow all applicable labor laws of the Borrower and the State and that these further include provisions to the effect that contractors (i) carry out HIV/AIDS awareness programs for labor and disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; and (ii) follow and implement all statutory provisions on labor (including not employing or using children as labor, equal pay for equal work), health, safety, welfare, sanitation, and working conditions. Such contracts shall also include clauses for	Being complied- HIV/AIDS awareness Training was carried out in Sardarshahar, Abu Road, Sirohi and Banswara towns. HIV/AIDS awareness programs for labor shall be conducted in other project towns in coming days.  Being Complied- Project is implementing all statutory provisions on labor (including not employing or using	Nil

Section	Loan Covenants	Compliance Status	Action Required
	termination in case of any breach of the stated provisions by the contractors.	children as labor, equal pay for equal work), health, safety, welfare, sanitation, and working conditions.	
<b>Project Agreement. Article II. Particular Covenants</b>			
Section 2.05.	(a) The State shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance of Project facilities to such extent and against such risks and in such amounts, as shall be consistent with sound practice.	Being Complied- all the required insurances as per contract agreement and need is being done in all projects	Nil
	(b) Without limiting the generality of the foregoing, the State, shall insure, or cause to be insured, the Goods to be procured including imported for the Project against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such Goods.	Being Complied- all the required insurances as per contract agreement is being done in all projects	Nil

### 3. COMPLIANCE STATUS WITH THE ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN

12. Environmental management and monitoring plan has been prepared for all the sub projects and included in respective IEEs. Periodical monitoring is conducted by environmental specialist and support staff of CMSC and PMCBC through site visits, public consultations, consultations with labors and contractors staff, documents checking and environmental monitoring for ambient air and noise conditions, soil and water quality analysis through third party monitoring agencies.

13. As per IEEs, contractor is required to submit Site Specific EHS Plan (SEMP). SEMP of 6 towns (Ratangarh, Laxmangarh, Fatehpur, Sardarshahar, Abu Road and Sirohi) is submitted by contractor and approved. SEMP's from other contractors are under submission/review for approval. Contractors are following mitigation measures as per SEMP and EMP at project sites.

14. Compliance status with the environmental management and monitoring plan of the sub-projects are given in following **Table 9**, photographs of safeguard compliance is shown in **Appendix 1**, and environmental site visit checklists are attached in **Appendix 4**.

## ENVIRONMENTAL MONITORING TABLES

Table 9: EMP Compliance Status of All Sub-projects under RSTDSP

(Abbreviations of town names- RTG: Ratangarh, FTP: Fatehpur, LXM: Laxmangarh, SRD: Sardarshahar, SHR: Sirohi, ABR: Abu Road, PRT: Pratapgarh, BNS: Banswara, KTR: Khetri, MND:Mandawa, KMN: Kuchaman, LDN: Ladnu, MKR: Makrana, DID: Didwana)

Table 9A: Design Phase

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN	
<b>Sewerage Treatment Plant- Odour nuisance and aesthetics:</b> <ul style="list-style-type: none"> <li>Provide a green buffer zone of 10-20 m wide all around the STP, and 5-10 m around SPSs, with trees in multi-rows. This will act as a visual screen around the facility and will improve the aesthetic appearance. Treated wastewater shall be used for plantation.</li> <li>Develop layout plan of STP such that odour generating units (such as sludge / solids handling facilities are located away from the surrounding area with future development potential.</li> </ul>	<ul style="list-style-type: none"> <li>Buffer zone provided around STP with dense tree plantations</li> <li>STP layout</li> </ul>	BC	BC	NA	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	DBO Contract or / PIU
<b>All Work sites-Tree cutting and site preparation:</b> <ul style="list-style-type: none"> <li>Minimize removal of trees by adopting to site condition and with appropriate layout design of STP/SPS or any other site with trees</li> <li>Obtain prior permission for tree cutting at STP/SPS site or at any other site that may require tree cutting finalized during detailed design</li> <li>Plant and maintain 3 trees for each tree that is removed</li> </ul>	<ul style="list-style-type: none"> <li>List of trees to be but</li> <li>Tree cutting permission</li> <li>Compensatory plantations</li> </ul>	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	DBO Contract or / PIU/ CMSC/P MCBC
<b>Design of water supply system - Non-compliance or non-adherence with the environmental considerations proposed in preliminary designs during detailed design:</b> Ensure compliance with the following during the detailed design: <ul style="list-style-type: none"> <li>Adopting conjunctive use approach water source; utilizing feasible surface water sources and groundwater source optimally thereby reducing the existing groundwater abstraction to the extent possible</li> <li>Locating components and facilities appropriately by avoiding sensitive locations like forests and protected areas (environmentally, socially, and archeologically).</li> <li>Designing the entire system to maintain optimal flow and terminal pressure, and optimizing the overall energy usage.</li> <li>Avoiding usage of asbestos containing materials.</li> <li>Reducing the incidence of water borne diseases by providing 100% population including urban poor with potable water supplies</li> <li>Provision of appropriate personal protection equipment to the workers and staff</li> </ul>	<ul style="list-style-type: none"> <li>Project components away from environmentally sensitive areas</li> <li>Energy efficient design</li> <li>ACM management plan</li> <li>100 % coverage of population with improved water supply</li> <li>Use of PPEs by workers</li> </ul>	NA	NA	BC	BC	BC	BC	NA	TC	TC	BC	BC	NA	NA	NA	DBO Contract or
<b>Design sewerage system - Non-compliance or non-adherence with the environmental considerations proposed in preliminary designs during detailed design:</b> Ensure compliance with the following during the detailed	<ul style="list-style-type: none"> <li>Project components away from environmentally sensitive areas</li> <li>Reuse plan for treated effluent</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> </ul>	NA	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>C</li> <li>NA</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> <li>BC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> <li>BC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> <li>BC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> <li>BC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>BC</li> <li>BC</li> </ul>	DBO Contract or/ PIU/ CMSC/P MCBC

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN	
design: <ul style="list-style-type: none"><li>Locating components and facilities appropriately by avoiding sensitive locations like forests and protected areas (environmentally, socially, and archeologically).</li><li>Treatment and reuse of sludge from treatment process; providing a covered shed of adequate space to air dry the processed sludge for at least 15 days at STPs</li><li>Designing the entire system to maintain optimal flow and terminal pressure, and optimizing the overall energy usage</li><li>Avoiding usage of asbestos containing materials</li><li>Reducing the incidence of water borne diseases by providing 100% population including urban poor with potable water supplies</li><li>Reuse of treated wastewater from STP for non-potable uses thereby reducing the load in freshwater resources</li><li>Adopting a combined approach of sewerage system and faecal sludge and Septage management to cover 100% population of the town with safe collection, conveyance and treatment of sewage generated in the town</li><li>Provision of appropriate personal protection equipment to the workers and staff</li></ul>	<ul style="list-style-type: none"><li>Energy efficient design</li><li>ACM management plan</li><li>FSSM plan for areas where sewerage networks are not feasible</li></ul>	<ul style="list-style-type: none"><li>BC</li></ul>	<ul style="list-style-type: none"><li>BC</li></ul>		<ul style="list-style-type: none"><li>BC</li></ul>	<ul style="list-style-type: none"><li>BC</li></ul>	<ul style="list-style-type: none"><li>BC</li></ul>	<ul style="list-style-type: none"><li>BC</li></ul>	<ul style="list-style-type: none"><li>BC</li></ul>	<ul style="list-style-type: none"><li>BC</li></ul>					<ul style="list-style-type: none"><li>BC</li></ul>	
<b>Seismic sensitivity - Damage to infrastructure and potential risks: project area in moderate earthquake risk zone (Zone II):</b> Designs of project component structures shall comply with relevant codes of design such as Bureau of Indian Standard (BIS) specifications for earthquake resistant design (IS: 1893: Criteria for earthquake resistant design of structures).	<ul style="list-style-type: none"><li>Earthquake resistant design of project structures</li></ul>	C	C	C	C	C	C	C	C	C	C	C	C	C	C	DBO Contract or/PIU/ PMCBC
<b>Groundwater source - Source sustainability and over exploitation of groundwater:</b> <ul style="list-style-type: none"><li>Prepare a groundwater harvesting and artificial recharge plan;</li><li>Creation of artificial recharge pits in public places / public buildings. Local body can issue a notification to this effect.</li><li>Household level artificial recharge (like roof top rainwater harvesting) should be encouraged.</li><li>Groundwater regulation – options to close / discontinue all the tube wells in houses used for domestic purposes in Town in a phased manner once the project is implemented</li></ul>		NA	NA	NA	TC	TC	C  Feasibility Report attached in IEE	NA	NA	NA	TC	TC	NA	NA	NA	DBO contractor/PIU/ PHED
<b>Groundwater contamination:</b> <ul style="list-style-type: none"><li>Prepare a source protection plan for tube wells and open wells</li><li>Ensure proper construction of tube wells including casing pipes to prevent water contamination from well spaces, and due to flooding</li><li>Measures should be taken to control the open defecation, and to close all unsafe latrines (for example pit latrines).</li><li>Awareness programs shall be conducted regarding the</li></ul>	Tube wells and open wells	NA	NA	BC	BC	BC	BC	NA	NA	NA	BC	BC	NA	NA	NA	PHED/PIU



Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Respons ibility
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN	
sanitation practices and its effect on groundwater quality																
<b>Water Treatment Plant (WTP) - Inefficient treatment, treated water characteristic not satisfying the standards:</b> <ul style="list-style-type: none"><li>Design treatment process that is suitable for raw water source characteristics duly considering the seasonal variation in quality if any</li><li>Duly consider quality of ground water that will be supplemented for surface water supply variations</li><li>Treated water and supplied water at consumer end should meet the drinking water standards all times</li></ul>	<ul style="list-style-type: none"><li>Design parameters of WTP meeting with national standards</li><li>Raw water quality test reports</li><li>Treated water quality test reports</li></ul>	NA	NA	NA	NA	TC	BC	NA	TC	NA	NA	NA	NA	NA	NA	DBO Contract or/ CMSC
<b>Water Treatment Plant (WTP) - Design to prevent pollution due to waste water and sludge:</b> <ul style="list-style-type: none"><li>Ensure that the following are included in the WTP design:</li><li>Back wash water reuse system and sludge recovery and disposal system</li><li>Back water cycling components: Filter backwash holding tank, recovered water storage tank and pumping for recycling</li><li>Sludge management system components: Gravity thickeners for sludge from clarifiers, mechanical sludge dewatering system, storage facility for dewater desludge</li><li>Disposal of sludge at a landfill or the disposal site provided by the ULB</li></ul>	<ul style="list-style-type: none"><li>Design of WTP including back wash water recycle</li><li>Sludge management from WTP</li></ul>	NA	NA	NA	NA	BC	BC	NA	BC	NA	NA	NA	NA	NA	NA	DBO Contract or/PIU
<b>WTP, CWRs and STP - Hazardous/ harmful chemicals:</b> <ul style="list-style-type: none"><li>Reduce the use of chemicals in the treatment process to the extent possible (water treatment); provide non-chemical alternatives or easily recoverable and/or reusable chemicals or biocompatible alternatives.</li><li>Establish proper handling/ storage/ application system according to the relevant standards, safety precautions and prevent accidental release/spill</li><li>Provide leak/ spill detection, collection/ capture and safe disposal facilities such as chlorine absorption and neutralization facility</li><li>Provide ventilation, lighting, entry and exit facilities visible and audible alarm facilities to alert chemical/chlorine leak</li><li>Facility for isolation in the even to major leakages</li><li>Eye wash and shower facility</li><li>Personal protection and safety equipment for the operators (masks, oxygen cylinders, gloves, etc.,)</li><li>Provide training to the staff in safe handling and application of chemicals, material safety, and standard operating procedures and emergency responses</li><li>Develop emergency response procedures</li></ul>	<ul style="list-style-type: none"><li>Detail design of STP, WTP and CWR</li><li>Eye wash and shower facility included in STP design</li><li>Emergency response procedure for chemical hazard</li></ul>	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	DBO Contract or/ PMCBC/ CMSC
<b>Clear Water Reservoirs (CWRs) - Hazardous / harmful chemicals:</b> <ul style="list-style-type: none"><li>Establish proper handling / storage / application system according to the relevant standards, safety precautions and prevent accidental release / spill</li><li>Provide ventilation, lighting, entry and exit facilities; visible and audible alarm facilities to alert</li></ul>	<ul style="list-style-type: none"><li>Chlorine handling, storage and safety plan</li><li>Use of PPEs by workers handling chlorine cylinders</li><li>Training records</li><li>Emergency response plan</li></ul>	NA	NA	TC	BC	BC	BC	NA	BC	BC	BC	BC	NA	NA	NA	DBO Contract or/ PMCBC/ CMSC

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility															
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN																
chemical/chlorine leak <ul style="list-style-type: none"><li>Personal protection and safety equipment for the operators (masks, oxygen cylinders, gloves, etc.,)</li><li>Provide training to the staff in safe handling and application of chemicals, material safety, and standard operating procedures and emergency responses</li><li>Develop emergency response procedures</li></ul>																															
<b>Sewage Treatment Plant (STP)- Hazardous / harmful chemicals:</b> <ul style="list-style-type: none"><li>Reduce the use of chemicals in the treatment process to the extent possible; provide non-chemical alternatives or easily recoverable and/or reusable chemicals or biocompatible alternatives.</li><li>Establish proper handling / storage / application system according to the relevant standards, safety precautions and prevent accidental release / spill</li><li>Provide leak/spill detection, collection / capture and safe disposal facilities such as chlorine absorption and neutralization facility</li><li>Provide ventilation, lighting, entry and exit facilities; visible and audible alarm facilities to alert chemical/chlorine leak</li><li>Facility for isolation in the event of major leakages</li><li>Eye wash and shower facility</li><li>Personal protection and safety equipment for the operators (masks, oxygen cylinders, gloves, etc.,)</li><li>Provide training to the staff in safe handling and application of chemicals, material safety, and standard operating procedures and emergency responses</li><li>Develop emergency response procedures</li></ul>	<ul style="list-style-type: none"><li>Detail design of STP</li><li>Eye wash and shower facility included in STP design</li><li>Emergency response procedure for chemical hazard</li></ul>	BC	BC	NA	BC	BC	BC	BC	TC	TC	TC	TC	TC	TC	TC	TC	DBO Contract or/ CMSC														
<b>Sewage Treatment Plant (STP)- Inefficient sewage treatment, treated effluent characteristics not satisfying the CPCB/RPCB standards:</b> <ul style="list-style-type: none"><li>Ensure that the selected process in appropriate for the town and meets discharge standards and facilitate reuse</li><li>(Treated effluent should meet the criteria set by RSPCB/CPCB or the following bid specified parameters, whichever are stringent:<table><tr><td>pH</td><td>6.5 – 9.0</td></tr><tr><td>BOD5, mg/l</td><td>≤10</td></tr><tr><td>COD, mg/l</td><td>≤50</td></tr><tr><td>TSS, mg/l</td><td>≤20</td></tr><tr><td>NH4-N, mg/l</td><td>&lt;25</td></tr><tr><td>Total nitrogen, mg/l</td><td>&lt;10</td></tr><tr><td>Fecal Coliform, MPN/100 ml</td><td>&lt;1000</td></tr></table></li></ul>	pH	6.5 – 9.0	BOD5, mg/l	≤10	COD, mg/l	≤50	TSS, mg/l	≤20	NH4-N, mg/l	<25	Total nitrogen, mg/l	<10	Fecal Coliform, MPN/100 ml	<1000	<ul style="list-style-type: none"><li>BOD at 20<sup>0</sup>C for 5 days- less than 10 mg/l</li><li>Total suspended Solids (TSS)- less than 20 mg/l</li><li>Total nitrogen- less than 10 mg/l</li></ul>	BC	BC	NA	BC	BC	BC	TC	TC	TC	TC	TC	TC	TC	TC	TC	DBO Contract or/ PMCBC/ CMSC
pH	6.5 – 9.0																														
BOD5, mg/l	≤10																														
COD, mg/l	≤50																														
TSS, mg/l	≤20																														
NH4-N, mg/l	<25																														
Total nitrogen, mg/l	<10																														
Fecal Coliform, MPN/100 ml	<1000																														
<b>Change in raw sewage quality - Mixing of industrial effluent with sewage:</b> <ul style="list-style-type: none"><li>No industrial wastewater shall be allowed to dispose into municipal sewers</li><li>As there is a risk of potential mixing of industrial waste,</li></ul>	<ul style="list-style-type: none"><li>Separate sewerage networks for domestic sewage</li><li>Outlet parameters as per latest Govt. norms</li></ul>	BC	BC	NA	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	TC	DBO Contract or and PIU / PMU														

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN	
no domestic wastewater from industrial units shall be allowed into municipal sewers <ul style="list-style-type: none"> <li>Ensure that there is no illegal discharge through manholes or inspection chambers</li> <li>Conduct public awareness programs; in coordination with RSPCB and CLC.</li> <li>Conduct regular wastewater quality monitoring (at inlet and at outlet of STP) to ensure that the treated wastewater quality complies with the effluent standards</li> </ul>																
<b>Sewage Treatment Plant (STP)- Use of treated wastewater for reuse applications:</b> <ul style="list-style-type: none"> <li>Develop wastewater reuse plan for Town in consultation with CLC as per the Sewerage and Wastewater Policy, 2016. The Reuse Plan shall inter alia include the following:</li> <li>Identify potential reuse application in Town, and establish quality criteria for each of the use</li> <li>For applications that use treated wastewater directly (e.g., agriculture), the quality required for such application in safe manner considering health, environment and crop yield concerns shall be ensured;</li> <li>Prepare a reuse plan for agriculture, if that is the priority use or one of the applications as per the CLC in Town, clearly indicating the limits (geographical / crops / type of application / type of soils etc.); adopt international good practice suggested by agencies like World Health Organization (WHO), Food and Agricultural Organization (FAO) of the United Nations.</li> <li>Plan should include awareness and training provisions and responsibilities; these can be conducted by concerned department (e.g., Agricultural Department, District Collectorate)</li> <li>Carryout regular / online monitoring of critical quality parameters of treated wastewater to ensure that they meet the preset standards established for reuse</li> </ul>	<ul style="list-style-type: none"> <li>Reuse plan for treated effluent</li> <li>Outlet parameters as per latest Govt. norms</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	NA	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>C</li> </ul>	TC	DBO Contract or / PIU/CMS C/ PMCBC
<b>STP - Treated effluent discharge into water channel/drains and associated impacts on river water and downstream users:</b> <ul style="list-style-type: none"> <li>Obtain of consent of RSPCB for discharge of treated wastewater into drains</li> <li>Conduct a baseline water quality assessment of receiving water body</li> <li>Regularly monitor the treated wastewater quality at STP and ensure that it meets the discharge standards</li> <li>Monitor water quality periodically during operation phase as per the Environmental Monitoring Plan</li> </ul>	<ul style="list-style-type: none"> <li>Consent to Establish from RSPCB</li> <li>Reuse plan of treated effluent</li> <li>STP effluent- monitoring</li> <li>Water Quality monitoring of receiving water body</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	NA	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>TC</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	<ul style="list-style-type: none"> <li>C</li> <li>TC</li> <li>TC</li> <li>TC</li> </ul>	Contract or/PIU
<b>Sewage Treatment Plant (STP)/WTP- Sludge management and reuse:</b> <ul style="list-style-type: none"> <li>Prepare a sludge management plan</li> <li>Prepare a dried Sludge utilization plan for Town with the help of Agriculture Department / CLC; plan should also include if any additional processing is required for sludge to use as soil conditioner</li> </ul>	<ul style="list-style-type: none"> <li>Reuse plan for treated sludge</li> </ul>	TC	TC	NA	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	DBO Contract or/PIU

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility	
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN		
<ul style="list-style-type: none"><li>Plan should clearly identify various potential uses and demand in Town and surroundings</li><li>Establish usage limits, where required, (geographical / crops / type of application / type of soils etc.); adopt international good practice suggested by agencies like World Health Organization (WHO), Food and Agricultural Organization (FAO) of the United Nations.</li><li>Identify a landfill / suitable site for disposal of surplus dried sludge</li><li>Monitor sludge quality during operation phase as per the Environmental Monitoring Plan, ensure that it meets the quality parameters established by FCO</li><li>In case of sludge not meeting the quality parameters, it shall not be used as soil condition, and shall be disposed at appropriate disposal site (if it falls under hazardous category, it shall be disposed as per the Hazardous Waste Management Rules, 2016)</li></ul>																	
<b>Sewage pumping stations - Handling and disposal of accumulated waste at identified disposal sites:</b> <ul style="list-style-type: none"><li>Prepare a waste handling and management plan for the work, considering handling, disposal and occupational and public health safety</li><li>Assess the working conditions, develop appropriate working method, and work shall be only conducted under continuous supervision of EHS supervisor</li><li>Waste shall not be handled manually; use appropriate equipment</li><li>All workers shall be provided with necessary personal protection equipment, including gloves, boots, face / gas masks and oxygen cylinders in handy for emergency use etc.; if gas emission is suspected at any point of time, workers shall use gas masks with oxygen cylinders</li><li>Inform surrounding public about the work</li><li>Fire control and safety equipment shall be provided at the work site</li><li>Waste shall be properly covered during transport</li><li>Manage the solid waste as per the Solid Waste Management Rules, 2016</li></ul>	<ul style="list-style-type: none"><li>Waste Management Plan as per Solid Waste Management Rules 2016</li></ul>	BC	BC	NA	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	DBO Contract or/PIU
<b>Sewage pumping stations - Noise and odour generation from sewage pumping operations, and public and occupational safety :</b> <ul style="list-style-type: none"><li>Provide low noise, efficient pumping systems</li><li>Provide dedicated power supply to SPS, if possible, otherwise DG set to be used during power failure, should be soundproof and having acoustic enclosures with low/permitted air emission standards</li><li>Design SPS with appropriate retention time, so as not to retain the sewage in the sump for long time to avoid generation of odorous gases</li><li>Firm barricades should be provided all round during construction of SPS;</li><li>Boundary wall of sufficient height should be provided during operation phase so that no children/residents can</li></ul>	Design of SPS covering all these parameters	C	C	NA	C	C	C	C	C	BC	BC	BC	BC	BC	BC	BC	DBO Contract or/PIU

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility	
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN		
entre in the SPS premises <ul style="list-style-type: none"><li>Plantations should be provided if space available to reduce foul smell of sewer during operation</li><li>No workers camps should be allowed during construction works at SPS site</li><li>Entry should be restricted through provision of gate and guard during SPS operation.</li><li>Highest Flood Level (HFL) should be used as a basis while deciding on the SPS dimensions. Also, all the prevention methods including buffer capacity secondary tank and alternative power arrangements should be implemented so that sewage does not either leak during power outages or percolate into ground and pollute water.</li></ul>																	
<b>Sewer network – collection and conveyance - Poor design leading to overflows, blockages, and creating nuisance, pollution:</b> <ul style="list-style-type: none"><li>Limit the sewer depth where possible</li><li>Sewers shall be laid away from water supply lines and drains (at least 1 m, wherever possible);</li><li>In all cases, the sewer line should be laid deeper than the water pipeline (the difference between top of the sewer and bottom of water pipeline should be at least 300 mm)</li><li>In unavoidable, where sewers are to be laid close to storm water drains, appropriate pipe material shall be selected (stoneware pipes shall be avoided)</li><li>For shallower sewers and especially in narrow roads, use small inspection chambers in lieu of manholes;</li><li>Design manhole covers to withstand anticipated loads and ensure that the covers can be readily replaced if broken to minimize silt/garbage entry</li><li>Ensure sufficient hydraulic capacity to accommodate peak flows and adequate slope and gas vents in gravity mains to prevent buildup of solids and hydrogen sulfide generation</li><li>Take necessary precautionary measures to protect sewer network, and to avoid disposal of solid wastes, debris, wastewater into newly laid sewers from the time it is constructed to the start of operation phase</li></ul>	<ul style="list-style-type: none"><li>Sewer network design covering all these parameters</li></ul>	C	C	NA	C	C	C	C	TC	TC	TC	TC	TC	TC	TC	TC	DBO Contract or/PIU/PMCBC
<b>FSSM - Occupational health and safety issues, and impact on STP process:</b> Conduct detailed survey of the households to be covered with FSSM to design the system to suit the local conditions, such as type of septic tanks and their location in the houses <ul style="list-style-type: none"><li>Create awareness program on the FSSM from collection to treatment system that will be adopted</li><li>Design the sewage treatment process duly considering mixing of Septage</li><li>Ensure that the FSSM system is completely mechanized no human touch, even accidentally, from collection at household to discharge into STP, and in periodic cleaning of tankers</li><li>Demarcate a proper area for cleaning of mobile tankers in</li></ul>	<ul style="list-style-type: none"><li>FSSM plan and design covering all these requirements</li></ul>	TC	TC	NA	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	DBO Contract or

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN	
STP premises, and ensure that the wastewater shall be discharged into STP <ul style="list-style-type: none"> <li>• Provide proper training to the workers, and staff in safe handling of FSSM tasks, provide all necessary personal protection equipment</li> <li>• Ensure proper facilities for workers including showers, wash areas, toilets, drinking water, eating and resting places</li> <li>• Conduct regular health checks</li> <li>• Prepare Health and Safety Plan for FSSM</li> </ul>																
Physical Cultural resource - <b>Encroachment/ damage to protected monuments and chance finds:</b> <ul style="list-style-type: none"> <li>• consult Department of Archaeology and Museums to obtain an expert assessment of the archaeological potential of the site;</li> <li>• consider alternatives if the site is found to be of high risk;</li> <li>• 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</li> <li>• develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved. This should involve: <ul style="list-style-type: none"> <li>a. Having excavation observed by a person with archaeological field training; contractor should employ a person with a formal certification course in archaeology from recognized (such as Institute of Archaeology, ASI, Delhi) during the ground excavation activities</li> <li>b. Conduct awareness training to contractor &amp; supervision staff prior to start of excavation;</li> <li>c. Stopping work immediately to allow further investigation if any finds are suspected; Calling in the ASI if a find is suspected, and taking any action they require to ensure its removal or protection in situ</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• List of ASI/State protected monuments</li> <li>• Chance Finds protocol</li> </ul>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	DBO Contract or/ PIU/ CMSC/ PMCBC
<b>Asbestos cement (AC) pipes in existing water supply system &amp; Other locations: clearing, transfer and disposal; work in narrow streets, and interventions in existing AC pipelines - Health impacts due to air borne asbestos if handled unsafely, cut, drilled or broken into pieces:</b> <ul style="list-style-type: none"> <li>• Develop ACM Management Plan (AMP) that includes identification of hazards, the use of proper safety gear and disposal methods..</li> <li>• (Conduct awareness program on safety during the construction work</li> <li>• Undertake the construction work stretch-wise; excavation, pipe laying and trench refilling should be completed on the same day</li> <li>• (Provide barricades, and deploy security personnel to</li> </ul>	<ul style="list-style-type: none"> <li>• ACM plan covering all these requirements</li> </ul>	TC	NA	TC	TC	TC	TC	NA	TC	TC	TC	TC	NA	NA	NA	DBO Contract or/PIU/ PMCBC/ CMSC

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN	
<p>ensure safe movement of people and also to prevent unnecessary entry and to avoid accidental fall into open trenches</p> <ul style="list-style-type: none"> <li>Identify risk of intervention with existing AC pipes. If there is significant risk, implement the AMP strictly that includes identification of hazards, the use of proper safety gear and disposal methods.</li> <li>Maintain records of AC pipes as per the AMP</li> <li>Refer to the instructions of the Asbestos Expert</li> </ul>																
<p>Asbestos materials in existing PHED campus- Health impacts due to air borne asbestos if handled unsafely, cut, drilled or broken into pieces:</p> <ul style="list-style-type: none"> <li>Conduct risk assessment to determine extent of asbestos materials currently on-site</li> <li>Coordinate and provide support to the asbestos management service provider on the requirement of sampling, testing and disposing existing asbestos materials</li> <li>Ensure the selected area for temporary storage is suitable for safe storage of asbestos materials</li> <li>Incorporate international and national standards considered in designing the temporary storage</li> <li>Ensure that handling and disposal of asbestos materials are carried out by specially trained service provider/s following Government of India requirements, or in their absence, internationally recognized procedures</li> </ul>	<ul style="list-style-type: none"> <li>ACM plan covering all these requirements</li> </ul>	TC	NA	TC	TC	TC	TC	NA	TC	TC	TC	TC	NA	NA	NA	DBO Contract or/PMU
<p><b>Preparation of plans and protocols - Various impacts:</b></p> <ul style="list-style-type: none"> <li>Preparation of waste handling and management plan for SPS sites</li> <li>Prepare traffic management plan</li> <li>Prepare occupational health and safety plan</li> <li>Prepare spoils management plan</li> </ul>	<ul style="list-style-type: none"> <li>Site Specific Environment, Health and Safety plan, covering all these plans</li> </ul>	C	C	C	C	C	C	TC	TC	TC	TC	TC	TC	TC	TC	DBO Contract or CMSC and PMCBC

Table 9 B. Pre-Construction Phase

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MNW	KMN	DID	MKR	LDN	
<p><b>Compliance with environmental subproject selection criteria - Environmental impacts due to subproject:</b></p> <p>Compliance with environmental subproject selection criteria</p>	Compliance with environmental subproject selection criteria	C	C	C	C	C	C	C	C	C	C	C	C	C	C	DBO Contractor, PIU, CMSC/PMCBC
<p><b>Environmental monitoring of baseline conditions of air, noise, water and soil - To establish base line environmental conditions:</b></p> <p>Environmental monitoring through NABL accredited laboratory</p>	Baseline environmental monitoring of ambient air, noise, water and soil conducted	C	C	C	C	C	C	C	C	C	C	C	C	C	C	DBO contractor
<p><b>Legal compliance - Environmental legal noncompliance may attract legal actions Failure to obtain necessary consents Permits, NOCs etc. can result to design revisions and /or</b></p>	List of consents required as per IEE	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	DBO contractor/ PIU/Consultants

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														LDN	Responsibility
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MNW	KMN	DID	MKR			
<b>stoppage of works:</b> <ul style="list-style-type: none"><li>Obtain all consents, clearances (CTE/CTO from RSPCB), permits NOCs etc. before start of construction works</li><li>Ensure that all necessary approvals for construction to be obtained by contractor are in place before start of construction</li><li>Following consents are required-</li><li>Tree cutting-local authority</li><li>Storage, handling and transport of hazardous materials- RSPCB</li><li>Sand mining, quarries, borrow areas- Department of mines and Geology</li><li>Traffic diversion/road cutting- local authority, traffic police</li><li>Acknowledge in writing and provide report on compliance all obtained consents, permits, clearance, NOCs etc. Include in detailed design drawings and documents all conditions and provisions; if necessary</li></ul>																	
<b>Utilities - Telephone lines, electric poles and wires, water lines within proposed project area:</b> <ul style="list-style-type: none"><li>Identify and include locations and operators of these utilities in the detailed design documents to prevent unnecessary disruption of services during construction phase; and</li><li>Require construction contractors to prepare a contingency plan to include actions to be taken in case of unintentional interruption of services.</li><li>Require contractors to prepare spoils management plan</li></ul>	<ul style="list-style-type: none"><li>List of affected utilities</li><li>Utilities contingency plan</li><li>Spoil management plan</li></ul>	C	C	C	C	C	C	TC	TC	TC	TC	TC	TC	TC	TC	TC	DBO Contractor in collaboration with PIU and with approval of PMU
<b>Social and Cultural Resources - Ground disturbance can uncover and damage archaeological and historical remains:</b> Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognized, and measures are taken to ensure they are protected and conserved	Chance finds protocol	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	DBO Contractor/CMSC and PIU
<b>Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas.- Disruption to traffic flow and sensitive receptors:</b> <ul style="list-style-type: none"><li>Prioritize areas within or nearest possible vacant space in the project location;</li><li>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;</li><li>Do not consider residential areas;</li><li>Take extreme care in selecting sites to avoid direct disposal to water body which will inconvenience the community.</li><li>For excess spoil disposal, ensure</li></ul>	<ul style="list-style-type: none"><li>Location plan of Construction work camps, hot mix plants, stockpile areas, storage areas, and disposal areas</li><li>Spoil management plan</li></ul>	C	C	C	C	C	C	TC	TC	TC	TC	TC	TC	TC	TC	TC	DBO Contractor/CMSC and PIU



Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MNW	KMN	DID	MKR	LDN	
<ul style="list-style-type: none"> <li>o site shall be selected preferably from barren, infertile lands. In case agricultural land needs to be selected, written consent from landowners (not lessees) will be obtained;</li> <li>(b) debris disposal site shall be at least 200 m away from surface water bodies;</li> <li>(c) no residential areas shall be located within 50 m downwind side of the site; and</li> <li>(d) site is minimum 250 m away from sensitive locations like settlements, ponds/lakes or other water bodies.</li> </ul>																
<b>Sources of Materials - Extraction of materials can disrupt natural land contours and vegetation resulting in accelerated erosion, disturbance in natural drainage patterns, ponding and water logging, and water pollution:</b> <ul style="list-style-type: none"> <li>• Prioritize sites already permitted by the Department of Mines and Geology</li> <li>• 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 PMU and</li> <li>• If additional quarries will be required after construction is started, inform construction contractor to obtain a written approval from PIU.</li> </ul>	Permission from Govt. for procurement of construction materials	C	C	C	C	C	C	C	C	C	C	C	C	C	TC	DBO Contractor to prepare list of approved quarry sites and sources of materials with the approval of PIU
<b>Consents, permits, clearances, NOCs, etc.- Failure to obtain necessary consents, permits, NOCs, etc. can result to design revisions and/or stoppage of works:</b> <ul style="list-style-type: none"> <li>• Obtain all necessary consents (including CTE for STP from RSPCB), permits, clearance, NOCs, etc. prior to award of civil works. Following consents are required-</li> <li>• Tree cutting- local authority</li> <li>• Storage, handling and transport of hazardous materials- RPCB</li> <li>• Sand mining, quarries, borrow areas- Department of mines and Geology</li> <li>• Traffic diversion/road cutting- local authority, traffic police</li> <li>• Ensure that all necessary approvals for construction to be obtained by contractor are in place before start of construction</li> <li>• Acknowledge in writing and provide report on compliance all obtained consents, permits, clearance, NOCs, etc.</li> <li>• Include in detailed design drawings and documents all conditions and provisions if necessary</li> </ul>	List of consents required as per IEE	BC	BC	NA	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	DBO Contractor and PIU and Consultant
<b>Asbestos materials in existing PHED campus &amp; other Locations - Health impacts due to air borne asbestos if handled unsafely, cut, drilled or broken into pieces:</b> <ul style="list-style-type: none"> <li>• Coordinate and provide support to the asbestos</li> </ul>	ACM plan covering all these requirements	NA	NA	BC	TC	TC	TC	NA	TC	TC	NA	TC	NA	NA	NA	DBO Contractor/PIU/CMSC

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTP	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MNW	KMN	DID	MKR	LDN	
management service provider on the requirement of sampling, testing and disposing existing asbestos material • Coordinate and implement the the construction of the temporary storage per specification of the asbestos management service provider • Provide support to the asbestos management service provider supervising the removal, transport, disposal and documentation of the asbestos materials • Conduct awareness workshops and trainings to stakeholders on the risks of the asbestos materials • Maintain records of asbestos materials inventory • Ensure that handling and disposal of asbestos materials are carried out by specially trained service provider/s following Government of India requirements, or in their absence, internationally recognized procedures																

Table 9 C: Construction Phase

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN	
<b>EMP Implementation - Irreversible impact to the environment, workers, and community:</b> • Contractor is required to depute a qualified and experienced EHS officer/supervisor for monitoring of EMP implementation measures Project manager and all key workers will be required to undergo EMP implementation including spoils management, Standard operating procedures (SOP) for construction works; occupational health and safety (OH and S), core labor laws, applicable environmental laws, etc.	• EHS officer deputed by contractor • Training for project manager and other key workers conducted in pre-construction phase	C	C	C	C	C	C	C	C	C	C	C	C	C	C	Construction Contractor/ PIU/ PMCB/ CMSC
<b>Air Quality - Emissions from construction vehicles, equipment, and machinery used for installation of pipelines resulting to dusts and increase in concentration of vehicle-related pollutants such as carbon monoxide, sulfur oxides, particulate matter, nitrous oxides, and hydrocarbons:</b> • Plan the work sites properly, and demarcate the sites for stockpiling of, soils, gravel, and other construction materials away from the traffic, vehicle, general worker movement to avoid disturbance of loose materials • Damp down exposed soil and any stockpiled material on site by water sprinkling; • Use tarpaulins to cover sand and other loose material when transported by trucks; • Clean wheels and undercarriage of haul trucks	• Site plan of stockyard for soil, gravel and other construction materials • Covered transport of loose materials • PUC of vehicles • CTE/CTO of batching plant, hot mix plant, crushers and DG sets • Construction raw materials from authorized sources • Air quality monitoring conducted	C	C	C	C	C	C	C	BC	TC	TC	TC	TC	TC	TC	DBO Contractor/ PIU/ CMSC

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility	
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN		
<p>prior to leaving construction site</p> <ul style="list-style-type: none"><li>• Don't allow access in the work area except workers to limit soil disturbance and prevent access by barricading and security personnel</li><li>• Fit all heavy equipment and machinery with air pollution control devices which are operating correctly</li><li>• contractor's vehicles and equipment should compulsorily have PUC and submit to PIU before deployment at site</li><li>• Obtain, CTE and CTO for batching plant, hot mix plant, crushers and DG set etc. if specifically established for this project.</li><li>• If contractor procures any material (such as ready mix concrete, asphalt/macadam, aggregates etc.,) from third party agencies, contractor shall ensure that such agencies have all necessary clearances / permissions as required under the law; these include CTE/CTO from RSPCB, environmental clearance, etc.; contractor shall collect the copy of these certificates and submit to PIU; PIU will approve the source only after all the certificates are submitted</li><li>• Conduct air quality monitoring according to the Environmental Management Plan (EMP).</li></ul>																	
<p><b>Surface water quality - Works in rains/ Mobilization of settled silt materials, and chemical contamination from fuels and lubricants during installation of pipelines can contaminate nearby surface water quality:</b></p> <ul style="list-style-type: none"><li>• Prepare and implement a spoils management plan</li><li>• Avoid stockpiling of earth fill especially during the monsoon season unless covered by tarpaulins or plastic sheets;</li><li>• Prioritize re-use of excess spoils and materials in the construction works. If spoils will be disposed, consult with PIU on designated disposal areas;</li><li>• Inspect all the drainage at construction site/construction camp/labor camp etc. and clear all the drainage lines so that no water stagnation/flooding may occur during heavy rainfall</li><li>• As for a possible avoid trench works and excavation works (pipe laying) during monsoon season to avoid any water logging and accident due to it</li><li>• If open trenches are not avoidable during monsoon, keep ready all the mitigations measures to avoid water logging such as dewatering pumps and sufficient pipes, traffic assistance, barricades etc.</li><li>• Inspect and verify all the emergency measures</li></ul>	<ul style="list-style-type: none"><li>• Spoils management plan</li><li>• Stockpiling of soils</li><li>• Inspection of drainage pattern at stockyard</li><li>• Monsoon preparedness plan</li><li>• Emergency preparedness plan</li></ul>	C	C	C	C	C	C	TC	TC	TC	TC	TC	TC	TC	TC	TC	DBO Contractor/ PIU/ CMSC/ PMCBC

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility	
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN		
and emergency control system before start of monsoon, keep the emergency response committee on high alert during monsoon/heavy rain fall <ul style="list-style-type: none"><li>Install temporary silt traps or sedimentation basins along the drainage leading to the water bodies;</li><li>Place storage areas for fuels and lubricants away from any drainage leading to water bodies;</li><li>Dispose any wastes generated by construction activities in designated sites; and</li><li>Conduct surface quality inspection according to the Environmental Management Plan (EMP).</li></ul>																	
<b>Surface water quality - Degradation of water quality of Angore, Kalka Ji and Bhainsa Singh dams due to intake works:</b> <ul style="list-style-type: none"><li>Select a construction methodology that is least disturbing, and appropriate for the in-situ soil condition, and able to complete the construction work prior to onset of monsoon</li><li>Schedule the construction works during low water level period – late winter months to pre monsoon (February – June/July); ensure that works are completed during the same period to prior to onset of monsoon;</li><li>Erect temporary barriers to form enclosed construction area with least disturbance</li><li>Allow adequate time to settle the distributed solids to prior to pumping out water; only clear/clarified water shall be pumped back into the reservoir; any silt laden water should be pumped to a silt pond</li><li>Avoid/minimize use of fuels, chemicals and lubricants; ensure no spillage</li><li>Clear the work site after completion at least to pre project conditions, ensure that there are no materials, debris, spills etc., and prior to removal of temporary barriers / coffer dam</li><li>Implement work site safety at works in water bodies</li></ul>	<ul style="list-style-type: none"><li>Construction work plan</li><li>Work schedule</li><li>Safety arrangements</li><li>Water quality monitoring</li></ul>	NA	NA	NA	NA	TC	TC	NA	TC	NA	NA	NA	NA	NA	NA	NA	DBO contractor/ PIU/ CMSC/ PMCBC
<b>Noise Levels - Increase in noise level due to earth-moving and excavation equipment, and the transportation of equipment, materials, and people:</b> <ul style="list-style-type: none"><li>Plan activities in consultation with PIU/Consultant so that activities with the greatest potential to generate noise are conducted during periods of the day which will result in least disturbance;</li><li>Horns should not be used unless it is necessary to warn other road users or animals of the vehicle's approach;</li><li>Minimize noise from construction equipment by using vehicle silencers, fitting jackhammers with noise-reducing mufflers, and portable street</li></ul>	<ul style="list-style-type: none"><li>Use of PPEs to reduce impact of sound on workers</li><li>Checking of vehicle silencers, noise-reducing mufflers</li><li>Noise quality monitoring at sites</li></ul>	C	C	C	C	C	C	C	C	C	C	C	C	C	TC	DBO Contractor/ PIU/ CMSC	

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														LDN	Responsibility
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR			
barriers the sound impact to surrounding sensitive receptor; and <ul style="list-style-type: none"><li>Maintain maximum sound levels not exceeding 80 decibels (dB A) when measured at a distance of 10 m or more from the vehicle/s.</li><li>Periodical monitoring of noise quality as per EMP</li></ul>																	
<b>Landscape and aesthetics - Impacts due to excess excavated earth, excess construction materials, and solid waste such as removed concrete, wood, packaging materials, empty containers, spoils, oils, lubricants, and other similar items:</b> <ul style="list-style-type: none"><li>Prepare and implement spoils management plan</li><li>Avoid stockpiling of excess excavated soils;</li><li>Coordinate with ULB/PIU for beneficial uses of excess excavated soils or immediately dispose to designated areas;</li><li>Recover used oil and lubricants and reuse or remove from the sites;</li><li>Manage solid waste according to the following preference hierarchy: reuse, recycling and disposal to designated areas;</li><li>Remove all wreckage, rubbish, or temporary structures which are no longer required; and</li><li>Request PIU to report in writing that the necessary environmental restoration work has been adequately performed before acceptance of work</li></ul>	<ul style="list-style-type: none"><li>Spoils management plan</li><li>Solid waste management plan</li><li>Site observations</li></ul>	C	C	C	C	C	C	BC	BC	TC	TC	BC	BC	BC	TC	DBO Contractor/PIU/ CMSC	
<b>Existing Infrastructure and Facilities - Disruption of service and damage to existing infrastructure at specified project location:</b> <ul style="list-style-type: none"><li>Obtain from PIU the list of affected utilities and operators if any;</li><li>Prepare a contingency plan to include actions to be done in case of unintentional interruption of service</li></ul>	<ul style="list-style-type: none"><li>List of affected utilities and contingency plan to restore if damaged</li><li>Site observations</li></ul>	C	C	C	C	C	C	C	C	C	C	C	C	C	TC	DBO Contractor/PIU/ CMSC	
<b>Ecological Resources – Terrestrial - Loss of vegetation and tree cover:</b> <ul style="list-style-type: none"><li>Minimize removal of vegetation and disallow cutting of trees;</li><li>If tree-removal will be required, obtain tree-cutting permit from the concerned department; and</li><li>Plant 3 native trees for every one that is removed</li></ul>	<ul style="list-style-type: none"><li>Tree cutting list</li><li>Tree cutting permission</li><li>Compensatory plantation</li></ul>	C	C	C	C	C	C	C	C	BC	BC	BC	BC	BC	TC	DBO Contractor/PIU/ CMSC	
<b>Land Use- Environmental Issues due to land use change:</b> The impact due to change in land use will be negligible due to this project	Land documents of sites	C	C	C	C	C	C	C	C	C	C	C	C	C	TC	DBO Contractor/PIU/ CMSC	
<b>Accessibility - Traffic problems and conflicts near project locations and haul road:</b> <ul style="list-style-type: none"><li>Plan sewer line works to minimize traffic disturbance / blockades; as the sewer lines are to be laid in all the roads and streets in the town,</li></ul>	<ul style="list-style-type: none"><li>Work Plan</li><li>Traffic Management Plan</li><li>Site observations</li><li>Project information</li></ul>	C	C	C	C	C	C	BC	BC	BC	BC	BC	BC	BC	TC	DBO Contractor/PIU/ CMSC	

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility	
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN		
<p>work planning is crucial to minimize the inconvenience to public.</p> <ul style="list-style-type: none"><li>• Prepare and implement a Traffic Management Plan</li><li>• Duly consider and select sections for trenchless method of pipe laying based on traffic conditions</li><li>• Plan transportation routes so that heavy vehicles do not use narrow local roads, except in the immediate vicinity of delivery sites;</li><li>• Schedule transport and hauling activities during non-peak hours;</li><li>• Locate entry and exit points in areas where there is low potential for traffic congestion;</li><li>• Keep the site free from all unnecessary obstructions;</li><li>• (Drive vehicles in a considerate manner;</li><li>• Coordinate with Traffic Police for temporary road diversions and with for provision of traffic aids if transportation activities cannot be avoided during peak hours;</li><li>• Notify affected sensitive receptors 1-week in advance by providing sign boards informing nature and duration of construction works and contact numbers for concerns/complaints.</li><li>• Plan and execute the work in such a way that the period of disturbance/ loss of access is minimum.</li><li>• Provide pedestrian access in all the locations until normalcy is restored. Provide wooden/metal planks over the open trenches at each house to maintain the access</li></ul>	<p>boards</p> <ul style="list-style-type: none"><li>• Prior public consultations by contractor's team</li><li>• Accessibility provided during works</li></ul>																
<p><b>Socio-Economic – Income.- Impede the access of residents and customers to nearby shops:</b></p> <ul style="list-style-type: none"><li>• Prepare and implement spoils management plan</li><li>• Contractor to Implement RP and to follow mitigation measures prescribed</li><li>• Leave spaces for access between mounds of soil;</li><li>• Provide walkways and metal sheets where required for people;</li><li>• Increase workforce in front of critical areas such as institutions, place of worship, business establishment, hospitals, and schools;</li><li>• Consult businesses and institutions regarding operating hours and factoring this in work schedules; and</li><li>• Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.</li></ul>	<ul style="list-style-type: none"><li>• Spoil management plan</li><li>• Mitigation measures as per RP and IEE</li><li>• Prior public consultations by contractor's team with shopkeepers</li><li>• Project information boards</li></ul>	C	C	C	C	C	C	BC	BC	BC	BC	BC	BC	BC	BC	TC	DBO Contractor/ PIU/ CMSC
<p><b>Socio-Economic - Employment - Generation of temporary employment and increase in local revenue:</b></p> <ul style="list-style-type: none"><li>• Employ local labour force, or to the maximum extent possible</li><li>• Comply with labor laws</li></ul>	Labour records	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	TC	DBO Contractor	

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)													Responsibility	
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR		LDN
<b>Occupational Health and Safety - Occupational hazards which can arise during work:</b> <ul style="list-style-type: none"><li>• Comply with all national, state and local core labor laws</li><li>• Following best practice health and safety guidelines: IFC’s General EHS Guidelines<sup>i4</sup> and Sector Specific (Sanitation) Guidelines</li><li>• Develop and implement site-specific occupational health and safety (OH and S) Plan which will include measures such as:<ul style="list-style-type: none"><li>a) excluding public from the site;</li><li>(b) ensuring all workers are provided with and use personal protective equipment like helmet, gumboot, safety belt, gloves, nose musk and ear plugs; (c) OH and S Training for all site personnel;</li><li>(d) documented procedures to be followed for all site activities; and</li><li>(e) documentation of work-related accidents;</li></ul></li><li>• Conduct work in confine spaces, trenches, and at height with suitable precautions and using standards and safe construction methods; do not adopt adhoc methods; all trenches deeper than 1.5 m shall be provided with safety shoring/braces; and avoid open cutting method for trenches deeper than 3.5 m by adopting trenchless technology</li><li>• Develop site specific OHS plan for sewage pumping stations works; SPS sites are located in low lying areas with accumulated waste and harmful working conditions</li><li>• Ensure that qualified first-aid can be provided at all times. Equipped first-aid stations shall be easily accessible throughout the site;</li><li>• Provide medical insurance coverage for workers;</li><li>• Secure all installations from unauthorized intrusion and accident risks;</li><li>• The project area experiences extreme temperature during summer months of April and May, which may affect the health of workers engaged in construction work. Contractor should take necessary measures during summers including the following:<ul style="list-style-type: none"><li>o work schedule should be adjusted to avoid peak temperature hours (12 – 3 PM); (b) provide appropriate shade near the workplace; allow periodic resting and provide adequate water, and</li><li>(c) provide necessary medicine and facilities to take care of dehydration related health issues</li></ul></li><li>• Provide supplies of potable drinking water;</li><li>• Provide clean eating areas where workers are not exposed to hazardous or noxious substances;</li></ul>	<ul style="list-style-type: none"><li>• Site specific EHS Plan</li><li>• Work plans</li><li>• Use of PPEs by workers</li><li>• Safety signage and information boards</li><li>• Drinking water and rest sheds</li><li>• First aid facilities at site</li><li>• Site protection and barricades</li><li>• Medical and health insurance of workers</li><li>• Health check-up records of workers</li><li>• Safety trainings/ orientations records</li><li>• Solid waste management</li><li>• Site observations</li></ul>	C	C	C	C	C	C	BC	BC	BC	BC	BC	BC	BC	TC	DBO Contractor

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)													LDN	Responsibility
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR		
<ul style="list-style-type: none"><li>• 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;</li><li>• 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;</li><li>• Ensure the visibility of workers through their use of high visibility vests when working in or walking through heavy equipment operating areas;</li><li>• Ensure moving equipment is outfitted with audible back-up alarms;</li><li>• 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;</li><li>• Disallow worker exposure to noise level greater than 85 dB A for a duration of more than 8 hours per day without hearing protection. The use of hearing protection shall be enforced actively.</li><li>• Conduct regular health check-ups for workers</li><li>• Provide periodical awareness camps and special trainings for workers for health issues and risks in construction sites</li><li>• Provide proper solid and liquid waste management system in workers' campsite, separate from spoils and debris disposal, as their presence can add to existing waste volume at the project sites.</li></ul>																
<b>Occupational and community health and safety -Hazardous working conditions due to presence of asbestos containing material / AC Pipes in work sites: clearing, transfer and disposal; work in narrow streets, and interventions in existing AC pipelines</b> <b>Health impacts due to air borne asbestos if handled unsafely, cut, drilled or broken into pieces:</b> <ul style="list-style-type: none"><li>• Implement the ACM Management Plan (AMP) that includes identification of hazards, the use of proper safety gear and disposal methods.</li><li>• Conduct awareness program on safety during the construction work</li><li>• Undertake the construction work stretch-wise; excavation, pipe laying and trench refilling should be completed on the same day</li><li>• Provide barricades, and deploy security personnel to ensure safe movement of people and also to</li></ul>	<ul style="list-style-type: none"><li>• Site specific EHS Plan</li><li>• Work plans</li><li>• Use of PPEs by workers</li><li>• Safety signage and information boards</li><li>• Drinking water and rest sheds</li><li>• First aid facilities at site</li><li>• Site protection and barricades</li><li>• Medical and health insurance of workers</li><li>• Health check-up records of workers</li><li>• Safety trainings/ orientations records</li><li>• Solid waste management</li></ul>	NA	NA	BC	BC	BC	BC	NA	BC	BC	BC	BC	NA	NA	NA	DBO Contractor/ PIU/ CMSC



Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)															Responsibility	
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN			
prevent unnecessary entry and to avoid accidental fall into open trenches • Identify risk of intervention with existing AC pipes. If there is significant risk, implement the AMP strictly that includes identification of hazards, the use of proper safety gear and disposal methods. • Appropriate actions as defined in the Asbestos Management Plan will have to be adhered to • Maintain records of AC pipes as per the AMP	• Site observations																	
<b>Community Health and Safety.- Traffic accidents and vehicle collision with pedestrians during material and waste transportation:</b> • Trench excavation and pipeline works shall be conducted in a safe manner; if the allowing public movement along the work sites (pedestrians or vehicles as the case may be) is likely to cause safety risks, movement should be blocked temporarily and work shall be conducted; in such areas, conducting night work or working in small stretches to avoid blockage of traffic/movement no more than few hours in due consultation with the local community and ULB shall be planned • All trenches deeper than 1.5 m shall be provided with safety shoring/braces; and avoid open cutting method for trenches deeper than 3.5 m by adopting trenchless technology • Survey the surrounding vulnerable buildings for likely issues in structural stability / differential settlement during the excavation works • Provide prior information to the local people about the • Plan routes to avoid times of peak-pedestrian activities. • Liaise with PIU/ULB in identifying high-risk areas on route cards/maps. • Maintain regularly the vehicles and use of manufacturer-approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure. • Provide road signs and flag persons to warn of on-going trenching activities	• Work plan • Barricades • Trench safety • Public consultation records with nearby residents • Safety signage and project information boards	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	TC	DBO Contractor CMSC		
<b>Safety of sensitive groups (children, elders etc.) and other pedestrians in narrow streets - Trench excavation in narrow streets will pose high risk to children and elders in the locality:</b> • Provide prior information to the local people about the nature and duration of work • Conduct awareness program on safety during the construction work • Undertake the construction work stretch-wise; excavation, pipe laying and trench refilling should be completed on the same day • Provide barricades, and deploy security personnel to ensure safe movement of people	• Work plan • Barricades • Trench safety • Public consultation records with nearby residents • Safety signage and project information boards	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	TC	DBO Contractor		

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN	
and also to prevent unnecessary entry and to avoid accidental fall into open trenches																
<b>Night Works - Public inconvenience due to traffic diversion, disturbance due to excessive noise and access loss, occupational health and safety issues etc:</b> <ul style="list-style-type: none"> <li>• Prepare a night work protocol and obtain prior approval from PIU, and strictly implement and report on implementation of protocol during the workers;</li> <li>• Contractors should have handheld noise level meter for measurement of noise during night hours</li> <li>• Contractors should have handheld lux meter for the measurement of illumination during night hours</li> <li>• Preferably electrical connection is available for running equipment otherwise soundproof/super silent Diesel Generator set should be available</li> <li>• Sound level should not increase as prescribe by CPCB</li> <li>• Illumination should be as prescribed in protocol</li> <li>• As far as possible ready-mix concrete from batching plant to be used, otherwise the concrete should be prepared away from residential areas and brought to the site</li> <li>• All the noisy activities like hammering, cutting, crushing, running of heavy equipment should be done in daytime and avoided in nighttime</li> <li>• Workers engaged in night works should have adequate rest/sleep in daytime before start of night works</li> <li>• Worker engaged for night works should have previous experience of night works and should be physically fit for such works including clear vision in night.</li> <li>• All the necessary provisions of traffic aids such as traffic signals, road signage, barricades, cautions boards, traffic diversion boards etc. should be available with fluorescent/retro-reflective arrangements</li> <li>• Workers should be trained before start of night works about risks and hazards of night works and their mitigation measures and should be provided all the protective aids (PPEs) including fluorescent/retro-reflective vests</li> <li>• Horns should not be permitted by equipment and vehicles</li> <li>• Workers should not shout and create noise</li> <li>• First aid and emergency vehicles should be available at site</li> <li>• Emergency preparedness plan should be operative during night works</li> <li>• Old persons and pregnant women and women</li> </ul>	<ul style="list-style-type: none"> <li>• Night work plan approval from PIU</li> <li>• Noise and illumination monitoring during night works</li> <li>• Public consultations before night works</li> <li>• Workers records</li> <li>• First aid and emergency plans for night works</li> <li>• Nearby sensitive receptors</li> <li>• Site restoration after night works</li> </ul>	TC*	TC*	TC*	TC*	TC*	TC*	TC*	TC*	TC*	TC*	TC*	TC*	TC*	TC	TC*= to be complied when night works will be required DBO Contractor

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility	
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN		
having small kids should not work in night-time <ul style="list-style-type: none"><li>All the vehicles and equipment being used at night works should have adequate type of silencers/enclosures/mufflers to reduce noise</li><li>All the vehicles should be checked for working head lamps, tail lamps, inner lights etc. before start of night works</li><li>PIU/DSC site engineers and contractor’s safety personnel should closely monitor the safety of works continuously and noise and illumination levels on hourly basis and maintain photographic and video graphic records as well as register the observations.</li><li>Night works should be stopped early in the morning at least one hour before start of pedestrian/traffic movement</li><li>After completion of night works all the site should be cleaned and maintained obstruction free for daytime movement of vehicles and pedestrians</li><li>Drivers and workers should be alert and responsive during night works</li><li>All the wages to workers working in night hours should be as per the applicable labour acts</li><li>Avoid any nuisance which may create problems to nearby habitants and work peacefully during night hours</li><li>Night works should not be conducted near hospitals and during peak seasons such as peak tourist season, students’ exam times etc.</li></ul>																	
<b>Work in narrow streets - will pose high risk to children and elders in the locality:</b> <ul style="list-style-type: none"><li>Conduct awareness program on safety during the construction work</li><li>Undertake the construction work stretch-wise; excavation, pipe laying and trench refilling should be completed on the same day</li><li>Provide barricades, and deploy security personnel to ensure safe movement of people and also to prevent unnecessary entry and to avoid accidental fall into open trenches</li><li>Trench excavation and pipeline works shall be conducted in a safe manner; if the allowing public movement along the work sites (pedestrians or vehicles as the case may be) is likely to cause safety risks, movement should be blocked temporarily and work shall be conducted; in such areas, conducting night work or working in small stretches to avoid blockage of traffic/movement no more than few hours in due consultation with the local community and ULB shall be planned</li></ul>	<ul style="list-style-type: none"><li>Work plan</li><li>Barricades</li><li>Trench safety</li><li>Public consultation records with nearby residents</li><li>Safety signage and project information boards</li></ul>	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	TC	DBO Contractor
<b>Construction camps and worker facilities - Temporary air and noise pollution from machine</b>	<ul style="list-style-type: none"><li>Approval of site from PIU</li></ul>	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	TC	DBO Contractor

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN	
<b>operation, water pollution from storage and use of fuels, oils, solvents, and lubricants. Unsanitary and poor living conditions for workers:</b> <ul style="list-style-type: none"><li>• Consult with PIU before locating project offices, sheds, and construction plants;</li><li>• Minimize removal of vegetation and disallow cutting of trees;</li><li>• Provide drinking water, water for other uses, and sanitation facilities for employees;</li><li>• Provided temporary rest and eating area at all work sites</li><li>• Ensure conditions of livability at work camps are always maintained at the highest standards possible; living quarters and construction camps shall be provided with standard materials (as far as possible to use portable ready to fit-in reusable cabins with proper ventilation); thatched huts, and facilities constructed with materials like GI sheets, tarpaulins, etc., shall not be used as accommodation for workers; accommodation shall meet the IFC standards for workers accommodation which include: provision of safe housing, availability of electricity, plumbing, water and sanitation, adequate fire protection and dormitory/room facilities; accommodation shall be in the range from 10 to 12.5 cubic meters (volume) or 4 to 5.5 square meters (surface) per worker, a minimum ceiling height of 2.10 meters; a reasonable number of workers are allowed to share the same room – (standards range from 2 to 8 workers); workers with accompanying families shall be provided with a proper and safe accommodation</li><li>• Train employees in the storage and handling of materials which can potentially cause soil contamination;</li><li>• Recover used oil and lubricants and reuse or remove from the site;</li><li>• Manage solid waste according to the preference hierarchy: reuse, recycling and disposal to designated areas;</li><li>• Ensure unauthorized persons specially children are not allowed in any worksite at any given time.</li></ul>	<ul style="list-style-type: none"><li>• Tree cutting for camps</li><li>• Facilities for workers e.g. ventilated rooms, first aid, crèche, cooking areas, toilet and washing facility</li><li>• Solid waste management at camps</li><li>• Sanitation facilities and dust bins</li><li>• Signage</li></ul>															
<b>Social/Physical and Cultural Resources - Risk of archaeological chance finds:</b> <ul style="list-style-type: none"><li>• Strictly follow the protocol for chance finds in any excavation work;</li><li>• Create awareness among the workers, supervisors and engineers about the chance finds during excavation work</li><li>• Stop work immediately to allow further investigation if any finds are suspected;</li></ul>	<ul style="list-style-type: none"><li>• Chance finds protocol given in IEE</li><li>• Training of workers</li><li>• Consultation with Archaeological department</li></ul>	NA	NA	NA	NA	NA	NA	NA	NA	BC	BC	NA	NA	NA	NA	DBO Contractor

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Status of Compliance (BC: Being Complied, TC: To be Complied, C: Complied, NA: Not Applicable)														Responsibility
		RTG	FTH	LXM	SRD	SHR	ABR	PRT	BNS	KTR	MND	KMN	DID	MKR	LDN	
<ul style="list-style-type: none"><li>Inform local Archeological Department if a find is suspected and take any action, they require to ensure its removal or protection in situ</li></ul>																
<b>Monsoon preparedness - Disruption of utilities and water logging in trenches:</b> <ul style="list-style-type: none"><li>As for a possible avoid trench works and excavation works (pipe laying) during monsoon season to avoid any water logging and accident due to it</li><li>if open trenches are not avoidable during monsoon, keep ready all the mitigations measures to avoid water logging such as dewatering pumps and sufficient pipes, traffic assistance, barricades etc.</li><li>keep emergency response system ready before monsoon/heavy rain fall</li></ul>	<ul style="list-style-type: none"><li>Monsoon preparedness plan</li><li>Emergency response plan</li></ul>	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	TC	DBO contractor
<b>Submission of EMP implementation report - Unsatisfactory compliance to EMP:</b> <ul style="list-style-type: none"><li>Appointment of supervisor to ensure EMP implementation</li><li>Timely submission of monitoring reports including pictures</li></ul>	<ul style="list-style-type: none"><li>Appointment of EHS officer</li><li>Regular submission of reports</li></ul>	C	C	C	C	C	C	C	C	C	C	C	C	C	TC	DBO Contractor
<b>Post-construction clean-up - Damage due to debris, spoils, excess construction materials:</b> <ul style="list-style-type: none"><li>Remove all spoils wreckage, rubbish, or temporary structures (such as buildings, shelters, and latrines) which are no longer required; and</li><li>All excavated roads shall be reinstated to original condition.</li><li>All disrupted utilities restored</li><li>All affected structures rehabilitated/compensated</li><li>The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc. and these shall be cleaned up.</li><li>All hardened surfaces within the construction camp area shall be ripped, all imported materials removed, and the area shall be top soiled and re-grassed using the guidelines set out in the re-vegetation specification that forms part of this document.</li><li>The contractor must arrange the cancellation of all temporary services.</li><li>Request PIU to report in writing that worksites and camps have been vacated and restored to pre- project conditions before acceptance of work.</li></ul>	<ul style="list-style-type: none"><li>Site clearance and cleaning</li><li>Road and utilities restoration</li><li>Restoration of site as previous conditions</li></ul>	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC	DBO Contractor

**Table-9 D: Town Specific EMP Compliance Status of All Sub-projects under RSTDSP**

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Compliance Status	Responsibility
<b>Design Phase</b>			
<b>Laxmangarh</b>			
<b>Location impacts of designed components - Nearby community may be affected due to increased pollution during construction and operation:</b> Sites should be selected so that nearby community may have no or minimum impact due to proposed works	<ul style="list-style-type: none"> <li>Site locations and lay out plan</li> <li>Mitigation measures to reduce impacts during construction works</li> </ul>	C	DBO Contractor/PIU
<b>Abu Road</b>			
<b>STP - Interference with cultural activities (crematorium near discharge point): Abu Road</b> Locate discharge point of STP-1 at Santpur on the downstream of crematorium, and comfortably away from the river section used for rituals / bathing; consult with local community to finalize location	Location of discharge point	TC	DBO Contractor / PMCBC/CMSC/PIU
<b>Intake in Bhaisa Singh Dam (Abu Road) and - Water quality and ecological impacts:</b> <ul style="list-style-type: none"> <li>Do not utilize the dead storage for supply; ensure that dead storage is available in the dam all times</li> <li>Design inlet of intake pipe in the dam with appropriate screen to avoid entry of aquatic organisms into inlet</li> <li>Select a construction methodology that is least disturbing, and appropriate for the in-situ soil condition, and able to complete the construction work prior to onset of monsoon</li> <li>Schedule the construction works during low water level period – late winter months to pre monsoon (February – June/July); ensure that works are completed during the same period to prior to onset of monsoon;</li> <li>Erect temporary barriers to form enclosed construction area with least disturbance</li> <li>Allow adequate time to settle the distributed solids to prior to pumping out water; only clear/clarified water shall be pumped back into the reservoir; any silt laden water should be pumped to a silt pond</li> <li>Avoid/minimize use of fuels, chemicals and lubricants; ensure no spillage</li> </ul>	<ul style="list-style-type: none"> <li>Intake design</li> <li>Clearance for abstraction of raw water from dam</li> <li>Screen at inlet of intake to avoid entry of aquatic organisms</li> <li>Construction design of intake</li> <li>Construction schedule</li> <li>Safety measures at intake works</li> </ul>	TC Intake Design Under Review	DBO Contractor / PMCBC/CMSC/PIU

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Compliance Status	Responsibility
<ul style="list-style-type: none"> <li>Clear the work site after completion at least to pre project conditions, ensure that there are no materials, debris, spills etc., and prior to removal of temporary barriers / coffer dam</li> </ul> <p>Implement work site safety at works in water body</p>			
<p><b>All work sites- Physical cultural resources and chance finds:</b> Ensure that worksites are not located in archeologically sensitive areas; liaise and reconfirm with local Archeological Department during detailed design phase;</p> <p>(ii) Create awareness among the workers, supervisors and engineers about the chance finds during excavation work;</p> <p>(iii) Stop work immediately to allow further investigation if any finds are suspected;</p> <p>(iv) Inform local Archeological Department / Museum office if a find is suspected and take any action, they require to ensure its removal or protection in situ</p>	<ul style="list-style-type: none"> <li>Records of trainings</li> <li>Chance Finds protocol</li> </ul>	BC	DBO Contractor / PIU
<p><b>Critical habitat and protected species</b></p> <ul style="list-style-type: none"> <li>Loss of habitat and breeding trees</li> <li>Change in food availability – carcasses</li> <li>Induced impacts of improved water supply leading to increased agriculture and cattle rearing in location which in turns increases local use of chemicals harmful to vultures</li> <li>Disturbance of vultures at feeding locations during construction phase:</li> </ul> <p>Before starting any construction activities, conduct pre-construction survey for presence of this species.</p> <ul style="list-style-type: none"> <li>If these species are present, the findings should be recorded and reported. No disturbance or works on the site should start/continue until PIU issues clearance to proceed.</li> <li>PIU should coordinate with the Forestry Department to coordinate the translocation of the affected species.</li> <li>If these vulture species are present, the design shall ensure that breeding areas are not directly affected by the proposed pipeline routes and permanent infrastructure. Changes in route alignment, timing of works and avoidance of tree felling</li> </ul>	<ul style="list-style-type: none"> <li>Survey of vultures and other species dependent on the available food in the work areas</li> <li>Bio-diversity assessment</li> </ul>	TC	PIU / CMSC with the assistance of PMCBC Bio-diversity expert and DBO contractor

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Compliance Status	Responsibility
<p>will reduce risk and impacts</p> <ul style="list-style-type: none"> <li>Construction work shall be timed to avoid the breeding season if specimens of the these birds are found to be using the AoA during the breeding season</li> </ul> <p><i>Monitoring.</i> If such species are present the project shall take the opportunity to monitor vulture activities within the project area and develop a local community awareness program to support conservation of the species</p>			
<p><b>Direct harm or killing of individuals during construction earthworks, tracking of vehicles and equipment across burrows.</b></p> <p><b>Indirect disturbance of individuals through noise and vibration during pipeline construction works. Induced impacts through improved access along pipeline way leave during and after construction period causing increased opportunity for hunting of species for meat trade:</b></p> <ul style="list-style-type: none"> <li>Before starting any construction activities, conduct survey of species for the EIA process AND prior to construction works, even if not found in initial surveys.</li> <li>If these species are present, the findings should be recorded and reported. No disturbance or works on the site should start/continue until PIU issues clearance to proceed.</li> <li>PIU should coordinate with the Forestry Department to coordinate the translocation of the affected species.</li> </ul> <p>If such species are present the project shall take the opportunity to monitor vulture activities within the project area and develop a local community awareness program to support conservation of the species</p>	<ul style="list-style-type: none"> <li>Survey of vultures and other species dependent on the available food in the work areas</li> <li>Bio-diversity assessment</li> </ul>	TC	PIU / CMSC with the assistance of PMCBC Bio-diversity expert and DBO contractor
<b>Sirohi</b>			
<p><b>Intake in Angore and Kalkaji Dam (Sirohi) - Water quality and ecological impacts:</b></p> <ul style="list-style-type: none"> <li>Design inlet of intake pipe in the dam with appropriate screen to avoid entry of aquatic organisms into inlet</li> <li>Select a construction methodology that is least disturbing, and appropriate for the in-situ soil condition, and able to complete the construction work prior to onset of monsoon</li> </ul>	<ul style="list-style-type: none"> <li>Design of intake</li> <li>Methodology of intake construction works</li> <li>Maintenance of construction machineries to prevent any oil spillage</li> <li>Safety arrangement at intake site</li> <li>Work schedule</li> </ul>	TC	PIU / CMSC with the assistance of PMCBC



Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Compliance Status	Responsibility
<ul style="list-style-type: none"> <li>Schedule the construction works during low water level period – late winter months to pre monsoon (February – June/July); ensure that works are completed during the same period to prior to onset of monsoon;</li> <li>Erect temporary barriers to form enclosed construction area with least disturbance</li> <li>Allow adequate time to settle the distributed solids to prior to pumping out water; only clear/clarified water shall be pumped back into the reservoir; any silt laden water should be pumped to a silt pond</li> <li>Avoid/minimize use of fuels, chemicals and lubricants; ensure no spillage</li> <li>Clear the work site after completion at least to pre project conditions, ensure that there are no materials, debris, spills etc., and prior to removal of temporary barriers / coffer dam</li> <li>Implement work site safety at works in water body</li> </ul>			
<b>Khetri</b>			
<b>All work sites - Physical cultural resources and chance finds:</b> <ul style="list-style-type: none"> <li>Ensure that worksites are not located in archeologically sensitive areas; liaise and reconfirm with local Archeological Department during detailed design phase;</li> <li>Create awareness among the workers, supervisors and engineers about the chance finds during excavation work;</li> <li>Stop work immediately to allow further investigation if any finds are suspected;</li> <li>Inform local Archaeological Department / Museum office if a find is suspected and take any action, they require to ensure its removal or protection in situ.</li> </ul>	<ul style="list-style-type: none"> <li>Location of work sites</li> <li>Chance finds protocol</li> </ul>	TC	DBO Contractor/ PIU/ CMSC/ PMCBC
<b>Pre –Construction Phase</b>			
<b>Abu Road</b>			
<b>Works close to forest areas - Disturbance / damage to flora, fauna:</b> <ul style="list-style-type: none"> <li>Intake work site and associated work facilities shall be properly demarcated and barricaded;</li> <li>All works, construction material storage/ancillary works shall be</li> </ul>	<ul style="list-style-type: none"> <li>Survey for bio-diversity near the works of intake, WTP close to forest areas</li> <li>Locations of work camps</li> <li>Work schedule</li> </ul>	TC (during detail design of intake well)	DBO contractor/ PIU/Consultants

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Compliance Status	Responsibility
confined to the demarcated areas, no movement of workers, vehicles, equipment allowed outside this area • Ensure proper barricading so that no wildlife, even if it is unlikely, accidentally enters work area • No labour camps shall be located near intake or near forests (maintain minimum 2 km buffer) • Limit the work to daylight hours only; no work after sunset • No workers /personnel shall enter forest areas; it is the DBOC responsibility to take necessary precautions & prevent workers removing/damaging trees/vegetation, hunting / harming animals • Create awareness among workers on environment & safety; • No high noisy works shall be conducted			
<b>Preparation of plans and protocols- Various impacts:</b> (i) Prepare traffic management plan (ii) Prepare occupational health and safety plan (iii) Prepare spoils management plan	Site specific EHS plan covering all these plans	C	DBO Contractor
<b>Banswara</b>			
<b>Preparation of plans and protocols- Various impacts:</b> (i) Prepare traffic management plan (ii) Prepare occupational health and safety plan (iii) Prepare spoils management plan	Site specific EHS plan covering all these plans	BC	DBO Contractor
<b>Construction Phase</b>			
<b>Ratangarh</b>			
<b>Construction of CRMC at Main Ginani - Safe disposal of Solid waste accumulated at Ginani, workers and public safety (In Ratangarh):</b> • Provide dedicated power supply at site, if possible, otherwise DG set to be used during power failure, should be soundproof and having acoustic enclosures with low/permitted air emission standards; • Remove solid waste from site and dispose scientifically • Firm barricades should be provided all-round the site; • No workers camps should be allowed during construction works at site; • Entry should be restricted through provision of gate and guard during SPS operation; and	• Work plan • Design approval • Site safety including signage, barricades, project information boards • Removal of solid waste before start of works • Tree cutting • Noise level monitoring during construction works	C	DBO Contractor

Impacts/ Mitigation Measures (List from IEE)/	Parameters Monitored	Compliance Status	Responsibility
<p><b>Construction of CRMC at Nagar Palika Office Campus - Disturbance to public and staff visiting/working in Nagar Palika office, traffic disturbance and safety risks (In Ratangarh and Pratapgarh):</b></p> <ul style="list-style-type: none"> <li>• No worker camps should be constructed at CRMC site</li> <li>• Proper barricades and signage should be provided at site</li> <li>• No noisy works and transportation of construction materials/plying of heavy vehicles at/near site during office working hours should be ensured</li> <li>• Removal of extraneous materials from site up to end of day should be ensured</li> <li>• provide proper toilets for workers at site</li> <li>• Avoid tree cutting and if tree cutting is necessary compensatory plantation should be done as per RUIDP policy</li> <li>• Provide dedicated power supply at site, if possible, otherwise DG set to be used during power failure, should be soundproof and having acoustic enclosures with low/permitted air emission standards</li> </ul>	<ul style="list-style-type: none"> <li>• Work plan</li> <li>• Design approval</li> <li>• Site safety including signage, barricades, project information boards</li> <li>• Removal of extraneous materials on same day</li> <li>• Tree cutting</li> <li>• Noise level monitoring during construction works</li> </ul>	C	DBO Contractor

**OVERALL COMPLIANCE WITH EMP IN DIFFERENT PACKAGES****Table-10: Overall Compliance with EMP**

No.	Sub-Project Name	Package no.	EMP/ CEMP Part of Contract Documents (Y/N)	CEMP/ EMP Being Implemented (Y/N)	Status of Implementation (Excellent/ Satisfactory/ Partially Satisfactory/ Below Satisfactory)	Action Proposed and Additional Measures Required
1.	Ratangarh Sewerage Works	RSTDIP/RTG-FTP-LXG/01	Yes	Yes	Satisfactory	No any
2.	Fatehpur Sewerage Works		Yes	Yes	Satisfactory	No any
3.	Laxmangarh Water Supply Works		Yes	Yes	Satisfactory	No any
4.	Sardarshahar Water Supply and Sewerage Works	RSTDIP/SRD/01	Yes	Yes	Satisfactory	No any
5.	Sirohi Water Supply and Sewerage Works	RSTDIP/SHR-ABR/01	Yes	Yes	Satisfactory	No any
6.	Abu Road Water Supply and Sewerage Works		Yes	Yes	Satisfactory	No any
7.	Pratapgarh Sewerage Works	RSTDIP/PRT/01	Yes	Yes	Satisfactory	No any
8.	Banswara Water Supply and Sewerage Works	RSTDIP/BNS/04	Yes	Yes	Satisfactory	No any
9.	Khetri Water Supply and Sewerage Works	RSTDIP/KTR/03	Yes	Yes	Satisfactory	No any
10.	Mandawa Water Supply and Sewerage Works	RSTDIP/MDW/03	Yes	Yes	Satisfactory	No any

11.	Kuchaman Sewerage Works	RSTDIP/KMN/02	Yes	Yes	Satisfactory	No any
12.	Ladnu Sewerage Works	RSTDIP/LDN-DID-MKN/01	Yes	Yes	No work at present	-
13.	Didwana Sewerage Works		Yes	Yes	Satisfactory	No any
14.	Makrana Sewerage Works		Yes	Yes	Satisfactory	No any

Table 11: Package-wise IEE Status

Package Number	Components	Design Status (Preliminary Design Stage/Detailed Design Completed)	Final IEE based on Detailed Design				Site-specific EMP (or Construction EMP) approved by Project Manager? (Yes/No)	Remarks
			Not yet due (detailed design not yet completed)	Submitted to ADB (Provide Date of Submission)	Disclosed on project website (Provide Link)	Final IEE provided to Contractor/s (Yes/No)		
RSTDIP/RTG-FTP-LXG/01	Ratangarh Sewerage Works	Detail Design under process	✓				Yes	First Updated IEE Approved by ADB in Aug., 2021 and uploaded on ADB website link shared.
	Fatehpur Sewerage Works	Detail Design under process	✓				Yes	First Updated IEE Approved by ADB in Aug., 2021 and uploaded on ADB website link shared
	Laxmangarh Water Supply Works	Detail Design under process	✓				Yes	First Updated IEE Approved by ADB in Aug., 2021 and uploaded on ADB website link shared
RSTDIP/SRD/01	Sardarshahar Water Supply and Sewerage Works	Detail Design under process	✓				Yes	First Updated IEE Approved by ADB in Aug., 2021 and uploaded on ADB website link shared
RSTDIP/SHR-ABR/01	Sirohi Water Supply and Sewerage Works	Detail Design under process	✓				Yes	First Updated IEE Approved by ADB in Aug., 2021 and uploaded on ADB website link shared

	Abu Road Water Supply and Sewerage Works	Detail Design under process	✓				Yes	First Updated IEE Approved by ADB in Aug., 2021 and uploaded on ADB website link shared
RSTDIP/ PRT/01	Pratapgarh Sewerage Works	Detail Design under process	✓				No	First Updated IEE Approved by ADB in Sept., 2021 and uploaded on ADB website link shared
RSTDIP/ BNS/04	Banswara Water Supply and Sewerage Works	Detail Design under process	✓				No	Submitted Updated IEE on 07.09.2021 as per latest approved designs and shared with ADB, compliance of comments being done
RSTDIP/ KTR/03	Khetri Water Supply and Sewerage Works	Detail Design under process	✓				No	Submitted First Updated IEE on 20.09.2021 as per latest approved designs and shared with ADB, compliance of comments being done
RSTDIP/ MDW/03	Mandawa Water Supply and Sewerage Works	Detail Design under process	✓				No	Submitted First Updated IEE on 07.09.2021 as per latest approved designs and shared with ADB, compliance of comments being done
RSTDIP/ KMN/02	Kuchaman Sewerage Works	Detail Design under process	✓				No	First Updated IEE Approved by ADB in Sept., 2021 and uploaded on ADB website
RSTDIP/ LDN-DID-MKN/01	Ladnu Sewerage Works	Preliminary Design Stage	✓				Not submitted by contractor	Draft IEE not updated due to no approval of designs
RSTDIP/ LDN-DID-MKN/01	Didwana Sewerage Works	Detail Design under process	✓				No	First Updated IEE Approved by ADB in Sept., 2021 and uploaded on ADB website link shared
RSTDIP/ LDN-DID-MKN/01	Makrana Sewerage Works	Detail Design under process	✓				No	First Updated IEE Approved by ADB in Sept., 2021 and uploaded on ADB website link shared

**Note:** Draft IEEs are disclosed in RUIDP website- <https://urban.rajasthan.gov.in/content/raj/udh/ruidp/en/safeguard-policies/initial-environmental-examination--iee-reports/fordetails.html> updated IEEs also has been disclosed at this link after approval from ADB

#### 4. APPROACH AND METHODOLOGY FOR ENVIRONMENTAL MONITORING OF THE PROJECT

15. **Institutional Arrangement for Environmental Management.** For the measurement of effectiveness of the environmental performance of contractor, regular environmental monitoring is required. In RSTDSP there is well established organizational structure for environmental monitoring. Project Officer (Environment) with support of Assistant Project Officer (Environment) in PMU is overall looking environmental issues in the project. Safeguard and Safety Officers (SSO) deputed in each PIU are responsible for day to day monitoring of environmental performance of project contractor. In PMCBC; Environment Safeguard Specialist (ESS) is deputed with environmental safeguard support staff who are responsible for review the updated IEE/EMP and monitoring of environmental safeguard compliances during construction phase. ESS will support PO (Environment) at PMU and SSOs at PIUs in implementation, management and monitoring of all environmental safeguards related activities. The town level consultant team (Construction Management and Supervision Consultants-CMSCs) includes Environmental Safeguard Professional and Environmental Safeguard Support personals, who are responsible for updating the IEE/EMP, monitoring of implementation measures on project sites and reporting to PIU/PMU. CMSCs also include Assistant Construction Manager (ACM) at each PIU responsible for the construction supervision including environmental safeguards at subproject town level. Community Action and Participation Consultants (CAPC) will support PIUs in construction facilitation, community consultation/participation, grievance registration and redress during the construction. The contractors have appointed an Environment, Health and Safety (EHS) Officer in each town who are responsible on a day-to-day basis for (i) ensuring implementation of EMP, (ii) coordinating with the ACM and environment safeguards specialists (all levels PO, SSO & ESS); (iii) community liaison, consultations with interested/affected parties, and grievance redress; and (iv) reporting.

16. **Site visits.** Site visit is carried out by ESS, PMCBC and Environment Safeguard Professionals of CMSCs and/or their safeguard support staff on regular basis for the monitoring of contractor's performance towards social, environment, health and safety issues as described in EMP. During site visit the safeguard personnel visit all the working sites along with town consultants engineers/PIU engineers, contractor's EHS supervisor and site engineers and verify the compliances towards environmental safeguard outlined in EMP. During site visit safeguard team also interacts with labors and nearby habitants and shopkeepers to find out whether they are facing any difficulties due to construction works and discusses these issues with PIU and contractor for remedial action to be taken. During

site visit if any issue is identified which is not addressed in IEE/EMP it is discussed with PIU/PMU and further would be updated in IEE with mitigation measures for it.

17. **Document Checks.** At project offices (PU/PIUs) and during visit to project towns various documents related to environmental safeguard compliances are regularly checked by ESS. Main documents checked are contractors EHS plan, PUC of contractor's vehicles, agreements with other parties, environmental monitoring (air, water, noise, soil etc.) reports, training records, NOCs, consents, permits from other departments, work plan and site plans, grievances register, first aid register, equipment fitness reports etc.

18. **Consultations.** Consultation is a process in the project cycle to ensure the involvement of the public as stakeholders in project execution through consultation and focus group discussion meetings. Stakeholders' participation and consultation have been taken up as a continual course of action, which promote public understanding and help to minimize grievances due to ongoing work in the project. Consultation during project implementation is an integral part of the environmental management process, which not only minimizes the risks of public agitation/resistance against the project but also eradicate the gap between the community and the project management authorities, which leads to timely completion of the project and making the project people friendly.

19. Keeping in mind the objective of minimizing adverse impact and the need of the stakeholders' participation for the smooth implementation of the project, consultation with the members of different sections of society, the affected people, identified vulnerable groups including women headed households, slum dwellers, vendors, vegetable seller, tourist and students of the project area were carried out during planning phase. As per ADB policy consultations will be continued throughout the project implementation period. Consultations are essential part of site visit of safeguard team to project areas.

20. The main objectives of undertaking these consultations are:

- To seek inputs from the stakeholders on the project execution and understand the difficulties/priorities / concerns of the communities
- To make affected persons aware of the project impacts
- Dissemination of information to build awareness among DPs and other stakeholders and inform them about the nature of inconvenience which may be anticipated during implementation of the project.
- Discuss about the training requirements to enhance their skills & restore the livelihood



21. **Monitoring of ambient environmental conditions.** Environmental Monitoring for ambient air, noise, water and soil is being carried out quarterly in all project towns. The details of environmental monitoring are described in chapter 6.

## 5. NATIONAL STANDARDS

**Table -12: National Ambient Air Quality Standards**

SI No:	Pollutants	Time weighted average	Concentration in ambient air		Method of measurement	IFC Standards (µg/m <sup>3</sup> )
			Industrial, Residential, Rural & Other Areas	Ecologically Sensitive Areas		
1	Sulphur Dioxide (SO <sub>2</sub> ) µg/m <sup>3</sup>	Annual 24 hours	50 80	20 80	Improved West and Geake-Ultraviolet fluorescence	50 (Annual) 20 (24-hr) 500 (10-min)
2	Nitrogen Dioxide (NO <sub>2</sub> ) µg/m <sup>3</sup>	Annual 24 hours	40 80	30 80	Modified Jacob & Hochheiser (Na-Arsenite) Chemiluminescence	40 (Annual) 80 (24-hr) 200 (1-hr)
3	Particulate Matter (Size less than 10 µm) or PM10 µg/m <sup>3</sup>	Annual 24 hours	60 100	60 100	Gravimetric -TOEM -Beta attenuation	20 (Annual) 50 (24-hr)
4	Particulate Matter (Size less than 2.5 µm) or PM2.5 µg/m <sup>3</sup>	Annual 24 hours	40 60	40 60	Gravimetric -TOEM -Beta attenuation	10 (Annual) 25 (24-hr)
5	Carbon Monoxide (CO) µg /m <sup>3</sup>	8 hours 1 hours	02 04	02 04	Non Dispersive Infra Red (NDIR) Spectroscopy	2,000 (8-hr) 4,000 (1-hr) 100,000 (15-min)

**Table -13: National Ambient Air Quality and ADB SPS's Standards in Respect of Noise**

As per the Noise Pollution (Regulation and Control) Rules, 2000

Area code	Category of area/zone	NAAQS Limit in dB (A)		ADB SPS Limit dB (A)	
		Day time	Night time	Day time	Night time
a	Industrial area	75	70	70	70
b	Commercial area	65	55	70	70
c	Residential area	55	45	55	45
d	Silence zone	50	40	-	-
e	Institutional/Educational	-	-	55	45

**Table -14: Drinking Water Quality Standards (As per IS 10500:2012)**

Organoleptic and Physical Parameters  
(Foreword and Clause 4)

SI No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to Part of IS 3025	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Colour, Hazen units, Max	5	15	Part 4	Extended to 15 only, if toxic substances are not

SI No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to Part of IS 3025	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
					suspected in absence of alternate sources
ii)	Odour	Agreeable	Agreeable	Part 5	a)Test cold and when heated b)Test at several dilutions
iii)	pH value	6.5-8.5	No relaxation	Part 11	—
iv)	Taste	Agreeable	Agreeable	Parts 7 and 8	Test to be conducted only after safety has been established
v)	Turbidity, NTU, Max	1	5	Part 10	—
vi)	Total dissolved solids, mg/l, Max	500	2 000	Part 16	—

NOTE — It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.

**Table -15: General Parameters Concerning Substances Undesirable in Excessive Amounts**

(Foreword and Clause 4)

SI No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Aluminium (as Al), mg/l, Max	0.03	0.2	IS 3025 (Part 55)	—
ii)	Ammonia (as total ammonia-N), mg/l, Max	0.5	No relaxation	IS 3025 (Part 34)	—
iii)	Anionic detergents (as MBAS) mg/l, Max	0.2	1.0	Annex K of IS 13428	—
iv)	Barium (as Ba), mg/l, Max	0.7	No relaxation	Annex F of IS 13428* or IS 15302	—
v)	Boron (as B), mg/l, Max	0.5	1.0	IS 3025 (Part 57)	—
vi)	Calcium (as Ca), mg/l, Max	75	200	IS 3025 (Part 40)	—
vii)	Chloramines (as Cy, mg/l, Max	4.0	No relaxation	IS 3025 (Part 26)* or APHA 4500-Cl G	—
viii)	Chloride (as Cl), mg/l, Max	250	1 000	IS 3025 (Part 32)	—
ix)	Copper (as Cu), mg/l, Max	0.05	1.5	IS 3025 (Part 42)	—
x)	Fluoride (as F) mg/l, Max	1.0	1.5	IS 3025 (Part 60)	—
xi)	Free residual chlorine, mg/l, Min	0.2	1	IS 3025 (Part 26)	To be applicable only when water is chlorinated. Tested at consumer end. When protection against viral infection is required, it should be minimum 0.5 mg/l
xii)	Iron (as Fe), mg/l, Max	0.3	No relaxation	IS 3025 (Part 53)	Total concentration of man ganes (as

SI No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
					Mn) and iron (as Fe) shall not exceed 0.3 mg/l
xiii)	Magnesium (as Mg), mg/l, <i>Max</i>	30	100	IS 3025 (Part 46)	—
xiv)	Manganese (as Mn), mg/l, <i>Max</i>	0.1	0.3	IS 3025 (Part 59)	Total concentration of manganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
xv)	Mineral oil, mg/l, <i>Max</i>	0.5	No relaxation	Clause 6 of IS 3025(Part 39) Infrared partition method	—
xvi)	Nitrate (as NOA mg/l, <i>Max</i>	45	No relaxation	IS 3025 (Part 34)	—
xvii)	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH), 0.001 mg/l, <i>Max</i>		0.002	IS 3025 (Part 43)	—
xviii)	Selenium (as Se), mg/l, <i>Max</i>	0.01	No relaxation	IS 3025 (Part 56) or IS 15303*	—
xix)	Silver (as Ag), mg/l, <i>Max</i>	0.1	No relaxation	Annex J of IS 13428	—
xx)	Sulphate (as SO <sub>4</sub> ) mg/l, <i>Max</i>	200	400	IS 3025 (Part 24)	May be extended to 400 provided that Magnesium does not exceed 30
xxi)	Sulphide (as H <sub>2</sub> S), mg/l, <i>Max</i>	0.05	No relaxation	IS 3025 (Part 29)	—
xxii)	Total alkalinity as calcium carbonate, mg/l, <i>Max</i>	200	600	IS 3025 (Part 23)	—
xxiii)	Total hardness (as CaCO <sub>3</sub> ), mg/l, <i>Max</i>	200	600	IS 3025 (Part 21)	—
xxiv)	Zinc (as Zn), mg/l, <i>Max</i>	5	15	IS 3025 (Part 49)	—

**NOTES**

- 1 In case of dispute, the method indicated by '\*' shall be the referee method.
- 2 It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected

**Table -16: Surface Water Quality Standards for class B (bathing)  
(As per IS 2296:1982)**

S.No.	Characteristic	Tolerance Limit
1.	pH Value	6.5 to 8.5
2.	Dissolved Oxygen, mg/l/ Max	5.0
3.	Biochemical Oxygen Demand	3.0
4.	Total Coliform Organisms, MPN/100 ml, Max	500
5.	Fluorides (as F) <mg/l, Max	1.5
6.	Colour, Hazen Units, Max	300
7.	Cyanides (as CN), mg/l, Max	0.05
8.	Arsenic (as As), mg/l, Max	0.2
9.	Phenolic Compounds (As C <sub>6</sub> H <sub>5</sub> OH) mg/l, Max	0.005
10.	Chromium (as Cr <sup>6+</sup> ), mg/l, Max	1.0

11.	Anionic detergents (as MBAS), mg/l, Max	1.0
12.	Alpha emitters, mc/ml, Max	$10^{-8}$

**Table-17: Discharge Standards to be achieved as per NGT order dtd. 30.04.2019**

Sl. No.	Parameters	Parameters Limit
1	pH	5.5-9.0
2	BOD (mg/l)	Not more than 10 mg/l
3	COD (mg/l)	Not more than 50 mg/l
4	TSS (mg/l)	Not more than 20 mg/l
5	P-Total (mg/l)- for discharge into ponds/lakes	Not more than 1.0 mg/l
6	N-Total (mg/l)	Not more than 10 mg/l
7	Fecal Coliform (MPN/100ml)	Desirable- Less than 100 MPN/100ml Permissible- 230 MPN/100ml

**Note:** The discharge standards as directed by NGT to be achieved are already being followed in RSTDSP projects.

## 6. MONITORING OF ENVIRONMENTAL PARAMETERS IN PROJECT LOCATIONS (AMBIENT AIR, WATER QUALITY, SOIL QUALITY AND NOISE LEVELS)

22. Before start of project activities baseline monitoring is done in each project towns at prominent locations identified in IEE to establish the baseline data of ambient conditions of environment in the project areas. During construction phase monitoring for ambient environmental conditions (air, water, noise and soil) is conducted on quarterly duration on the locations identified in IEE/EMP. During site visit if any other requirement for environmental monitoring is found, which is not identified in IEE/EMP, contractor is required to do monitoring after approval of CMSC/PIU. Monitoring results are compared from baseline data and/or national standards and if unacceptable deviation is found, mitigation measures are prepared by ESS of CMSC and conveyed to contractor for compliance. Type of environmental monitoring with parameters and location is given in following **Table 18** and method of monitoring and equipment used is given in **Table 19**.

**Table-18: Types, parameters and locations of environmental monitoring**

S.No.	Type of monitoring	Parameters	Locations
1.	Ambient Air Quality	Particulate Matters PM <sub>10</sub> , SO <sub>x</sub> , NO <sub>x</sub> , Carbon Monoxide (CO), Particulate Matter PM <sub>2.5</sub>	WTP, STP, SPS, Pipe laying site specially near sensitive locations
2.	Ambient Noise monitoring	L <sub>day</sub> and L <sub>night</sub> (in Leq dBA) 24 hrs basis	WTP, STP, SPS, Pipe laying site specially near sensitive locations
3.	Surface Water quality	pH, Turbidity, Total Hardness, DO, BOD, COD, Chloride, Hg, Iron, TDS, TSS, Calcium, Zn, Cr <sup>+6</sup> , Magnesium, Copper, Manganese, Sulphate, Cyanide, Nitrate, Sodium, Potassium, Fluoride, Cadmium, Arsenic, Lead, Boron, Selenium, Aluminium, Total residual Chlorine	Surface water resources (river, pond, lake etc.) if within 500 mtrs of project affected area, intake source
4.	Ground Water quality	pH, TDS, Total Hardness, Zn, Chloride, Iron, Copper, DO, Manganese, Suplhate,	WTP, STP, SPS and any central location in

		Nitrate, Fluoride, Hg, Cadmium, Cr <sup>+6</sup> , Arsenic, Lead, Total Alkalinity, Phosphate, Phenolic compound	the town
5.	Soil Quality	pH, Elect. Conductivity (at 25°C), Moisture (at 105°C), Texture (silt, clay, sand), Calcium (as CaO), Magnesium (as Mg), Permeability, Nitrogen (as N), Sodium (as Na), Phosphate (as PO <sub>4</sub> ), Potassium (as K), Organic Matter, oil and grease	WTP, STP, SPS

**Table 19: Method of monitoring and equipment used**

S.No.	Parameter of monitoring	Equipment used	Methodology	Protocol of test
<b>Air Quality</b>				
1.	PM <sub>10</sub>	Fine Particulate Sampler (e.g. Envirotech APM 550)	Collection of particulate matter on filter papers and gravimetric analysis	IS 5182 (part 23): 2006
2	PM <sub>2.5</sub>	PM <sub>2.5</sub> sampler (e.g. Envirotech APM 154)	Collection of particulate matter on filter papers and gravimetric analysis	As per CPCB guidelines
3	SO <sub>x</sub>	Respirable Dust Sampler with gaseous attachment (e.g. Envirotech APM 460BL), UV/VIS spectrophotometer	Absorption of a gases in liquid absorbent and analysis by improved West and Geike	IS 5182 (part 2): 2001
4	NO <sub>x</sub>	Respirable Dust Sampler with gaseous attachment (e.g. Envirotech APM 460BL), UV/VIS spectrophotometer	Absorption of a gases in liquid absorbent and analysis by Modified Jacob and Hochheiser (Na-arsenite)	IS 5182 (part VI):2006
5	CO	Single Gas Analyser (CO meter)	Detection method	IS 5182 (part 10): 1999
<b>Noise Quality</b>				
6	Noise Level (Day time and night time)	Noise level meter (Envirotech SLM 100)	Instrumental	IS 9989
<b>Water Quality</b>				
7	pH	pH meter	Instrumental	IS:3025 (part 11): 2002
8	Turbidity	Manual Grab Sampling in Sterilized Sample collection bottle and lab analysis	Gravimetric Analysis	IS:3025 (part 10): 1984
9	Total Suspended Solids (TSS)	-do-	Gravimetric Analysis	IS:3025 (part 15): 1984
10	Total Dissolved Solids (TDS)	-do-	Gravimetric Analysis	IS:3025 (part 16): 2006
11	Total Hardness as CaCO <sub>3</sub>	-do-	Qualitative Analysis	IS:3025 (part 21): 2009
12	Chloride as Cl	-do-	Qualitative Analysis	IS:3025 (part 32): 2003

S.No.	Parameter of monitoring	Equipment used	Methodology	Protocol of test
13	Sulphate as SO <sub>4</sub>	-do-	Qualitative Analysis	IS:3025 (part 24): 2003
14	Iron as Fe	-do-	Qualitative Analysis	IS:3025 (part 53): 2003
15	Fluoride as F	-do-	Qualitative Analysis	IS:3025 (part 60): 2008
16	Zinc as Zn	-do-	Qualitative Analysis	IS:3025 (part 49): 1994
17	Copper as Cu	-do-	Qualitative Analysis	IS:3025 (part 42): 1992
18	Manganese as Mn	-do-	Qualitative Analysis	IS:3025 (part 59): 2006
19	Mercury as Hg	-do-	Qualitative Analysis	IS:3025 (part 48): 1994
20	Cadmium	-do-	Qualitative Analysis	IS:3025 (part 41): 1992
21	Chromium as Cr	-do-	Qualitative Analysis	IS:3025 (part 52): 2003
22	Total Arsenic as As	-do-	Qualitative Analysis	IS:3025 (part 37): 1988
23	Lead as Pb	-do-	Qualitative Analysis	IS:3025 (part 47): 1994
24	Dissolved Oxygen (DO)	-do-	Qualitative Analysis	IS:3025 (part 38): 1989
25	Chlorine (residual free)	-do-	Qualitative Analysis	APHA 22 <sup>nd</sup> edition-4500Cl B
26	Calcium as Ca	-do-	Qualitative Analysis	IS:3025 (part 40): 2003
27	Magnesium as Mg	-do-	Qualitative Analysis	APHA 22 <sup>nd</sup> edition
28	Total Alkanity as CaCO <sub>3</sub>	-do-	Qualitative Analysis	IS:3025 (part 23): 2003
29	Colour	-	Physical observation	APHA 22 <sup>nd</sup> edition
30	Odour	-	Physical observation	APHA 22 <sup>nd</sup> edition
31	Taste	-	Physical observation	APHA 22 <sup>nd</sup> edition
32	Phenolic Compound	-do-	Qualitative Analysis	IS:3025 (part 43): 1992
33	Total Residual Chlorine	-do-	Qualitative Analysis	IS:3025 (part 26): 1986

## 7. ENVIRONMENTAL MONITORING DURING REPORTING PERIOD

23. Baseline environmental monitoring for ambient air, noise, water and soil has been conducted in all towns. Results show that ambient air quality in these towns are well within the prescribed standards, whereas noise quality is slightly higher in most of project towns due to prevailing ambient conditions such as noise from vehicles and other activities near the monitoring locations. During reporting period; Pre-construction (Baseline) environmental monitoring was conducted in 4 towns (Kuchaman, Ladnu, Didwana and Makrana) whereas Construction phase environmental monitoring (quarterly) was conducted in 8 towns (Abu Road, Sirohi, Banswara, Pratapgarh, Sardarshahar, Ratangarh, Khetri, Mandawa) during reporting period. Results of environmental monitorings (baseline and periodical) during reporting period in all 12 towns are given in **Appendix 10**. Summary of environmental monitoring conducted during reporting period is given below in Table -20.

**Table 20: Summary of environmental monitoring conducted under RSTDSP during April to September 2021**

S. No	Name of town	Stage of project monitoring	Type of environmental monitoring	Period of sampling	Locations covered	Summary of Results and comparison with National Standards and ADB SPS requirements
1.	Abu Road	Construction	Air Quality, Noise Quality, Ground Water Quality, Drinking water and Soil quality	10.04.2021 to 12.04.2021	<ul style="list-style-type: none"> <li>Sewer Network Talhati</li> <li>Water Network Akrahhatta, Manpur Workman colony</li> <li>Santpur STP &amp; WTP</li> <li>L&amp;T Guest House (for drinking water)</li> <li>Manpur STP</li> </ul>	<p>Air quality monitoring conducted at 4 locations and results are within national standards for all parameters in all locations, whereas PM<sub>10</sub> (89.91, 87.06, 78.84 and 73.89 µg/m<sup>3</sup>) and PM<sub>2.5</sub> (47.68, 43.31, 39.28 and 29.69 µg/m<sup>3</sup>) values in all 4 locations are more than applicable ADB SPS limits but in the range of baseline environmental monitoring. All other parameters are within prescribed limits as per both standards.</p> <p>Noise quality monitoring conducted at 4 locations and day time results range from 56.35 to 58.40 dBA. In all 4 locations results are higher than national standards as well as ADB SPS recommended standards for residential areas. At 3 locations, Night time results (45.80 dBA, 46.75 dBA and 45.25 dBA) are higher than national standards and ADB SPS limits. Only at 1 location i.e. Water Network Akrahhatta, night time result (44.85 dBA) is within permissible limits as per both standards. As works were not being conducted in night time on given date of monitoring, therefore increased level of noise is not due to RSTDSP works.</p>
2.	Pratapgarh	Construction	Air Quality, Noise Quality, Ground Water Quality, Soil Quality	15.06.2021 to 16.06.2021	<ul style="list-style-type: none"> <li>Labour Yard, Housing Board</li> <li>Bhatpura Darwaza</li> <li>At Sewage Treatment Plant, Near Ahinsa Circle</li> <li>Raj Mandir Kila Parisar, Near STP site</li> </ul>	<p>Air quality monitoring conducted at 3 locations and results are within national standards for all parameters in all locations, whereas PM<sub>10</sub> (80.27, 85.36 and 88.40 µg/m<sup>3</sup>) and PM<sub>2.5</sub> (39.86, 42.79 and 45.36 µg/m<sup>3</sup>) values in all 3 locations are more than applicable ADB SPS limits but within the range of baseline environmental monitoring. All other parameters are within prescribed limits as per both standards.</p> <p>Noise quality monitoring conducted at 3 locations and day time results range from 55.4 to 59.2 dBA. In all 3 locations results are higher than national standards as well as ADB SPS recommended standards for residential areas. On</p>

						the other hand, Night time results ranges from 45.5 dBA to 48.5 dBA which are higher than both the standards i.e. national standards and ADB SPS limits. As works were not being conducted in night time on given date of monitoring and baseline monitoring results were exceeding the prescribed limits, therefore increased level of noise is not due to RSTDSP works.
3.	Sirohi	Construction	Air Quality, Noise Quality, Ground Water Quality	12.07.2021 to 14.07.2021 (For air & Noise) and 05.06.2021 (for Ground Water Quality)	<ul style="list-style-type: none"> <li>• Work Man Habitat &amp; 5.0 MLD STP</li> <li>• Near 1.7 MLD STP</li> <li>• Bhadrakar Nagar</li> <li>• WTP (At Angore PHED Campus)</li> <li>• Bore well at Labour Colony/ Workman Camp</li> </ul>	<p>Air quality monitoring conducted at 3 locations and results are within national standards for all parameters in all locations, whereas PM<sub>10</sub> (70.09, 63.80 and 58.08 µg/m<sup>3</sup>) and PM<sub>2.5</sub> (29.55, 28.13 and 26.49 µg/m<sup>3</sup>) values in all 3 locations are more than applicable ADB SPS limits but in the range of baseline environmental monitoring. All other parameters are within prescribed limits as per both standards.</p> <p>Noise quality monitoring conducted at 3 locations and day time results range from 57.36 to 61.25dBA. In all 3 locations results are higher than national standards as well as ADB SPS recommended standards for residential areas. At 2 locations, Night time results (43.62 dBA and 42.15 dBA) are within prescribed limits as per both standards for residential area whereas at 1 location i.e. Near 1.7 MLD STP, night time result (45.34 dBA) is slightly higher than the permissible limits as per both standards. As works were not being conducted in night time on given date of monitoring and baseline monitoring results were exceeding the prescribed limits, therefore increased level of noise is not due to RSTDSP works.</p>
4.	Banswara	Construction	Air Quality, Noise Quality, Ground Water Quality, Surface water Quality	30.06.2021 to 05.07.2021	<ul style="list-style-type: none"> <li>• WTP-AEN (PHED) Campus</li> <li>• Kagdi Site/Intake</li> <li>• STP Site</li> <li>• SPS At Nathelav pond</li> <li>• SPS at Pratapgarh Road</li> <li>• Near ST bus</li> </ul>	<p>Air quality monitoring conducted at 6 locations and results are within national standards for all parameters in all locations, whereas PM<sub>10</sub> (from 58.3 to 88.2 µg/m<sup>3</sup>) and PM<sub>2.5</sub> (from 24.5 to 48.7 µg/m<sup>3</sup>) values in all 6 locations are more than applicable ADB SPS limits but in the range of baseline environmental monitoring. All other parameters are within prescribed limits as per both standards.</p> <p>Noise quality monitoring conducted at 6 locations. Day time results ranges from 50 to 73 dBA and night time</p>



					stand	results ranges from 42 to 67 dBA. Results show that at 5 locations Day time and night time results are higher than the national standards as well as ADB SPS recommended standards for residential areas. As works were not being conducted in night time on given date of monitoring and baseline monitoring results were exceeding the prescribed limits, therefore increased level of noise is not due to RSTDSP works. Only at one location at Kagdi Site, day time (50 dBA) and night time (42 dBA) results are within prescribed limits as per both standards for residential area.
5.	Ratangarh	Construction	Air Quality, Noise Quality, Ground Water Quality, Drinking water, Soil Quality	19.07.2021 to 27.07.2021	<ul style="list-style-type: none"> <li>Near Mangalam Medical/PMO Hospital</li> <li>SPS 3.8 MLD, Ratangarh</li> <li>Ginani, SPS 4.6 MLD</li> <li>STP 3.8 MLD, Ratangarh</li> <li>Labour Camp</li> </ul>	<p>Air quality monitoring conducted at 5 locations and results are within national standards for all parameters in all 5 locations, whereas PM<sub>10</sub> (ranges from 76.38 to 82.36 µg/m<sup>3</sup> and PM<sub>2.5</sub> (ranges from 36.27 to 41.62 µg/m<sup>3</sup>) values in all 5 locations are more than applicable ADB SPS limits but in the range of baseline environmental monitoring. All other parameters are within prescribed limits as per both standards.</p> <p>Noise quality monitoring conducted at 5 locations. Day time results ranges from 48.5 to 64.7 dBA and night time results ranges from 35.7 to 41.2 dBA. Results show that during day time, noise quality results were higher than the national standards as well as ADB SPS recommended standards for residential areas at 2 locations i.e. SPS 3.8 MLD(64.7 dBA) and STP 3.8 MLD (63.1 dBA) whereas during night time results are within prescribed limits as per both standards for residential area at all 5 locations.</p>
6.	Khetri	Construction	Air Quality, Noise Quality, Ground Water Quality, Soil Quality	24.06.2021 to 25.06.2021	<ul style="list-style-type: none"> <li>Near UP Koshadhikari Office</li> <li>Near Old PHED office</li> <li>Near Ajeet Govt. Hospital</li> <li>Near JEN Staff Colony</li> </ul>	<p>Air quality monitoring conducted at 7 locations and all results are within national standards for all parameters in all 7 locations, whereas PM<sub>10</sub> (ranges from 66.08 to 79.52 µg/m<sup>3</sup> and PM<sub>2.5</sub> (ranges from 35.29 to 39.21 µg/m<sup>3</sup>) values in all 7 locations are more than applicable ADB SPS limits but in the range of baseline environmental monitoring.. All other parameters are within prescribed limits as per both standards.</p> <p>Noise quality monitoring conducted at 7 locations. Day</p>

					<ul style="list-style-type: none"> <li>• In Jai Singh Govt. School</li> <li>• Near ITI College/STP proposed site</li> <li>• Near Prashashanik Bhawan</li> <li>• Siddhi Vinayak Temple</li> </ul>	time results ranges from 53.2 to 59.7 dBA and night time results ranges from 42.2 to 49.2 dBA. Results show that during day time, noise quality results were higher than the national standards as well as ADB SPS recommended standards for residential areas at all locations (except Near Ajeet Govt. School – 53.2 dBA) whereas during night time at 3 locations i.e. Near Ajeet Govt. Hospital (42.2 dBA), In Jai Singh Govt. School (44.5 dBA) and at Near Prashashanik Bhawan (44.6 dBA), results were within prescribed limit as per both standards and at remaining 3 locations results (ranges from 46.2 dBA to 49.2 dBA) were higher than the national standards as well as ADB SPS recommended standards for residential areas. As works were not being conducted in night time on given date of monitoring and baseline monitoring results were exceeding the prescribed limits, therefore increased level of noise is not due to RSTDSP works.
7	Mandawa	Construction	Air Quality, Noise Quality, Ground Water Quality, Soil Quality	02.09.2021 to 04.09.2021	<ul style="list-style-type: none"> <li>• SPS-1 (PHED) Campus beside SPS Site</li> <li>• CWR Site-1</li> <li>• STP Site-1</li> <li>• Pipe laying site within the preferably near sensitive receptor-1</li> </ul>	<p>Air quality monitoring conducted at 4 locations and all results are within national standards for all parameters in all 4 locations, whereas PM<sub>10</sub> (ranges from 58.61 to 66.27 µg/m<sup>3</sup> and PM 2.5 (ranges from 26.58 to 28.08 µg/m<sup>3</sup>) values in all 4 locations are more than applicable ADB SPS limits but in the range of baseline environmental monitoring. All other parameters are within prescribed limits as per both standards.</p> <p>Noise quality monitoring conducted at 4 locations. Day time results ranges from 50.46 to 53.42 dBA and night time results ranges from 40.62 to 43.57 dBA. Results show that during day and night time, noise quality results were within prescribed limit as per the national standards as well as ADB SPS recommended standards for residential areas at all 4 locations.</p>
8	Sardarshahar	Construction	Air Quality, Noise Quality, Water quality and Soil Quality	12.07.21 to 22.07.21	<ul style="list-style-type: none"> <li>• STP-1 (2.30 MLD) South Campus</li> <li>• PHED Campus-CWR (2400 KL)</li> </ul>	Air quality monitoring conducted at 5 locations and all results are within national standards for all parameters in all 5 locations. PM <sub>10</sub> (ranges from 76.0 to 86.11 µg/m <sup>3</sup> and PM 2.5 (ranges from 29.14 to 38.72 µg/m <sup>3</sup> ). PM <sub>10</sub> and PM <sub>2.5</sub> values in all 5 locations are more than applicable ADB SPS limits but in the range of baseline environmental

					& PH at Hanumangarh Road • STP-2 (3.40 MLD) North Campus • Ramnagar Sullage Pipeline Zone 3 • Near Meena ka Kawa Guest House Zone 4B	monitoring. All other parameters are within prescribed limits as per both standards.  Noise quality monitoring conducted at 5 locations. Day time results ranges from 42.56 to 53.26 dBA and night time results ranges from 38.16 to 49.61 dBA. Results show that during day time, results are within the prescribed limits of national standards as well as ADB SPS recommended standards for residential areas at 5 locations whereas during night time at one location i.e. near Meena ka Kawa Guest House, Zone 4-B, result were higher than the ADB SPS recommended standards for residential areas except this, night time results are within prescribed limits as per both standards for residential area at remaining 4 locations. As works were not being conducted in night time on given date of monitoring therefore increased level of noise is not due to RSTDSP works.
9	Kuchaman	Pre-Construction	Air Quality, Noise Quality, Soil Quality	23.08.2021 to 24.08.2021	• RUIDP Office (Near SPS-02) • Kuber Complex in Market • Near Bus Stand (Near STP) • Old CWR, Near PHED Office • Pachwa Road, Old CWR • BSNL Office, Near SPS-01	Air quality monitoring conducted at 6 locations and all results are within national standards for all parameters in all 6 locations. PM <sub>10</sub> (ranges from 70.5 to 86.5 µg/m <sup>3</sup> and PM 2.5 (ranges from 34.8 to 53.5 µg/m <sup>3</sup> ). PM <sub>10</sub> and PM <sub>2.5</sub> values in all 6 locations are more than applicable ADB SPS limits. All other parameters are within prescribed limits as per both standards.  Noise quality monitoring conducted at 6 locations. Day time results ranges from 53.9 to 65.1 dBA and night time results ranges from 40.2 to 44.4 dBA. Results show that during day time, noise quality results were higher than the national standards as well as ADB SPS recommended standards for residential areas at 5 locations (except BSNL Office near SPS-01). These are baseline environmental monitorings; being conducted first time in town, thus represent the actual environmental conditions in town, however contractor was instructed to adopt mitigation plan to reduce noise levels during construction works. Night time results are within prescribed limits as per both standards for residential area at all 6 locations.

10	Ladnu	Pre-Construction	Air Quality, Noise Quality, Water quality and Soil Quality	28.08.2021 to 05.09.2021	<ul style="list-style-type: none"> <li>• L &amp; T Office</li> <li>• Workmen Colony</li> <li>• STP-2, Ladnu</li> <li>• Pipe Laying Site-2</li> <li>• STP-1</li> <li>• Pipe Laying Site-1</li> </ul>	<p>Air quality monitoring conducted at 6 locations and all results are within national standards for all parameters in all 6 locations. PM<sub>10</sub> (ranges from 72.0 to 87.0 µg/m<sup>3</sup> and PM 2.5 (ranges from 40.0 to 50.0 µg/m<sup>3</sup>). PM<sub>10</sub> and PM<sub>2.5</sub> values in all 6 locations are more than applicable ADB SPS limits. All other parameters are within prescribed limits as per both standards.</p> <p>Noise quality monitoring conducted at 6 locations. Day time results ranges from 55.7 to 64.9 dBA and night time results ranges from 39.5 to 49.3 dBA. Results show that during day time, noise quality results were higher than the national standards as well as ADB SPS recommended standards for residential areas at 6 locations but in the range of baseline environmental monitoring; whereas during night time, at 3 locations results are within prescribed limits as per both standards for residential area and at 2 locations i.e. STP-1 and Pipe Laying site-1 results are higher than the national standards as well as ADB SPS recommended standards for residential areas. These are baseline environmental monitorings; being conducted first time in town, thus represent the actual environmental conditions in town, however contractor was instructed to adopt mitigation plan to reduce noise levels during construction works..</p>
11	Makrana	Pre-Construction	Air Quality, Noise Quality, Water quality and Soil Quality	24.08.2021 to 29.08.2021	<ul style="list-style-type: none"> <li>• Main Office, Near Suncity Hospital</li> <li>• Workmen Colony, Store Yard</li> <li>• STP Site, Borawar Road</li> <li>• SPS-1, Jhalara Pond</li> <li>• SPS-2, Matabhar</li> <li>• Pipe Laying Site, Near UMA Hospital</li> </ul>	<p>Air quality monitoring conducted at 6 locations and all results are within national standards for all parameters in all 6 locations. PM<sub>10</sub> (ranges from 70.0 to 84.0 µg/m<sup>3</sup> and PM 2.5 (ranges from 40.0 to 52.0 µg/m<sup>3</sup>). PM<sub>10</sub> and PM<sub>2.5</sub> values in all 6 locations are more than applicable ADB SPS limits. All other parameters are within prescribed limits as per both standards.</p> <p>Noise quality monitoring conducted at 6 locations. Day time results ranges from 58.4 to 63.3 dBA and night time results ranges from 42.0 to 45.0 dBA. Results show that during day time, noise quality results were higher than the national standards as well as ADB SPS recommended standards for residential areas at all 6 locations. These</p>

						are baseline environmental monitorings; being conducted first time in town, thus represent the actual environmental conditions in town, however contractor was instructed to adopt mitigation plan to reduce noise levels during construction works. Whereas night time results are within prescribed limits as per both standards for residential area at all 6 locations.
12	Didwana	Pre-Construction	Air Quality, Noise Quality, Water quality and Soil Quality	24.08.2021 to 01.09.2021	<ul style="list-style-type: none"> <li>• L &amp; T Office</li> <li>• Workmen Colony</li> <li>• STP-2</li> <li>• SPS-2, Near Power House</li> <li>• Pipe Laying Site-1</li> <li>• SPS-1, Near Temple</li> </ul>	<p>Air quality monitoring conducted at 6 locations and all results are within national standards for all parameters in all 6 locations. PM<sub>10</sub> (ranges from 69.0 to 83.0 µg/m<sup>3</sup> and PM 2.5 (ranges from 35.0 to 54.0 µg/m<sup>3</sup>). PM<sub>10</sub> and PM<sub>2.5</sub> values in all 6 locations are more than applicable ADB SPS limits. All other parameters are within prescribed limits as per both standards.</p> <p>Noise quality monitoring conducted at 6 locations. Day time results ranges from 56.5 to 63.5 dBA and night time results ranges from 41.0 to 45.7 dBA. Results show that during day time, noise quality results were higher than the national standards as well as ADB SPS recommended standards for residential areas at all 6 locations whereas during night time except one location i.e. Pipe Laying site - 1, all results are within prescribed limits as per both standards for residential area at remaining 5 locations. These are baseline environmental monitorings; being conducted first time in town, thus represent the actual environmental conditions in town, however contractor was instructed to adopt mitigation plan to reduce noise levels during construction works.</p>

24. In Kuchaman, Ladnu, Makrana Didwana towns; environmental monitoring has been conducted for the first time therefore these results are taken as baseline environmental qualities of these towns. Quarterly environmental monitoring is proposed in RSTDSP, which shall be reported through SEMRs to ADB.

## **8. ASBESTOS MANAGEMENT**

25. Asbestos is a collective name given to a group of minerals that occur naturally as fiber bundles and possess high tensile strength, flexibility, heat resistance, non-biodegradability with chemical and physical durability. Asbestos is hydrated silicates with complex crystal structures. It is found in two configurations: chrysotile (derived from serpentine minerals) and amphibole is a naturally occurring mineral with long thin fibers. The most abundant asbestos used in the world is chrysotile. The use of Asbestos Containing Materials (ACM) propagated due to its economic viability.

26. Presently Asbestos is banned all over India, therefore there is no use of new ACMs at any project site. But, in the existing water supply system, Asbestos pipes are laid earlier, which are still in use by PHED. After completion of RSTDSP construction works, these old lines containing Asbestos pipes will be made defunct and new HDPE pipelines will be made functional for city water supply. There is chance of stored Asbestos pipes at project sites or encounter with ACM during pipe laying works in old/inner areas of towns, where existing water supply networks may contain Asbestos pipes. Keeping in mind the hazardous nature of Asbestos Containing Materials (ACM), Asbestos Management Plan (AMP) is being prepared to prevent the exposure of people to Asbestos. The purpose of this AMP is to identify, use appropriate methodology and scientifically handling /disposal of the Asbestos Containing Materials (ACM) in order to comply with the applicable National legislation and International standards in sync with norms of ADB's SPS 2009. Draft of ACM is already included in draft IEEs, which is being updated as per project town conditions.

27. Presently estimation of ACM is under progress in all towns and ACM management plan shall be updated after estimation is completed. Updated ACM plan shall be included in IEE and submitted to ADB for approval. As pipe laying works are presently being done in outskirts/new areas of the towns, where there are no existing water supply networks and therefore there is neither a chance of encounter with Asbestos pipes nor any ACM is reported at pipe laying sites. Contractors have already been made aware of hazards of ACM during pre-construction stage trainings in all towns.

## 9. SITE VISITS FOR MONITORING OF CONTRACTORS PERFORMANCE FOR ENVIRONMENTAL SAFEGUARD COMPLIANCE

28. During reporting period environmental safeguard experts of PMCBC and CMSCs visited different sites for monitoring of contractors' environmental safeguard compliances in different sites. Environmental Site visit checklists are given in **Appendix 4**. A summary of site visits is given in following **Table – 21**.

**Table 21- Summary of Site Visits**

S.N.	Town visited, date of visit and name of person conducted site visit	Summary of main findings during site visits	Action taken/to be taken by contractor
1.	<b>Town:</b> Abu Road  <b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II, Mr. S K Soni, Team Leader, CMSC-II and Mr. Sajal Srivastava (Social Safeguard Professional, CMSC-II)  <b>Location:</b> Bhainsa Singh Dam  <b>Date of site Visit:</b> 08.04.2021	The proposed route of canal for irrigation is passing on hilly terrain may not be used for water supply pipe line due to following reasons: In the old forest diversion proposal estimate & drawings, no item were taken related to drinking water supply scheme and on the proposed route of canal for irrigation purpose will required more cutting and filling and cleaning of trees.	-
2.	<b>Town:</b> Sirohi  <b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II, Mr. S K Soni, Team Leader, CMSC-II and Mr. Sajal Srivastava (Social Safeguard Professional, CMSC-II)  <b>Location:</b> Pipe laying site for water supply and Labour Camp  <b>Date of site Visit:</b> 09.04.2021	<b>Pipe laying site</b> <ul style="list-style-type: none"> <li>• No barricading was used around the trench</li> <li>• No project information board was observed at trench excavation site;</li> <li>• No contact details of PIU/contractor are provided for grievances at site; and</li> <li>• Workers were seen using proper PPEs.</li> </ul> <b>Labour Camp</b> <ul style="list-style-type: none"> <li>• Labour attendance register, daily temperature register of labour, first aid box, fire extinguisher etc.was available at labour camp</li> <li>• In this labour camp</li> </ul>	<b>Pipe laying Site</b> <ul style="list-style-type: none"> <li>• Provide proper barricades and road signage during work on roads</li> <li>• Provide project information board at excavation site along with contact details of PIU/contractor for grievances redressal</li> </ul> <b>Labour Camp</b> Good practices were observed at Labour Camp

		<p>total 24 numbers of rooms are allotted for labour and there are 14 nos. bathrooms and 14 nos. toilets for labour use.</p> <ul style="list-style-type: none"> <li>No female workers were reported at camp site</li> </ul>	
3.	<p><b>Town:</b> Banswara <b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II,</p> <p><b>Location:</b> 200 mm DWC sewage pipe laying and manhole work at Sri Ram Colony</p> <p><b>Date of site Visit:</b> 02.07.2021</p>	<ul style="list-style-type: none"> <li>No information board is observed at site and no PIU/contractor details are provided for to address the grievances.</li> <li>No proper barricading is observed that excavated open trenches for sewer pipe laying, to avoid free fall of human being into the open trenches.</li> <li>No first aid box is available at the excavation and pipe laying sites in Sri Ram Colony</li> <li>No drinking water facility at construction site</li> </ul>	<ul style="list-style-type: none"> <li>Project Information board to be provided in all sites.</li> <li>Proper hard barricades are required along trenches.</li> <li>First aid box and drinking water should be provided at all sites</li> <li>Excavated soil to be removed on same day</li> <li></li> </ul>
	<p><b>Town:</b> Banswara <b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II,</p> <p><b>Location:: Worker Camp near Kagdi Gate 5</b></p> <p><b>Date of site Visit:</b> 02.07.2021</p>	<p>In the labour camp approx. 50 families are staying. Following non-compliances were observed in the labour camp:</p> <ul style="list-style-type: none"> <li>Only 25 tin shed room are available for staying the labour and. Approx. 50 % of families are in sheds.</li> <li>tin shed rooms are without-light facility and room flooring that may be cause of snake/insect biting.</li> <li>Sufficient Toilet and bathroom facilities are not present.</li> <li>No LPG gas cylinders are provided to labour for cooking food.</li> <li>Drinking water supply tank was observed at labour camp</li> </ul>	<p>Basic minimum facilities such as drinking water, solid waste management, first aid box, fire prevention, , clean fuel such as LPG should be provided in workmen camps</p> <p><b>Minimum facilities to be provided in a room:</b> Minimum of following facilities should be provided in each workers camp room-</p> <ul style="list-style-type: none"> <li>Provision for wall mounted Fan.</li> <li>Provision for lighting.</li> <li>Two no's of 5 A (5 Ampier) plug point for mobile charging.</li> <li>Bed arrangement for sleeping.</li> </ul>
	<p><b>Town:</b> Banswara <b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II,</p> <p><b>Location:</b> 200 mm DWC sewage pipe laying and manhole</p>	<p>Worker was observed at manhole working without PPEs</p>	<p>Working at manhole should be with proper personal safety equipment such as Helmet, Boot, Safety Jackets and Goggles etc.</p>



	work at Sri Ram Colony  <b>Date of site Visit:</b> 12.08.2021		
4.	<b>Town:</b> Laxmangarh  <b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II,  <b>Location:</b> Bad Ke Balaji Head Works, Laxmangarh  <b>Date of site Visit:</b> 27.07.2021	<ul style="list-style-type: none"> <li>Asbestos Containing Pipes and Couplers were observed at site</li> <li>Inventory of Asbestos pipes were carried out</li> </ul>	ACM Plan is required for safe management of ACM
5.	<b>Town:</b> Sardarshahar  <b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II,  <b>Location:</b> PHED Executive Engineer Project Office on Hanumangarh Road, Sardarshahar  <b>Date of site Visit:</b> 29.07.2021	<ul style="list-style-type: none"> <li>Asbestos Containing Pipes and Couplers were observed at site</li> <li>Inventory of Asbestos pipes were carried out</li> </ul>	ACM Plan is required for safe management of ACM
6.	<b>Town:</b> Pratapgarh  <b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II,  <b>Location:</b> 200 mm DWC sewage pipe laying and manhole work at Bahubali Colony, Pratapgarh  <b>Date of site Visit:</b> 13.08.2021	<ul style="list-style-type: none"> <li>Warning sign board was observed at site and on this board PIU/contractor contact numbers are displayed.</li> <li>Mobile Toilet Van was observed at construction and in this mobile van separate male and female toilets are present on opposite sides.</li> <li>No proper barricading was observed on excavated open trenches of sewer pipe laying, which may be cause of casualty.</li> </ul>	<ul style="list-style-type: none"> <li>Good Practice of Work</li> <li>Good Practice of mobile toilets arrangement at construction Site</li> <li>Excavations shall be hard barricaded with signs and shall have warning lights at night.</li> </ul>
	<b>Town:</b> Pratapgarh  <b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II,  <b>Location:</b> 250 mm HDPE Trenchless	<ul style="list-style-type: none"> <li>Oil and Grease leakage was observed from Trenchless Horizontal Directional Drilling Machine</li> <li>Barricading and safety sign boards were not seen around the Water Pumping Engine during at road side of Neemach National</li> </ul>	<ul style="list-style-type: none"> <li>Oil and Grease Collecting tray should be placed below the hydraulic box to collect spillage of machine oil and grease</li> <li>Proper barricading around this machine during using of this machine.</li> </ul>

	sewage pipe laying at Neemach Road, Pratapgarh  <b>Date of site Visit:</b> 13.08.2021	Highway.	<ul style="list-style-type: none"> <li>• Safety Warning Board should be provided to avoid accident</li> </ul>
	<b>Town:</b> Pratapgarh  <b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II,  <b>Location:</b> CRMC Building Construction Site at Municipal Council Campus, Pratapgarh  <b>Date of site Visit:</b> 13.08.2021	<ul style="list-style-type: none"> <li>• Safety Warning Board was observed at entrance of this site</li> <li>• First Aid Box is observed at site</li> </ul>	Good practice of site arrangement Good practice of safety at working site
7.	<b>Town:</b> Didwana  <b>Person visited the Site:</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Mr. Vardan Srivastava, Environment professional, CMSC-I  <b>Location:</b> 200 mm DWC sewer pipe laying and manhole works at Zone 5, near RSEB office  <b>Date of site Visit:</b> 14.09.2021	<ul style="list-style-type: none"> <li>• No any project information board is provided at site, contact details of PIU/contractor is not given at sites for grievances from people</li> <li>• Pipe barricades are not properly anchored on ground, though trench is fully fenced by barricades</li> <li>• Workers were seen using proper PPEs</li> <li>• Road is fully blocked but no any cautionary signage provided for road users and nearby habitants</li> </ul>	<ul style="list-style-type: none"> <li>• Provide approved project information board, at each site</li> <li>• Provide proper barricades with proper anchoring on ground and distance of vertical posts should be as specified in contract with proper clamps</li> <li>• Good practice and to be continued</li> <li>• Provide cautionary signage such as- Work in Progress, Road is closed, Diversion with signage etc. as and where required</li> </ul>
	<b>Town:</b> Didwana  <b>Person visited the Site:</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Mr. Vardan Srivastava, Environment professional, CMSC-I  <b>Location:</b> 200 mm DWC sewer pipe laying and manhole works at Mohandas ka Bas, near Shamshan Bhoomi	<ul style="list-style-type: none"> <li>• No any project information board is provided at site, contact details of PIU/contractor is not given at sites for grievances from people</li> <li>• Pipe barricades are not properly anchored, unstable and having risk of toppling down, trench is not fully fenced by barricades</li> <li>• JCB working at site was not having reverse horn</li> </ul>	<ul style="list-style-type: none"> <li>• Provide project information boards with contact details of PIU and contractor should be displayed at site</li> <li>• Provide firm barricades with proper anchoring on ground</li> <li>• Provide reverse horn in all vehicles and keep</li> </ul>

	<p><b>Date of site Visit:</b> 14.09.2021</p>	<p>and required documents such as PUC, DL, RC and insurances were not present with operator</p> <ul style="list-style-type: none"> <li>• First Aid box and drinking water was not available at site</li> <li>• During consultation with nearby habitants, it was noted that SOT of contractor has given project information to habitants, but no any contact numbers of PIU and contractor was provided to them for grievances, if any</li> </ul>	<p>copies of all necessary documents in all vehicles as well</p> <ul style="list-style-type: none"> <li>• Provide first aid box and drinking water at each site</li> <li>• It is advised that contact details of PIU and contractor should be circulated to the nearby habitants printed in the project pamphlets to register any grievance from public, contact details should also be displayed at site</li> </ul>
	<p><b>Town:</b> Didwana</p> <p><b>Person visited the Site:</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Mr. Vardan Srivastava, Environment professional, CMSC-I</p> <p><b>Location: Workers camp and storage yard</b></p> <p><b>Date of site Visit:</b> 14.09.2021</p>	<ul style="list-style-type: none"> <li>• Workmen rooms are completed but workers are not started living in rooms</li> <li>• Toilets and bathrooms are constructed for workers and proper water supply and waste water management is being done and gender specific signage is provided</li> <li>• Doctor's chamber and induction room is established at workers camp for screening of new workers</li> <li>• Kitchens are under construction at workmen camps</li> <li>• A lot of HDPE pipes are stored at storage yard but firefighting arrangement are not provided at site</li> </ul>	<ul style="list-style-type: none"> <li>• Provide emergency numbers, fire extinguishers, different types of signage and other required facilities at camp before moving workers in this camp, follow guidelines for workers camps issued by RUIDP earlier</li> <li>• Good practice and to be maintained in future</li> <li>• Good practice and to be continued</li> <li>• Ensure that only LPG or other clean fuel should be used for cooking at camps, no burning of firewood should be allowed for cooking or heating purpose</li> <li>• Calculate fire load of site as per available and future requirements and provide adequate type of firefighting systems at site</li> </ul>
8.	<p><b>Town:</b> Kuchaman, Ladnun, Makrana, Didwana, Khetri and Mandawa</p> <p><b>Person visited the Site:</b> Mr. Vardan Srivastava, Environment Professional, CMSC-I</p> <p><b>Location:</b></p> <p><b>Date of site Visit:</b></p>	<ul style="list-style-type: none"> <li>• It was observed that labours not wearing proper PPE's at construction site</li> <li>• Some labour's using fire wood for cooking purpose at labour camp site so instructions given that provide the LPG connections.</li> <li>• First Aid Box was not available at working site</li> <li>• No EHS Officer at site</li> </ul>	<ul style="list-style-type: none"> <li>• Mandatory Use of PPE's at construction site .No one allowed to perform his duty without wearing PPE's.</li> <li>• Instruction given to the contractor to provide and make assure to availability of First Aid Box in each and every construction site.</li> <li>• Deployment of EHS Officer for taken care of</li> </ul>

	11.08.2021 to 13.08.2021		<p>Environmental and Safety issues at site.</p> <ul style="list-style-type: none"> <li>• Orientation of Safety is required for every staff.</li> <li>• Direction given to the contractor's taking all safety measures at site and monitor at their level on daily basis.</li> </ul>
	<p><b>Town:</b> Kuchaman</p> <p><b>Person visited the Site:</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Mr. Vardan Srivastava, Environment professional, CMSC-I</p> <p><b>Location:</b> 90 mm HDPE water supply pipe laying works near Kuchaman Valley</p> <p><b>Date of site Visit:</b> 15.09.2021</p>	<ul style="list-style-type: none"> <li>• No any project information board is provided at site, contact details of PIU/contractor is not given at sites for grievances from people</li> <li>• Road is fully blocked but no any cautionary signage provided for road users and nearby habitants</li> <li>• Workers were seen using proper PPEs</li> <li>• First Aid box and drinking water facility was not available at site</li> </ul>	<ul style="list-style-type: none"> <li>• Provide separate project information board, indicating type and duration of works, contact details of PIU and contractor for grievances for people</li> <li>• Provide cautionary signage such as- Work in Progress, Road is closed, Diversion with signage etc. as and where required</li> <li>• Good practice and to be continued</li> <li>• Provide first aid box and drinking water at each site</li> </ul>
	<p><b>Town:</b> Kuchaman</p> <p><b>Person visited the Site:</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Mr. Vardan Srivastava, Environment professional, CMSC-I</p> <p><b>Location:</b> 200 mm DWC sewer pipe laying and manhole works at Balaji vihar Colony</p> <p><b>Date of site Visit:</b> 15.09.2021</p>	<ul style="list-style-type: none"> <li>• No any project information board is provided at site, contact details of PIU/contractor is not given at sites for grievances from people</li> <li>• Barricades and caution boards are available at site</li> <li>• Short orientation was given to contractors workers at site regarding environmental safeguard requirements in the project</li> <li>• During consultation with nearby habitants, it was noted that SOT of contractor has given project information to habitants, but no any contact numbers of PIU and contractor was provided to them for grievances, if any</li> <li>• First Aid box and drinking water was not available at site</li> </ul>	<ul style="list-style-type: none"> <li>• Provide project information boards with contact details of PIU and contractor should be displayed at site</li> <li>• It was noted that contractor's HSE officer gives regular pep talk to workers and workers are well aware about the HSE requirements at site</li> <li>• It is advised that contact details of PIU and contractor should be circulated to the nearby habitants printed in the project pamphlets to register any grievance from public, contact details should also be displayed at site</li> <li>• Provide first aid box and drinking water at each site</li> </ul>
	<p><b>Town:</b> Kuchaman</p> <p><b>Person visited the Site:</b> Mr. Abhay Srivastava,</p>	<ul style="list-style-type: none"> <li>• Workmen camp is established in a two storied building will all basic facilities and workers</li> </ul>	<ul style="list-style-type: none"> <li>• Workers accommodation is satisfactory</li> <li>• Good practice and it to</li> </ul>

	<p>Environment Specialist, PMCBC and Mr. Vardan Srivastava, Environment professional, CMSC-I</p> <p><b>Location: Workers camp and storage yard at Panchwa road</b></p> <p><b>Date of site Visit: 15.09.2021</b></p>	<p>started living in rooms</p> <ul style="list-style-type: none"> <li>• Toilets and bathrooms are provided for workers and proper water supply and waste water management is being done and gender specific signage is provided</li> <li>• Induction room is established at workers camp for screening of new workers</li> <li>• Kitchens are provided to workers at workmen camps with LPG cooking arrangement</li> <li>• A lot of signage regarding HSE and good practices are provided in form of speaking walls</li> <li>• Fire extinguisher is provided in workmen camp</li> </ul>	<p>be ensured that only LPG or other clean fuel should be used for cooking at camps, no burning of firewood should be allowed for cooking or heating purpose</p> <ul style="list-style-type: none"> <li>• Fire extinguisher in the workmen camp, use of LPG Gas, signage regarding HSE and good practices, Induction room for workers are the Good practices and to be continued</li> </ul>
9	<p><b>Town: Makrana</b></p> <p><b>Person visited the Site:</b> Mr. Abhay Srivastava, Environment Specilaist, PMCBC and Mr. Vardan Srivastava, Environment professional, CMSC-I</p> <p><b>Location: 200 mm DWC sewer pipe laying and manhole works at Jhanjharia Ki Dhani village</b></p> <p><b>Date of site Visit: 15.09.2021</b></p>	<ul style="list-style-type: none"> <li>• No any project information board is provided at site, contact details of PIU/contractor is not given at sites for grievances from people</li> <li>• Barricades and caution boards are available at site</li> <li>• Workers were seen using proper PPEs</li> <li>• First Aid box and drinking water facility was not available at site</li> <li>• Proper barricades were provided at manhole works</li> <li>• Concrete mixture being used at site is not having enclosure to reduce noise and lacking proper stake height to avoid inhalation of smoke from concrete mixture, oil leakage is also seen in the equipment</li> <li>• Access to houses were left for passeege of habitants</li> <li>• During consultation with nearby habitants, it was noted that SOT of contractor has given project information to habitants, but no any contact numbers of PIU and contractor was provided to them for grievances, if any</li> </ul>	<ul style="list-style-type: none"> <li>• Provide project information boards with contact details of PIU and contractor should be displayed at site</li> <li>• Good practice and to be continued</li> <li>• Provide first aid box and drinking water at each site</li> <li>• Good practice and to be continued</li> <li>• It is advised to use safe and maintained portable concrete mixture with acoustic enclosure at site to reduce noise and emission of smoke. Also provide proper stake height to avoid inhalation of smoke by workers during operation of concrete mixture</li> <li>• Good practice and to be continued, no access to any house of shops should be blocked during construction works</li> <li>• It is advised that contact details of PIU and contractor should be circulated to the nearby habitants printed in the project pamphlets to register any grievance</li> </ul>

			from public, contact details should also be displayed at site
10.	<p><b>Town:</b> Fatehpur</p> <p><b>Person visited the Site:</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II,</p> <p><b>Location::</b> Outer wall and Effluent Overhead Tank of proposed STP, Fatehpur</p> <p><b>Date of site Visit:</b> 28.07.2021</p>	<ul style="list-style-type: none"> <li>Workers were observed with partially personally safety equipment's;</li> <li>First Aid box was observed at site;</li> <li>Drinking water facility was observed at site ;</li> <li>Project information is observed at site;</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Good practices were adopted at site</li> </ul>
	<p><b>Town:</b> Fatehpur</p> <p><b>Person visited the Site:</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Dr. Priya Goyal, Safeguard Support- Environment</p> <p><b>Location: STP (4.3 MLD) at Nari-Bari Road</b></p> <p><b>Date of site Visit:</b> 24.09.2021</p>	<ul style="list-style-type: none"> <li>Workers and site staff seen using proper PPEs at work site</li> <li>Proper barricades, access, staircase and signage are provided at site</li> <li>Proper electrical safety is provided at site</li> <li>Proper safety arrangements at elevated works of TEER are seen like- barricades, caution signage, formworks, stairs, safety net, safety belts etc.</li> <li>Excavator/tractor working at site are not having required documents at site</li> <li>Water stored in curing tank is having a lot of mosquito larva</li> <li>Fire extinguisher is hanged on a tree</li> </ul>	<ul style="list-style-type: none"> <li>Use of PPEs, Proper barricades, access, staircase and signage at site, Proper electrical safety are the good practices and to be continued in future</li> <li>Ensure a copy of all required documents such as PUC, insurance, RC, DL and fitness certificate/inspection tag etc. are present in each vehicle at site</li> <li>Cover the tank with mosquito net or use suitable insecticide to prevent mosquito breeding in stored water</li> <li>Provide proper stand for fire extinguisher at site with adequate signage</li> </ul>
	<p><b>Town:</b> Fatehpur</p> <p><b>Person visited the Site:</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Dr. Priya Goyal, Safeguard Support- Environment</p> <p><b>Location: 200 mm DWC sewer pipe laying and manhole works at Zone 3, Mominpura</b></p> <p><b>Date of site Visit:</b> 24.09.2021</p>	<ul style="list-style-type: none"> <li>No any project information board is provided at site, contact details of PIU/contractor is not given at sites for grievances from people</li> <li>Road is fully blocked but no any cautionary signage provided for road users and nearby habitants</li> <li>Male workers were seen using proper PPEs, whereas female workers were not using safety shoes and helmets</li> <li>During consultation with nearby habitants, it was</li> </ul>	<ul style="list-style-type: none"> <li>Provide separate project information board, indicating type and duration of works, contact details of PIU and contractor for grievances for people</li> <li>Provide cautionary signage such as- Work in Progress, Road is closed, Diversion with signage etc. as and where required</li> <li>Provide and ensure use of basic PPEs by all workers, including female workers</li> </ul>

		<p>noted that SOT of contractor has given project information to habitants before start of work in this location, but during construction no consultations done and people were making complaints that no access for vehicles was left since last 5-6 days</p> <ul style="list-style-type: none"> <li>• Orientation was given to workers about EHS requirements during construction works at site</li> </ul>	<ul style="list-style-type: none"> <li>• It is required that SOT and site team should continuously remain in contact with people throughout construction works to find out any difficulties due to works, it is advised that contact details should also be displayed at site for grievances from people</li> <li>• Workers informed that daily pep talk was in practice by site supervisor and safety staff- good practice</li> </ul>
	<p><b>Town:</b> Fatehpur</p> <p><b>Person visited the Site:</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Dr. Priya Goyal, Safeguard Support- Environment</p> <p><b>Location:</b> Workers camp and storage yard</p> <p><b>Date of site Visit:</b> 24.09.2021</p>	<ul style="list-style-type: none"> <li>• Approx. 45 workers are living in workers camps, all the basic facilities are provided in camps</li> <li>• Toilets and bathrooms are constructed for workers and proper water supply and waste water management is being done but gender specific signage is not provided</li> <li>• Kitchens are provided at workmen camps and LPG is being used for cooking</li> <li>• Height mock up structure is provided for checking fitness of workmen for work at height</li> <li>• A lot of HDPE pipes are stored at storage yard but sufficient firefighting arrangements are not provided at site</li> </ul>	<ul style="list-style-type: none"> <li>• All required basic amenities, use of LPG gas in kitchen, Height mock up structure for checking fitness of workmen for work at height are the good practices and to be maintained in future</li> <li>• Provide gender specific signage for toilets and bathrooms</li> <li>• Good practice- Ensure that only LPG or other clean fuel should be used for cooking at camps, no burning of firewood should be allowed for cooking or heating purpose</li> <li>• Calculate fire load of site as per available and future requirements and provide adequate type of firefighting systems at site</li> </ul>

## 10. ORIENTATIONS FOR SAFEGUARDS

29. Environmental performance of contractors can be improved and ensured through regular orientations and trainings. Orientations for environmental safeguards including provisions of ADB SPS 2009 and other contractual and legal requirements as per Central and State Governments is necessary for contractors and site staff of PIUs and Consultants to understand the basic EHS requirements during construction works. Pre-construction stage safeguard orientations of site engineers of PIUs, CMSCs and contractors is done by PMCBC/CMSC environmental specialists in all towns. These orientations included following topics-

- ❖ ADB SPS 2009 and RUIDP safeguards requirements
- ❖ Contractual and legal requirements as per ADB, RUIDP, Govt. of Rajasthan and Govt. of India legislations, requirement of consents (CTE/CTO) from RSPCB for WTP/STP/DG set etc.,
- ❖ Safeguard provisions in contract documents, pre-construction requirements
- ❖ Safeguards implementation arrangements and roles and responsibility of different functionaries in the project
- ❖ Assessment of environmental impacts and planning for mitigation measures, including best management practices, in the design, construction, operation and maintenance of water supply and sewerage subprojects
- ❖ Preparation, updating, and review of IEE
- ❖ Preparation of site-specific EMPs/EHS Plan
- ❖ Occupational and community health and safety
- ❖ Labor and public safety and labor laws
- ❖ Heritage conservation, Biodiversity conservation
- ❖ Asbestos Management Plan (ACM)
- ❖ Solid waste (domestic, construction, and spoils) management
- ❖ Environmental monitoring including air, noise, water and soil
- ❖ Preparation of monitoring checklists and reports
- ❖ Areas of safety concerns in construction works
- ❖ Public consultations and grievance redress mechanism of RUIDP
- ❖ Good practices, tree plantations
- ❖ Probable pollutions during construction works and their mitigation measures
- ❖ Reuse of treated effluent and sludge from STP
- ❖ COVID-19 prevention and control

30. Reports of pre-construction stage environmental safeguard orientations given in Abu road, Sirohi, Sardarshahar, Ratangarh, Laxmangarh, Fatehpur towns were reported in last SEMR (October 2020 to March 2021).

31. During site visits of safeguard experts/safeguard support personnel of PMCBC and CMSC to project sites, onsite orientations for safeguards compliances are regularly being done for site engineers of PIU/CMSC/Contractors and site supervisors, workers, operators. During orientations ADB SPS Policy and safeguard requirements are described to attendees and non-compliances observed during site visits is discussed with them and required rectification and mitigation measures are also described in detail.



32. Contractors' EHS personnel also give orientations and trainings to their site staff and workers regarding environmental safeguard implementation at work sites. Different topics such as safety during trench works, work at height, confined space works, hot works, PPEs, health and sanitation, COVID-19 prevention and control, public safety, barricades etc are covered under the training given by contractors' EHS personal. Details of Contractors' trainings are given in **Appendix 8**.

33. During the reporting period following safeguard orientations were done by PMCBC/CMSC environmental safeguard specialists-

**Table 22- Safeguard Orientations Done during April to September 2021  
(by Safeguard specialists of PMCBC/CMSC)**

S. No.	Orientation/Training	Date	Demonstrators	Participants
<b>Banswara Town</b>				
1	Orientation regarding requirements of environmental safeguard during project implementation	01.07.2021	Dr. Mahaveer Prasad Saini , Environment Safeguard Professional of CMSC -II	<b>PIU:</b> 1.Ashok Jangid (EXN-RUIDP), Banswara)  <b>Consultant (CMSC-II):</b> 1. Mr. Mohit Jain (Support Staff-CMSC-2, Banswara) 2. Mr. Mayank Prajapati (Support Engineer CMSC-2, Banswara)  <b>Contractor's team (L&amp; T):</b> 1. Mohd. Shahid (Project In charge, BIPL SC HP) 2. Kenal Sayuj (Project Co-ordinator and Liaison Officer, BIPL SC HP)  <b>Total Participants- 5</b> <b>Male-5</b> <b>Female-0</b>
<b>Laxmangarh Town</b>				
2	Orientation regarding requirements of environmental safeguard during project implementation	27.07.2021	Dr. Mahaveer Prasad Saini , Environment Safeguard Professional of CMSC -II	<b>PIU:</b> None  <b>Consultant (CMSC-II):</b> None  <b>Contractor:</b> 1. Mr. Kartikeya Singh, Supervisor 2. Mr. Vishal Gorai, Dy. Mechanical Engineer 3. Mr. Survesh, Workman <b>Total Participants- 3</b> <b>Male-3</b> <b>Female-0</b>
<b>Fatehpur Town</b>				
3	Orientation regarding requirements of environmental safeguard during project implementation	28.07.2021	Dr. Mahaveer Prasad Saini , Environment Safeguard Professional of CMSC-II	<b>PIU :</b> None  <b>Contractor's team (L&amp; T):</b>  Smt. Govindi Mr. Haishankar Smt. Jamna

				Mr. Angand Mr. Bari Lal Mr. Bindi Pal  <b>Total Participants- 6</b> <b>Male-4</b> <b>Female-2</b>
<b>Pratapgarh Town</b>				
4	Orientation regarding requirements of environmental safeguard during project implementation	13.08.2021	Dr. Mahaveer Prasad Saini , Environment Safeguard Professional of CMSC-II	<b>PIU:</b> None  <b>Consultant (CMSC-II):</b> 1. Mrs Sapna Mehta, Social Safeguard Support  Contractor: 1. Mr. Kaalu ram Meena 2. Mr. Praburam 3. Mr. Jeevatram 4. Mr. Guddu Meena 5. Mr. Ramlal Meena  <b>Total Participants- 6</b> <b>Male-5</b> <b>Female-1</b>
<b>Ladnu, Didwana &amp; Makrana</b>				
5	Pre-construction orientation regarding requirements of environmental safeguard during Project Implementation	14.09.2021	Mr. Abhay Srivastava- Environment Safeguard Specialist, PMCBC Mr. Vardan Srivastava, Environment Specialist, CMSC-I	<b>PIU:</b> 1. Mr. Rakesh Mudgal, SE, PIU, Kuchaman 2. Mr. Ashok Chordia, Executive Engineer, PIU, Ladnu 3. Mr. Gurtej Singh, Executive Engineer, PIU, Makrana and Didwana 4. Mr. Jeetendra Kumar Meena, Junior Engineer, PIU, Ladnu 5. Mr. Jitendra, Junior Engineer, PIU, Makrana and Didwana  <b>Consultant (CMSC-I):</b> 1.Mr. Vardan Srivastava, Environmental Safeguard Professional, Jaipur 2. Mr. Arun Kanojia, ACM, CMSC-1, Didwana and Makrana 3. Mr. Vijay Pal, ACM, Ladnu 4.Mr. Sher Mohammad, Support Engineer, Ladnu 5.Mr. Saddam Nirwan, Support Engineer Didwana 6. Mr. Suraj Kumar Singh, Construction Manager, Didwana  <b>Contractor's team (L &amp; T):</b> 1. Mr. Sanjay Kumar Singh, Project Manager, Didwana and Ladnu 2. Mr. Ravinder Rawat, Construction Manager, Didwana 3. Mr. Ranjit Jain, IR, Didwana 4. Mr. Robin Maprani, HSE officer, Didwana and Makrana 5. Mr. Anil, QA/QC 6. Mr. Arun C.D., Accounts

				<p>7. Mr. Eswaran K.P. Construction Manager, Ladnu</p> <p>8. Mr. Jeevan Kumar P.K., HSE officer, Ladnu</p> <p>9. Mr. T. Rambabu, Accounts and Admin, Ladnu</p> <p>10. Mr. Ranjit Jha, IR, Ladnu</p> <p><b>Consultant (CMSC-II):</b></p> <p>1.Mr. Vardan Srivastava, Environmental Safeguard Professional, Jaipur</p> <p>2.Mr. Swadesh Godara, Support Engineer</p> <p>3. Mr. Ankit Sharma, Support Engineer</p> <p><b>Total Participants- 24</b> <b>Male-24</b> <b>Female-0</b></p>
<b>Kuchaman Town</b>				
6	Pre-construction orientation regarding requirements of environmental safeguard during project implementation	15.09.2021	Mr. Abhay Srivastava-Environment Safeguard Specialist, PMCBC	<p><b>PIU:</b></p> <p>1. Mr. M. C. Gupta, Executive Engineer, PIU, Kuchaman</p> <p>2. Mr. Saurabh Kumar Tayal, Junior Engineer, PIU, Kuchaman</p> <p><b>Consultant (CMSC-I):</b></p> <p>1. Mr. Vardan Srivastava, Environmental Safeguard Professional, Jaipur</p> <p>2. Mr. Swadesh Godara, Support Engineer</p> <p>3. Mr. Ankit Sharma, Support Engineer</p> <p><b>Contractor:</b></p> <p>1. Mr. Shah Nawaz Hasan, Project Manager, Kuchaman</p> <p>2. Mr. K. C. Panigrahi, Construction Manager, Kuchaman</p> <p>3. Mr. Anurag, Planning</p> <p>4. Mr. Avijit Dhara, Engineer</p> <p>5. Mr. Sayan Anjum, Engineer</p> <p>6. Mr. P. Ashok, QA/QC</p> <p>7. Mr. Sunil Kumar, Surveyor</p> <p>8. Mr. Anurag Baherwal., HSE officer</p> <p>9. Mr. Indrajit Adhikari, civil technician</p> <p>10. Md. Rashid, Civil Surveyor</p> <p>11. Mr. Mrityunjay Singh, SOT member</p> <p>12. Ms. Koyal Rathore, SOT member</p> <p>13. Ms. Roshan Kanwar, SOT member</p> <p>14. Mr. Kishan Singh, SOT member</p> <p>15. Mr. Atul Singh, Engineer</p> <p><b>CAPC:</b></p> <p>1. Mr. Devender Singh, SDE</p> <p><b>Total Participants- 21</b> <b>Male-19</b> <b>Female-2</b></p>

**Note- Photographs and attendance sheets of orientations are attached in Appendix 8**

## 11. PUBLIC CONSULTATION & GRIEVANCE REDRESS MECHANISM

### A. Public Consultation

34. Public consultations are being conducted by environmental specialist and environment safeguard support of CMSC through site visits which includes public consultations with project stakeholders including residents and shop owners, road users, public representatives etc, Summary of consultations done during reporting period is given in following table-

**Table 23- SUMMARY OF CONSULTATIONS DURING APRIL 2021– SEPTEMBER 2021**

S. No.	Date and place of consultation	Works being executed at/near site	Persons consulted	Topics discussed during consultation	Outcome of consultation
1.	02.07.2021, Sri Ram Colony, Dhahod Road, Banswara	DWC pipe laying of 200 mm dia and construction of manholes, Banswara	Local residents  Total-4 Male: 4 Female: 0	<ul style="list-style-type: none"> <li>During Public Consultation it was observed that Contractor site Engineering's informed to some local residents but not informed to every household in particular street where trench excavation would be taken.</li> </ul>	<ul style="list-style-type: none"> <li>Contractor should inform to households and shopkeepers about the nature and duration of work before start the excavation works and trenches should not be taken open for long duration to avoid public inconvenience.</li> </ul>
2.	27.07.2021, Zone 1 B, Laxmangarh	Pipe laying work and water supply house connection	Shopkeepers and nearby residents  Male- 3 Female-0	<p>Safety measures taken for locality are not proper but contractor has given early information about the schedule of excavation and laying work.</p> <p>Delay in repairing of damaged (from pipe laying work) water supply house connection lines.</p>	<ul style="list-style-type: none"> <li>Repairing of water supply house connections should be done immediately after the excavation/road cutting work.</li> </ul>
3.	14.09.2021, Mohandas ka Bas, near Shamshan Bhoomi, Didwana	200 mm DWC sewer pipe laying and manhole works	Nearby residents  Male- 2 Female-0	During consultation with nearby habitants, it was noted that SOT of contractor has given project information to habitants, but no any contact numbers of PIU and contractor was provided to them for	<ul style="list-style-type: none"> <li>It is advised that contact details of PIU and contractor should be circulated to the nearby habitants printed in the project pamphlets to register any grievance from public, contact details should also</li> </ul>

S. No.	Date and place of consultation	Works being executed at/near site	Persons consulted	Topics discussed during consultation	Outcome of consultation
				grievances, if any	be displayed at site
4.	15.09.2021, Balaji vihar Colony, Kuchaman	200 mm DWC sewer pipe laying and manhole works	Nearby residents Male- 1 Female- 1	During consultation with nearby habitants, it was noted that SOT of contractor has given project information to habitants, but no any contact numbers of PIU and contractor was provided to them for grievances, if any	<ul style="list-style-type: none"> <li>It is advised that contact details of PIU and contractor should be circulated to the nearby habitants printed in the project pamphlets to register any grievance from public, contact details should also be displayed at site</li> </ul>
5.	15.9.2021, at Jhanjharia Ki Dhani village, Makrana	200 mm DWC sewer pipe laying and manhole works	Nearby residents Male- 2 Female- 0	During consultation with nearby habitants, it was noted that SOT of contractor has given project information to habitants, but no any contact numbers of PIU and contractor was provided to them for grievances, if any	<ul style="list-style-type: none"> <li>It is advised that contact details of PIU and contractor should be circulated to the nearby habitants printed in the project pamphlets to register any grievance from public, contact details should also be displayed at site</li> </ul>
6.	24.09.21, Momminpura (200 mm dia.), Zone -3, Fatehpur	Pipe Laying Works	Nearby residents Male- 4 Female- 2	<ul style="list-style-type: none"> <li>Pre-construction information about nature, difficulties, duration of work</li> <li>Inconvenience due to Pipe laying work</li> <li>Project Information about contact details</li> <li>People were making complaints that no access for vehicles was left since last 5-6 days</li> <li>Co-operation of Workers/supervisors/Engineers during work</li> </ul>	<ul style="list-style-type: none"> <li>All Information were provided to nearby residents</li> <li>Residents were satisfied with the arrangements done for the ease of residents during pipe laying</li> <li>Already provided</li> <li>Residents were satisfied with Workers/supervisor s/Engineers co-operation</li> </ul>
7.	24.9.21, SPS (1.1 MLD) site near Railway Underpass, Nawalgarh Road, Pratap Nagar, Fatehpur	Proposed construction of SPS	Nearby residents Male- 3 Female- 0	<ul style="list-style-type: none"> <li>Type of land</li> <li>Pre-construction information about proposed work</li> <li>Satisfaction status of the nearby residents from the proposed pipe</li> </ul>	<ul style="list-style-type: none"> <li>It was informed that this is Government land and belongs to Municipal Council</li> <li>Information were provided to nearby residents</li> </ul>

S. No.	Date and place of consultation	Works being executed at/near site	Persons consulted	Topics discussed during consultation	Outcome of consultation
				laying work	<ul style="list-style-type: none"> <li>Nearby Residents were happy with proposal of SPS construction in their area</li> </ul>

35. Photographs of consultations and attendance sheets as a sample are attached as **Appendix 2**.

## **B. PROJECT-SPECIFIC GRIEVANCE REDRESS MECHANISM**

36. A project-specific, three-tier grievance redress mechanism (GRM) covers both environment and social issues. The GRM will be established to receive, evaluate, and facilitate the resolution of affected persons' concerns, complaints, and grievances about the social and environmental performance at project level. The GRM will aim to provide a time-bound and transparent mechanism to voice and resolve social and environmental concerns related to the project. Assessment of the GRM designed and implemented for Rajasthan Urban Sector Development Program (RUSDP)<sup>5</sup> the system was effective in timely resolution of grievances in a transparent manner.<sup>6</sup> The multichannel, project-specific, three-tier GRM is functional at RUSDP, hence the design of GRM for RSTDSP takes into account the proposed institutional structure for RSTDSP and the positive features and learnings from the previous GRM.<sup>7</sup>

37. **Common GRM.** A common GRM will be in place for social, environmental, or any other grievances related to the project. Implementation of the resettlement plans/RIPPs/DDR/IEEs will follow the GRM described below. The GRM will provide an accessible and trusted platform for receiving and facilitating resolution of affected persons' grievances related to the project.

<sup>5</sup> The procedures followed for grievance redress during implementation of RUSDP Phase III included the project GRM and the pilot GRM software application (Smart Check) in Pali, the Sampark portal of Government of Rajasthan, and the Chief Minister's helpline. Complaints received through various channels were mostly minor and pertained to damage to existing water supply pipelines and disruption of water supply during construction, delays in road restoration, and pending new connections. Complaints related to damage to private property (compound walls/steps, etc.) were less in number. The grievances were mostly possible to resolve in coordination with the contractors. Complaints received were immediately referred by the CAPC/PMDSC supervision staff to the PIU Nodal officer (safeguards) and concerned engineer at PIU, who advised them on further action. Follow up with the contractor on complaint resolution was undertaken by PIU Nodal officer CAPC and PMDSC and final feedback sought from complainant upon resolution. Complaints requiring inter-departmental coordination were referred to the PMU for resolution, and feedback provided to complainant. The PMU kept regular track of grievances through Whatsapp and email alerts, ensuring registration and follow-up until resolution.

<sup>6</sup> Town-level grievance registration data indicates that a large number of grievances were registered, pointing to the effectiveness of the multi-channel GRM. No major grievance was received for RUSDP Phase III. The GRM helped smoothen the process of project implementation, hence the proposed architecture for the RSTDSP GRM remains similar, with some refinement, taking into account the changes in institutional setup proposed for project implementation.

<sup>7</sup> Continued logistics support at field level will be key to successful management of grievance redress under RSTDSP. The target date for establishment of the first level (PIU level) and second level (Zonal level) of GRM is before loan negotiation.

38. Public awareness campaigns within entire ULB/Municipal area will ensure that awareness on grievance redress procedures is generated. The nodal officer- social/environment at field level through community awareness and public participation consultant (CAPPC) will conduct ULB/Municipal area-based awareness campaigns to ensure that poor and vulnerable households are made aware of grievance redress procedures and entitlements. Contractors will provide pamphlets to communities prior to start of works and billboards during construction. The pamphlets and billboards will include relevant environmental and social safeguards, GRM information, and contact details of key personnel from PIU and contractors.

39. Affected persons will have the flexibility of conveying grievances/suggestions by dropping grievance redress/suggestion forms in complaint/suggestion boxes that will be installed by project PIUs or by e-mail, by post, or by writing in a complaints register in ULB offices/complaints register at contractor's work site<sup>8</sup> or by sending a Whatsapp message to the PIU<sup>9</sup> or by dialling the phone number of town level PIU/CAPPC or by dialling a toll-free number.<sup>10</sup> Any aggrieved person can also avail the facilities of online grievance monitoring system 'Rajasthan Sampark' portal to register their grievance which is a parallel mechanism of grievance registration, in addition to the project GRM.<sup>11</sup> Careful documentation of the name of the complainant, date of receipt of the complaint, address/contact details of the person, location of the problem area, and how the problem was resolved will be undertaken and feedback provided to the complainant on action/decision taken. The Safeguard and Safety Officer of town/city level PIU will have the overall responsibility for timely grievance redressal on environmental and social safeguards issues and for registration of grievances, related disclosure, with the assistance of project consultants. In case of grievances that are immediate and urgent in the perception of the complainant, the contractor, and officials of PIU with assistance from construction management and supervision consultants (CMSC) and CAPPC on-site will provide the most easily accessible or first level of contact for quick resolution of grievances. Contact numbers and names of the concerned PIU safeguard and safety officer, contractors, CAPPC and CMSC personal will be posted at all construction sites at visible locations.

---

<sup>8</sup> RUSDP piloted an online application based live GRM counter for resolution of public grievances over and above the usual process of grievance registration and redressal. This app based GRM - "RUIDP Smart Check" is available at Google play store (free of cost) and is operational. The RUIDP Smart Check "app" was launched in Pali town in July 2017 and is proposed to be scaled up in RSTDSP project towns. For persons without access to the application, the traditional channels will continue to be available.

<sup>9</sup> It is suggested for each PIU to have a dedicated whatsapp group for registration of grievances and receipt of quick feedback, to be followed by more formal communication.

<sup>10</sup> Project contractors in all project towns will have a toll-free number with specific working hours for registration of grievances related to RSTDSP.

<sup>11</sup> <http://www.sampark.rajasthan.gov.in/RajSamWelcome.aspx>

- (i) **1st level grievance.** The contractors, PIU Executive Engineer (EE)/Assistant Engineer (AE) designated as safeguard and safety officer (social and environment), CMSC (safeguard staff) and CAPPCC can immediately resolve issues on-site, in consultation with each other and will be required to do so within 7 days of receipt of a complaint/grievance. If required, city level monitoring committee (CLMC)<sup>12</sup> will be involved in resolution of grievances at the 1<sup>st</sup> level.
- (ii) **2nd level grievance.** All grievances that cannot be redressed within 7 days at field/PIU level will be brought to the notice of Zonal PIU headed by Additional Chief Engineer (ACE). The ACE at zonal PIU will resolve the grievance within 7 days of receipt of complaint/grievance in discussion with the ASO, field level PIU, CMSC, CAPPCC and the contractor.
- (iii) **3rd level grievance.** All the grievances that are not addressed by Zonal PIU within 7 days of receipt will be brought to the notice of the PMU. Depending on the nature of grievance, the Project Officer (Social/Environment) at PMU will resolve the grievance within 15 days of receipt of grievance with necessary coordination of Zonal PIU and CMSC and guidance/instruction of Additional Project Director (APD-PMU).
- (iv) Grievances not redressed through this process within/at the project level within stipulated time period will be referred to the CLC/GRC, which has been set up.<sup>13</sup> In its role as a GRC, the CLC will meet whenever there is an urgent, pending grievance. Other grievances can be discussed during its regular meetings. Zonal PIU will inform the CLC regarding any grievances required to be resolved urgently. The GRC will resolve the grievance within 15 days of receiving the complaint. In case of any indigenous peoples impacts in subprojects, the CLC/GRC must have representation of the affected indigenous people community, the chief of the tribe or a member of the tribal council as traditional arbitrator (to ensure that

<sup>12</sup> The CLMC has been formed at the town/city level for planning and monitoring of work, resolve issues related to departmental coordination etc. It is headed by Commissioner/Executive Officer ULB (Chairman) and city engineer of public health engineering department (PHED), public works department (PWD) and head of PIU acting as Member Secretary.

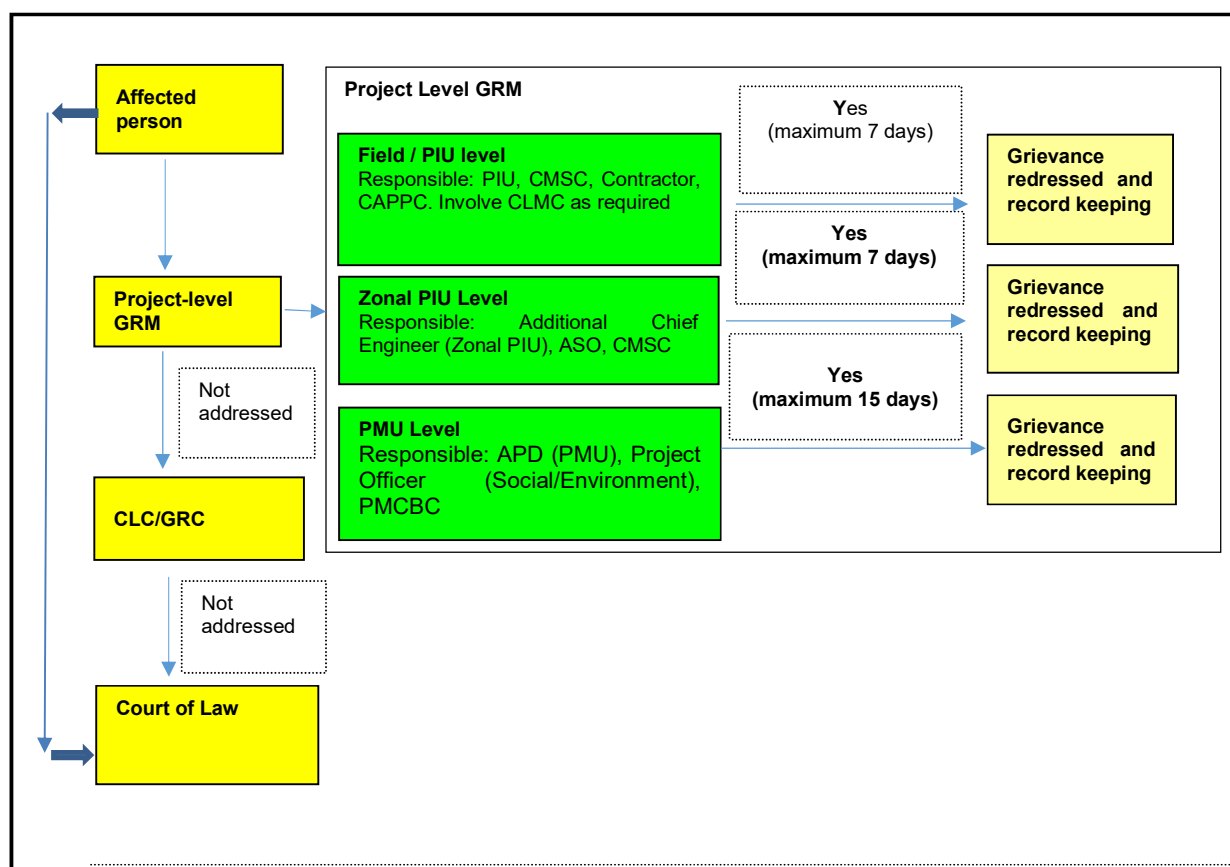
<sup>13</sup> City Level Committee (CLC)/grievance redress committees (GRCs) has been constituted for each town/city under the Chairmanship of District Collector to provide overall subproject guidance and "to sort out issues and remove hindrances, if any". CLC formed at city-level/district level with members composed of: District Collector as Chairperson, and following as members: ULB Commissioner/Mayor/Chairman; Deputy Mayor/Vice Chairman ULB; Chairman / Secretary Urban Improvement Trust (UIT); Head of Zonal/field level PIU as Member Secretary; one representative each from relevant government departments as appropriate (PWD/PHED/Town Planning Department etc.). All CLCs in their role as GRCs will have at least one-woman member/chairperson. In addition, for project-related grievances, representatives of affected persons, community-based organizations (CBOs), and eminent citizens will be invited as observers in GRC meetings. The concerned Member of Parliament (MP) and Member of Legislative Assembly are also part of the CLC.



traditional grievance redress systems are integrated) and an NGO working with indigenous people groups.

- (v) The multi-tier GRM for the project is outlined below (Figure XXX), each tier having time-bound schedules and with responsible persons identified to address grievances and seek appropriate persons' advice at each stage, as required. The GRC will continue to function throughout the project duration.

**Figure 2: Grievance Redress Mechanism-RSTDSP**



Note: APD = Additional Project Director, ASO = Assistant Safeguards Officer, CAPPC = community awareness and public participation consultant, CMSC = construction management and supervision consultants, CLC = city level committee, CLMC = city level monitoring committee, GRC = grievance redress committee, PIU = project implementation unit, PMU = program management unit, PMCBC = project management and capacity building consultant.

40. The project GRM notwithstanding, an aggrieved person shall have access to the country's legal system at any stage, and accessing the country's legal system can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM. In case of grievance related to land acquisition, resettlement and rehabilitation, the affected persons will have to approach a

legal body/court specially proposed under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (RFCTLARRA), 2013.<sup>14</sup>

41. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism<sup>15</sup>.

42. PMU, RUIDP, had issued office order no. 1282 dtd. 04.05.2018 referring that Grievance Redress Mechanism prevailing in RUIDP Phase-III (loan no. 3183-IND) will be replicated in RUIDP Phase-IV (RSTDSP loan no. 3972-IND) project also. Further PMU, RUIDP Jaipur has issued a letter no. 11367 dtd. 18.12.2020 to all PIUs to establish the GRM under RSTDSP and nomination of required officers at first level in PIUs. Copy of these letter are attached as **Appendix 11**.

43. Grievance Redress Committee is set up under RSTDSP at all levels. Details of GRC members are given in **Table 24**-

**Table- 24: Details of GRC Members**

<b>GRC Members (Grievance redressal committee members)</b>								
<b>Town Name</b>	<b>1<sup>st</sup> Level GRC Members</b>					<b>2<sup>nd</sup> Level GRC Members</b>	<b>3<sup>rd</sup> Level GRC Members</b>	
	Contractor (Project Manager)	Executive Engineer, PIU	Safeguard and Safety Officer (SSO), PIU	Environment Safeguard -, CMSC	Social Safeguard, CMSC	Zonal Additional Chief Engineer	Project Officer, Environment, PMU	Project Officer, Social, PMU
Ratangarh	Mr. Bhanu Pratap Raghuvanshi	Mr. R.D. Garg	Mr. Deepak Mandan	Dr. Mahaveer	Mr. Naasir	Mr. S.K. Verma, Zone-Jodhpur	Mr. Vijay Choudhary	Mr. K M Mandawariya
Fatehpur	Mr. Madheshwar Kumar	Mr. Hari Babu	Mr. Surendra Godra					
Laxmangarh	Mr. Madheshwar Kumar	Mr. Hari Babu	Mr. Hari Babu					
Sardarshahar	Mr. Rishi Kumar	Mr. R.D. Garg	Mr. Dinesh Fogat					

<sup>14</sup> The Authority admits grievance only with reference to the Land Acquisition and R&R issues under the RFCTLARRA, 2013.

<sup>15</sup> Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

	Sakalley	(on Additional Charge)		Saini	Hussain			
Abu Road	Mr. Pankaj Biswas	Mr. Deepak Mandan	Mr. Sunil Vishnoi					
Sirohi	Mr. Prakash Chand Gupta	-	Mr. Ashok Kadwasara					
Pratapgarh	Mr. Lalit Trivedi	Mr. Ashok Kumar Jangid	Mr. Madan Lohar					
Banswara	Mr. S.P. Singh	Mr. Ashok Jangid	Mr. Prabhulal Bhabor					
Kuchaman	Mr. Shahnavaz Hasan	Mr. Ashok Kr. Choradia	Mr. Saurabh Tayal					
Ladhun	Mr. S.K.Singh	Mr. Ashok Kr. Choradia	Mr. Jitendra.					
Makrana	Mr. S.K.Singh	Mr. Ashok Kr. Choradia	Mr. Gurtej Singh					
Didwana	Mr. S.K.Singh	Mr. Ashok Kr. Choradia	Mr. Jitendra Meena					
Khetri	Mr. Anil kumar Meena	Mr. D.K.Verma	Mr. Devendra Saini					
Mandawa	Mr. Karri Bhujanga Rao	Mr. D.K.Verma	Mr. Devendra Saini (On additional Charge)					

44. During April to September 2021, no any grievance related to Environment, Health and Safety was received in any of the town and no any GRC or CLMC meeting was required at any town and no any such meetings conducted in any town during reporting period.

**12. CONTRACTORS' ENVIRONMENTAL, HEALTH AND SAFETY (EHS) PERFORMANCES**

45. Contractors of different packages have deputed EHS Engineers in their respective towns for compliance of EHS and safeguard issues at site. Contractors have provided workers camps with sufficient and adequate facilities. Proper barricades and signage are being provided during pipe laying works in general. Contractors are also observing different important days (safety week, world environment day, labor day etc.) at their respective sites to recognise the importance of Environment, Health and Safety and making awareness among workers. Various types of environmental, health and safety activities and worker's welfare activities like workers health check-ups, blood donation camps, plantations, social works, safety orientations, COVID-19 awareness and training are also performed by contractors time to time apart from project related EHS compliances. Contractors' performance of EHS is monitored by safeguard specialists/support of PMCBC/CMSCs during their site visit and contractors also submit monthly and quarterly reports of various EHS activities at sites to PIU/CMSC/PMCBC.

46. During reporting period various such activities were performed by different contractors and illustrations are attached as **Appendix 7 and 8** with this report.

47. Contractors of Abu Road, Sirohi, Sardarshahar, Laxmangarh, Ratangarh, Fatehpur have submitted the Site Specific Environment Management Plans (SEMP) in pre-construction phase, which are approved and being followed in construction works. These SEMP's also include Solid Waste and Spoil Management Plan, Traffic Management Plan, Health and Safety Plans, Workers camps plans, COVID-19 prevention and control plan, Asbestos Management Plan etc. SEMP's of other contractors are under stage of submission/review by experts and shall be reported in next SEMR.

48. **Prevention and control measures adopted by contractors during COVID-19 pandemic.** Due to pandemic of COVID-19 there is risk of infection to workers and staff while working at sites, therefore there was requirement to follow COVID appropriate behaviour at all work sites and offices, for which RUIDP prepared guidelines for COVID-19 and issued to all PIUs and contractors with the instruction to strictly follow these guidelines during construction works at sites and all offices of PIU/consultants/contractors. Contractors followed all the guidelines as specified by RUIDP and Governments and prepared SOP for construction activities.

49. All the contractors have prepared separate plan for prevention and control of COVID-19 during pandemic and after resume of works at site. Purpose of these documents are to lay down procedures to be followed during pandemic conditions as per guidelines issued by State Government & local authorities. RUIDP directions, contractors SOPs, their efforts and activities for

prevention and control measures for COVID-19; adopted by contractors are reported in **Appendix 9**.

50. **Accident and Incident at project sites.** Contractors are implementing the safety measures at all project sites as per best practices, but there are always chances of accident and incident during construction works. Contractors are reporting accident, incident, near miss and first aid cases on quarterly basis to PIUs/consultants. A report on accident and incident cases during reporting period is attached as **Appendix 12**.

### **13. SUMMARY OF KEY ISSUES AND REMEDIAL ACTIONS**

#### **A. FINDINGS AND KEY ISSUES**

51. Up to September 2021, contracts for all 14 project towns have been awarded (Ratangarh, Laxmangarh and Fatehpur under single contract as package, no. RSTDIP/RTG-FTP-LXG/01, Sardarshahar – package no. RSTDIP/SRD/01, Abu Road and Sirohi under single contract as package no. RSTDIP/SHR-ABR/01, Pratapgarh; package no. RSTDIP/PRT/01, Banswara; package no. RSTDIP/BNS/04, Khetri; package no. RSTDIP/KTR/03, Mandawa; package no. RSTDIP/MDW/03, Kuchaman; package no. RSTDIP/KMN/02, Didwana, Makrana and Ladnu under single contract as package no. RSTDIP/LDN-DID-MKN/01. Work has started in all 14 towns (Ratangarh, Laxmangarh, Fatehpur, Sardarshahar, Abu Road, Sirohi, Pratapgarh, Banswara, Khetri, Mandawa, Kuchaman, Ladnu, Makrana and Didwana).

52. IEEs of 13 project towns (out of 14 towns; excluding Ladnu town) have been updated as per approved design status and changed scope of works/locations and submitted to ADB for further review and approval. Out of total 13 IEE submitted, IEEs of 10 towns i.e. Ratangarh, Sardarshahar, Fatehpur, Laxmangarh, Abu Road, Sirohi, Pratapgarh, Kuchaman, Didwana, Makrana towns have been approved by ADB and uploaded on ADB and RUIDP web portals whereas updated IEEs of 3 towns of Khetri, Mandawa and Banswara were submitted to ADB in September 2021, which were reviewed by ADB and comments were given which are under compliance by RUDSICO-EAP.

53. Contractors have been oriented in pre-construction stages by PMCBC/CMSC environment specialists about requirements of ADB safeguard policy and other contractual and legal compliances. Periodical refresher trainings and orientations is required during regular site visits to ensure compliance of EMP.

54. All the required legal obligations are being fulfilled in the project. CTE for proposed construction of STPs and WTPs are being applied before start of any construction activities at site.

There are total 19 STPs and 3 WTPs proposed for construction in all 14 towns, thus total 22 WTPs/WTPs required CTE. Up to September 2021 total 20 applications for CTEs were submitted out of which 18 CTEs have been issued by RSPCB. Application for other pending CTEs is required before start of construction works at sites. Other contractual and legal compliances are being fulfilled in all project towns.

55. Pre-construction environmental monitoring (baseline) of ambient conditions (air, Noise, Soil and water) is conducted in all contracts. Quarterly environmental monitoring is required to be conducted throughout the construction period in all project towns as per EMP.

56. All precautionary measures for prevention and control of COVID-19 is being undertaken in all projects as per RUIDP, State of Rajasthan and Union Government's guidelines.

## B. REMEDIAL MEASURES

57. Following remedial measures and action plan is developed to address the issues of concerns raised in this report.

**Table 25: Remedial Measures and Action Plan**

Pending Issue	Proposed Remedial Measure	Responsibility	Time Frame
Pending clearances/ consents from regulatory agencies	Follow up for pending Forest clearance for some stretch of raw water rising main at Abu Road	PIU/CMSC-2	31.12.2021
Land Issues of project components	Ladnu- Land for STP 3.5 MLD at Vishwanathpur Sardarshahar- Land for STP 1.6 MLD at Gandhi Vidya Mandir's land	PIU, Ladnu PIU, Sardarshahar	At earliest At earliest
Non submission of SEMP's by contractors	Submit final/updated SEMP's of following packages- Pratapgarh, Banswara, Khetri, Mandawa, Ladnu, Didwana, Makrana, Kuchaman	DBO contractors of all towns	30.11.2021
Poor Implementation of EMP in some packages-	Provide project information boards and caution boards, proper barricades, drinking water, first aid box, toilets etc. at the work sites in following packages- Makrana, Didwana, Kuchaman, Pratapgarh, Banswara	DBO contractors of concerned towns	Immediate
Environmental monitoring conducted only in few packages	Conduct ambient environmental monitoring as per the EMP in following packages- Khetri	DBO contractor	Immediate
Training of workers on HIV/AIDS awareness	Conduct Training for HIV/AIDS for all contractors' workers, PIU and other engineers in projects of Pratapgarh, Laxmangarh, Ratangarh, Fatehpur, Mandawa, Khetri, Ladnu, Didwana, Makrana, Kuchaman towns	DBO contractors of concerned towns	31.12.2021









**APPENDIX 1: PHOTOS OF SITE VISITS AND CONSTRUCTION WORKS**

<b>Abu Road Town</b>	
	
Construction works at 6.9 MLD STP	Construction works at STP site
<b>Sirohi Town</b>	
	
Use of PPEs by workers at 1.7 MLD STP	Safety during work at height at 5 MLD STP
	
Sewer pipe laying works at Housing Board	Labour Camp Photos
<b>Banswara Town</b>	



	
200 mm DWC sewage pipe laying and manhole work at Sri Ram Colony <b>Pratapgarh Town</b>	
	
Mobile Toilet Van at Construction site, Bahubali Colony, Pratapgarh	CRMC Building Construction Site at Municipal Council Campus, Pratapgarh
<b>Laxmangarh Town</b>	
	
Separate toilets for men and women in workers camp	Use of PPE Kit during AC Pipes inventory
<b>Fatehpur Town</b>	
	
Construction works at STP site	Project information board at STP site



	
Proper electrical safety at STP site	Height mock up structure at workers camp
<b>Sardarshahar Town</b>	
	
Use of PPE Kit during inventory of AC Pipes	Use of PPEs at site
<b>Mandawa Town</b>	
	
Pipe Laying works with caution boards and barricades	
<b>Khetri Town</b>	
	
Pipe Laying work at site	
<b>Didwana Town</b>	

	
<p>Doctor's chamber and induction room at workers camp</p>	<p>Separate Toilets and bathrooms at workers camp</p>
<b>Kuchaman Town</b>	
	
<p>Workers camp at Panchwa Road</p>	<p>Speaking walls showing safety practices at workers camps</p>
<b>Makrana Town</b>	
	
<p>Barricades at Construction site</p>	<p>Passage for habitants at costruction site</p>
<b>Ladnu Town</b>	
	
<p>Ladnu:- STP 01</p>	<p>Ladnu:-STP 02</p>



**APPENDIX 2: SAMPLE PHOTOGRAPHS OF CONSULTATIONS**

	
Public consultation at Sri Ram Colony, Banswara dated 02.07.2021	Public consultation at Zone 1B, Laxmangarh dated 27.07.2021
	
Public Consultation at Mohandas ka Bas, near Shamshan Bhoomi, Didwana dated 14.09.2021	Public Consultation at Balaji Vihar Colony, Kuchaman dated 15.09.2021
	
Public consultation at Jhanjharia Ki Dhani village, Makrana dated 15.09.2021	Public consultation at Momminpura Zone -3, Fatehpur dated 24.09.2021
	
Public consultation at Proposed SPS (1.1 MLD) site, Fatehpur dated 24.09.2021	

**APPENDIX 2A: SAMPLES OF ATTENDANCE SHEETS OF CONSULTATIONS****Attendance Sheet of Public Consultation at Sri Ram Colony, Banswara dated 02.07.2021**

**PUBLIC CONSULTATION SIGNATURE SHEET**

**Project name:** Rajasthan Secondary Towns Development Sector Project – Sewerage Subproject in Banswara Town, Banswara District, Rajasthan

**Date and Time:** 02/07/2021 – 10.00 am to 12.00 pm

**Place:** Sri Ram Colony, Dhahool Road Banswara.

S.No.	Name of Participant	Occupation	Address	Signature	Phone Number
1.	Prakash Chandra Gupta	Retired Engineer	-	[Signature]	941426447180
2.	Prash Gupta	Corporator	-	[Signature]	9461573523
3.	Amit Tiwari	Student	-	[Signature]	9785426927
4.	Sainath	Mill Worker	-	[Signature]	9785694575
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					

**Attendance Sheet of Public Consultation at Zone 1B, Laxmangarh dated 27.07.21**

DATE 27 07 2021

**Project Name:-** Rajasthan Secondary Towns Development Sector Project – Water Supply Project in Laxmangarh Town, District-Sikar, Rajasthan.

**Public consultation sheet. Date:-** 27.07.2021

**Time:-** 5:00 PM

S.No.	Name of Participant	Occupation	Mobile	Signature
1.	Mohammad Akram	Shopkeeper	9828574814	[Signature]
2.	Mohammad Sakil	Worker	9928335362	[Signature]
3.	Mohammad Amir Qureshi	Self-employed	7073869914	[Signature]

### Attendance Sheet of Public Consultation at Mohandas ka Bas, near Shamshan Bhoomi, Didwana dated 14.09.21

**Consultation with Stakeholders (Panning/Implementation Phase)**

Project Town: Didwana Name of the project: Sewerage Pipe Line 20mm dia  
 Date: 14/9/2021 Place of consultation: Mohandas bagh (Banshan)

S.No.	Name and mobile no.	Designation and/or Address	Topics Discussed	Outcome of the consultation	Signature
1	<u>Om Prakash</u>	<u>Mohandas Bagg/Shamshan Bhoomi</u>	<u>Project information dissemination by SOT any problem due to construction work</u>	<u>SOT members given project information, no problem due to work</u>	
2	<u>Aman Chand Sharma</u>	<u>Mohandas Bagg (Shamshan Bhoomi)</u>			
3					
4					
5					

Name and Signature of the person who done consultation: [Signature]  
 Any special issue noted at site: No work done as rain at site

### Attendance Sheet of Public Consultation at Balaji vihar Colony, Kuchaman dated 15.09.21

**Consultation with Stakeholders (Panning/Implementation Phase)**

Project Town: Kuchaman Name of the project: Sewerage  
 Date: 15/9/2021 Place of consultation: Balaji vihar colony

S.No.	Name and mobile no.	Designation and/or Address	Topics Discussed	Outcome of the consultation	Signature
1	<u>Jagdish / Poojar</u>	<u>Balaji vihar</u>	<u>Project information, Problem due to construction work</u>	<u>SOT given project information, Satisfactory work</u>	<u>[Signature]</u>
2	<u>Soni Devi PSH 106</u>	<u>Balaji vihar</u>	<u>any other issue</u>	<u>no issue</u>	
3					
4					
5					

Name and Signature of the person who done consultation: [Signature]  
 Any special issue noted at site: A.S., EAS, PSH 106



**Attendance Sheet of Public Consultation at Jhanjharia Ki Dhani village, Makrana dated 15.09.21****Consultation with Stakeholders (Panning/Implementation Phase)**

Project Town: Makrana Name of the project: Sewerage (Zammin DWC Bika and manohale)  
 Date: 15/9/2021 Place of consultation: Jhanjharia Ki Dhani

S.No.	Name and mobile no.	Designation and/or Address	Topics Discussed	Outcome of the consultation	Signature
1	Mohan Ram	Jhanjharia Ki Dhani	Proposed information by SOT, problem due to ongoing	SOT have given proposed information people are	<i>[Signature]</i>
2	Kanka Ram Ji	Jhanjharia Ki Dhani	works - Any other issue	Satisfied with works	
3					
4					
5					

Name and Signature of the person who done consultation: *[Signature]*Any special issue noted at site: *(A.S., B.S., P.M.C.C.)***Attendance Sheet of Public Consultation at Momminpura Zone -3, Fatehpur dated 24.09.21****Consultation with Stakeholders (Panning/Implementation Phase)**

Project Town: Fatehpur Name of the project: Fatehpur Lowenage Project  
 Date: 24-09-21 Place of consultation: Momminpura, Zone-3 (Road Restoration)

S.No.	Name and mobile no.	Designation and/or Address	Topics Discussed	Outcome of the consultation	Signature
1	Gulqam	Resident	• Pre-Construction information • Display Board / Information Board at site • Co-operation of workers / Supervisors with local residents	• Details/Information about the proposed work was provided to nearby residents.	<i>[Signature]</i>
2	Piroza	Resident	• Information about duration of work completion	• Nearby residents are happy & satisfied with proposed pipe laying work	<i>[Signature]</i>
3	Mr Mustakin	Resident	• No way for Transportation of vehicles • Business being affected / people suffering		<i>[Signature]</i>
4	Mr Khulad	Resident			<i>[Signature]</i>
5	Mr Gulqam	Resident			<i>[Signature]</i>
6	Pranod	Resident			<i>[Signature]</i>

Name and Signature of the person who done consultation: *[Signature]*  
 Any special issue noted at site:

### Attendance Sheet of Public Consultation at Proposed SPS (1.1 MLD) site, Fatehpur dated 24.09.21

**Consultation with Stakeholders (Panning/Implementation Phase)**

Project Town: Fatehpur Name of the project: Sewerage works  
 Date: 24.09.2021 Place of consultation: Near Railway line SPS  
Chauri

S.No.	Name and mobile no.	Designation and/or Address	Topics Discussed	Outcome of the consultation	Signature
1	<u>Suresh Chivara</u> <u>9001526551</u>	<u>Member MC</u>	<u>Awareness about proposed works, awareness of any wildlife near</u>	<u>People are aware about the project works.</u>	<u>Suresh</u>
2	<u>Rakesh Kumar</u>	<u>Fatehpur Nagar</u>	<u>Project area status of sewerage condition in the town, any</u>	<u>no forest and wild life noted at town area.</u>	<u>Rakesh</u>
3	<u>Shiva</u>	<u>Fatehpur Nagar</u>	<u>Other issue related to project</u>	<u>Sewerage condition of town is not satisfactory.</u>	<u>Shiva</u>
4					
5					

Name and Signature of the person who done consultation: Arjun  
24.09.2021  
 Any special issue noted at site: None  
24.09.21

**APPENDIX 3: COPIES OF ENVIRONMENTAL CLEARANCES AND PERMITS****A. Details of Consent to Establish (CTEs) reported in Previous SEMRs**

S.No.	Component and Town Name	Vailidity	Reported in which SEMR
1	2.3 MLD STP at Sardarshahar	Valid from 15.10.2020 to 30.09.2025 under Air Act Valid from 13.02.2021 to 31.01.2026 under Water Act	SEMR (October 2020 to March 2021)
2	3.4 MLD STP at Sardarshahar	Valid from 15.10.2020 to 30.09.2025 under Air Act Valid from 13.02.2021 to 31.01.2026 under Water Act	SEMR (October 2020 to March 2021)
3	2.3 MLD STP at Abhu Road	CTE Issued Valid from 15.02.2021 to 31.01.2026	SEMR (October 2020 to March 2021)
4	6.9 MLD STP at Abhu Road	CTE Issued Valid from 15.02.2021 to 31.01.2026	SEMR (October 2020 to March 2021)
5	10 MLD WTP in Abhu Road	CTE Issued Valid from 15.02.2021 to 31.01.2026	SEMR (October 2020 to March 2021)
6	1.7 MLD STP at Sirohi	CTE Issued Valid from 11.02.2021 to 31.01.2026	SEMR (October 2020 to March 2021)

**B. Details of other permissions/NOCs**

S.No.	Type of permission/NOCs and Town Name	Reported in which SEMR
1	Tree cutting permission at CWR site at Laxmangarh	SEMR (October 2020 to March 2021)
2	Tree cutting permission for CWR site at PHED Campus in Sardarshahar	SEMR (October 2020 to March 2021)
3	Tree cutting permission for STP site in Pratapgarh	SEMR (October 2020 to March 2021)
4	Tree Cutting permission for CRMC site at Pratapgarh	SEMR (October 2020 to March 2021)
5	Tree Cuttng permission for WTP site at PHED campus, Banswara	SEMR (October 2020 to March 2021)



## C. Details of Environmental clearances/permission issued in this reporting period

## Consent to Establish (CTE) for 3.8 MLD STP at Ratangarh



**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852



**Registered**

File No : F(Tech)/Churu(Ratangarh)/1764(1)/2020-2021/408-410  
 Order No : 2021-2022/Liquid Waste/1228  
 Unit Id : 106923  
 Dispatch Date: 03/06/2021

**M/s Sewage Treatment Plant- 3.8 MLD**  
**Nagar Palika, Near Ratangarh bus stand , Ratangarh**

**Sub: Consent to Establish** under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.  
**Ref:** Your application(s) for Consent to Establish dated 12/02/2021 and subsequent correspondence.

**Sir,**

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended in date and rules & the orders issued thereunder **is hereby granted** for your **Sewage Treatment Plant 3.8 MLD plant** situated / proposed at **Khasra No. 4, 2B, NH-11, Derasar Ratangarh Tehsil:Ratangarh District:Churu** , Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:-

1. That this Consent to Establish is valid for a period from **12/02/2021 to 31/01/2026 or date of Commencement of production / commissioning of the project or activities whichever is earlier**.
2. That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below.

Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	3,800.00 KLD

3. That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
4. That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.
5. That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:

Page 1 of 4

**Signature Not Verified**  
 Digitally signed by Niraj Mathur  
 Date: 2021.06.03 15:15:25 IST  
 Reason: Self Attested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

File No : F(Tech)/Churn(Ratangarh)/1764(1)/2020-2021/408-410

Order No : 2021-2022/Liquid Waste/1228

Dispatch Date: 03/06/2021

Unit Id : 105823

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	3800.000	NIL	3,800.000 On Land For Plantation/Horticulture after adequate treatment.

- 6 That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act-1986 for disposal **Into Inland Surface Water**. The main parameters for regular monitoring shall be as under:

Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

- 7 In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/l.
- 8 That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 1663 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount.
- 9 That no treated/untreated effluent shall be discharged into any water body and entire treated sewage shall be utilized in plantation/horticulture/ other gainful purposes.

Page 2 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.06.03 15:15:25 IST  
 Reason: Self Attested  
 Location:





Head Office Liquid Waste  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Churu(Ratangarh)/1764(1)/2020-2021/408-410

Order No : 2021-2022/Liquid Waste/1228

Dispatch Date: 03/06/2021

Unit Id : 106823

- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation.
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That, not withstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained **section 27(2) of the Water Act** to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the **Water Act**.
- 17 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent.
- 18 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that, non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the the relevant provisions of the said Act(s).

Page 3 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.06.03 15:15:25 IST  
 Reason: SelfAttested  
 Location:





Head Office Liquid Waste  
**Rajasthan State Pollution Control Board**  
4, Institutional Area, Jhalana Doongari, Jaipur-302  
Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Churu(Ratangarh)/1764(1)/2020-2021/408-410

Order No : 2021-2022/Liquid Waste/1228

Dispatch Date: 03/06/2021

Unit Id : i06923

This bears the approval of the competent authority.

Yours Sincerely

Group Incharge[ Liquid Waste]

(A): Copy To:-

- 1 Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Sikar to ensure compliance of conditions of CTE
- 2 Master File.

Group Incharge[ Liquid Waste]

Page 2 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
Date: 2021.06.06 15:15:25 IST  
Reason: Self Attested  
Location:





**Consent to Establish (CTE) for 6.10 MLD STP at Ratangarh**

Head Office Liquid Waste  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

File No : F(Tech)/Churu(Ratangarh)/1764(1)/2020-2021/1055-1057

Order No : 2021-2022/Liquid Waste/1240

Dispatch Date: 05/07/2021

Unit Id : 106823

M/s Sewage Treatment Plant- 3.8 MLD

Nagar Palika, Near Ratangarh bus stand, Ratangarh

**Sub:** Consent to Establish under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.

**Ref:** Your application(s) for Consent to Establish dated 13/02/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder is hereby granted for your **Sewage Treatment Plant - 6.1 MLD plant** situated / proposed at **Khasra No 639, Gaushala Land, Ratangarh Ratangarh Tehsil:Ratangarh District:Churu**, Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:-

- 1 That this Consent to Establish is valid for a period from **13/02/2021 to 31/01/2026 or date of Commencement of production / commissioning of the project or activities whichever is earlier.**
- 2 That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below.

Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	6,100.00 KLD

- 3 That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel, the project proponent is required to obtain fresh consent to establish.
- 4 That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.
- 5 That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:

Page 1 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.07.06 12:38:36 IST  
 Reason: Self Attested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

**File No :** F(Tech)/Churu(Ratangarh)/1764(1)/2020-2021/1055-1057

**Order No :** 2021-2022/Liquid Waste/1240

**Dispatch Date:** 05/07/2021

**Unit Id :** 105823

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	6100.000	NIL	6100.000 On Land For Plantation/Horticulture after adequate treatment

6. That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act-1986 for disposal **into Inland Surface Water**. The main parameters for regular monitoring shall be as under:

Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

7. In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/l.
8. That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 2177.7 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount.
9. That no treated/untreated effluent shall be discharged into any water body and entire treated sewage shall be utilized in plantation/horticulture/ other gainful purposes.

Page 2 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.07.05 12:38:36 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

**File No :** F(Tech)/Churu(Ratangarh)/1764(1)/2020-2021/1055-1057

**Order No :** 2021-2022/Liquid Waste/1240

**Dispatch Date:** 05/07/2021

**Unit Id :** 106823

- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation of tree species in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation.
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That, notwithstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained section 27(2) of the Water Act to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the Water Act.
- 17 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent.
- 18 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that, non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the the relevant provisions of the said Act(s).

Page 3 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.07.06 12:38:36 IST  
 Reason: Self Attested  
 Location:





Head Office Liquid Waste  
**Rajasthan State Pollution Control Board**  
4, Institutional Area, Jhalana Doongari, Jaipur-302  
Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Churn(Ratangarh)/1764(1)/2020-2021/1055-1057

Order No : 2021-2022/Liquid Waste/1240

Dispatch Date: 05/07/2021

Unit Id : 106823

This bears the approval of the competent authority.

Yours Sincerely,

Group Incharge Liquid Waste

(A) Copy To:-

- 1 Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Sikar to ensure compliance of conditions of CTE
- 2 Master File.

Group Incharge Liquid Waste

Page 4 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
Date: 2021.07.06 12:38:36 IST  
Reason: Self Attested  
Location:





**Consent to Establish (CTE) for 4.3 MLD STP at Fatehpur**

**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

File No : F(Tech)/Sikar(Fatehpur)/18(1)/2020-2021/399-401

Order No : 2021-2022/Liquid Waste/1230

Dispatch Date: 03/06/2021

Unit Id : 106650

M/s E.O. Municipal Board Fatehpur - Shekhawati (4.3 MLD STP)

NEAR EXISTING STP, NARI-BARI ROAD, FATEHPUR

Tehsil:Fatehpur

District:Sikar

**Sub: Consent to Establish** under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.

**Ref:** Your application(s) for Consent to Establish dated 16/02/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder **is hereby granted** for your **4.3 MLD STP plant** situated / proposed at **NEAR EXISTING STP, NARI-BARI ROAD SIKAR, FATEHPUR Tehsil:Fatehpur District:Sikar**, Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:-

- 1 That this Consent to Establish is valid for a period from **16/02/2021 to 31/01/2026 or date of Commencement of production / commissioning of the project or activities whichever is earlier**.
- 2 That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below.

Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	4,300.00. KLD.

- 3 That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
- 4 That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.

Page 1 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.06.06 15:14:16 IST  
 Reason: Self Attested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

**File No :** F(Tech)/Sikar(Fatehpur)/18(1)/2020-2021/399-401

**Order No :** 2021-2022/Liquid Waste/1230

**Dispatch Date:** 03/06/2021

**Unit Id :** i06650

- 5 That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	4300.000	NIL	4,300.000 On Land For Plantation/Horticulture after adequate treatment

- 6 That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act-1986 for disposal **into Inland Surface Water**. The main parameters for regular monitoring shall be as under:

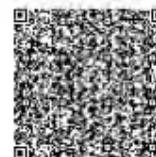
Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

- 7 In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/L.
- 8 That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs.2064 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount.

Page 2 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.06.03 15:14:16 IST  
 Reason: Self Attested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Sikar(Fatehpur)/18(1)/2020-2021/399-401

Order No : 2021-2022/Liquid Waste/1230

Dispatch Date: 03/06/2021

Unit Id : i06650

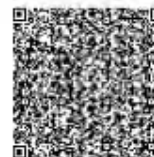
- 9 That no treated/untreated effluent shall be discharged into any water body and entire treated sewage shall be utilized in plantation/horticulture/ other gainful purposes.
- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge, A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation.
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That, not withstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained **section 27(2) of the Water Act** to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the **Water Act**.
- 17 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent.
- 18 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that, non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under

Page 3 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.06.03 15:14:16 IST  
 Reason: Self Attested  
 Location:





Head Office Liquid Waste  
**Rajasthan State Pollution Control Board**  
4, Institutional Area, Jhalana Doongari, Jaipur-302  
Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Sikar(Fatehpur)/18(1)/2020-2021/399-401

Order No : 2021-2022/Liquid Waste/1230

Dispatch Date: 03/06/2021

Unit Id : 106650

the relevant provisions of the said Act(s).

This bears the approval of the competent authority.

Yours Sincerely

Group Incharge Liquid Waste

(A) Copy To:-

- 1 Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Sikar to ensure compliance of conditions of CTE
- 2 Master File

Group Incharge Liquid Waste

Page 4 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
Date: 2021.06.03 15:14:16 IST  
Reason: SelfAttested  
Location:





**Consent to Establish (CTE) for 5.0 MLD STP at Sirohi**

**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
**4, Institutional Area, Jhalana Doongari, Jaipur-302**  
**Phone: 0141-2716852 Fax: 0141-276852**

**Registered**

File No : F(Tech)/Sirohi(Sirohi)/62(1)/2020-2021/482-484

Order No : 2021-2022/Liquid Waste/1235

Dispatch Date: 07/06/2021

Unit Id : 109656

M/s Municipal Council

Municipal Council, Near Bus Stand , Sirohi

**Sub:** Consent to Establish under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.

**Ref:** Your application(s) for Consent to Establish dated 11/02/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder **is hereby granted** for your **Sewage Treatment Plant 5MLD plant** situated / proposed at **Sewage Treatment Plant, Near Nehru Nagar Sirohi Tehsil:Sirohi District:Sirohi**, Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:-

- 1 That this Consent to Establish is valid for a period from **11/02/2021 to 31/01/2026 or date of Commencement of production / commissioning of the project or activities whichever is earlier**.
- 2 That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below.

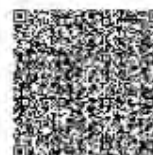
Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	5.00 MLD

- 3 That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
- 4 That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.
- 5 That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:

Page 1 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.06.07 15:18:02 IST  
 Reason: Self Attested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

File No : F(Tech)/Sirohi(Sirohi)/62(1)/2020-2021/482-484

Order No : 2021-2022/Liquid Waste/1235

Dispatch Date: 07/06/2021

Unit Id : 109656

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	5.000	NIL	5.000 On Land For Plantation/Horticulture after adequate treatment

6. That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act, 1986 for disposal **into Inland Surface Water**. The main parameters for regular monitoring shall be as under.

Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

7. In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/L.
8. That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs.2290 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount.
9. That no treated/untreated effluent shall be discharged into any water body and entire treated sewage shall be utilized in plantation/horticulture/ other gainful purposes.

Page 2 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.06.07 15:18:02 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Sirohi(Sirohi)/62(1)/2020-2021/482-484

Order No : 2021-2022/Liquid Waste/1235

Dispatch Date: 07/06/2021

Unit Id : 109656

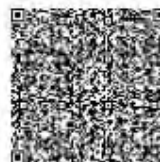
- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation.
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 300 KVA.
- 17 That, notwithstanding anything, provided hereinabove, the State Board shall have power and reserves its right, as contained section 27(2) of the Water Act to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the Water Act.
- 18 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent.
- 19 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that, non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the relevant provisions of the said Act(s).

Page 3 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.06.07 15:18:02 IST  
 Reason: SelfAttested  
 Location:





Head Office Liquid Waste  
**Rajasthan State Pollution Control Board**  
4, Institutional Area, Jhalana Doongari, Jaipur-302  
Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Sirohi(Sirohi)/62(1)/2020-2021/482-484

Order No : 2021-2022/Liquid Waste/1235

Dispatch Date: 07/06/2021

Unit Id : 109656

This bears the approval of the competent authority.

Yours Sincerely

Group Incharge] Liquid Waste

(A) Copy To:-

- 1 Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Pali to ensure compliance of conditions of CTE
- 2 Master File

Group Incharge] Liquid Waste

Page 4 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
Date: 2021.06.07 15:18:02 IST  
Reason: Self Attested  
Location:





**Consent to Establish (CTE) for 9.0 MLD WTP at Sirohi**

**Regional Office Sirohi**  
**Rajasthan State Pollution Control Board**  
**Sirohi**  
**Phone: 02932-231616 Fax: 02932-231616**

**Registered**

File No : F(Tech)/Sirohi(Sirohi)/64(1)/2021-2022/160-161

Order No : 2021-2022/Sirohi/7595

Dispatch Date: 28/09/2021

Unit Id : 110752

**M/s PHED Water Supply**

**Executive Engineer Office, Public Health Department,**  
**Near District Court, Sirohi**

**Sub: Consent to Establish** under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.

**Ref:** Your application(s) for Consent to Establish dated 31/03/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder **is hereby granted** for your **Water Treatment Plant** situated / proposed at **Main Pump House Angore, PHED Angore Sirohi Tehsil:Sirohi District:Sirohi**, Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:-

- 1 That this Consent to Establish is valid for a period from **31/03/2021** to **28/02/2026** or **date of Commencement of production / commissioning of the project or activities whichever is earlier**.
- 2 That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below.

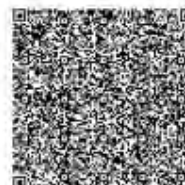
Particular	Type	Quantity / Capacity
WATER TREATMENT PLANT	Service	9.00 MILLION LITRES/ DAY

- 3 That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
- 4 That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.

Page 1 of 4

**Signature Not Verified**

Digitally signed by **Rahul Sharma**  
 Date: 2021.09.28 15:06:48 IST  
 Reason: SelfAttested  
 Location:





**Regional Office Sirohi**  
**Rajasthan State Pollution Control Board**  
**Sirohi**

Phone: 02932-231616 Fax: 02932-231616

Registered

File No : F(Tech)/Sirohi(Sirohi)/64(1)/2021-2022/160-161

Order No : 2021-2022/Sirohi/7595

Dispatch Date: 28/09/2021

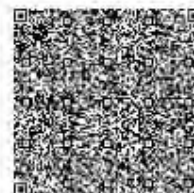
Unit Id : 110752

- 5 That this consent is being issued to EE, PHED for Operating of Water Treatment Plant of capacity 9.0 MLD at Near Angore, Sirohi. In case of any increase in capacity or addition/ modification/ alteration/ or change in product mix or process or raw material or fuel, the project proponent is required to obtain fresh consent to establish from the Board
- 6 That this Consent to Establish is valid for Water Treatment Plant (with recycling system) for a investment of Rs. 336.3/- lacs under 'Orange' category. Any change in production & its capacity unit has to seek prior consent to establish/operate from the State Board.
- 7 That the provisions of EIA notification 14/09/2006 by MoEF shall be strictly followed and the unit shall obtain Environmental Clearance under 8(a) of the aforesaid notification if required and the sole responsibility of the same shall lie on the project proponent.
- 8 That this consent to establish is issued to the unit on the basis of documents submitted by the applicant, if any discrepancy is found in the document/facts submitted by the unit then the applicant shall be liable for legal action in accordance with provisions of law.
- 9 That no industrial trade effluent i.e. wastewater from water re-circulation system, shall be discharged inside/outside the premises. The entire process water shall be re-circulated with the processes through proposed settling tanks.
- 10 That the back-wash water shall be treated through adequately design treatment system and should be completely recycled into the process thus maintaining zero discharge inside and outside the premises.
- 11 That the domestic effluent shall be disposed off in soak pits through properly designed septic tanks.
- 12 That no source of air emission shall be permitted under this consent, unit shall apply for separate consent to establish under the provisions of Air Act-1981 if there is proposal for any source of air emission.
- 13 All the conditions and instructions as provided in the General conditions for Consent to establish/consent to operate under Water (Prevention & Control of Pollution) Act-1974 shall be complied with strictly.
- 14 That rain water harvesting system shall be provided to harness rain water for domestic purposes & that the industry shall not dig new well / tube well without prior permission from the competent authority.

Page 2 of 4

**Signature Not Verified**

Digitally signed by Rahul Sharma  
 Date: 2021.09.28 15:06:48 IST  
 Reason: SelfAttested  
 Location:





**Regional Office Sirohi**  
**Rajasthan State Pollution Control Board**  
**Sirohi**

Phone: 02932-231616 Fax: 02932-231616

Registered

File No : F(Tech)/Sirohi(Sirohi)/64(1)/2021-2022/160-161

Order No : 2021-2022/Sirohi/7595

Dispatch Date: 28/09/2021

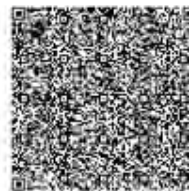
Unit Id : 110752

- 15 That the industry shall ensure that noise from the unit does not exceed the prescribed noise standards for industrial area i.e. 75 dB(A) Leq during day time and 70 dB(A) Leq during night time to meet the prescribed ambient noise standards. Day time is reckoned in between 6 A.M. and 9 P.M. and nighttime is reckoned between 9 P.M. to 6 A.M.
  - 16 That the unit shall maintain plantation at least in the 33% of total area within the unit premises.
  - 17 That the consent is valid subject to fulfillment of all the other statutory requirements in other Laws/Acts/Rules as applicable.
  - 18 That this consent is not an evidence for ascertaining the title of land.
  - 19 That this consent is only for environment purpose not be liable for any other purpose.
  - 20 That unit shall comply with standards, with respect to drinking water, as prescribed by the Bureau of Indian Standards in IS 10500-2012 as amended till date.
  - 21 That the unit shall apply for renewal of consent at least 120 days in advance prior to expiry date of this consent letter else additional fee shall have to be deposited in accordance with the Rajasthan Water & Air (Prevention & Control of Pollution) (Amendment) Rules 2016.
  - 22 That, notwithstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained **section 27(2) of the Water Act** to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the **Water Act**.
  - 23 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent.
  - 24 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.
- This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that.

Page 3 of 4

**Signature Not Verified**

Digitally signed by Rahul Sharma  
 Date: 2021.09.28 15:06:48 IST  
 Reason: SelfAttested  
 Location:





Regional Office Sirohi  
**Rajasthan State Pollution Control Board**  
Sirohi

Phone: 02932-231616 Fax: 02932-231616

Registered

File No : F(Tech)/Sirohi(Sirohi)/64(1)/2021-2022/160-161

Order No : 2021-2022/Sirohi/7595

Dispatch Date: 28/09/2021

Unit Id : 110752

non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the relevant provisions of the said Act(s).

Yours Sincerely

EE

(A): Copy To:-

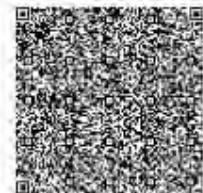
1. Master File

EE

Page 4 of 4

Signature Not Verified

Digitally signed by Rahul Sharma  
Date: 2021.09.28 15:06:48 IST  
Reason: Self Attested  
Location:





**Consent to Establish (CTE) for 9.6 MLD STP at Banswara**

Regional Office Banswara  
**Rajasthan State Pollution Control Board**  
 Choudhary Campus, Near Durga Petrol Pump,  
 Dahod Road, Thikariya, Banswara  
 Phone: 9414164925 Fax: 9999999999

**Registered**

File No : F(Tech)/Banswara(Banswara)/5145(1)/2021-2022/37-38

Order No : 2021-2022/Banswara/6735

Dispatch Date: 14/10/2021

Unit Id : 113267

M/s Sewerage Treatment

Municipal Council Officer, Banswara

**Sub:** Consent to Establish under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.

**Ref:** Your application(s) for Consent to Establish dated 08/07/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder is hereby granted for your **9.6 MLD STP plant** situated / proposed at **96 MLD STP within existing STP campus, on Udaipur Road, Janawari, Banswara Tehsil: Banswara District: Banswara, Rajasthan** under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:-

- 1 That this Consent to Establish is valid for a period from **08/07/2021 to 30/06/2026 or date of Commencement of production / commissioning of the project or activities whichever is earlier.**
- 2 That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below:

Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	9.60 MLD

- 3 That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
- 4 That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.
- 5 That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:-

Page 1 of 4

**Signature Not Verified**

Digitally signed by Ashish Kumar  
 Baurasi  
 Date: 2021.10.14 16:48:13 IST  
 Reason: Self Attested  
 Location:





**Regional Office Banswara**  
**Rajasthan State Pollution Control Board**  
 Choudhary Campus, Near Durga Petrol Pump,  
 Dahod Road, Taluka Banswara,  
 Phone: 9414164925 Fax: 9999999999

**Registered**

File No : F(Tech)/Banswara(Banswara)/5145(1)/2021-2022/37-38

Order No : 2021-2022/Banswara/6735

Dispatch Date: 14/10/2021

Unit Id : 113267

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	9600.000	NIL	9,600.000 On Land For Plantation/Horticulture after adequate treatment

- 6 That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act-1986 for disposal **Into Inland Surface Water**. The main parameters for regular monitoring shall be as under:

Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

- 7 In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/l.
- 8 That this Consent to Establish is being issued for establishment of Sewage Treatment Plant (STP) of capacity 9.6 MLD at within existing STP campus, on Udaipur Road, Janawari, Banswara, Tehsil: Banswara, District: Banswara.
- 9 That no treated/untreated effluent shall be discharged into any other water body and entire treated sewage shall be utilized in plantation/horticulture/other gainful purposes.

Page 2 of 4

**Signature Not Verified**

Digitally signed by Ashish Kumar  
 Baurasi  
 Date: 2021.10.14 18:48:13 IST  
 Reason: Self Attested  
 Location:





Regional Office Banswara  
**Rajasthan State Pollution Control Board**  
 Choudhary Campus, Near Durga Petrol Pump,  
 Dahod Road, Thikariya, Banswara  
 Phone: 9414164925 Fax: 9999999999

Registered

File No : F(Tech)/Banswara(Banswara)/5145(1)/2021-2022/37-38

Order No : 2021-2022/Banswara/6735

Dispatch Date: 14/10/2021

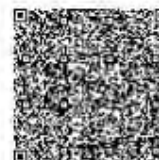
Unit Id : 113267

- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That sewage network alongwith house connections will be completed simultaneously with the commissioning of the STP
- 12 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 13 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilization.
- 14 That Online Continuous Effluent Monitoring System (OCEMS) for parameters namely pH, TSS, COD, BOD and flow meter shall be installed and monitoring data shall be connected with the servers of State Board and Central Pollution Control Board.
- 15 That guidelines prescribed by CPCB for OCEMS for effluents and Standard Operating Procedure (SOP) for Verification of Installation and Calibration of UV-Vis Dual Beam Scanning & Multipoint calibration mechanism technology based OCEMS (Effluent) used in STPs shall be followed.
- 16 That the sludge will be properly digested, de-watered and the treated sludge will be used as manure or will be disposed in a scientific manner.
- 17 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 18 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 19 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 20 That this Consent to Establish shall not be valid for establishment of any air polluting machinery e.g., DG set etc. Proponent shall obtain separate Consent to Establish for establishment of air polluting machinery e.g., DG set etc. under Air Act, 1981.
- 21 That the grant of consent shall not absolve the project proponent from making compliance of other statutory obligations prescribed under any other law or directions of courts or any other legal instrument for the time being in force.
- 22 That, not withstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained section 27(2) of the Water Act to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the Water Act.

Page 3 of 4

Signature Not Verified

Digitally signed by Ashish Kumar  
 Baurasi  
 Date: 2021.10.14 08:48:13 IST  
 Reason: Self Attested  
 Location:







**Regional Office Banswara**  
**Rajasthan State Pollution Control Board**  
 Choudhary Campus, Near Durga Petrol Pump,  
 Dahod Road, Thilwasiya, Banswara  
 Phone: 9414164925 Fax: 9999999999

**Registered**

**File No :** F(Tech)/Banswara(Banswara)/5145(1)/2021-2022/37-38

**Order No :** 2021-2022/Banswara/6735

**Dispatch Date:** 14/10/2021

**Unit Id :** 113267

23 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws, for the time-being in force, rests with the industry/ unit/ project proponent.

24 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that, non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the the relevant provisions of the said Act(s).

Yours Sincerely

EE

(A). **Copy To:-**

1. Master file

EE

Page 4 of 4

**Signature Not Verified**

Digitally signed by Ashish Kumar  
 Baurasi  
 Date: 2021.10.14 18:48:13 IST  
 Reason: Self Attested  
 Location:





**Consent to Establish (CTE) for 7.0 MLD STP at Ptarapgarh**

**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

File No : F(Tech)/Pratapgarh(Pratapgarh)/30(1)/2021-2022/479-481

Order No : 2021-2022/Liquid Waste/1234

Dispatch Date: 07/06/2021

Unit Id : 111078

M/s Municipal Council Pratapgarh

Municipal Council, , Pratapgarh

**Sub:** **Consent to Establish** under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.

**Ref:** Your application(s) for Consent to Establish dated 16/03/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder **is hereby granted** for your **7 MLD Sewage Treatment Plant** situated / proposed at **7 MLD STP, Jain Gosala, Kila Road Pratapgarh Rajasthan Tehsil:Pratapgarh District:Pratapgarh**, Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:

- 1 That this Consent to Establish is valid for a period from **16/03/2021 to 28/02/2026 or date of Commencement of production / commissioning of the project or activities whichever is earlier.**
- 2 That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below.

Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	7.00 MLD

- 3 That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
- 4 That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.
- 5 That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:

Page 1 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.06.07 15:17:40 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

File No : F(Tech)/Pratapgarh(Pratapgarh)/30(1)/2021-2022/479-481

Order No : 2021-2022/Liquid Waste/1234

Dispatch Date: 07/06/2021

Unit Id : 111078

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	7000.000	NIL	7,000.000 On Land For Plantation/Horticulture after adequate treatment

- 6 That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act-1986 for disposal **Into Inland Surface Water**. The main parameters for regular monitoring shall be as under:

Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

- 7 In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/l.
- 8 That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 1400 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount.
- 9 That no treated/untreated effluent shall be discharged into any water body and entire treated sewage shall be utilized in plantation/horticulture/ other gainful purposes.

Page 2 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.06.07 15:17:40 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
**4, Institutional Area, Jhalana Doongari, Jaipur-302**  
**Phone: 0141-2716852 Fax: 0141-276852**

Registered

File No : F(Tech)/Pratapgarh(Pratapgarh)/30(1)/2021-2022/479-481

Order No: 2021-2022/Liquid Waste/1234

Dispatch Date: 07/06/2021

Unit Id : 111078

- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation.
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 125 KVA.
- 17 That, not withstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained **section 27(2) of the Water Act** to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the **Water Act**.
- 18 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent.
- 19 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that, non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the the relevant provisions of the said Act(s).

Page 3 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.06.07 15:17:40 IST  
 Reason: SelfAttested  
 Location:





Head Office Liquid Waste  
**Rajasthan State Pollution Control Board**  
4, Institutional Area, Jhalana Doongari, Jaipur-302  
Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Pratapgarh(Pratapgarh)/30(1)/2021-2022/479-481

Order No : 2021-2022/Liquid Waste/1234

Dispatch Date: 07/06/2021

Unit Id : 111078

This bears the approval of the competent authority.

Yours Sincerely

Group Incharge[ Liquid Waste

(A): Copy To:-

1. Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Chittorgarh to ensure compliance of conditions of CTE
2. Master File.

Group Incharge[ Liquid Waste

Page 4 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
Date: 2021.06.07 15:17:40 IST  
Reason: SelfAttested  
Location:





**Consent to Establish (CTE) for 3.0 MLD STP at Didwana**

**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

File No : F(Tech)/Nagaur(Degana)/39(1)/2020-2021/6102-6104

Order No : 2020-2021/Liquid Waste/1218

Dispatch Date: 26/03/2021

Unit Id : 109985

M/s Municipal board didwana

Near bus stand, Didwana

**Sub:** Consent to Establish under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.

**Ref:** Your application(s) for Consent to Establish dated 10/02/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder **is hereby granted** for your **Sewage Treatment plant(STP) DIDWANA plant** situated / proposed at **NEAR MELA MAIDAN DIDWANA Didwana Tehsil:Didwana District:Nagaur**, Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:-

1. That this Consent to Establish is valid for a period from **10/02/2021 to 31/01/2026 or date of Commencement of production / commissioning of the project or activities whichever is earlier.**
2. That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below:-

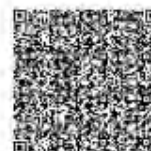
Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	3.00 MLD

3. That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
4. That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.
5. That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:

Page 1 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.26 14:49:14 IST  
 Reason: Self Attested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Nagaur(Degana)/39(1)/2020-2021/6102-6104

Order No : 2020-2021/Liquid Waste/1218

Dispatch Date: 26/03/2021

Unit Id : 109985

- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation.
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 180 KVA.
- 17 That, not withstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained **section 27(2) of the Water Act** to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the **Water Act**.
- 18 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent.
- 19 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that, non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the the relevant provisions of the said Act(s).

Page 3 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.26 14:49:14 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
**4, Institutional Area, Jhalana Doongari, Jaipur-302**  
**Phone: 0141-2716852 Fax: 0141-276852**

**Registered**

**File No :** F(Tech)/Nagaur(Degana)/39(1)/2020-2021/6102-6104  
**Order No :** 2020-2021/Liquid Waste/1218  
**Unit Id :** 109985  
**Dispatch Date:** 26/03/2021

This bears the approval of the competent authority.

Yours Sincerely

Group Incharge[ Liquid Waste]

(A): **Copy To:-**

1. Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Kishangarh to ensure compliance of conditions of CTE
2. Master File.

Group Incharge[ Liquid Waste]

Page 4 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.26 14:49:14 IST  
 Reason: SelfAttested  
 Location:



**Consent to Establish (CTE) for 7.6 MLD STP at Kuchaman**

Head Office Liquid Waste  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

File No : F(Tech)/Nagaur(Nagaur)/6831(1)/2020-2021/6096-6098

Order No : 2020-2021/Liquid Waste/1215

Dispatch Date: 26/03/2021

Unit Id : 109843

M/s Municipal board, Kuchaman City

Municipal Board, Nehru Udyan, Station Road.

Kuchaman, Nagaur

**Sub: Consent to Establish** under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.

**Ref:** Your application(s) for Consent to Establish dated 29/01/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder **is hereby granted** for your **Sewage Treatment Plant 7.6 MLD plant** situated / proposed at **Sewage Treatment Plant, near Stadium, Station Road, Kuchaman Kuchaman Nagaur Tehsil:Nagaur District:Nagaur**, Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:-

1. That this Consent to Establish is valid for a period from **29/01/2021** to **31/12/2025** or **date of Commencement of production / commissioning of the project or activities whichever is earlier**.
2. That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below.

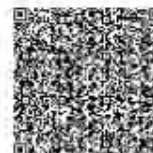
Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	7,600.00 KLD

3. That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
4. That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.

Page 1 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.26 14:48:28 IST  
 Reason: Self Attested  
 Location:







**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
**4, Institutional Area, Jhalana Doongari, Jaipur-302**  
**Phone: 0141-2716852 Fax: 0141-276852**

**Registered**

**File No. :** F(Tech)/Nagaur(Nagaur)/6831(1)/2020-2021/6096-6098

**Order No. :** 2020-2021/Liquid Waste/1215

**Dispatch Date:** 26/03/2021

**Unit Id :** 109843

- 5 That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under-

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	7600.000	NIL	7,600.000 On Land For Plantation/Horticulture after adequate treatment

- 6 That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act-1986 for disposal **Into Inland Surface Water**. The main parameters for regular monitoring shall be as under.

Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

- 7 In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/L.
- 8 That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 2697 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount.

Page 2 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.03.26 14:48:28 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Nagaur(Nagaur)/6831(1)/2020-2021/6096-6098

Order No : 2020-2021/Liquid Waste/1215

Dispatch Date: 26/03/2021

Unit Id : 109843

- 9 That no treated/untreated effluent shall be discharged into any water body and entire treated sewage shall be utilized in plantation/horticulture/ other gainful purposes.
- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation.
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 365 KVA.
- 17 That, not withstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained **section 27(2) of the Water Act** to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the **Water Act**.
- 18 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent.
- 19 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s) Please note that,

Page 3 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.03.26 14:48:28 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

**File No :** F(Tech)/Nagaur(Nagaur)/6831(1)/2020-2021/6096-6098

**Order No :** 2020-2021/Liquid Waste/1215

**Dispatch Date:** 26/03/2021

**Unit Id :** 109843

non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the the relevant provisions of the said Act(s).

This bears the approval of the competent authority.

**Yours Sincerely**

**Group Incharge Liquid Waste**

**(A): Copy To:-**

1. Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Kishangarh to ensure compliance of conditions of CTE
2. Master File

**Group Incharge Liquid Waste**

Page 4 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.26 14:48:28 IST  
 Reason: Self Attested  
 Location:



**Consent to Establish (CTE) for 5.50 MLD STP at Ladnu**

Head Office Liquid Waste  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852



Registered

File No : F(Tech)/Nagaur(Ladnu)/100(1)/2020-2021/5716-5718

Order No : 2020-2021/Liquid Waste/1205

Dispatch Date: 09/03/2021

Unit Id : 109723

M/s Municipal Council, Ladnu

Municipal Council, Station Road, Ladnu, , Ladnu

Tehsil:Ladnun

District:Nagaur

**Sub: Consent to Establish** under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.

**Ref:** Your application(s) for Consent to Establish dated 27/01/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder **is hereby granted** for your **Sewage Treatment Plant 5.5 MLD plant** situated / proposed at **Sewage Treatment Plant, Village Asota Asota Ladnu Tehsil:Ladnu District:Nagaur**, Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:-

- 1 That this Consent to Establish is valid for a period from **27/01/2021** to **31/12/2025** or **date of Commencement of production / commissioning of the project or activities whichever is earlier**.
- 2 That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below.

Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	5,500.00 KLD

- 3 That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
- 4 That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.

Page 1 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.03.09 16:08:07 IST  
 Reason: SelfAttested  
 Location:







**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

**File No :** F(Tech)/Nagaur(Ladnu)/100(1)/2020-2021/5716-5718

**Order No :** 2020-2021/Liquid Waste/1205

**Dispatch Date:** 09/03/2021

**Unit Id :** i09723

5. That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	5500.000	NIL	5,500.000 On Land For Plantation/Horticulture after adequate treatment

6. That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act-1986 for disposal **Into Inland Surface Water**. The main parameters for regular monitoring shall be as under:

Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

7. In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/l.
8. That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 2475 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount.

Page 2 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.09 16:08:07 IST  
 Reason: Self Attested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
**4, Institutional Area, Jhalana Doongari, Jaipur-302**  
**Phone: 0141-2716852 Fax: 0141-276852**

**Registered**

**File No :** F(Tech)/Nagaur(Ladnu)/100(1)/2020-2021/5716-5718

**Order No :** 2020-2021/Liquid Waste/1205

**Dispatch Date:** 09/03/2021

**Unit Id :** 109723

- 9 That no treated/untreated effluent shall be discharged into any water body and entire treated sewage shall be utilized in plantation/horticulture/ other gainful purposes.
- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation.
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 300 KVA.
- 17 That, not withstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained **section 27(2) of the Water Act** to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the **Water Act**.
- 18 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent
- 19 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that,

Page 3 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.09 16:08:07 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

**File No :** F(Tech)/Nagaur(Ladnu)/100(1)/2020-2021/5716-5718

**Order No :** 2020-2021/Liquid Waste/1205

**Dispatch Date:** 09/03/2021

**Unit Id :** 109723

non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the the relevant provisions of the said Act(s).

This bears the approval of the competent authority.

Yours Sincerely

Group Incharge Liquid Waste

(A): **Copy To:-**

- 1 Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Kishanganah to ensure compliance of conditions of CTE
- 2 Master File

Group Incharge Liquid Waste

Page 4 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.08 16:08:07 IST  
 Reason: Self Attested  
 Location:



**Consent to Establish (CTE) for 7.70 MLD STP at Makrana**

**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
**4, Institutional Area, Jhalana Doongari, Jaipur-302**  
**Phone: 0141-2716852 Fax: 0141-276852**

**Registered**

File No : F(Tech)/Nagaur(Makrana)/120(1)/2020-2021/6108-6110

Order No : 2020-2021/Liquid Waste/1214

Dispatch Date: 26/03/2021

Unit Id : 109853

M/s MUNICIPAL COUNCIL, MAKRANA

MUNICIPAL COUNCIL, MAKRANA NEAR GOVT

HOSPITAL ROAD MAKRANA, MAKRANA

Tehsil:MAKRANA

District:NAGGAUR

**Sub:** Consent to Establish under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.

**Ref:** Your application(s) for Consent to Establish dated 08/02/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder is **hereby granted** for your **SEWAGE TREATMENT PLANT MAKRANA** plant situated / proposed at **NEAR BALAJI COLONY RAILWAY KE PASS WARD NO 1 MAKRANA MAKRANA Tehsil: Makrana District: Nagaur**, Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:

1. That this Consent to Establish is valid for a period from **08/02/2021 to 31/01/2026 or date of Commencement of production / commissioning of the project or activities whichever is earlier**.
2. That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes or providing following services with capacities given below.

Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	7,700.00 KLD

3. That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
4. That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.

Page 1 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.26 14:50:32 IST  
 Reason: Self Attested  
 Location:







**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Nagaur(Makrana)/120(1)/2020-2021/6108-6110

Order No : 2020-2021/Liquid Waste/1214

Dispatch Date: 26/03/2021

Unit Id : i09853

5. That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	7700.000	NIL	7700.000 On Land For Plantation/Horticulture after adequate treatment

6. That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act-1986 for disposal **Into Inland Surface Water**. The main parameters for regular monitoring shall be as under:

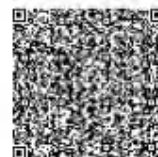
Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

7. In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/l.
8. That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 2726 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount.

Page 2 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
 Date: 2021.03.26 14:50:32 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
**4, Institutional Area, Jhalana Doongari, Jaipur-302**  
**Phone: 0141-2716852 Fax: 0141-276852**

**Registered**

**File No :** F(Tech)/Nagaur(Makrana)/120(1)/2020-2021/6108-6110

**Order No :** 2020-2021/Liquid Waste/1214

**Dispatch Date:** 26/03/2021

**Unit Id :** 109853

- 9 That no treated/untreated effluent shall be discharged into any water body and entire treated sewage shall be utilized in plantation/horticulture/ other gainful purposes.
- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation.
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 365 KVA.
- 17 That, not withstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained **section 27(2) of the Water Act** to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the **Water Act**.
- 18 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent.
- 19 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that,

Page 3 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.26 14:50:32 IST  
 Reason: SelfAttested  
 Location:





Head Office Liquid Waste  
Rajasthan State Pollution Control Board  
4, Institutional Area, Jhalana Doongari, Jaipur-302  
Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Nagaur(Makrana)/120(1)/2020-2021/6108-6110

Order No : 2020-2021/Liquid Waste/1214

Dispatch Date: 26/03/2021

Unit Id : 109853

non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the the relevant provisions of the said Act(s).

This bears the approval of the competent authority.

Yours Sincerely

Group Incharge Liquid Waste

(A) Copy To:-

- 1 Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Kishangarh to ensure compliance of conditions of CTE.
- 2 Master File

Group Incharge Liquid Waste

Page 4 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
Date: 2021.03.26 14:50:32 IST  
Reason: SelfAttested  
Location:



**Consent to Establish (CTE) for 3.15 MLD STP at Khetri**

**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

File No : F(Tech)/Jhunjhunu(Khetri)/88(1)/2020-2021/5645-5647

Order No : 2020-2021/Liquid Waste/1204

Dispatch Date: 05/03/2021

Unit Id : 110250

M/s Municipal Council, Khetri

Municipal Council, Main Market, Sabji Mandi, Ward  
no. 6, Khetri, Jhunjhunu**Sub:** Consent to Establish under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974.**Ref:** Your application(s) for Consent to Establish dated 17/02/2021 and subsequent correspondence.

Sir,

**Consent to Establish** under the provisions of section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 (hereinafter to be referred as the Water Act) as amended to date and rules & the orders issued thereunder **is hereby granted** for your **Sewage Treatment Plant (3.1MLD) plant** situated / proposed at **Sewage Treatment Plant 31MLD at Khasra nos 2352, 2353, 2354, 2356, near Kharia Kua, Khetri, Jhunjhunu Khetri, Jhunjhunu Tehsil, Khetri District, Jhunjhunu**, Rajasthan under the provisions of the said Act(s). This consent is granted on the basis of examination of the information furnished by you in consent application(s) and the documents submitted therewith, subject to the following conditions:-

- 1 That this Consent to Establish is valid for a period from **17/02/2021 to 31/01/2026 or date of Commencement of production / commissioning of the project or activities whichever is earlier**.
- 2 That this Consent is granted for manufacturing / producing following products / by products or carrying out the following activities or operation/processes- or providing following services with capacities given below.

Particular	Type	Quantity / Capacity
Sewage Treatment Plant	Service	3,100.00 KLD

- 3 That in case of any increase in capacity or addition / modification / alteration or change in product mix or process or raw material or fuel the project proponent is required to obtain fresh consent to establish.
- 4 That the control equipment as proposed by the applicant shall be installed before trial operation is started for which prior consent to operate under the provision of the **Water Act** shall be obtained. This consent to establish shall not be treated as consent to operate.

Page 1 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.05 12:09:47 IST  
 Reason: SelfAttested  
 Location:







**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716832 Fax: 0141-276852

**Registered**

**File No :** F(Tech)/Jhunjhunu(Khetri)/88(1)/2020-2021/5645-5647

**Order No :** 2020-2021/Liquid Waste/1204

**Dispatch Date:** 05/03/2021

**Unit Id :** 110250

5. That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	3100.000	NIL	3,100.000 On Land For Plantation/Horticulture after adequate treatment.

6. That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act-1986 for disposal **Into Inland Surface Water**. The main parameters for regular monitoring shall be as under:

Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

7. In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/L
8. That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs.865 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount.

Page 2 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.08 12:09:47 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

File No : F(Tech)/Jhunjhunu(Khetri)/88(1)/2020-2021/5645-5647

Order No : 2020-2021/Liquid Waste/1204

Dispatch Date: 05/03/2021

Unit Id : 110250

- 9 That no treated/untreated effluent shall be discharged into any water body and entire treated sewage shall be utilized in plantation/horticulture/ other gainful purposes
- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell.
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation.
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 180 KVA.
- 17 That, notwithstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained **section 27(2) of the Water Act** to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the **Water Act**.
- 18 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent.
- 19 That the grant of this **Consent to Establish** shall not in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that,

Page 3 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.05 12:09:47 IST  
 Reason: SelfAttested  
 Location:





**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
**4, Institutional Area, Jhalana Doongari, Jaipur-302**  
**Phone: 0141-2716852 Fax: 0141-276852**

**Registered**

**File No. :** F(Tech)/Jhunjhunu(Khetri)/88(1)/2020-2021/5645-5647

**Order No.:** 2020-2021/Liquid Waste/1204

**Dispatch Date:** 05/03/2021

**Unit Id :** 110250

non compliance of any of the above stated conditions would tantamount to revocation of **Consent to Establish** and project proponent / occupier shall be liable for legal action under the the relevant provisions of the said Act(s).

This bears the approval of the competent authority.

Yours Sincerely

Group Incharge[ Liquid Waste]

(A) **Copy To:-**

- 1 Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Sikar to ensure compliance of conditions of CTE.
- 2 Master File.

Group Incharge[ Liquid Waste]

Page 4 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.06 12:09:47 IST  
 Reason: Self Attested  
 Location:



**Consent to Establish (CTE) for 3.9 MLD STP at Mandawa**

**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
 4, Institutional Area, Jhalana Doongari, Jaipur-302  
 Phone: 0141-2716852 Fax: 0141-276852

**Registered**

**File No :** F(Tech)/Jhunjhunu(Jhunjhunu)/6569(1)/2020-2021/5642-5644

**Order No :** 2020-2021/Liquid Waste/1203

**Dispatch Date:** 05/03/2021

**Unit Id :** 110213

5. That the quantity of effluent generation and disposal along with mode of disposal for the treated effluent shall be as under:

Type of effluent	Max. effluent generation (KLD)	Quantity of effluent to be recycled (KLD)	Quantity of treated effluent to be disposed (KLD) and mode of disposal
Domestic Sewage	3900.000	NIL	3,900.000 On Land For Plantation/Horticulture after adequate treatment

6. That the domestic sewage shall be treated before disposal so as to conform to the standards prescribed by the Board as notified under the Environment (Protection) Act-1986 for disposal **into Inland Surface Water**. The main parameters for regular monitoring shall be as under:

Parameters	Standards
pH Value	Between 5.5 to 9.0
Phosphate as P	Not to exceed 1.0 mg/l
Biochemical Oxygen Demand (3 days at 27°C)	Not to exceed 10 mg/l
Chemical Oxygen Demand	Not to exceed 50 mg/l
Fecal Coliform	not to exceed 230 MPN/100 ml
N total	10 mg/l

7. In addition to above total suspended solids in the treated effluent before disposal shall not exceed 20 mg/L.
8. That fee for this consent to establish has been deposited on the basis of estimated project cost of Rs. 1625 lacs and in case of any increase in the project cost, the project proponent shall be liable to deposit balance amount.

Page 2 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.06 12:08:24 IST  
 Reason: SelfAttested  
 Location:







**Head Office Liquid Waste**  
**Rajasthan State Pollution Control Board**  
**4, Institutional Area, Jhalana Doongari, Jaipur-302**  
**Phone: 0141-2716852 Fax: 0141-276852**

**Registered**

**File No :** F(Tech)/Jhunjhunu/Jhunjhunu/6569(1)/2020-2021/5642-5644

**Order No :** 2020-2021/Liquid Waste/1203

**Dispatch Date:** 05/03/2021

**Unit Id :** 110213

- 9 That no treated/untreated effluent shall be discharged into any water body and entire treated sewage shall be utilized in plantation/horticulture/ other gainful purposes.
- 10 That the sludge will be properly digested, de-watered and used as manure or disposed in a scientific manner.
- 11 That the unit shall undertake spray of insecticides from time to time to control fly/mosquito growth in the area.
- 12 That the unit shall undertake plantation in two rows of suitable species all along the periphery of the site of the STP to control foul smell
- 13 That above stated effluent standards are subject to the Hon'ble NGT order dated 30/4/2019 in matter of O.A. no 1069/2018 Nitin Shankar Deshpande Vs Union of India and Ors.
- 14 That efforts should be made to reuse the treated sewage to the maximum possible extent and minimize its discharge. A network of pipelines should be laid from the treated sewage collection tank to fields for utilisation
- 15 That adequate measures shall be taken to avoid foul odour during treatment and disposal of sewage and sludge.
- 16 That Project Proponent shall apply for Consent to Establish under Air(Prevention & Control of Pollution), Act, 1981 for D.G. Set of 180 KVA.
- 17 That, not withstanding anything provided hereinabove, the State Board shall have power and reserves its right, as contained **section 27(2) of the Water Act** to review anyone or all the conditions imposed here in above and to make such variation as it deemed fit for the purpose of compliance of the **Water Act**.
- 18 That the grant of this **Consent to Establish** is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry/ unit/ project proponent
- 19 That the grant of this **Consent to Establish** shall not, in any way, adversely affect or jeopardize the legal proceedings, if any, instituted in the past or that could be instituted against you by the State Board for violation of the provisions of the Act or the Rules made thereunder.

This **Consent to Establish** shall also be subject, beside the aforesaid specific conditions, to the general conditions given in the enclosed Annexure. The project proponent will comply with the provisions of the **Water Act** and to such other conditions as may, from time to time, be specified by the State Board under the provisions of the aforesaid Act(s). Please note that,

Page 3 of 4

**Signature Not Verified**

Digitally signed by Niraj Mathur  
 Date: 2021.03.05 12:08:24 IST  
 Reason: Self Attested  
 Location:





Head Office Liquid Waste  
Rajasthan State Pollution Control Board  
4, Institutional Area, Jhalana Doongari, Jaipur-302  
Phone: 0141-2716852 Fax: 0141-276852

Registered

File No : F(Tech)/Jhunjhunu(Jhunjhunu)/6569(1)/2020-2021/5642-5644

Order No : 2020-2021/Liquid Waste/1203

Dispatch Date: 05/03/2021

Unit Id : 110213

non compliance of any of the above stated conditions would tantamount to revocation of  
**Consent to Establish** and project proponent / occupier shall be liable for legal action under  
the the relevant provisions of the said Act(s).

This bears the approval of the competent authority.

Yours Sincerely

Group Incharge[ Liquid Waste

(A) Copy To:-

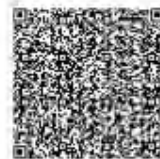
- 1 Regional Officer, Regional Office, Rajasthan State Pollution Control Board, Sikar to ensure compliance of conditions of CTE.
- 2 Master File

Group Incharge[ Liquid Waste

Page 4 of 4

Signature Not Verified

Digitally signed by Niraj Mathur  
Date: 2021.03.06 12:08:24 IST  
Reason: SelfAttested  
Location:



**APPENDIX 4: ENVIRONMENTAL SITE INSPECTION REPORTS****Report No.1**

<b>PROJECT NAME:</b> Rajasthan Secondary Towns Development Sector Project <b>Sub-project Name –</b> Didwana Sewerage Sub Project		<b>CONTRACT NUMBER:</b> RSTDIP/DID/01			
<b>DATE:</b> 14.09.2021		<b>SECTOR:</b> Sewerage			
<b>LOCATION (Name of Sites Visited):</b> 200 mm DWC sewer pipe laying and manhole works at Zone 5, near RSEB office, Workers camp and storage yard and at Mohandas ka Bas, near Shamshan Bhoomi, Didwana		<b>Contractor:</b> M/s Larsen & Toubro Limited.			
<b>WEATHER:</b> Clear <b>PROJECT ACTIVITY:</b> Laying of Sewer pipe		<b>Project Activity Stage-</b> <b>Site visit done by-</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Mr. Vardan Srivastava, Environment professional, CMSC-I			
<b>Monitoring Items</b>		<b>Compliance</b>			
<b>Compliance marked as Yes/No/Not applicable(NA)/Partially Implemented(PI)</b>		<b>YES</b>	<b>NO</b>	<b>NA</b>	<b>PI</b>
EHS supervisor appointed by contractor and available on site		√			
Construction site management plan (spoils, safety, schedule, equipment etc.,) prepared			√		
Traffic management plan prepared			√		
Dust is under control		√			
Excavated soil properly placed within minimum space		√			
Construction area is confined; no traffic/pedestrian entry observed		√			
Surplus soil/debris/waste is disposed without delay		√			
Construction material (sand/gravel/aggregate) brought to site as & when required only		√			
Tarpaulins used to cover sand & other loose material when transported by vehicles			√		
After unloading , wheels & undercarriage of vehicles cleaned prior to leaving the site			√		
No chance finds encountered during excavation		√			
Work is planned in consultation with traffic police		√			
Work is not being conducted during heavy traffic		√			
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)		√			
Pipe trenches are not kept open unduly		√			
Road is not completely closed; work is conducted on edge; at least one line is kept open		√			
Road is closed; alternative route provided & public informed, information board provided		√			
Pedestrian access to houses is not blocked due to pipe laying		√			

Spaces left in between trenches for access	√			
Wooden planks/metal sheets provided across trench for pedestrian			√	
No public/unauthorized entry observed in work site	√			
Children safety measures (barricades, security) in place at works in residential areas	√			
Prior public information provided about the work, schedule and disturbances	√			
Caution/warning board provided on site	√			
Guards with red flag provided during work at busy roads			√	
Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc)	√			
Workers conducting or near heavy noise work is provided with ear muffs			√	
Contractor is following standard & safe construction practices	√			
Deep excavation is conducted with land slip/protection measures	√			
First aid facilities are available on site and workers informed		√		
Drinking water provided at the site		√		
Toilet facility provided at the site	√			
Separate toilet facility is provided for women workers	√			
Workers camps are maintained cleanly	√			
Adequate toilet & bath facilities provided	√			
Contractor employed local workers as far as possible	√			
Workers camp set up with the permission of PIU	√			
Adequate housing provided	√			
Sufficient water provided for drinking/washing/bath	√			
No noisy work is conducted in the nights			√	
Local people informed of noisy work			√	
No blasting activity conducted			√	
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings			√	

**Summary of safeguard compliance of contractor-** Contractor is taking preventive measures during the construction work but need more attention towards the site safety and environment related issues.

**Overall performance of contractor-** Satisfactory

## Report No.2

<b>PROJECT NAME:</b> Rajasthan Secondary Towns Development Sector Project		<b>CONTRACT NUMBER:</b> RSTDIP/KMN/02			
<b>Sub-project Name –</b> Kuchaman Water supply and Sewerage Project					
<b>DATE:</b> 15.09.2021		<b>SECTOR:</b> Water Supply & Sewerage			
<b>LOCATION (Name of Sites Visited):</b> 90 mm HDPE water supply pipe laying works near Kuchaman Valley, 200 mm DWC sewer pipe laying and manhole works at Balaji vihar Colony and Workers camp and storage yard at Panchwa road, Kuchaman		<b>Contractor:</b> M/s Larsen & Toubro Limited.			
<b>WEATHER:</b> Clear		<b>Project Activity Stage-</b>			
<b>PROJECT ACTIVITY:</b> Pipe laying for water supply and sewerage, work camps		<b>Site visit done by-</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Mr. Vardan Srivastava, Environment professional, CMSC-I			
<b>Monitoring Items</b>		<b>Compliance</b>			
<b>Compliance marked as Yes/No/Not applicable(NA)/Partially Implemented(PI)</b>		<b>YES</b>	<b>NO</b>	<b>NA</b>	<b>PI</b>
EHS supervisor appointed by contractor and available on site		√			
Construction site management plan (spoils, safety, schedule, equipment etc.) prepared			√		
Traffic management plan prepared			√		
Dust is under control		√			
Excavated soil properly placed within minimum space		√			
Construction area is confined; no traffic/pedestrian entry observed		√			
Surplus soil/debris/waste is disposed without delay		√			
Construction material (sand/gravel/aggregate) brought to site as & when required only		√			
Tarpaulins used to cover sand & other loose material when transported by vehicles		√			
After unloading , wheels & undercarriage of vehicles cleaned prior to leaving the site				√	
No chance finds encountered during excavation				√	
Work is planned in consultation with traffic police		√			
Work is not being conducted during heavy traffic		√			
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)		√			
Pipe trenches are not kept open unduly		√			
Road is not completely closed; work is conducted on edge; at least one line is kept open		√			
Road is closed; alternative route provided & public informed, information board provided				√	
Pedestrian access to houses is not blocked due to pipe laying			√		

Spaces left in between trenches for access	√			
Wooden planks/metal sheets provided across trench for pedestrian			√	
No public/unauthorized entry observed in work site	√			
Children safety measures (barricades, security) in place at works in residential areas	√			
Prior public information provided about the work, schedule and disturbances	√			
Caution/warning board provided on site	√			
Guards with red flag provided during work at busy roads			√	
Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc)	√			
Workers conducting or near heavy noise work is provided with ear muffs			√	
Contractor is following standard & safe construction practices	√			
Deep excavation is conducted with land slip/protection measures	√			
First aid facilities are available on site and workers informed		√		
Drinking water provided at the site		√		
Toilet facility provided at the site		√		
Separate toilet facility is provided for women workers		√		
Workers camps are maintained cleanly	√			
Adequate toilet & bath facilities provided	√			
Contractor employed local workers as far as possible	√			
Workers camp set up with the permission of PIU	√			
Adequate housing provided	√			
Sufficient water provided for drinking/washing/bath	√			
No noisy work is conducted in the nights	√			
Local people informed of noisy work			√	
No blasting activity conducted			√	
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings			√	

**Summary of safeguard compliance of contractor-** Contractor is taking preventive measures during the construction work but need more attention towards the site safety and environmental related issues.

**Overall performance of contractor-** Satisfactory

## Report No.4

<b>PROJECT NAME:</b> Rajasthan Secondary Towns Development Sector Project		<b>CONTRACT NUMBER:</b> RSTDIP/MKN/01			
<b>Sub-project Name</b> – Mandawa Water Supply Subproject					
<b>DATE:</b> 21.10.2021		<b>SECTOR:</b> Water Supply			
<b>LOCATION (Name of Sites Visited):</b>		<b>Contractor:</b> M/s Larsen & Toubro Limited.			
<b>WEATHER:</b> Clear & Sunny		<b>Project Activity Stage-</b>			
<b>PROJECT ACTIVITY:</b>		<b>Site visit done by-</b> Mr. Vardan Srivastava, Environment professional, CMSC-I			
<b>Monitoring Items</b>		<b>Compliance</b>			
<b>Compliance marked as Yes/No/Not applicable(NA)/Partially Implemented(PI)</b>		<b>YES</b>	<b>NO</b>	<b>NA</b>	<b>PI</b>
EHS supervisor appointed by contractor and available on site		√			
Construction site management plan (spoils, safety, schedule, equipment etc.,) prepared		√			
Traffic management plan prepared			√		
Dust is under control		√			
Excavated soil properly placed within minimum space		√			
Construction area is confined; no traffic/pedestrian entry observed		√			
Surplus soil/debris/waste is disposed without delay			√		
Construction material (sand/gravel/aggregate) brought to site as & when required only		√			
Tarpaulins used to cover sand & other loose material when transported by vehicles			√		
After unloading , wheels & undercarriage of vehicles cleaned prior to leaving the site			√		
No chance finds encountered during excavation		√			
Work is planned in consultation with traffic police			√		
Work is not being conducted during heavy traffic		√			
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)		√			
Pipe trenches are not kept open unduly		√			
Road is not completely closed; work is conducted on edge; at least one line is kept open					
Road is closed; alternative route provided & public informed, information board provided		√			
Pedestrian access to houses is not blocked due to pipe laying			√		
Spaces left in between trenches for access		√			
Wooden planks/metal sheets provided across trench for pedestrian			√		
No public/unauthorized entry observed in work site		√			

Children safety measures (barricades, security) in place at works in residential areas	√			
Prior public information provided about the work, schedule and disturbances	√			
Caution/warning board provided on site	√			
Guards with red flag provided during work at busy roads		√		
Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc)	√			
Workers conducting or near heavy noise work is provided with ear muffs			√	
Contractor is following standard & safe construction practices	√			
Deep excavation is conducted with land slip/protection measures			√	
First aid facilities are available on site and workers informed		√		
Drinking water provided at the site	√			
Toilet facility provided at the site		√		
Separate toilet facility is provided for women workers		√		
Workers camps are maintained cleanly	√			
Adequate toilet & bath facilities provided	√			
Contractor employed local workers as far as possible	√			
Workers camp set up with the permission of PIU	√			
Adequate housing provided	√			
Sufficient water provided for drinking/washing/bath	√			
No noisy work is conducted in the nights	√			
Local people informed of noisy work	√			
No blasting activity conducted			√	
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings			√	

**Summary of safeguard compliance of contractor-** Contractor is taking preventive measures during the construction work but need more attention towards the site safety and environmental related issues.

**Overall performance of contractor-** Satisfactory



## Report: 5

<b>PROJECT NAME:</b> Rajasthan Secondary Towns Development Sector Project <b>Sub-project Name –</b> Makrana Waste Water Project		<b>CONTRACT NUMBER:</b> RSTDIP/MDW/03			
<b>DATE:</b> 21.10.2021		<b>SECTOR:</b> Water Supply			
<b>LOCATION (Name of Sites Visited):</b> 200 mm DWC sewer pipe laying and manhole works at Jhanjharia Ki Dhani village, Makrana		<b>Contractor:</b> M/s LNA-R&B(JV)			
<b>WEATHER:</b> Clear & Sunny		<b>Project Activity Stage-</b>			
<b>PROJECT ACTIVITY:</b> 90 mm HDPE water supply pipe laying works near Ramgarh Road ward no-19 Mandawa		<b>Site visit done by-</b> Mr. Abhay Srivastava, Environment Specialist, PMCBC and Mr. Vardan Srivastava, Environment professional, CMSC-I			
<b>Monitoring Items</b>		<b>Compliance</b>			
<b>Compliance marked as Yes/No/Not Implemented(PI)</b>		<b>YES</b>	<b>NO</b>	<b>NA</b>	<b>PI</b>
EHS supervisor appointed by contractor and available on site		√			
Construction site management plan (spoils, safety, schedule, equipment etc.,) prepared		√			
Traffic management plan prepared			√		
Dust is under control		√			
Excavated soil properly placed within minimum space		√			
Construction area is confined; no traffic/pedestrian entry observed		√			
Surplus soil/debris/waste is disposed without delay			√		
Construction material (sand/gravel/aggregate) brought to site as & when required only		√			
Tarpaulins used to cover sand & other loose materials when transported by vehicles			√		
After unloading , wheels & undercarriage of vehicles cleaned prior to leaving the site			√		
No chance finds encountered during excavation		√			
Work is planned in consultation with traffic police			√		
Work is not being conducted during heavy traffic		√			
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)		√			
Pipe trenches are not kept open unduly		√			
Road is not completely closed; work is conducted on edge; at least one line is kept open		√			
Road is closed; alternative route provided & public informed, information board provided		√			
Pedestrian access to houses is not blocked due to pipe laying			√		
Spaces left in between trenches for access		√			

Wooden planks/metal sheets provided across trench for pedestrian		√		
No public/unauthorized entry observed in work site	√			
Children safety measures (barricades, security) in place at works in residential areas	√			
Prior public information provided about the work, schedule and disturbances	√			
Caution/warning board provided on site	√			
Guards with red flag provided during work at busy roads		√		
Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc)	√			
Workers conducting or near heavy noise work is provided with ear muffs		√		
Contractor is following standard & safe construction practices	√			
Deep excavation is conducted with land slip/protection measures	√			
First aid facilities are available on site and workers informed	√			
Drinking water provided at the site	√			
Deep excavation is conducted with land slip/protection measures	√			
First aid facilities are available onsite and workers informed	√			
Drinking water provided at the site (repetition)	√			
Toilet facility provided at the site		√		
Separate toilet facility is provided for women workers		√		
Workers camps are maintained cleanly	√			
Adequate toilet & bath facilities provided	√			
Contractor employed local workers as far as possible	√			
Workers camp set up with the permission of PIU	√			
Adequate housing provided	√			
Sufficient water provided for drinking/washing/bath	√			
No noisy work is conducted in the nights	√			
Local people informed of noisy work	√			
No blasting activity conducted			√	
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings			√	

**Summary of safeguard compliance of contractor-** Contractor is taking working with taking safety arrangement but required more safety sign boards and hard barricading's. Disposal of the excavated material is a serious concern.

**Overall performance of contractor-** Satisfactory

## Report : 06

<b>PROJECT NAME:</b> Rajasthan Secondary Towns Development Sector Project		<b>CONTRACT NUMBER:</b> RSTDIP/MDW/03			
<b>Sub-project Name –</b> Mandawa Sewerage and Water Supply work					
<b>DATE:</b> 21.10.2021		<b>SECTOR:</b> Sewerage			
<b>LOCATION (Name of Sites Visited):</b> Sewerage zone – 01 Near Bishao Road.		<b>Contractor:</b> M/s LNA-R&B(JV)			
<b>WEATHER:</b> Clear & Sunny		<b>Project Activity Stage-</b>			
<b>PROJECT ACTIVITY:</b> Sewerage pipe laying work at Zone-01.		<b>Site visit done by-</b> Mr. Vardan Srivastava, Environment professional, CMSC-I			
<b>Monitoring Items</b>		<b>Compliance</b>			
<b>Compliance marked as Yes/No/Not applicable(NA)/Partially Implemented(PI)</b>		<b>YES</b>	<b>NO</b>	<b>NA</b>	<b>PI</b>
EHS supervisor appointed by contractor and available on site		√			
Construction site management plan (spoils, safety, schedule, equipment etc.) prepared			√		
Traffic management plan prepared			√		
Dust is under control		√			
Excavated soil properly placed within minimum space		√			
Construction area is confined; no traffic/pedestrian entry observed		√			
Surplus soil/debris/waste is disposed without delay			√		
Construction material (sand/gravel/aggregate) brought to site as & when required only		√			
Tarpaulins used to cover sand & other loose material when transported by vehicles			√		
After unloading , wheels & undercarriage of vehicles cleaned prior to leaving the site			√		
No chance finds encountered during excavation		√			
Work is planned in consultation with traffic police		√			
Work is not being conducted during heavy traffic		√			
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)		√			
Pipe trenches are not kept open unduly		√			
Road is not completely closed; work is conducted on edge; at least one line is kept open		√			
Road is closed; alternative route provided & public informed, information board provided			√		
Pedestrian access to houses is not blocked due to pipe laying		√			
Spaces left in between trenches for access		√			
Wooden planks/metal sheets provided across trench for pedestrian			√		
No public/unauthorized entry observed in work site		√			
Children safety measures (barricades, security) in place at works in residential areas		√			
Prior public information provided about the work, schedule and disturbances			√		
Caution/warning board provided on site		√			
Guards with red flag provided during work at busy roads				√	
Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc)		√			

Workers conducting or near heavy noise work is provided with ear muffs			√	
Contractor is following standard & safe construction practices	√			
Deep excavation is conducted with land slip/protection measures			√	
First aid facilities are available on site and workers informed		√		
Drinking water provided at the site	√			
Toilet facility provided at the site		√		
Separate toilet facility is provided for women workers		√		
Workers camps are maintained cleanly	√			
Adequate toilet & bath facilities provided	√			
Contractor employed local workers as far as possible	√			
Workers camp set up with the permission of PIU	√			
Adequate housing provided	√			
Sufficient water provided for drinking/washing/bath	√			
No noisy work is conducted in the nights	√			
Local people informed of noisy work			√	
No blasting activity conducted			√	
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings			√	

**Summary of safeguard compliance of contractor-** Contractor is taking working with taking safety arrangement but required more safety sign boards and hard barricading's. Disposal of the excavated material is a serious concern.

**Overall performance of contractor-** Satisfactory

## Report No.7

<b>PROJECT NAME:</b> Rajasthan Secondary Towns Development Sector Project <b>Sub-project Name –</b> Sirohi Water Supply and Sewerage works		<b>CONTRACT NUMBER:</b> RSTDIP/SHR/01			
<b>DATE:</b> 09.04.2021		<b>SECTOR:</b> Water Supply and Sewerage			
<b>LOCATION (Name of Sites Visited):</b> Pipe laying site for water supply and Labour Camp, Sirohi		<b>Contractor:</b> L&T			
<b>WEATHER:</b> Clear and Sunny <b>PROJECT ACTIVITY:</b> Pipe Laying		<b>Project Activity Stage- Construction</b> <b>Site visit done by-</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II, Mr. S K Soni, Team Leader, CMSC-II and Mr. Sajal Srivastava (Social Safeguard Professional, CMSC-II)			
<b>Monitoring Items</b>		<b>Compliance</b>			
<b>Compliance marked as Yes/No/Not Implemented(PI)</b>		<b>applicable(NA)/Partially</b>	<b>YES</b>	<b>NO</b>	<b>NA</b>
					<b>PI</b>
EHS supervisor appointed by contractor and available on site			√		
Construction site management plan (spoils, safety, schedule, equipment etc.) prepared			√		
Traffic management plan prepared					√
Dust is under control			√		
Excavated soil properly placed within minimum space					√
Construction area is confined; no traffic/pedestrian entry observed			√		
Surplus soil/debris/waste is disposed without delay					√
Construction material (sand/gravel/aggregate) brought to site as & when required only			√		
Tarpaulins used to cover sand & other loose material when transported by vehicles					√
After unloading , wheels & undercarriage of vehicles cleaned prior to leaving the site					√
No chance finds encountered during excavation			√		
Work is planned in consultation with traffic police					√
Work is not being conducted during heavy traffic			√		
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)					√
Pipe trenches are not kept open unduly			√		
Road is not completely closed; work is conducted on edge; at least one line is kept open					√
Road is closed; alternative route provided & public informed, information board provided					√
Pedestrian access to houses is not blocked due to pipe laying					√
Spaces left in between trenches for access			√		
Wooden planks/metal sheets provided across trench for pedestrian					√
No public/unauthorized entry observed in work site			√		
Children safety measures (barricades, security) in place at works in residential areas			√		
Prior public information provided about the work, schedule and disturbances			√		
Caution/warning board provided on site					√
Guards with red flag provided during work at busy roads					√
Workers using appropriate PPE (boots, gloves, helmets, ear muffs)					√

etc)				
Workers conducting or near heavy noise work is provided with ear muffs		√		
Contractor is following standard & safe construction practices				√
Deep excavation is conducted with land slip/protection measures	√			
First aid facilities are available on site and workers informed	√			
Drinking water provided at the site	√			
Deep excavation is conducted with land slip/protection measures				
First aid facilities are available onsite and workers informed	√			
Drinking water provided at the site	√			
Toilet facility provided at the site		√		
Separate toilet facility is provided for women workers		√		
Workers camps are maintained cleanly				√
Adequate toilet & bath facilities provided	√			
Contractor employed local workers as far as possible				√
Workers camp set up with the permission of PIU	√			
Adequate housing provided	√			
Sufficient water provided for drinking/washing/bath	√			
No noisy work is conducted in the nights	√			
Local people informed of noisy work		√		
No blasting activity conducted	√			
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings	√			

**Summary of safeguard compliance of contractor-** Contractor is taking preventive measures during the construction work but need more attention towards the site safety and environmental related issues.

**Overall performance of contractor-** Satisfactory

## Report No.8

<b>PROJECT NAME:</b> Rajasthan Secondary Towns Development Sector Project		<b>CONTRACT NUMBER:</b> RSTDIP/BNS/04			
<b>Sub-project Name –</b> Banswara Water Supply and Sewerage Works					
<b>DATE:</b> 02.07.2021		<b>SECTOR:</b> Water Supply and Sewerage			
<b>LOCATION (Name of Sites Visited):</b> 200 mm DWC sewage pipe laying and manhole work at Sri Ram Colony and Worker Camp near Kagdi Gate 5, Banswara		<b>Contractor:</b> L&T			
<b>WEATHER:</b> Clear & Sunny		<b>Project Activity Stage-</b> Construction			
<b>PROJECT ACTIVITY:</b> Pipe laying and Manhole work		<b>Site visit done by-</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II			
<b>Monitoring Items</b>		<b>Compliance</b>			
<b>Compliance marked as Yes/No/Not applicable(NA)/Partially Implemented(PI)</b>		<b>YES</b>	<b>NO</b>	<b>NA</b>	<b>PI</b>
EHS supervisor appointed by contractor and available on site			✓		
Construction site management plan (spoils, safety, schedule, equipment etc.,) prepared		✓			
Traffic management plan prepared					✓
Dust is under control		✓			
Excavated soil properly placed within minimum space		✓			
Construction area is confined; no traffic/pedestrian entry observed					✓
Surplus soil/debris/waste is disposed without delay					✓
Construction material (sand/gravel/aggregate) brought to site as & when required only		✓			
Tarpaulins used to cover sand & other loose material when transported by vehicles					✓
After unloading , wheels & undercarriage of vehicles cleaned prior to leaving the site					✓
No chance finds encountered during excavation		✓			
Work is planned in consultation with traffic police		✓			
Work is not being conducted during heavy traffic			✓		
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)					✓
Pipe trenches are not kept open unduly		✓			
Road is not completely closed; work is conducted on edge; at least one line is kept open		✓			
Road is closed; alternative route provided & public informed, information board provided					✓
Pedestrian access to houses is not blocked due to pipe laying					✓
Spaces left in between trenches for access		✓			
Wooden planks/metal sheets provided across trench for pedestrian					✓
No public/unauthorized entry observed in work site		✓			
Children safety measures (barricades, security) in place at works in residential areas					✓

Prior public information provided about the work, schedule and disturbances	✓			
Caution/warning board provided on site				✓
Guards with red flag provided during work at busy roads				✓
Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc)				✓
Workers conducting or near heavy noise work is provided with ear muffs				✓
Contractor is following standard & safe construction practices				✓
Deep excavation is conducted with land slip/protection measures	✓			
First aid facilities are available on site and workers informed	✓			
Drinking water provided at the site	✓			
Deep excavation is conducted with land slip/protection measures				✓
First aid facilities are available onsite and workers informed		✓		
Drinking water provided at the site				✓
Toilet facility provided at the site		✓		
Separate toilet facility is provided for women workers		✓		
Workers camps are maintained cleanly		✓		
Adequate toilet & bath facilities provided		✓		
Contractor employed local workers as far as possible				✓
Workers camp set up with the permission of PIU	✓			
Adequate housing provided				✓
Sufficient water provided for drinking/washing/bath				✓
No noisy work is conducted in the nights	✓			
Local people informed of noisy work		✓		
No blasting activity conducted	✓			
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings	✓			

**Summary of safeguard compliance of contractor-** Contractor is taking preventive measures during the construction work but need more attention towards the site safety and environmental related issues.

**Overall performance of contractor-** Near Satisfactory



## Report No.9

<b>PROJECT NAME:</b> Rajasthan Secondary Towns Development Sector Project		<b>CONTRACT NUMBER:</b> RSTDIP/LXG/01			
<b>Sub-project Name</b> – Laxmangarh Water Supply Works					
<b>DATE:</b> 27.07.2021		<b>SECTOR:</b> Water Supply			
<b>LOCATION (Name of Sites Visited):</b> Bad Ke Balaji Head Works, Laxmangarh		<b>Contractor:</b> L&T			
<b>WEATHER:</b> Clear & Sunny		<b>Project Activity Stage-</b>			
<b>PROJECT ACTIVITY:</b> Inventorization of AC Pipes		<b>Site visit done by-</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II			
<b>Monitoring Items</b>		<b>Compliance</b>			
<b>Compliance marked as Yes/No/Not Implemented(PI)</b>		<b>applicable(NA)/Partially</b>	<b>YES</b>	<b>NO</b>	<b>NA</b>
					<b>PI</b>
EHS supervisor appointed by contractor and available on site			✓		
Construction site management plan (spoils, safety, schedule, equipment etc.) prepared			✓		
Traffic management plan prepared					✓
Dust is under control			✓		
Excavated soil properly placed within minimum space					✓
Construction area is confined; no traffic/pedestrian entry observed			✓		
Surplus soil/debris/waste is disposed without delay					✓
Construction material (sand/gravel/aggregate) brought to site as & when required only			✓		
Tarpaulins used to cover sand & other loose material when transported by vehicles					✓
After unloading , wheels & undercarriage of vehicles cleaned prior to leaving the site					✓
No chance finds encountered during excavation			✓		
Work is planned in consultation with traffic police					✓
Work is not being conducted during heavy traffic			✓		
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)					✓
Pipe trenches are not kept open unduly					✓
Road is not completely closed; work is conducted on edge; at least one line is kept open				✓	
Road is closed; alternative route provided & public informed, information board provided				✓	
Pedestrian access to houses is not blocked due to pipe laying				✓	
Spaces left in between trenches for access					✓
Wooden planks/metal sheets provided across trench for pedestrian				✓	
No public/unauthorized entry observed in work site			✓		
Children safety measures (barricades, security) in place at works in residential areas				✓	
Prior public information provided about the work, schedule and disturbances			✓		
Caution/warning board provided on site					✓

Guards with red flag provided during work at busy roads		✓		
Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc)				✓
Workers conducting or near heavy noise work is provided with ear muffs		✓		
Contractor is following standard & safe construction practices				✓
Deep excavation is conducted with land slip/protection measures				✓
First aid facilities are available on site and workers informed	✓			
Drinking water provided at the site	✓			
Deep excavation is conducted with land slip/protection measures				✓
First aid facilities are available onsite and workers informed	✓			
Drinking water provided at the site	✓			
Toilet facility provided at the site	✓			
Separate toilet facility is provided for women workers		✓		
Workers camps are maintained cleanly	✓			
Adequate toilet & bath facilities provided		✓		
Contractor employed local workers as far as possible				✓
Workers camp set up with the permission of PIU	✓			
Adequate housing provided	✓			
Sufficient water provided for drinking/washing/bath	✓			
No noisy work is conducted in the nights	✓			
Local people informed of noisy work		✓		
No blasting activity conducted	✓			
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings	✓			

**Summary of safeguard compliance of contractor-** Inventorization of AC Pipes were carried out with proper Personal Protective equipments.

**Overall performance of contractor-** Satisfactory

## Report No.10

<b>PROJECT NAME:</b> Rajasthan Secondary Towns Development Sector Project		<b>CONTRACT NUMBER:</b> RSTDIP/SRD/01			
<b>Sub-project Name</b> –Sardarshahar Water Supply and Sewerage Works					
<b>DATE:</b> 29.07.2021		<b>SECTOR:</b> Water Supply and Sewerage			
<b>LOCATION (Name of Sites Visited):</b> PHED Executive Engineer Project Office on Hanumangarh Road, Sardarshahar		<b>Contractor:</b> L&T			
<b>WEATHER:</b> Sunny and Clear		<b>Project Activity Stage-</b>			
<b>PROJECT ACTIVITY:</b> Inventorization of AC Pipes		<b>Site visit done by-</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II			
<b>Monitoring Items</b>		<b>Compliance</b>			
<b>Compliance marked as Yes/No/Not applicable(NA)/Partially Implemented(PI)</b>		<b>YES</b>	<b>NO</b>	<b>NA</b>	<b>PI</b>
EHS supervisor appointed by contractor and available on site		✓			
Construction site management plan (spoils, safety, schedule, equipment etc.) prepared		✓			
Traffic management plan prepared				✓	
Dust is under control		✓			
Excavated soil properly placed within minimum space			✓		
Construction area is confined; no traffic/pedestrian entry observed		✓			
Surplus soil/debris/waste is disposed without delay					✓
Construction material (sand/gravel/aggregate) brought to site as & when required only		✓			
Tarpaulins used to cover sand & other loose material when transported by vehicles		✓			
After unloading , wheels & undercarriage of vehicles cleaned prior to leaving the site					✓
No chance finds encountered during excavation		✓			
Work is planned in consultation with traffic police				✓	
Work is not being conducted during heavy traffic				✓	
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)				✓	
Pipe trenches are not kept open unduly				✓	
Road is not completely closed; work is conducted on edge; at least one line is kept open				✓	
Road is closed; alternative route provided & public informed, information board provided				✓	
Pedestrian access to houses is not blocked due to pipe laying				✓	
Spaces left in between trenches for access				✓	
Wooden planks/metal sheets provided across trench for pedestrian				✓	
No public/unauthorized entry observed in work site		✓			
Children safety measures (barricades, security) in place at works in residential areas		✓			
Prior public information provided about the work, schedule and disturbances		✓			
Caution/warning board provided on site		✓			

Guards with red flag provided during work at busy roads		✓		
Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc)				✓
Workers conducting or near heavy noise work is provided with ear muffs			✓	
Contractor is following standard & safe construction practices				✓
Deep excavation is conducted with land slip/protection measures	✓			
First aid facilities are available on site and workers informed	✓			
Drinking water provided at the site	✓			
Deep excavation is conducted with land slip/protection measures				
First aid facilities are available onsite and workers informed	✓			
Drinking water provided at the site	✓			
Toilet facility provided at the site		✓		
Separate toilet facility is provided for women workers		✓		
Workers camps are maintained cleanly				✓
Adequate toilet & bath facilities provided				✓
Contractor employed local workers as far as possible				✓
Workers camp set up with the permission of PIU	✓			
Adequate housing provided	✓			
Sufficient water provided for drinking/washing/bath	✓			
No noisy work is conducted in the nights	✓			
Local people informed of noisy work	✓			
No blasting activity conducted	✓			
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings	✓			

**Summary of safeguard compliance of contractor--** Inventorization of AC Pipes were carried out with proper Personal Protective equipments.

**Overall performance of contractor- Satisfactory**

## Report No.11

<b>PROJECT NAME:</b> Rajasthan Secondary Towns Development Sector Project		<b>CONTRACT NUMBER:</b> RSTDIP/PRT/01			
<b>Sub-project Name –</b> Pratapgarh Sewerage Works					
<b>DATE:</b> 13.08.2021		<b>SECTOR:</b> Sewerage			
<b>LOCATION (Name of Sites Visited):</b> 200 mm DWC sewage pipe laying and manhole work at Bahubali Colony and 250 mm HDPE Trenchless sewage pipe laying at Neemach Road, Pratapgarh		<b>Contractor:</b> M/s. Khilari Infrastructure Pvt. Ltd.			
<b>WEATHER:</b> Sunny and Clear		<b>Project Activity Stage-</b>			
<b>PROJECT ACTIVITY:</b> Sewage pipe laying and manhole work		<b>Site visit done by-</b> Dr. Mahaveer Saini, Environment Professional, CMSC-II			
<b>Monitoring Items</b>		<b>Compliance</b>			
<b>Compliance marked as Yes/No/Not applicable(NA)/Partially Implemented(PI)</b>		<b>YES</b>	<b>NO</b>	<b>NA</b>	<b>PI</b>
EHS supervisor appointed by contractor and available on site		✓			
Construction site management plan (spoils, safety, schedule, equipment etc.,) prepared		✓			
Traffic management plan prepared		✓			
Dust is under control		✓			
Excavated soil properly placed within minimum space		✓			
Construction area is confined; no traffic/pedestrian entry observed					✓
Surplus soil/debris/waste is disposed without delay					✓
Construction material (sand/gravel/aggregate) brought to site as & when required only					✓
Tarpaulins used to cover sand & other loose material when transported by vehicles		✓			
After unloading , wheels & undercarriage of vehicles cleaned prior to leaving the site		✓			
No chance finds encountered during excavation		✓			
Work is planned in consultation with traffic police					✓
Work is not being conducted during heavy traffic					✓
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)					✓
Pipe trenches are not kept open unduly					✓
Road is not completely closed; work is conducted on edge; at least one line is kept open					✓
Road is closed; alternative route provided & public informed, information board provided					✓
Pedestrian access to houses is not blocked due to pipe laying					✓
Spaces left in between trenches for access					✓
Wooden planks/metal sheets provided across trench for pedestrian					✓
No public/unauthorized entry observed in work site		✓			
Children safety measures (barricades, security) in place at works in residential areas		✓			
Prior public information provided about the work, schedule and		✓			

disturbances				
Caution/warning board provided on site	✓			
Guards with red flag provided during work at busy roads				✓
Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc)				✓
Workers conducting or near heavy noise work is provided with ear muffs				✓
Contractor is following standard & safe construction practices				✓
Deep excavation is conducted with land slip/protection measures	✓			
First aid facilities are available on site and workers informed	✓			
Drinking water provided at the site	✓			
Deep excavation is conducted with land slip/protection measures	✓			
First aid facilities are available onsite and workers informed	✓			
Drinking water provided at the site	✓			
Toilet facility provided at the site	✓			
Separate toilet facility is provided for women workers	✓			
Workers camps are maintained cleanly	✓			
Adequate toilet & bath facilities provided	✓			
Contractor employed local workers as far as possible				✓
Workers camp set up with the permission of PIU	✓			
Adequate housing provided	✓			
Sufficient water provided for drinking/washing/bath	✓			
No noisy work is conducted in the nights				✓
Local people informed of noisy work		✓		
No blasting activity conducted	✓			
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings	✓			

**Summary of safeguard compliance of contractor-** Contractor is taking preventive measures during the construction work but need more attention towards the site safety and environmental related issues

**Overall performance of contractor-** Satisfactory

**APPENDIX-5: COMPLIANCES OF ENVIRONMENTAL SELECTION CRITERIA**

Components	Criteria	Design Considerations (if criterion is not met)	Compliance Status
<b>All subprojects</b>			
	Subproject will avoid potentially significant adverse impacts that are diverse, irreversible or unprecedented (ADB SPS Category A for environment).		Complied- All projects are under category B as per ADB SPS, no significant impact is envisaged from any sub project
	Comply with all requirements of ADB SPS 2009 and follow procedures set in this EARF.		Complied- EARF and ADB SPS is being complied in all sub projects
	Comply with relevant national, and local laws, rules and regulations regarding EIA, environmental protection, pollution prevention (water, air, noise, solid waste, etc.), wildlife protection, core labor standards, physical cultural resources, health and safety, and other laws in specific sectors as indicated below		Complied- Compliance of all relevant national and state laws, rules and regulations are being done in all sub projects
	Reflect inputs from public consultations	Refer to ADB SPS requirements on meaningful consultations <sup>16</sup>	Complied- Consultations are being done in all stages of project
Location	Avoid involuntary resettlement by prioritizing rehabilitation over new construction using vacant government land where possible, and taking all possible measures in design and selection of site or alignment to avoid resettlement impacts	If cannot be avoided, prepare Resettlement Plan.	Complied- Only temporary impacts on livelihood is anticipated in sub projects for which Resettlement Plan is prepared
	Avoid or minimize the cutting of trees	If tree is to be cut, consider plantations in the ration of at least 1:3	Being Complied- Tree cutting permission is being taken, where tree cutting is required, compensatory plantations will be done in the ratio of at least 1:3
Biodiversity	Avoid locating subprojects in critical habitats, such as, but not limited to, wildlife/bird sanctuaries, national parks, tiger reserves, elephant reserves, conservation reserves or core zone of biosphere reserves. Appendix 1 provides preliminary	If criterion is not met, this is potential for Category A therefore alternate location should be considered. A Biodiversity Expert shall assess and confirm critical habitat qualification.	Complied- There are no ecological sensitive areas within the areas of project impact

<sup>16</sup> Per ADB SPS, meaningful consultation is defined as “a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues”

	analysis using the International Biodiversity Assessment Tool (IBAT) key biodiversity areas, protected areas, IUCN red list species and likelihood of critical habitats per town.  Should not directly affect environmentally protected areas, core zones of biosphere reserves and highly valued habitat	Appendix 2 provides a Biodiversity Assessment Report prepared for a sample subproject (Abu Road water and sewerage subproject).	
	If work is proposed with the aim of improving the conservation or management of designated subproject sites (e.g. improved drainage), this must only be undertaken: (i) after a comprehensive study and development of management plans and criteria; and (ii) with the direct involvement and approval of national and local bodies responsible for the subproject site.		Not applicable
Physical Cultural Resources	Should not result in the destruction/damage of or encroachment onto physical cultural resources (PCR) <sup>17</sup> such as archaeological monuments; heritage sites and movable or immovable objects, sites, structures, group of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic or other cultural significance.	If town has potential PCR, conduct Heritage Impact Assessment (HIA). Appendix 3 provides a sample HIA prepared for a sample subproject (Khetri water and sewerage subproject).  For legally protected PCRs: (i) if location is within 300 m of notified PCRs such as protected monuments/sites and there is no alternative, permissions from the ASI or State Department of Archaeology shall to be obtained prior to finalization of detailed engineering design.	Being Complied— There are no any listed archaeological monuments within the impact area of any sub project. Heritage Impact Assessment is being done in heritage towns.
Existing Facilities to be rehabilitated or expanded	Conduct environmental audit of existing facilities <sup>18</sup> per ADB SPS	For non-compliances identified in the environmental audit, provide corrective action for each area of concern including cost and schedule to be included in the subproject EMP.	Complied- Environmental audit of existing facilities has been done, where rehabilitation or upgradations works are proposed
Associated Facilities <sup>19</sup>	Analyze environmental impacts and risks to be included in the IEE		Complied- environmental

<sup>17</sup> Physical cultural resources as defined as “movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources may be located in urban or rural settings and may be above or below ground or under water. Their cultural interest may be at the local, provincial, national, or international level.”

<sup>18</sup> ADB SPS Appendix 4 para 12 on Existing Facilities



			impact assessment of associated facilities done
Asbestos-containing materials (ACM) including, but not limited to, pipes, roofing, ceilings, insulation materials, excess pipes stored in PHED campuses, walls, etc.	<p>Avoid handling or removing any ACM.</p> <p>Ensure asbestos concrete (AC) pipes facilities containing asbestos will not be disturbed and left in-situ. Appendix 4 provides asbestos management plan.</p> <p>RUDSICO shall include AMP in all contracts.</p>	<p>If ACM is suspected, asbestos verification by Asbestos Management Expert is required. Prepare site-specific asbestos management plan (AMP) prepared.</p> <p>Appendix 4 provides a sample AMP prepared for a sample subproject (Sardarshahar water and sewerage subproject).</p>	Being Complied-AC pipes are not being used in the project and ACM management plan is being prepared in all sub projects where there is possibilities of encounter with ACM
	When designing subproject infrastructure that involves excavation in urban areas the relevant authorities must be consulted to ascertain the location of any ACM prior to any subproject activity. Locations of new infrastructure must then be designed to avoid excavating or disturbing any ACM.		Being Complied- AC pipes in existing water supply networks are being ascertain after consultation from the PHED and existing AC pipes will remain in-situ and will not be removed from earth
Right-of-way	Locate water supply pipelines within the right of way (ROW) of other linear structures (roads, irrigation canals) as far as possible, to reduce new land acquisition.	If criterion is not met, prepare Resettlement Plan according to Resettlement Framework	Complied- water supply and waste water pipes are planned in ROW only, no private land acquisition will be done for pipe laying works
	Ensure that pipelines ROW do not require land acquisition from individual farmers that is a significant proportion of their total land holding (>10%).	If criterion is not met, prepare Resettlement Plan according to Resettlement Framework	
<b>Water Supply</b>			
Sustainability	Utilize water sources at sustainable levels of abstraction only (i.e. without significant reductions in the quantity or quality of the source overall)	Water source sustainability or the concurrence from PHED should be provided in the subproject's IEE. Submit groundwater sustainability report and obtain permission from the Central Groundwater Board or the State Groundwater Board.	Complied- Ground water sustainability reports are obtained from ground water department, where ground water is being used as source
Quality (raw water, treated water)	Ensure that water supply to consumers comply with the national drinking water standards at all times and confirm this by regular monitoring at WTPs and in domestic premises.		Being Complied-WTPs are designed as per applicable standards for drinking waters and

<sup>19</sup> ADB SPS Appendix 1 para 6 defines associated facilities as “not funded as part of the project (funding may be provided separately by the borrower/client or by third parties), and whose viability and existence depend exclusively on the project and whose goods or services are essential for successful operation of the project”

			regular monitoring shall be done during operation
	Avoid using water sources that may be polluted by upstream users	Baseline raw water quality to be included in the IEE.	Complied- Raw water is being drawn where no pollution from upstream users
	Avoid water-use conflicts by not abstracting water that is used for other purposes (e.g. irrigation)	If there are other users, permits or clearance for the allocation should be provided in the IEE.	Complied
Location	As far as possible locate all new facilities – Water Treatment Plants (WTP), Tube Wells (TW), etc. away from houses, shops or any other premises used by people, thus establishing a buffer to reduce the effects of noise, dust and the visual appearance of the site.		Complied- all new facilities are away from houses, shops or other premises as far as possible
	Locate WTP at sites where there is no risk of flooding or other hazards that might impair functioning of the WTP or present a risk of damage to the WTP or the surrounding area		Complied- WTP sites are not having hazards of flooding
Design	Ensure that the water supply system improvements are combined with improvements in sewerage to deal with the increased discharge of domestic wastewater.		Complied- water supply and sewerage system are synchronized
<b>Sewage System</b>			
Location	<p>Previous projects considered 500m as distance consideration from nearest habitation. This has been reduced to 100m considering facilities will be located in developed areas and technology to be used. RSTDSP considered using Sequencing Batch Reactor (SBR) technology in STPs, which is proven to cause minimal odor as compared to other treatment technologies such as Waste Stabilization Pond or Activated Sludge Process.</p> <p>As far as possible, new Sewage Treatment Plants (STP) should be preferably 100m away from any inhabited areas, in locations where no urban expansion is expected in the next 20 years, thus establishing a buffer to reduce effects of odor, visual appearance or other nuisance of the site (this may be reviewed depending on the technology adopted for the treatment of effluent).</p>	In case of non-availability of suitable sites due to land and technical design constraints in already developed areas, where 100 m buffer is not available, following procedures shall be adopted and documented in order to finalize sites for implementation of project: (i) conduct alternate site analysis, justify the selected site; (ii) develop odor mitigation measures to prevent and control odor/air emissions – design measures, and operational practices that are feasible and practical in local conditions and include in IEE; (iii) develop layout plan with maximum buffer to nearby houses; (iv) provide a peripheral green buffer (at least three rows of trees within the STP compound); and (v) public information –	Complied- STPs are at least 100 meters away from habitations, SBR technology is adopted in all STPs, dense plantation is taken in to consideration in the periphery of all STPs to reduce foul smell

		consult local community, inform about the need, process adopted to select sites, its suitability, and measures adopted for odor prevention and control	
	As far as possible Sewage Pumping Stations (SPS) and wet wells should be located preferably 50m from any inhabited areas and from sites such as hospitals, schools, temples, etc. to minimize nuisance impacts from odor, rodents, etc.	In case of non-availability of suitable sites due to land and technical design constraints in already developed areas, where 50 m buffer is not available, following procedures shall be adopted and documented in order to finalize sites for implementation of project: (i) conduct alternate site analysis, justify the selected site; (ii) develop odor mitigation measures to prevent and control odor/air emissions – design measures, and operational practices that are feasible and practical in local conditions and include in IEE; (iii) develop layout plan with maximum buffer to nearby houses; (iv) provide a peripheral green buffer (at least three rows of trees within the pumping station compound); and (v) public information – consult local community, inform about the need, process adopted to select sites, its suitability, and measures adopted for odor prevention and control	Complied- SPS and wet wells are designed at least 50 mts away from habitations and sensitive receptors
	Locate STP at sites where there is no risk of flooding or other hazards that might impair function of the STP or present a risk of damage to the STP or the surrounding area		Complied- selected STP sites are having no risk of flooding
Quality	Ensure that sewage is treated at all times to national waste water discharge standards and confirm this by regular monitoring of effluent from the STP.		Being Complied- all STPs are designed on latest parameters set by Government, provision of regular monitoring of treated effluent is taken in all projects
Treated water	Ensure that no wastewater is discharged into a water course in which it could be a hazard to downstream	Reuse of treated effluent and sludge for beneficial uses will be encouraged in	Will be Complied- Reuse of treated effluent from STP in

	users (e.g. a waterway that is used as a source of water for domestic or municipal supply)	the project. During final design options and method of reuse will be developed and updated in IEE.	beneficial purposes is taken in project designs
Sludge	Include measures to ensure the safe disposal of sewage sludge and if possible, to promote its safe and beneficial use as an agricultural fertilizer		Will be complied-reuse of treated sludge from STPs for beneficial purposes is considered in the project
Right-of-way for sewer network	Locate sewage pipelines within the right of way (ROW) of other linear structures (e.g. roads) wherever feasible, to reduce new land acquisition.	If criterion is not met, prepare Resettlement Plan according to Resettlement Framework	Complied- pipe lines are designed within ROW only, no land acquisition is required for pipe laying in any sub project
	Ensure that routes of sewage mains do not require land acquisition from individual farmers that is a significant proportion of their total land holding (10%)	If criterion is not met, prepare Resettlement Plan according to Resettlement Framework	

**APPENDIX-6: PHOTOGRAPHS AND ATTENDANCE SHEETS OF SAGEGUARD  
ORIENTATIONS AND TRAININGS  
(During April to September 2021)**

(by Environment Specialist, PMCBC and Environment Professional, CMSC)

	
<b>Safeguard Orientation at Laxmanagarh Dated 27.07.2021</b>	<b>Safeguard Orientation at Fatehpur Dated 28.07.2021</b>
	
<b>Safeguard Orientation at Pratapgargh Dated 13.08.2021</b>	<b>Safeguard Orientation at Pratapgargh Dated 13.08.2021</b>
	
<b>Safeguard Orientation at Didwana (for Didwana and Ladnu towns) Dated 14.09.2021</b>	<b>Safeguard Orientation at Kuchaman Dated 15.09.2021</b>

**Attendance sheet of Safeguard Orientation/Training at Banswara Dated 01.07.2021**

**Attendance Sheet for Training/Orientation**

**Name of Project:** Rajasthan Secondary Towns Development Sector Project (RSTDSP)–Banswara Water Supply and Sewerage Subproject, District – Banswara, Rajasthan

**Orientation/Training Topic:** Contractual and Legal Requirement, and Environment Health and Safety

**Place:** RUIDP Office, Banswara **Date and Time:** 01/07/2021 12:00 pm

S.No	Participant	Department/Agency	Designation	Mobile Number/Mail ID	Signature
1	Ashok Jangid	RUIDP	XEN	9602135607	SL
2	Mohit Jain	CMSC – II	Support Engineer	7024412928	
3	Mayank Prajapat	CMSC – II	Sup. Engr.	8385090373	
4	Kenu Singh	BIPL SC HP	Commissioner	9377884711	IL D. Singh
5	Mohd. Shahid Khan	BIPL SC HP	Deputy Project Manager	9001011999	
6					
7					
8					
9					

**Attendance sheet of Safeguard Orientation/Training at Laxmanagarh Dated 27.07.2021**

**Attendance Sheet for Safety Training/Orientation**

**Name of Project:** Rajasthan Secondary Towns Development Sector Project (RSTDSP)–Laxmanagarh Water Supply Subproject, District – Sikar, Rajasthan

**Orientation/Training Topic:** Environment Health and Safety Training

**Place:** Zone - 1a **Date and Time:** 27.07.2021 4:50 PM

S.No	Participant	Department/Agency	Designation	Mobile Number/Mail ID	Signature
1	Kartikya Singh	L&T	Supervisor	9695401923	Raj/L
2	Nishal Goyal	L&T	Eng. Mechanical	7001657720	
3	Sanvesh	"	Workman	---	---
4					
5					
6					
7					
8					
9					



**Attendance sheet of Safeguard Orientation/Training at Fatehpur Dated 28.07.2021**

**Attendance Sheet for Safety Training/Orientation**

**Project Name:** - Rajasthan Secondary Towns development sector Project- sewerage Subproject in Fatehpur Town, Sikar District, Rajasthan.

**Date** 28.07.2021 **Time** 4:50 PM

**Place:** - Proposed STP site - on Nazi Bari Road, Fatehpur

Sr. No.	Name of Participant	Dept.	Designation	Signature	Phone Number
1.	Godidi Parkkar	Worker	Helper	[Signature]	6263604256
2.	Harishanker	"	"	"	7060208038
3.	Jamang	"	"	[Signature]	8130118220
4.	Angana	"	"	[Signature]	7409657230
5.	Bani-Qal	"	"	"	"
6.	Bindi Pal	"	"	"	"
7.					

**Attendance sheet of Safeguard Orientation/Training at Banswara Dated 13.08.2021**

**Attendance Sheet for Safety Training/Orientation**

**Name of Work:** - "Construction of Sewerage system including sewerage Network, Sewage Treatment Plant, Sewage Pumping Station and House Sewer Connections along with all allied Works and operation services of the entire system for 10 years at Pratappgarh Town (RSTDIP/PRT/01)"

**Project Name:** Rajasthan Urban Infrastructure Development Project Phase-IV Sewerage Network in Pratappgarh, Rajasthan.

**Date:** 13/08/2021 **Time:** 1:50 - 1:30 PM

**Place:** Pratappgarh (Banswara Colony).

Sr.No.	Name of Participant	Dept.	Designation	Signature	Phone Number
1	Prabhu Khader	Worker	Helper	[Signature]	-
2	Prabhu Khader	"	"	[Signature]	-
3	Teevataram	"	"	[Signature]	-
4	Guddu Meena	"	"	[Signature]	9685227187
5	Ram Lal Meena	"	"	[Signature]	9929681081
6					

**Attendance sheet of Safeguard Orientation/Training at Didwana and Ladnu Dated  
14.09.2021**

ATTENDANCE SHEET				
Town: <u>Didwana</u>				
Project: <u>Sewerage Project, Didwana and Makrana</u>				
Date: <u>14.09.2021</u>				
Subject: <u>Environmental Safeguard Orientation</u>				
S.No.	Name	Designation	Mobile and email	Signature
1	<u>Rakesh Mudgal</u>	<u>SE</u>	<u>9414456296</u>	<u>[Signature]</u>
2	<u>Gurtej Singh</u>	<u>EE, Makrana</u>	<u>9828529028</u>	<u>[Signature]</u>
3	<u>Arun C.D</u>	<u>Accounts</u>	<u>9597293643</u>	<u>[Signature]</u>
4	<u>ARUN KANATIYA</u>	<u>Acem</u>	<u>9893409451</u>	<u>[Signature]</u>
5	<u>S.K.SINGH</u>	<u>PM L&amp;T</u>	<u>9412739733</u>	<u>[Signature]</u>
6	<u>Jeetender Kumar meen</u>	<u>J.G. RUPP</u>	<u>9461307761</u>	<u>[Signature]</u>
7	<u>Saddam Niswan</u>	<u>SUPPOT-ENG. CMSC</u>	<u>7727891555</u>	<u>[Signature]</u>
8	<u>Sunaj Kumar Singh</u>	<u>CM Didwana</u>	<u>8936943655</u> <u>Sunajkr@Intec.com</u>	<u>[Signature]</u>
9	<u>Auti Bachel</u>	<u>cm l&amp;e</u>	<u>8696945316</u>	<u>[Signature]</u>
10	<u>Robin Maprani</u>	<u>EH&amp;SO</u>	<u>9895978165</u>	<u>[Signature]</u>
11	<u>RAVINDER PAWAR</u>	<u>CM (L&amp;T)</u>	<u>9412739717</u> <u>Ravindar@Intec.com</u>	<u>[Signature]</u>
12	<u>Vardan Sivasdan</u>	<u>Env. Specialist</u> <u>CSMC-01</u>	<u>9410085377</u>	<u>[Signature]</u>
13	<u>Ranjit Dora</u>	<u>IR L&amp;T</u>	<u>9377960919</u>	<u>[Signature]</u>
14				
15				
Signature of PMCBC			Signature of PIU	



## Safeguard Orientation/Training at Ladnu Dated 14.09.2021

## ATTENDANCE SHEET

Town: LadnuProject: Sewerage Project, LadnuDate: 14.09.2021Subject: Environmental Safeguard Orientation


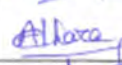
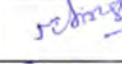
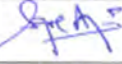


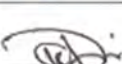

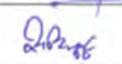


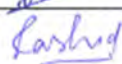
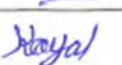
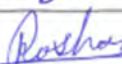
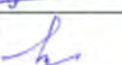
S.No.	Name	Designation	Mobile and email	Signature
1	Rakesh Mudgal	SE	9414456296	
2	ASHOK CHORDIA	EE	9414345265	
3	Jitendra	J.E.	9783433002	
4	VISAY PAL	ACM	9799363291	
5	SHER MOHAMMED	Support Engineer	8094736147	
6	S.K.SINGH	PM (LST)	9412739783	
7	ARUN KAN ESWARAN KP	CM (LST)	7849918596	
8	Jeewan Jeewan PK	BUSO	9446224558	
9	T. RAMESH	Asst. S. Asst.	9849499910	
10	Anil Barchat	CA-600	8690945316	
11	Vardan Sircar	Environmental Specialist - CSMC-II	7986939303	
12	Ranjit Thakur	IR- LST	9719960919	
13				
14				
15				

Signature of PMCBC

Signature of PIU

**Attendance sheet of Safeguard Orientation at Kuchaman dated 15.09.2021****ATTENDANCE SHEET**

Town: Kuchaman  
 Project: Sewerage Project & Water Supply, Kuchaman  
 Date: 15.09.2021  
 Subject: Environmental Safeguard orientation

S.No.	Name	Designation	Mobile and email	Signature
1	ANURAG	PLANNING (L&T)	7990659827	
2	AVIJIT DHARA	Execution (L&T)	7890891553	
3	Mrityunjay Suresh	SOT (L&T)	8696945443	
4	Sayam Anjum	Execution (L&T)	9554170786	
5	ATUL STHGH	11 L&T	6306520635	
6	Ankit Sharma	Support Engineer CMSC- RUIDP	9660904080	
7	K. C. Parashar	CM (L&T)	9783168222	
8	M. C. Gupta	Ex. En RUIDP	7597921020	
9	Saurabh K. Toyal	Jen. RUIDP	9509139689	
10	Sandeep Gaudara	Support Engineer CMSC- RUIDP	8947083460	
11	Devendra Singh	SDE CAPP-RUIDP	9950601807	
12	Mohd Rashid	Civil Supervisor	9936526885	
13	Nayal Pathak	SOT (L&T)	8769813183	
14	Rashan Kanwar	SOT (L&T)	6378384301	
15	Indrajit Adhikari	Civil Technician (Supervisor)	81590611858	

Signature of PMCBC

Signature of PIU

(2)

## ATTENDANCE SHEET

Town: Kuchaman.  
 Project: Water Supply & Sewerage Proj<sup>n</sup>.  
 Date: 15/9/2021  
 Subject: WS/WW

S.No.	Name	Designation	Mobile and email	Signature
16	Vandana Srivastava	Env. Specialist CSMC-01	7985939383	
17	Kishan Singh	Sgt (IST)	8209223080	
18	Sunil Kumar	Surveyor (LIT)	8953217789	
19	Shahnaz Hosan	PM (LST)	7997002054 SHZ@LNTECC.COM	
20	P. Ashok	DL (L&E)	7296880693 ashokpolice@intecr.	
21	V. Suguney	FAA (LST)	959661156 suguney@intecr.	
7	Anurag Bagherwal	Safety	9119104580	
8				
9				
10				
11				
12				
13				
14				
15				

Signature of PMCBC

Signature of PIU



**APPENDIX 7: PHOTOS OF EHS ACTIVITIES BY DIFFERENT CONTRACTORS DURING  
REPORTING PERIOD  
(April to September 2021)**

<b>Abu Road Town</b>	
	
<b>Training on Electrical safety</b>	<b>Loading unloading safety</b>
	
<b>Fire-fighting training</b>	<b>Training on Importance of PPE</b>
<b>Sirohi Town</b>	
	
<b>Contract Workmen Training</b>	<b>OJ Training- Electrical safety</b>
	
<b>SST-confined Space Safety</b>	<b>First AID Training</b>
<b>Sardarshahar Town</b>	

 <p>A group of people, including men and women, are standing in a line, possibly receiving instructions or waiting for services. The scene is outdoors, and the individuals are wearing masks and maintaining social distance.</p>	 <p>A group of people, including men and women, are standing in a line, possibly receiving instructions or waiting for services. The scene is outdoors, and the individuals are wearing masks and maintaining social distance.</p>
<p><b>EHS Induction &amp; COVID Precaution during lockdown</b></p>	<p><b>EHS Induction &amp; COVID Precaution</b></p>
 <p>A group of people, including men and women, are standing in a line, possibly receiving instructions or waiting for services. The scene is outdoors, and the individuals are wearing masks and maintaining social distance.</p>	 <p>A group of people, including men and women, are standing in a line, possibly receiving instructions or waiting for services. The scene is outdoors, and the individuals are wearing masks and maintaining social distance.</p>
<p><b>Site specific Training</b></p>	<p><b>Scaffolding Safety</b></p>
<p><b>Fatehpur Town</b></p>	
 <p>A group of people, including men and women, are standing in a line, possibly receiving instructions or waiting for services. The scene is outdoors, and the individuals are wearing masks and maintaining social distance.</p>	 <p>A group of people, including men and women, are standing in a line, possibly receiving instructions or waiting for services. The scene is outdoors, and the individuals are wearing masks and maintaining social distance.</p>
<p><b>Contractor Worker Training (CWT)</b></p>	<p><b>Traffic Management</b></p>
 <p>A group of people, including men and women, are standing in a line, possibly receiving instructions or waiting for services. The scene is outdoors, and the individuals are wearing masks and maintaining social distance.</p>	 <p>A group of people, including men and women, are standing in a line, possibly receiving instructions or waiting for services. The scene is outdoors, and the individuals are wearing masks and maintaining social distance.</p>
<p><b>Confined space work safety</b></p>	<p><b>EHS Alert no. 2 &amp; 3</b></p>
 <p>A group of people, including men and women, are standing in a line, possibly receiving instructions or waiting for services. The scene is outdoors, and the individuals are wearing masks and maintaining social distance.</p>	 <p>A group of people, including men and women, are standing in a line, possibly receiving instructions or waiting for services. The scene is outdoors, and the individuals are wearing masks and maintaining social distance.</p>
<p><b>P &amp; M Work Safety</b></p>	<p><b>Electrical Work Safety</b></p>



	
<b>Excavation work Safety</b>	<b>Mock drill</b>
	
<b>Traffic Management Training</b>	<b>Height Work safety</b>
<b>Ratangarh Town</b>	
	
<b>Excavation Safety Training</b>	<b>Material Handling Training, Excavation Safety, COVID-19 precautions</b>
	
<b>Work at Height Training</b>	<b>EHS Alert Training</b>
<b>Laxmangarh Town</b>	

	
<b>Others Training (OT)</b>	<b>Site Specific Training (SST)</b>
	
<b>Contractor Worker Training (CWT)</b>	<b>Induction</b>
<b>Pratapgarh Town</b>	
	
<b>Tree Plantation</b>	
<b>Banswara Town</b>	
	
<b>Training on Excavation safety</b>	<b>Material handling safety</b>
	
<b>Training on House keeping</b>	<b>Training on Road safety</b>



Kuchaman Town	
	
Training on Material Handling Safety at office	Training on Working on Road Safety at office
	
Excavation & Electrical Safety Training at site	Training on Importance of Barricade & PPES at site
Mandawa Town	
	
Electrical Safety Training	Manual material handling Training
Khetri Town	
	
Training on House keeping	Training on Road safety



**Appendix 8: SAFEGUARD TRAININGS CONDUCTED BY CONTRACTORS**  
**(April to September 2021)**

S. No.	Activities done	Date	Location	Trainer	No. of participants
<b>Abu Road Town</b>					
1	Electrical safety	09.04.2021	Talehti	Srilekha	07
2	Material handling safety	10.04.2021	Manpur store	Srilekha	10
3	House keeping	10.04.2021	Manpur HB	Srilekha	06
4	Electrical safety	14.04.2021	Manpur	Srilekha	07
5	Road safety	14.04.2021	Jaat Samaj	Srilekha	07
6	House keeping	26.04.2021	Manpur	Srilekha	04
7	Electrical safety	26.04.2021	Manpur	Srilekha	04
8	Excavation Safety	27.04.2021	Manpur	Srilekha	05
9	Loading unloading safety	28.04.2021	Manpur	Srilekha	06
10	Electrical safety	05.05.2021	Housing Board	Srilekha	05
11	House keeping	07.05.2021	Manpur HB	Srilekha	10
12.	Excavation Safety	07.05.2021	Akrabatta	Srilekha	06
13	Loading unloading safety	12.05.2021	Manpur HB	Srilekha	05
14	Road safety	12.05.2021	Tahleti	Srilekha	07
15.	Material handling	13.05.2021	Manpur HB	Srilekha	06
16	House keeping	13.05.2021	Manpur	Srilekha	07
17	Road safety	18.05.2021	manpur	Srilekha	05
18	Loading unloading safety	19.05.2021	Manpur store	Srilekha	08
19	Electrical safety	21.05.2021	New Manpur	Srilekha	11
20	Material handling	22.05.2021	Manpur	Srilekha	10
21	Electrical safety	24.05.2021	Manpur HB	Srilekha	08
22	Excavation Safety	01.06.2021	New Manpur	Srilekha	06
23	House keeping	09.06.2021	Manpur	Srilekha	06
24	Loading unloading safety	09.06.2021	Manpur HB	Srilekha	07
25	Material handling safety	09.06.2021	Tartoli	Srilekha	06
26	Electrical safety	14.06.2021	Akrabatta	Srilekha	09
27	Excavation Safety	24.06.2021	Santpur	Srilekha	06
28	House keeping	25.06.2021	Manpur HB	Srilekha	11
29	Soil Collapse	25.06.2021	Santpur	Srilekha	06
30	Electrical safety	26.06.2021	Gandhinagar	Srilekha	07
31	EHS Alert	29.06.2021	Santpur	Srilekha	18
32	CWT	July'21	Santpur	Mr. Sachin Sharma	31
33	Road safety and Excavation safety	July'21	Maanpur	Mr. Sachin Sharma	6
34	Excavation safety and Housekeeping	July'21	Tartoli	Mr. Sachin Sharma	7
35	Excavation safety	July'21	Santpur STP	Mr. Sachin Sharma	14
36	Manual material handling	July'21	New Maanpur	Mr. Sachin Sharma	6
37	Manual material handling safety and hot work safety	July'21	Tartoli	Mr. Sachin Sharma	7
38	Importance of PPE and fire	July'21	Santpur STP	Mr. Sachin	14

	safety			Sharma	
39	Housekeeping and Electrical safety	July'21	Santpur STP	Mr. Sachin Sharma	14
40	EHS	Aug 21	Office	Mr. Sachin Sharma	26
41	EHS	Aug 21	Office	Mr. Sachin Sharma	13
42	Road safety and Excavation safety	Aug 21	Maanpur HB	Mr. Sachin Sharma	8
43	Material handling safety	Aug 21	Maanpur	Mr. Sachin Sharma	9
44	CWT	Aug 21	Workmen Camp	Mr. Sachin Sharma	12
45	Importance of PPE	Aug 21	Maanpur HB	Mr. Sachin Sharma	9
46	Electrical safety	Aug 21	Maanpur HB	Mr. Sachin Sharma	9
47	Housekeeping and Electrical safety	Aug 21	Ambika colony	Mr. Sachin Sharma	8
48	Material handling safety	Aug 21	Maanpur	Mr. Sachin Sharma	6
49	EHS	Aug'21	Workmen Camp	Mr. Sachin Sharma	13
50	CWT	Aug'21	Workmen Camp	Mr. Sachin Sharma	12
51	EHS	Aug'21	New Maanpur	Mr. Sachin Sharma	4
52	EHS	Aug'21	STP Santpur	Mr. Sachin Sharma	8
53	EHS	Aug'21	Gandhinagar	Mr. Sachin Sharma	7
54	EHS	Aug'21	STP Santpur	Mr. Sachin Sharma	13
55	EHS Alert #14	Sep'21	Maanpur	Mr. Sachin Sharma	6
56	Electrical safety and road safety	Sep'21	Workmen Camp	Mr. Sachin Sharma	8
57	EHS Alert #13	Sep'21	Workmen Camp	Mr. Sachin Sharma	9
58	Material handling safety	Sep'21	Office	Mr. Sachin Sharma	18
59	EHS Alert #14	Sep'21	Workmen Camp	Mr. Sachin Sharma	6
60	Excavation safety and Housekeeping	Sep'21	Maanpur	Mr. Sachin Sharma	8
61	Electrical safety and Excavation safety	Sep'21	Maanpur	Mr. Sachin Sharma	10
62	EHS Alert #13	Sep'21	Maanpur	Mr. Sachin Sharma	6
63	EHS Alert #15	Sep'21	Office	Mr. Sachin Sharma	17
64	EHS Alert #16	Sep'21	Office	Mr. Sachin Sharma	17
65	loading and unloading safety	Sep'21	Workmen Camp	Mr. Sachin Sharma	7
66	Material Handling	Sep'21	Santpur STP	Mr. Sachin Sharma	32
67	EHS Alert#16	Sep'21	Maanpur	Mr. Sachin	5

				Sharma	
68	CWT	Sep'21	Workmen Camp	Mr. Sachin Sharma	15
69	CWT	Sep'21	Workmen Camp	Mr. Sachin Sharma	15
70	Fire-fighting training	Sep'21	Office	Mr. Sachin Sharma	26
71	Confined Space-Gas Testing	Sep'21	Office	Mr. Sachin Sharma	12
<b>Sirohi Town</b>					
1	EHS Alert #14	Sep'21	Maanpur	Mr. Sachin Sharma	6
2	Electrical safety and road safety	Sep'21	Workmen Camp	Mr. Sachin Sharma	8
3	EHS Alert #13	Sep'21	Workmen Camp	Mr. Sachin Sharma	9
4	Material handling safety	Sep'21	Office	Mr. Sachin Sharma	18
5	EHS Alert #14	Sep'21	Workmen Camp	Mr. Sachin Sharma	6
6	Excavation safety and Housekeeping	Sep'21	Maanpur	Mr. Sachin Sharma	8
7	Electrical safety and Excavation safety	Sep'21	Maanpur	Mr. Sachin Sharma	10
8	EHS Alert #13	Sep'21	Maanpur	Mr. Sachin Sharma	6
9	EHS Alert #15	Sep'21	Office	Mr. Sachin Sharma	17
10	CWT Training	10.07.21	Sirohi	Satish	15
11	Material Handling	16.07.21	Sirohi	Satish	12
12	Excavation Safety	23.07.21	Sirohi	Satish	07
13	Excavation Safety	25.07.21	Sirohi	Satish	10
14	CWT Training	27.07.21	Sirohi	Satish	09
15	Manual Material Handling	17.08.21	Sirohi	Satish	7
16	CWT Training	25.08.21	Sirohi	Satish	5
17	CWT Training	28.08.21	Sirohi	Satish	5
18	EHS Alert Training	28.08.21	Sirohi	Satish	23
19	Electrical Safety	20.09.21	Sirohi	Satish	09
20	Traffic managements	22.09.21	Sirohi	Satish	11
21	Health and hygiene Safety	24.09.21	Sirohi	Satish	08
22	EHS Alert	25.09.21	Sirohi	Satish	12
<b>Sardarshahar Town</b>					
1	loading and unloading safety	Sep'21	Workmen Camp	Mr. Sachin Sharma	7
2	Material Handling	Sep'21	Santpur STP	Mr. Sachin Sharma	32
3	EHS Alert#16	Sep'21	Maanpur	Mr. Sachin Sharma	5
4	CWT	Sep'21	Workmen Camp	Mr. Sachin Sharma	15
5	CWT	Sep'21	Workmen Camp	Mr. Sachin Sharma	15
6	Fire-fighting training	Sep'21	Office	Mr. Sachin Sharma	26
7	Confined Space-Gas Testing	Sep'21	Office	Mr. Sachin Sharma	12

8	EHS Alert #01	14.04.2021, 15.04.2021, 29.04.2021	Sardarshahar	Rakesh kumar Sahu	15
9	EHS Alert # 01,03 & 04	12.05.2021	Sardarshahar	Rakesh kumar Sahu	10
10	EHS Alert # 01 & 02	17.05.2021	Sardarshahar	Rakesh kumar Sahu	14
11	Mock Drill On Heat Stroke	29.04.2021	Sardarshahar	Rakesh kumar Sahu	15
12	Site Specific Training-COVID safety precaution	26.05.2021	Sardarshahar	Rakesh kumar Sahu	17
13	Mock Drill on COVID suspected case	28.05.2021	Sardarshahar	Rakesh kumar Sahu	20
14	Vaccination Awareness	28.05.2021	Sardarshahar	Rakesh kumar Sahu	35
15	Electrical Safety-Staffs	14.06.2021	Sardarshahar	Rakesh kumar Sahu	20
16	Electrical Safety-Workmen	17.06.2021	Sardarshahar	Rakesh kumar Sahu	45
17	Mock Drill on Electrocution	29.06.2021, 30.06.2021	Sardarshahar	Rakesh kumar Sahu	23
18	EHS Induction & COVID Precaution	July, 2021	Sardarshahar	Rakesh Kumar Sahu	119
19	EHS Induction & COVID Precaution	August 2021	Sardarshahar	Rakesh Kumar Sahu	126
20	EHS Induction & COVID Precaution	September 2021	Sardarshahar	Rakesh Kumar Sahu	131
21	Contractor Workmen Training	July 2021	Sardarshahar	Rakesh Kumar Sahu	9
22	Contractor Workmen Training	August 2021	Sardarshahar	Rakesh Kumar Sahu	14
23	Contractor Workmen Training	September, 2021	Sardarshahar	Rakesh Kumar Sahu	22
24	Site Specific Training-Electrical Safety	July 2021	Sardarshahar	Rakesh Kumar Sahu	71 (39 WORKMEN 32 STAFFS)
25	Site Specific Training-Work at height	August 2021	Sardarshahar	Rakesh Kumar Sahu	64 (38 WORKMEN 26 STAFFS)
26	Site Specific Training-Security	August 2021	Sardarshahar	Rakesh Kumar Sahu	06
27	Site Specific Training-Gas Testing in Confined Space	September 2021	Sardarshahar	Rakesh Kumar Sahu	73 (56 WORKMEN 17 STAFFS)
28	Site Specific Training-Monsoon Preparedness Plan	September 2021	Sardarshahar	Rakesh Kumar Sahu	17
29	Other trainings	July 2021	Sardarshahar	Rakesh Kumar Sahu	95
30	Other trainings	August 2021	Sardarshahar	Rakesh Kumar Sahu	44
31	Other trainings	September 2021	Sardarshahar	Rakesh Kumar Sahu	232 (198 WORKMEN 34 STAFFS)
<b>Fatehpur Town</b>					
1	CWT Training	04.06.2021	Fatehpur	Mr. Vyankatesh	11
2	Mock Drill	07.06.2021	Fatehpur	Mr. Vyankatesh	11
3	Excavation Work Safety	08.06.2021	Fatehpur	Mr. Vyankatesh	7

4	Traffic Management	10.06.2021	Fatehpur	Mr. Vyankatesh	14
5	CWT Training	14.06.2021	Fatehpur	Mr. Vyankatesh	15
6	Excavation Work Safety	15.06.2021	Fatehpur	Mr. Vyankatesh	9
7	Electrical Work Safety	18.06.2021	Fatehpur	Mr. Vyankatesh	14
8	Mock Drill	19.06.2021	Fatehpur	Mr. Vyankatesh	17
9	EHS Alert no 02 , 03	23.06.2021	Fatehpur	Mr. Vyankatesh	14
10	EHS Alert no 05	23.06.2021	Fatehpur	Mr. Vyankatesh	19
11	Confined Space Work Safety	26.06.2021	Fatehpur	Mr. Vyankatesh	10
12	Traffic Management	30.06.2021	Fatehpur	Mr. Vyankatesh	09
13	Fire Drill - SST 1	01.07.2021	Fatehpur	Mandeep Walia	05
14	EHS Alert No- 06,08,11, 01,07,08, 09, 10, 10,12,13,14,15,16,17	07.07.2021, 14.07.2021, 19.07.2021, 24.07.2021, 31.07.2021 02.08.2021, 11.08.2021, 13.08.2021, 20.08.2021, 20.08.2021, 27.08.2021, 06.09.2021, 10.09.2021, 30.09.2021	Fatehpur	Mandeep Walia	158
15	Traffic Management	10.07.2021	Fatehpur	Mandeep Walia	6
16	CWT Training	11.07.2021, 14.07.2021, 19.07.2021, 22.07.2021, 23.07.2021, 06.08.2021, 09.08.2021, 24.08.2021, 25.08.2021, 06.09.2021, 22.09.2021	Fatehpur	Mandeep Walia	148
17	Excavation Work Safety	12.07.2021	Fatehpur	Mandeep Walia	06
18	Confined Space work safety	15.07.2021, 07.08.2021, 12.08.2021	Fatehpur	Mandeep Walia	13
19	Mock Drill	15.07.2021, 31.07.2021, 05.08.2021, 13.08.2021, 26.08.2021, 29.09.2021	Fatehpur	Mandeep Walia	61
20	Height Work Safety	16.07.2021, 08.09.2021, 20.09.2021	Fatehpur	Mandeep Walia	21
21	Material Handling	20.07.2021, 27.08.2021, 15.09.2021	Fatehpur	Mandeep Walia	29
22	P&M Work Safety	10.08.2021, 09.09.2021	Fatehpur	Mandeep Walia	13
23	Electrical Work Safety	23.08.2021	Fatehpur	Mandeep Walia	06
24	UA,UC,UB	30.08.2021	Fatehpur	Mandeep Walia	19
25	Confined space Safety , Fire safety Information , First Aid	02.09.2021	Fatehpur	Mandeep Walia	17

	Training				
26	Traffic Management	06.09.2021, 21.09.2021	Fatehpur	Mandeep Walia	13
<b>Ratangarh Town</b>					
1	Excavation safety training	16.01.2021	L&T OFFICE	Musthafa	12
2	Site specific training	12.01.2021	L&T OFFICE	Musthafa	15
3	EHS alert training	30.01.2021	L&T OFFICE	Musthafa	12
4	Excavation safety training	20.01.2021	L&T OFFICE	Musthafa	16
5	Excavation training	22.02.2021	L&T OFFICE	Musthafa	14
6	Excavation safety training	20.02.2021	L&T OFFICE	Musthafa	08
7	Site specific training	24.03.2021	L&T OFFICE	Musthafa	16
8	EHS alert training	16.03.2021	L&T OFFICE	Musthafa	12
9	Site specific training	26.03.2021	L&T OFFICE	Musthafa	10
10	Site specific training	25.03.2021	L&T OFFICE	Musthafa	08
11	Excavation Safety Training	02.07.21,08. 07.21, 26.07.21,20. 08.21,	L&T OFFICE	Musthafa	38
12	Site Specific Training	04.07.21, 24.08.21,25. 09.21,26.09. 21	L&T OFFICE	Musthafa	49
13	EHS Alert Training	29.07.21, 16.09.21	L&T OFFICE	Musthafa	24
<b>Laxmangarh Town</b>					
1	Site Specific Training (SST)	03.04.2021	Site	Vinayak Dev	08
2	Contractors Work Training (CWT)	12.04.2021	WMC	Vinayak Dev	05
3	EHS Alert Training	16.04.2021	WMC	Vinayak Dev	05
4	Contractors Work Training (CWT)	19.04.2021	WMC	Vinayak Dev	08
5	Contractors Work Training (CWT)	20.04.2021	WMC	Vinayak Dev	10
6	Others Training (OT)	20.04.2021	WMC	Vinayak Dev	08
7	Site Specific Training (SST)	20.04.2021	WMC	Vinayak Dev	08
8	Site Specific Training (SST)	04.05.2021	Site	Vinayak Dev	07
9	Others Training (OT)	11.05.2021	EHS Alert Training	Vinayak Dev	11
10	Contractors Work Training (CWT)	04.06.2021	WMC	Vinayak Dev	07
11	Site Specific Training (SST)	04.06.2022	Site	Shahrukh Khan	04
12	Contractors Work Training (CWT)	05.06.2021	WMC	Shahrukh Khan	07
13	Contractors Work Training (CWT)	10.06.2021	WMC	Shahrukh Khan	08
14	Site Specific Training (SST)	11.06.2021	WMC	Shahrukh Khan	03
15	EHS Alert Training	11.06.2021	WMC	Shahrukh Khan	08
16	Contractors Work Training (CWT)	11.06.2023	WMC	Shahrukh Khan	08
17	Induction	12.06.2021	WMC	Shahrukh Khan	5
18	Contractors Work Training (CWT)	12.06.2021	WMC	Shahrukh Khan	5
19	Induction	14.06.2021	WMC	Shahrukh Khan	3
20	Contractors Work Training (CWT)	14.06.2022	WMC	Shahrukh Khan	3
21	Induction	15.06.2021	WMC	Shahrukh Khan	14

22	Contractors Work Training (CWT)	15.06.2021	WMC	Shahrukh Khan	14
23	EHS Alert Training	15.06.2021	WMC	Shahrukh Khan	5
24	Induction	16.06.2021	WMC	Shahrukh Khan	1
25	EHS Alert Training	17.06.2021	WMC	Shahrukh Khan	19
26	Induction	18.06.2021	WMC	Shahrukh Khan	8
27	Contractors Work Training (CWT)	18.06.2022	WMC	Shahrukh Khan	8
28	Site Specific Training (SST)	18.06.2022	Site	Shahrukh Khan	7
29	EHS Alert Training	19.06.2021	WMC	Shahrukh Khan	8
30	Induction	21.06.2021	WMC	Shahrukh Khan	4
31	CWT	21.06.2022	WMC	Shahrukh Khan	4
32	Induction	22.06.2021	WMC	Shahrukh Khan	4
33	Contractors Work Training (CWT)	22.06.2022	WMC	Shahrukh Khan	4
34	Induction	23.06.2021	WMC	Shahrukh Khan	3
35	Induction	24.06.2021	WMC	Shahrukh Khan	3
36	Site Specific Training (SST)	25.06.2021	Site	Shahrukh Khan	6
37	Induction	26.06.2021	WMC	Shahrukh Khan	2
38	Induction	28.06.2021	WMC	Shahrukh Khan	1
39	Contractors Work Training (CWT)	28.06.2021	WMC	Shahrukh Khan	1
40	EHS Alert	01.07.2021, 02.07.2021, 08.07.2021, 12.07.2021, 15.07.2021, 22.07.2021, 27.07.2021, 13.08.2021, 14.08.2021, 16.08.2021, 11.09.2021, 14.09.2021, 22.09.2021	Site	Shahrukh Khan	84
41	Induction	06.07.2021, 08.07.2021, 09.07.2021, 10.07.2021, 12.07.2021, 16.07.2021, 17.07.2021, 20.07.2021, 23.07.2021, 02.08.2021, 03.08.2021, 10.08.2021, 13.08.2021, 25.08.2021, 26.08.2021, 27.08.2021, 28.08.2021, 29.08.2021, 31.08.2021, 02.09.2021, 06.09.2021, 11.09.2021, 14.09.2021,	WMC	Shahrukh Khan	126

		18.09.2021, 23.09.2021, 24.09.2021, 26.09.2021			
42	CWT	06.07.2021, 08.07.2021, 09.07.2021, 12.07.2021, 23.07.2021, 02.08.2021, 03.08.2021, 10.08.2021, 13.08.2021, 25.08.2021, 26.08.2021, 27.08.2021, 28.08.2021, 29.08.2021, 31.08.2021, 02.09.2021, 06.09.2021, 11.09.2021, 11.09.2021, 14.09.2021, 18.09.2021, 23.09.2021, 24.09.2021, 26.09.2021	WMC	Shahrukh Khan	119
43	SST	09.07.2021, 28.07.2021, 06.08.2021, 11.08.2021, 13.08.2021, 19.08.2021, 14.09.2021	Site	Shahrukh Khan	41
44	OT	19.07.2021, 21.07.2021, 10.08.2021, 20.08.2021, 21.08.2021, 27.08.2021, 06.09.2021, 23.09.2021	WMC	Shahrukh Khan	71
45	Mock Drill	27.08.2021	Site	Shahrukh Khan	3
46	Cook & helper training	03.09.2021	Site	Shahrukh Khan	2
<b>Pratapgarh Town</b>					
1	COVID-19 Training	01.07.2021	At the site	ASHUTOSH	10
2	COVID-19 Training	08.07.2021	At the site	ASHUTOSH	16
3	COVID-19 Training	15.07.2021	At the site	ASHUTOSH	14
4	COVID-19 Training	22.07.2021	At the site	ASHUTOSH	08
5	COVID-19 Training	29.07.2021	At the site	ASHUTOSH	12
6	COVID-19 Training	05.08.2021	At the site	ASHUTOSH	12
7	COVID-19 Training	12.08.2021	At the site	ASHUTOSH	15
8	Electrical Safety Training	19.08.2021	At the site	ASHUTOSH	16
9	Excavation Training	26.08.2021	At the site	ASHUTOSH	10
10	Ladder Training	02.09.2021	At the site	ASHUTOSH	08
11	PPE's Training	09.09.2021	At the site	ASHUTOSH	20
12	Material Lifting Training	14.09.2021	At the site	ASHUTOSH	10



13	HIV/AIDS Awareness Training	18.09.2021	At the site	Dr. Sandeep /Ashutosh (Safety)	50
14	Road Safety Training	23.09.2021	At the site	ASHUTOSH	20
15	Earth Moving Machinery	30.09.2021	At the site	ASHUTOSH	25
<b>Banswara Town</b>					
1	Material handling safety	20.09.2021	Banswara	Heera Babu	08
2	House keeping	22.09.2021	Banswara	Heera Babu	09
3	Road safety	23.09.2021	Banswara	Heera Babu	10
4	House keeping	25.09.2021	Banswara	Heera Babu	05
5	Excavation Safety	27.09.2021	Banswara	Heera Babu	09
6	Loading unloading safety	28.09.2021	Banswara	Heera Babu	12
7	House keeping	30.09.2021	Banswara	Heera Babu	11
<b>Kuchaman Town</b>					
1	Excavation &Electrical Safety, Working on Road Safety, Material Handling Safety COVID Awareness	04.09.2021	Training Center	Anurag Bagherwal	19
2	Excavation &Electrical Safety, Importance of Barricade & PPES, Working on Road Safety, Material Handling Safety, COVID Awareness	07.09.2021	Training Center	Anurag Bagherwal	09
3	Excavation &Electrical Safety, Awareness for COVID-19	07.09.2021	Shiv Nagar	Anurag Bagherwal	13
4	Excavation &Electrical Safety, Importance of Barricade & PPES, Working on Road Safety, Material Handling Safety, COVID Awareness	13.09.2021	Training Center	Anurag Bagherwal	08
5	Excavation &Electrical Safety, Importance of Barricade & PPES, Working on Road Safety, Material Handling Safety, COVID Awareness	15.09.2021	Training Center	Anurag Bagherwal	09
6	Excavation &Electrical Safety, Awareness for COVID-19	16.09.2021	Training Center	Anurag Bagherwal	05
7	Excavation &Electrical Safety, Awareness for COVID-19 & Fire Safety	17.09.2021	Training Center	Anurag Bagherwal	10
8	Excavation &Electrical Safety, Importance of Barricade & PPES, Working on Road Safety, Material Handling Safety, COVID Awareness	20.09.2021	Training Center	Anurag Bagherwal	14
9	Excavation &Electrical Safety, Awareness for COVID-19	20.09.2021	Training Center	Anurag Bagherwal	04
10	Excavation &Electrical Safety, Importance of Barricade & PPES, Working on Road Safety, Material Handling Safety, COVID Awareness	21.09.2021	Training Center	Anurag Bagherwal	06
11	Excavation &Electrical Safety, Awareness for COVID-19	25.09.2021	Training Center	Anurag Bagherwal	13
12.	Excavation &Electrical Safety,	28.09.2021	Training Center	Anurag	08

	Importance of Barricade & PPES, Working on Road Safety, Material Handling Safety, COVID Awareness			Bagherwal	
13	Excavation & Electrical Safety, Importance of Barricade & PPES, Working on Road Safety, Material Handling Safety, COVID Awareness	29.09.2021	Training Center	Anurag Bagherwal	23
<b>Didwana Town</b>					
1	Confined space training	15.09.2021	Office	Robin Maprani	15
2	Site specific training	05.09.2021	All sites	Anil Panchal	30
3	Environmental Safeguard Orientation at site	14.09.2021	Office	Abhay Srivastava	10
4	SOT training	21.09.2021	Office	Kaveri	06
5	Induction training	All month	All sites	Robin & Shyam	All workers
6	Alert training	All month	All sites	Shyam Chaudhary	All workers
<b>Makrana Town</b>					
1	Confined space training	15.09.2021	Office	Robin Maprani	15
2	Environmental Safeguard Orientation for staff	14.09.2021	Office	Abhay Srivastava	10
3	SOT training	21.09.2021	Office	Kaveri Dutta	20
4	Induction training	All month	All sites	Robin & Zakir	All workers
5	Alert training	All month	All sites	Zakir Khan	All workers
<b>Ladnu Town</b>					
1	Site induction training	20.09.2021 to 30.09.2021	Work sites & L&T office	32	-
2	Alert training	30.09.2021	L&T Office	6	-
3	Confined Space training	22.09.2021	L&T office	7	-
<b>Mandawa Town</b>					
1	Excavation Safety Training	04.08.2021	ZONE-03	Manoj	07
2	Excavation Safety Training	09.08.2021	ZONE-01	Manoj	05
3	Excavation Safety Training	20.08.2021	ZONE-02	Manoj	11
4	Excavation Safety Training	28.08.2021	ZONE-01	Manoj	09
5	Manual material handling Training	07.09.2021	ZONE-03	Manoj	13
7	Excavation Safety Training	13.09.2021	ZONE-02	Manoj	04
8	Electrical & Excavation Safety Training	18.09.2021	ZONE-01	Manoj	16
9	Electrical Safety Training	26.09.2021	ZONE-03	Manoj	06
10	Excavation Safety Training	29.09.2021	ZONE-02	Manoj	14
<b>Khetri Town</b>					
1.	Road safety	05.07.2021	Khetri	Raj Kapoor	05
2.	Excavation Safety	12.07.2021	Khetri	Raj Kapoor	08
3.	Material handling safety	19.07.2021	Khetri	Raj Kapoor	09
4.	House keeping	26.07.2021	Khetri	Raj Kapoor	07
5.	Road safety	03.08.2021	Khetri	Raj Kapoor	05
6.	Excavation Safety	08.08.2021	Khetri	Raj Kapoor	06
7.	Material handling safety	17.08.2021	Khetri	Raj Kapoor	09
8.	House keeping	22.08.2021	Khetri	Raj Kapoor	10
9.	Road safety	06.09.2021	Khetri	Raj Kapoor	09
10.	Excavation Safety	13.09.2021	Khetri	Raj Kapoor	08
11.	Material handling safety	23.09.2021	Khetri	Raj Kapoor	11
12.	House keeping	29.09.2021	Khetri	Raj Kapoor	08

### Appendix 9: PREVENTION AND CONTROL MEASURES ADOPTED IN RSTDSP FOR COVID-19

**Note;** Directions by PMU to all PIUs for implementation of Prevention and Control Measures Adopted for COVID-19 as per RUIDP's "SOP-COVID-19 Management Plan" was issued vide letter no. 12680-85 dtd. 01.02.2021 and copy of same was attached in Appendix 10 of SEMR (October 2020 to March 2021)

#### COVID-19 (Awareness, Prevention and Control) Compliance by Towns during April 2021 to September 2021

S. No.	Activities done	Date	Location	No. of Participants	Remarks
<b>Abu Road Town</b>					
1	Thermal Screening at site	On Daily Basis	All Locations	NA	
2	Regular Disinfection Activity	On Weekly Basis	All Locations	NA	
3	Hand Sanitization Activity	On Daily Basis	All Locations	-	
4	Mask and Soap Distribution	On Weekly Basis	All Locations	NA	
<b>Sirohi Town</b>					
1	Awareness in daily PEP talk	Everyday	All Locations	-	
2	Awareness and Poster Display	On Weekly Basis	All Locations	NA	
3	Thermal Screening at site	On Daily Basis	All Locations	NA	
4	Regular Disinfection Activity	On Weekly Basis	All Locations	NA	
<b>Sardarshahar Town</b>					
1	COVID-19 Awareness & Precautions Training In Daily PEP	On Daily Basis	Project Site	-	
2	Hand Sanitization Activity	On Daily Basis	All Locations	-	
3	Disinfection	Twice in a day	All Locations	-	
4	Thermal Screening	Everyday	All Locations	-	
<b>Fatehpur Town</b>					
1	Regular Disinfection Activity	Weekly Basis	All Locations	NA	
2	Hand Sanitization Activity	Regular Basis	All Locations	NA	
3	COVID-19 Awareness & Precautions Training	18.06.2021 28.06.2021 16.07.2021, 26.07.2021, 18.08.2021, 28.08.2021, 18.09.2021, 28.09.2021	Site & Office Conference Room	120	
4	Thermal Screening	Everyday	All Locations	-	
<b>Ratangarh Town</b>					
1	Office disinfection	05.01.2021, 15.01.2021	AT L&T OFFICE	NA	
2	Office ,Labor Camp Disinfection	25.02.2021	AT L&T OFFICE, LABOR CAMP	NA	
3	Hand Sanitization Activity	Regular Basis	All Locations	NA	
4	COVID-19 Awareness & Precautions Training	Once in a week	-	-	

5	Thermal Screening	Everyday	All Locations		
<b>Laxmangarh Town</b>					
1	COVID Training	Regularly	Store Office, Sites	-	
2	Disinfection	Twice in a day	Store Office, Sites	-	
3	Hand Sanitization	On regular basis	Store Office, Sites	-	
4	Thermal Screening	Everyday	Store Office, Sites	-	
5	COVID 19 Test	-		All Staff	
6	COVID 19 vaccination	-		All Staff	
<b>Pratapgarh Town</b>					
1	Thermal Screening & Disinfection activity	On daily basis	At the site	All workers	-
2	COVID-19 Training	05.04.2021, 15.05.2021, 25.05.2021, 15.06.2021, 05.07.2021, 15.07.2021, 25.07.2021	At the site	87	-
3	Hand Sanitization	Regular Basis	All Locations	NA	
<b>Banswara town</b>					
1	Thermal Screening at site	On Daily Basis	All Locations	NA	
2	Regular Disinfection Activity	On Weekly Basis	All Locations	NA	
3	Hand Sanitization Activity	On Daily Basis	All Locations	-	
4	Mask and Soap Distribution	On Weekly Basis	All Locations	NA	
<b>Kuchaman Town</b>					
1	COVID-19 Awareness & Precautions Training In Daily PEP	On Daily Basis	Project Site	-	
2	Thermal Screening at site	On Daily Basis	All Locations	-	
3	Disinfection Activity	On Weekly Basis	All Locations	-	Office, Workmen Habitat & Guest House , Sites Premises
4	Hand Sanitization Activity	On Daily Basis	All Locations	-	
<b>Didwana Town</b>					
1	Digital face attendance	On Daily Basis	All Locations	NA	
2	Hand Sanitization Activity	On Daily Basis	All Locations	NA	
3	Awareness and Poster Display	01/09/2021	Office	20	
4	Thermal Screening at site	On Daily Basis	All Locations	All workers	
<b>Makrana Town</b>					
1	Digital face attendance	On Daily Basis	All Locations	NA	
2	Hand Sanitization Activity	On Daily Basis	All Locations	NA	
3	Awareness and Poster Display	01/09/2021	Office	20	
4	Thermal Screening at site	On Daily Basis	All Locations	All workers	

Mandawa Town					
1.	Thermal Screening at site On Daily Basis	On Daily Basis	All locations	N/A	-
2.	Sanitization activity at site On Daily Basis	On Daily Basis	All locations	N/A	-
Khetri Town					
1	Hand Sanitization Activity	Daily	All Locations	-	
2	Awareness in daily PEP talk	Everyday	All Location	-	
3	Thermal Screening	Daily	All Locations	-	

**Photographs showing COVID-19 (Awareness, Prevention and Control) Compliance by Towns during April to September 2021**

Abu Road Town	
	
Mask Distribution	
Sirohi Town	
	
<b>COVID-19 Awareness Posters</b>	<b>PEP Talk &amp; COVID-19 Awareness All Site</b>
Sardarshahar Town	
	
<b>Thermal scanning of the workers</b>	<b>Hand sanitization of the workers</b>
Ratangarh Town	

	
<b>Mask &amp; Sanitizer Distribution</b>	<b>Office &amp; Labor Camp Disinfection</b>
<b>Fatehpur Town</b>	
	
<b>Awareness among workers against COVID-19</b>	<b>Regular Disinfection Activity</b>
<b>Laxmangarh Town</b>	
	
<b>Awareness Campaigns against COVID-19</b>	<b>Glucose Distribution</b>
<b>Pratapgarh Town</b>	
	
<b>Thermal Screening at the site</b>	<b>Face Mask Distribution</b>
<b>Banswara Town</b>	
	



Hand Sanitization	Thermal Screening
<b>Kuchaman Town</b>	
 <p>Kuchaman City, Rajasthan, India Unnao Road, Kuchaman City, Rajasthan 361008, India Lat N 23° 7' 48.6212" Long E 74° 51' 21.1212" 01/09/21 09:37 AM</p>	
<b>Hand Sanitization at site</b>	<b>Awareness among workers against COVID-19</b>
<b>Khetri Town</b>	
 <p>Khetri, Rajasthan, India Amul Road, Khetri, Rajasthan 330004, India Lat N 23° 00' 00" Long E 74° 00' 00"</p>	 <p>Khetri, Rajasthan, India Amul Road, Khetri, Rajasthan 330004, India Lat N 23° 00' 00" Long E 74° 00' 00"</p>
<b>Mask and soap Distribution</b>	<b>Hand Sanitization</b>

**Appendix 10: ENVIRONMENTAL MONITORING RESULTS DURING APRIL 2021 -  
SEPTEMBER 2021 IN RSTDSP  
Air Monitoring Results**

	Package / Town / Monitoring Location	Monitoring date	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
					µg/m <sup>3</sup>		
	<b>National AAQ Standard (24 hours)</b>		100	60	80	80	2000
	<b>Applicable Per ADB SPS (µg/m<sup>3</sup>)</b>		20 (Annual) 50 (24-hr)	10 (Annual) 25 (24-hr)	50 (Annual) 20 (24-hr) 500 (10-min)	40 (Annual) 80 (24-hr) 200 (1-hr)	2,000 (8-hr) 4,000 (1-hr) 100,000 (15-min)
<b>1</b>	<b>RSTDIP/SHR-ABR/01</b>						
	<b>Abu Road</b>						
	Sewer Network Talhati	10.04.2021 to 11.04.2021	89.91	47.68	10.34	23.81	480
	Water Network Akrahatta	10.04.2021 to 11.04.2021	87.06	43.31	10.62	23.65	470
	Manpur Workman colony	11.04.2021 to 12.04.2021	78.84	39.28	8.10	21.15	470
	Santpur STP & WTP	11.04.2021 to 12.04.2021	73.89	34.13	9.77	17.39	800
	<b>Sirohi Town</b>						
	Work Man Habitat & 5.0 MLD STP	12.07.2021 to 13.07.2021	70.09	29.55	11.60	15.08	670
	Near 1.7 MLD STP	12.07.2021 to 13.07.2021	63.80	28.13	7.59	13.18	660
	Bhadrankar Nagar	13.07.2021 to 14.07.2021	58.08	26.49	7.29	12.45	600
<b>2</b>	<b>RSTDIP/PRT/01</b>						
	<b>Pratapgarh Town</b>						
	Labour Yard, Housing Board	15.06.2021	80.27	39.86	9.25	26.43	540
	Bhatpura Darwaza	15.06.2021	85.36	42.79	8.45	24.18	520
	At Sewage Treatment Plant, Near Ahinsa Circle	15.06.2021	88.40	45.36	9.08	25.70	550
<b>3</b>	<b>RSTDIP/BNS/04</b>						
	<b>Banswara Town</b>						
	WTP-AEN (PHED) Campus	02.07.2021 to 03.07.2021	61.6	27.4	8.5	13.1	340
	Kagdi Site	02.07.2021 to 03.07.2021	58.3	24.5	7.2	11.1	180
	STP Site	02.07.2021 to 03.07.2021	66.4	28.8	8.8	12.4	360
	SPS At Nathelav pond	02.07.2021 to	64.4	29.3	10.2	13.8	400



	Package / Town / Monitoring Location	Monitoring date	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
		03.07.2021					
	SPS at Pratapgarh Road	02.07.2021 to 03.07.2021	78.4	37.2	13.8	19.4	500
	Near ST bus stand	02.07.2021 to 03.07.2021	88.2	48.7	16.4	22.3	610
<b>4</b>	<b>RSTDIP/ SRD/01</b>						
	<b>Sardarshahar Town</b>						
	STP-1 (2.30 MLD) South Campus	12.07.21 to 13.07.21	79.96	31.68	11.27	21.18	740
	PHED Campus-CWR (2400 KL) & PH at Hanumangarh Road	12.07.21 to 13.07.21	86.11	38.72	15.65	27.64	940
	STP-2 (3.40 MLD) North Campus	12.07.21 to 13.07.21	81.96	31.92	12.69	21.38	790
	Ramnagar Sullage Pipeline Zone 3	12.07.21 to 13.07.21	74.24	29.14	9.47	17.26	750
	Near Meena ka Kawa Guest House Zone 4B	12.07.21 to 13.07.21	76.0	30.60	11.17	19.07	780
<b>5</b>	<b>RSTDIP/KTR/03</b>						
	<b>Khetri Town</b>						
	Near UP Koshadhikari Office	25.06.2021	72.62	36.54	8.06	16.44	300
	Near Old PHED office	25.06.2021	79.52	39.21	8.62	17.06	320
	Near Ajeet Govt. Hospital	25.06.2021	67.18	36.51	6.34	15.84	280
	Near JEN Staff Colony	25.06.2021	67.48	35.32	7.34	16.26	280
	In Jai Singh Govt. School	25.06.2021	66.08	35.29	6.48	15.36	260
	Near ITI College	25.06.2021	71.14	36.61	7.12	16.26	300
	Near Prashashanik Bhawan	25.06.2021	73.80	38.42	7.22	16.06	300
<b>6</b>	<b>RSTDIP/KMN/02</b>						
	<b>Kuchaman Town</b>						
	RUIDP Office (Near SPS-02)	23.08.21 to 24.08.21	72.5	34.8	8.5	22.0	420
	Kuber Complex in Market	23.08.21 to 24.08.21	78.0	40.9	9.5	23.0	530
	Near Bus Stand (Near STP)	23.08.21 to 24.08.21	76.1	39.1	9.7	25.0	350
	Old CWR, Near PHED Office	23.08.21 to 24.08.21	78.2	53.5	7.2	23.0	430
	Pachwa Road, Old CWR	23.08.21 to 24.08.21	86.5	50.8	9.3	27.0	470
	BSNL Office, Near SPS-01	23.08.21 to 24.08.21	70.5	41.7	8.1	28.0	400
<b>7</b>	<b>RSTDIP/MDW/03</b>						
	<b>Mandawa Town</b>						
	SPS-1 (PHED) Campus beside SPS Site	02.09.21 to 03.09.21	61.26	27.31	7.16	12.42	380
	CWR Site-1	02.09.21 to 03.09.21	63.43	27.86	7.92	13.20	420
	STP Site-1	02.09.21 to 03.09.21	66.27	28.08	8.02	14.06	460
	Pipe laying site within the preferably near sensitive	02.09.21 to 03.09.21			8.36	14.68	500

	Package / Town / Monitoring Location	Monitoring date	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
	receptor-1						
<b>8</b>	<b>RSTDIP/DID/01</b>						
	<b>Didwana Town</b>						
	STP-2	30.08.2021 to 31.08.2021	80.0	41.0	7.6	25.0	530
	SPS-2, Near Power House	30.08.2021 to 31.08.2021	74.0	44.0	9.3	24.0	420
	Pipe Laying Site-1	30.08.2021 to 31.08.2021	69.0	35.0	9.7	29.0	510
	SPS-1, Near Temple	30.08.2021 to 31.08.2021	78.0	38.0	9.9	25.0	570
<b>9</b>	<b>RSTDIP/MKN/01</b>						
	<b>Makrana Town</b>						
	Main Office, Near Suncity Hospital	26.08.2021 to 30.08.2021	84.0	45.0	7.6	29.0	450
	Workmen Colony, Store Yard	26.08.2021 to 30.08.2021	79.0	43.0	7.3	25.0	540
	STP Site, Borawar Road	26.08.2021 to 30.08.2021	82.0	49.0	8.7	21.0	500
	SPS-1, Jhalara Pond	26.08.2021 to 30.08.2021	70.0	40.0	9.7	24.0	420
	SPS-2, Matabhar	26.08.2021 to 30.08.2021	83.0	52.0	6.6	28.0	390
	Pipe Laying Site, Near UMA Hospital	26.08.2021 to 30.08.2021	70.0	32.0	6.8	27.0	420
<b>10</b>	<b>RSTDIP/LDN/01</b>						
	<b>Ladnu Town</b>						
	STP-2, Ladnu	02.09.2021 to 05.09.2021	86.0	50.0	7.6	34.0	380
	Pipe Laying Site-2	02.09.2021 to 05.09.2021	81.0	48.0	8.6	24.0	540
	STP-1	02.09.2021 to 05.09.2021	72.0	40.0	9.7	25.0	620
	Pipe Laying Site-1	02.09.2021 to 05.09.2021	87.0	43.0	9.9	28.0	500

## Noise Monitoring Results

	Package / Town / Monitoring Location	Monitoring date	Type of area	Noise Level $L_{eq}$ (dB(A))	
				Day time	Night time
	Noise Standard (National)		Industrial Area	75	70
			Commercial/ Mixed Area	65	55
			Residential/ Rural	55	45
			Sensitive area	50	40
	Applicable Per ADB SPS (IFC's limits for Noise Level)		Residential/ institutional/ educational	55 dB(A)	45 dB(A)
<b>1</b>	<b>RSTDIP/SHR-ABR/01</b>				
	<b>Abu Road Town</b>				
	Sewer Network Talhati	10.04.2021 to 11.04.2021	Residential	56.35	45.80
	Water Network Akrahatta	10.04.2021 to 11.04.2021	Residential	57.65	44.85
	Manpur Workman colony	11.04.2021 to 12.04.2021	Residential	58.40	46.75
	Santpur STP & WTP	11.04.2021 to 12.04.2021	Residential	58.25	45.25
	<b>Sirohi Town</b>				
	Work Man Habitat & 5.0 MLD STP	12.07.2021 to 13.07.2021	Residential	58.23	43.62
	Near 1.7 MLD STP	12.07.2021 to 13.07.2021	Residential	61.25	45.34
	Bhadrankar Nagar	13.07.2021 to 14.07.2021	Residential	57.36	42.15
<b>2</b>	<b>RSTDIP/PRT/01</b>				
	<b>Pratapgarh Town</b>				
	Labour Yard, Housing Board	15.06.2021	Residential	55.4	46.2
	Bhatpura Darwaza	15.06.2021	Residential	59.2	45.5
	At Sewage Treatment Plant, Near Ahinsa Circle	15.06.2021	Residential	56.2	48.5
<b>3</b>	<b>RSTDIP/BNS/04</b>				
	<b>Banswara Town</b>				
	WTP-AEN (PHED) Campus	30.06.2021	Residential	56	48
	Kagdi Site	30.06.2021	Residential	50	42
	STP Site	30.06.2021	Residential	61	55
	SPS at Nathelav pond	01.07.2021	Residential	63	52
	SPS at Pratapgarh Road	30.06.2021	Residential	67	58
	Near ST bus stand	01.07.2021	Residential	73	67
<b>4</b>	<b>RSTDIP/SRD/01</b>				
	<b>Sardarshahar Town</b>				
	STP-1 (2.30 MLD) South Campus	12.07.21 to 13.07.21	Residential	42.56	38.24
	PHED Campus-CWR (2400 KL) & PH at Hanumangarh Road	12.07.21 to 13.07.21	Residential	42.56	44.68

	Package / Town / Monitoring Location	Monitoring date	Type of area	Noise Level $L_{eq}$ (dB(A))	
	STP-2 (3.40 MLD) North Campus	12.07.21 to 13.07.21	Residential	47.27	39.48
	Ramnagar Sullage Pipeline Zone 3	12.07.21 to 13.07.21	Residential	48.31	38.16
	Near Meena ka Kawa Guest House Zone 4B	12.07.21 to 13.07.21	Residential	53.26	49.61
5	<b>RSTDIP/KTR/03</b>				
	<b>Khetri Town</b>				
	Near UP Koshadhikari Office	25.06.2021	Residential	59.6	49.2
	Near Old PHED office	25.06.2021	Residential	59.7	47.2
	Near Ajeet Govt. Hospital	25.06.2021	Residential	53.2	42.2
	Near JEN Staff Colony	25.06.2021	Residential	55.1	46.2
	In Jai Singh Govt. School	25.06.2021	Residential	56.3	44.5
	Proposed Site	25.06.2021	Residential	57.5	48.2
	Near Prashashanik Bhawan	25.06.2021	Residential	57.8	44.6
6	<b>RSTDIP/KMN/02</b>				
	<b>Kuchaman Town</b>				
	RUIDP Office (Near SPS-02)	23.08.21 to 24.08.21	Residential	56.4	41.1
	Kuber Complex in Market	23.08.21 to 24.08.21	Residential	64.2	44.0
	Near Bus Stand (Near STP)	23.08.21 to 24.08.21	Residential	62.0	43.7
	Old CWR, Near PHED Office	23.08.21 to 24.08.21	Residential	65.1	44.4
	Pachwa Road, Old CWR	23.08.21 to 24.08.21	Residential	60.3	43.2
	BSNL Office, Near SPS-01	23.08.21 to 24.08.21	Residential	53.9	40.2
7	<b>RSTDIP/MDW/03</b>				
	<b>Mandawa Town</b>				
	SPS-1 (PHED) Campus beside SPS Site	03.09.21 to 04.09.21	Residential	50.46	41.57
	CWR Site-1	03.09.21 to 04.09.21	Residential	51.36	42.71
	STP Site-1	03.09.21 to 04.09.21	Residential	51.46	40.62
	Pipe laying site within the preferably near sensitive receptor-1	03.09.21 to 04.09.21	Residential	53.42	43.57
8	<b>RSTDIP/DID/01</b>				
	<b>Didwana Town</b>				
	STP-2	25.08.2021 to 01.09.2021	Residential	63.5	42.9
	SPS-2, Near Power House	25.08.2021 to 01.09.2021	Residential	59.4	43.0
	Pipe Laying Site-1	25.08.2021 to 01.09.2021	Residential	60.7	45.7
	SPS-1, Near Temple	25.08.2021 to 01.09.2021	Residential	58.3	42.2
9	<b>RSTDIP/MKN/01</b>				

	Package / Town / Monitoring Location	Monitoring date	Type of area	Noise Level $L_{eq}$ (dB(A))	
	Makrana Town				
	Main Office, Near Suncity Hospital	26.08.2021 to 28.08.2021	Residential	61.3	42.0
	Workmen Colony, Store Yard	26.08.2021 to 28.08.2021	Residential	63.3	45.0
	STP Site, Borawar Road	26.08.2021 to 28.08.2021	Residential	62.3	43.9
	SPS-1, Jhalara Pond	26.08.2021 to 28.08.2021	Residential	60.9	40.7
	SPS-2, Matabhar	26.08.2021 to 28.08.2021	Residential	60.7	42.5
	Pipe Laying Site, Near UMA Hospital	26.08.2021 to 28.08.2021	Residential	58.4	44.4
10	RSTDIP/LDN/01				
	Ladnu Town				
	STP-2, Ladnu	02.09.2021 to 04.09.2021	Residential	55.7	39.5
	Pipe Laying Site-2	02.09.2021 to 04.09.2021	Residential	57.2	43.3
	STP-1	02.09.2021 to 04.09.2021	Residential	62.0	49.3
	Pipe Laying Site-1	02.09.2021 to 04.09.2021	Residential	64.9	46.8

### Surface Water Quality Monitoring

S. No	Parameter	RSTDIP/BNS/04	Drinking water standards (desirable – permissible value)
		Banswara (Date of Sampling: 01.07.2021 to 05.07.2021)	
		Kagdi Intake	
1	pH(at 25°C)	7.70	6.5 – 8.5
2	Colour	-	
3	Turbidity	4.1	5-10
4	Odour	-	
5	Conductivity	-	750 - 2000
6	Total Hardness	192	300-600
7	Sodium	22	
8	Potassium	4	
9	Alkalinity	-	200-600
10	Chloride	64	250-1000
11	Magnesium	35	30-100
12	TDS	448	500-2000

S. No	Parameter	RSTDIP/BNS/04	Drinking water standards (desirable – permissible value)
		<b>Banswara (Date of Sampling: 01.07.2021 to 05.07.2021)</b>	
		<b>Kagdi Intake</b>	
13	TSS	12	
14	Sulphate	24	200-400
15	Calcium	46	
16	Fluoride	1.1	1-1.5
17	Oil & Grease	-	
18	DO	4.8	
19	COD	BDL<4	
20	BOD	BDL<2	
21	Nitrate	-	45-100
22	Nitrite	-	Nil
23	Iron	0.26	0.3-1.0
24	Total Chromium	-	
25	Zinc	0.26	5-15
26	Copper	0.08	0.05-1.5
27	Manganese	-	0.1-0.3
28	Lead	-	0.01-0.05
29	Arsenic	-	0.01-0.05
30	TC	-	10
31	FC	-	<2.00
32	Mercury	0.1	
33	Boron (As B)	0.07	

## Ground water Quality Monitoring Results

S. No	Parameter	RSTDIP/SHR-ABR/01				RSTDIP/PRT/01		RSTDIP/BNS/04				RSTDIP/SRD/01						Drinking water standards (desirable – permissible value)
		Abu Road (Date of sampling 10.04.2021)		Sirohi (Date of sampling 05.06.2021)		Pratapgarh (Date of sampling15.06.2021)		Banswara (Date of sampling: 01.07.2021 to 05.07.2021)				Sardarshahar (Date of sampling: 17.7.21 to 22.7.21)						
		Santpur STP & WTP	Manpur Workman colony	WTP (At Angore PHED Campus)	Bore well at Labour Colony/ Workman Camp	Raj Mandir Kila Parisar, Near STP site	Bhatpura Darwaza	SPS at Pratapgarh Road	SPS at Nathelav pond	STP Site	AEN (PHED Campus)	STP-1 (2.30 MLD) South Campuses	PHED Campuses-CWR (2400 KL) & PH at Hanumanagarh Road	STP-2 (3.40 MLD) North Campuses	Near Meena ka Kawa Guest House Zone 4B	Ramnagar Sewage Pipeline Zone 3		
1	pH(at 25°C)	7.68	7.64	7.66	7.53	7.34	7.47	7.36	7.24	7.10	7.42	8.06	7.61	7.87	7.87	7.72	6.5 – 8.5	
2	Temperature	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	Turbidity	-	-	0.2	0.4	<01	<01	-	-	-	-	-	-	-	-	-	5-10	
4	Conductivity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	750 – 2000	
5	Total Hardness	188.60	174.80	131	132	168.16	344.34	260	334	392	120	439.04	101.92	98.0	117.6	35.28	300-600	
6	Calcium	55.31	51.62	34.4	29.6	62.52	121.84	-	-	-	-	-	-	-	-	-	75-200	
7	Sodium	-	-	-	-	37.20	86.18	-	-	-	-	-	-	-	-	-		
8	Potassium	-	-	-	-	16.74	38.78	-	-	-	-	-	-	-	-	-		
9	Alkalinity	166.46	154.28	142	155	124.00	300.00	132	198	160	56	403.92	93.84	175.44	134.64	440.64	200-600	
10	Chloride	386.59	371.05	45.2	40.8	170.16	124.07	28	92	62	20	352.1	31.34	156.7	55.30	302.32	250-1000	
11	Magnesium	12.30	11.18	3.2	3.3	2.91	9.72	-	-	-	-	-	-	-	-	-	30-100	
12	TDS	974.30	933.30	288	280	532.06	795.18	436	698	610	288	1485	178	504	287	1152	500-2000	
13	TSS	-	-	-	-	17.80	21.80					-	-	-	-	-		
14	Sulphate	110.89	94.76	13.65	15.16	68.17	49.63	10	28	42	10.6	147.04	10.91	28.33	21.27	116.05	200-400	

S. No	Parameter	RSTDIP/SHR-ABR/01				RSTDIP/PRT/01		RSTDIP/BNS/04				RSTDIP/SRD/01					Drinking water standards (desirable – permissible value)
		Abu Road (Date of sampling 10.04.2021)		Sirohi (Date of sampling 05.06.2021)		Pratapgarh (Date of sampling 15.06.2021)		Banswara (Date of sampling: 01.07.2021 to 05.07.2021)				Sardarshahar (Date of sampling: 17.7.21 to 22.7.21)					
		Santpur STP & WTP	Manpur Workman colony	WTP (At Angore PHED Campus)	Bore well at Labour Colony/ Workman Camp	Raj Mandir Kila Parisar, Near STP site	Bhatpura Darwaza	SPS at Pratapgarh Road	SPS at Nathelav pond	STP Site	AEN (PHED Campus)	STP-1 (2.30 MLD) South Campuses	PHED Campuses-CWR (2400 KL) & PH at Hanumangarh Road	STP-2 (3.40 MLD) North Campuses	Near Meena ka Kawa Guest House Zone 4B	Ramnagar Sewage Pipeline Zone 3	
15	Phosphate	-	-	-	-	-	-	0.17	0.56	0.12	0.27	0.31	BDL	BDL	BDL	0.24	
16	Fluoride	0.68	0.62	0.12	0.25	0.11	0.12	0.92	1.0	0.86	0.78	0.98	0.2	0.27	0.21	0.51	1-1.5
17	Oil & Grease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	DO	-	-	-	-	5.20	4.80	5.5	5.2	5.6	5.8	5.1	5.8	5.5	5.9	5.6	
19	COD	-	-	-	-	16.70	19.60	-	-	-	-	-	-	-	-	-	
20	BOD	-	-	-	-	1.80	2.50	-	-	-	-	-	-	-	-	-	45-100
21	Nitrate	12.73	10.49	1.31	2.01	11.80	28.12	5.07	4.2	14.6	3.17	26.34	7.62	13.9	12.68	30.56	Nil
22	Nitrite	-	-	-	-							-	-	-	-	-	0.3-1.0
23	Iron	0.22	0.18	0.01	0.01	0.06	0.08	0.18	0.28	0.12	0.15	0.26	BDL	BDL	BDL	BDL	
24	Total Chromium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5-15
25	Zinc	-	-	-	-	0.37	0.95	0.12	0.14	0.22	0.14	-	-	-	-	-	0.05-1.5
26	Copper	-	-	-	-	0.02	0.02	0.05	0.1	0.1	0.08	-	-	-	-	-	0.1-0.3
27	Manganese	-	-	-	-	-	-	0.04	0.09	0.06	0.05	-	-	-	-	-	0.01-0.05
28	Lead	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01-0.05
29	Arsenic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10



## Ground water Quality Monitoring Results (Continued—2)

S. No	Parameter	RSTDIP/KTR/03						RSTDIP/KMN/02				RSTDIP/MDW/03			Drinking water standards (desirable – permissible value)
		Khetri Town (Date of Sampling: 24.06.2021)						Kuchaman Town Date of Sampling: 24.08.2021				Mandawa Town Date os sampling: 03.09.21			
		Near UP Koshadhi kari Office	Near Old PHED office	Near Ajeet Govt. Hospital	Near JEN Staff Colony	In Jai Singh Govt. School	Siddhi Vinayak Temple	RUIDP Office (Near SPS-02)	Near Bus Stand (Near STP)	Old CWR, Near PHED Office	Pachwa Road, Old CWR	STP-1	CWR site-1	SPS-1	
1	pH(at 25°C)	7.17	7.11	7.06	7.24	7.32	7.41	8.92	8.70	8.72	8.17	8.12	8.19	7.56	6.5 – 8.5
2	Temperature	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	Turbidity	-	-	-	-	-	-	-	-	-	-	-	-	-	5-10
4	Conductivity	-	-	-	-	-	-	-	-	-	-	-	-	-	750 - 2000
5	Total Hardness	204.0	210.0	196.0	200.0	206.0	196.0	72.0	636.0	510.0	128.0	158.4	182.86	182.86	300-600
6	Calcium	-	-	-	-	-	-	1200.0	3800	2600.0	1100.0	-	-	-	75-200
7	Sodium	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	Potassium	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	Alkalinity	235	220	225	225	215	230	572.0	468.0	504.0	80.0	469.9	799.8	768.3	200-600
10	Chloride	151.95	145.98	149.00	145.95	153.95	165.98	372.0	322.0	256.0	378.0	13.87	313.93	317.65	250-1000
11	Magnesium	-	-	-	-	-	-	-	-	-	-	-	-	-	30-100
12	TDS	300.0	320.0	315.0	310.0	298.0	280.0	1534.0	2067.0	1852.0	168.0	500	1462.0	1467.0	500-2000
13	TSS	-	-	-	-	-	-	-	-	-	-	-	-	-	
14	Sulphate	72.45	78.32	68.51	65.25	73.46	71.25	121.0	87.0	196.0	23.0	38.10	94.74	95.03	200-400
15	Phosphate	-	-	-	-	-	-	<0.15	0.13	<0.15	<0.15	0.25	0.42	0.40	
16	Fluoride	0.38	0.46	0.41	0.31	0.36	0.30	1.1	1.2	0.54	0.24	0.46	0.73	0.74	1-1.5
17	Oil & Grease	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	DO	6.1	6.6	5.4	5.7	5.4	6.4	5.4	5.8	6.0	5.6	6.1	5.7	5.8	
19	Copper as Cu	-	-	-	-	-	-	<0.02	<0.02	<0.02	<0.02	-	-	-	
20	Phenolic Compound	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	45-100
21	Nitrate	19.24	16.23	17.21	16.34	18.35	14.78	20.0	85.0	55.0	2.0	19.02	31.09	28.83	Nil
22	Nitrite	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3-1.0
23	Iron	0.16	0.12	0.24	0.13	0.15	0.17	<0.05	<0.05	<0.05	<0.05	0.13	0.18	0.17	
24	Total Chromium	-	-	-	-	-	-	-	-	-	-	-	-	-	5-15

S. No	Parameter	RSTDIP/KTR/03						RSTDIP/KMN/02				RSTDIP/MDW/03			Drinking water standards (desirable – permissible value)
		Khetri Town (Date of Sampling: 24.06.2021)						Kuchaman Town Date of Sampling: 24.08.2021				Mandawa Town Date os sampling: 03.09.21			
		Near UP Koshadhi kari Office	Near Old PHED office	Near Ajeet Govt. Hospital	Near JEN Staff Colony	In Jai Singh Govt. School	Siddhi Vinayak Temple	RUIDP Office (Near SPS-02)	Near Bus Stand (Near STP)	Old CWR, Near PHED Office	Pachwa Road, Old CWR	STP-1	CWR site-1	SPS-1	
25	Zinc	-	-	-	-	-	-	<0.02	<0.02	<0.02	<0.02	-	-	-	0.05-1.5
26	Cadmium as Cd	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-	0.1-0.3
27	Manganese	-	-	-	-	-	-	<0.02	<0.02	<0.02	<0.02	-	-	-	0.01-0.05
28	Lead	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.005	-	-	-	0.01-0.05
29	Arsenic	-	-	-	-	-	-	<0.005	<0.005	<0.005	<0.005				10

## Ground water Quality Monitoring Results (Continued—3)

S. No	Parameter	RSTDIP/DID/01				RSTDIP/MKN/01						RSTDIP/LDN/01				Drinking water standards (desirable – permissible value)
		Didwana Town Date of Sampling: 24.08.2021 to 26.08.21				Makrana Town Date of Sampling: 24.08.2021 to 26.08.21						Ladnu Town Date of Sampling: 26.08.21				
		STP Site	SPS-2	Pipe Laying Site-1	SPS-1, Near Temple	Office near Suncity Hospital	Workmen Colony	STP Site (Borawar Road)	SPS-1 (Near Moksha Dham)	SPS-2 (Matabhar)	Pipe Laying Site, Near Uma hospital	Pipe Laying Site-1	STP Site -2	Pipe Laying Site -2	STP-1	
1	pH(at 25°C)	8.22	7.71	8.57	8.92	7.2	7.96	7.88	7.33	7.59	7.86	7.51	8.23	7.87	8.14	6.5 – 8.5
2	Temperature	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Turbidity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5-10
4	Conductivity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	750 - 2000
5	Total Hardness	307	230	787.0	173.0	614.0	165.0	346.0	1498.0	1555.0	307.0	614.0	346.0	230.0	1018.0	300-600

S. No	Parameter	RSTDIP/DID/01				RSTDIP/MKN/01						RSTDIP/LDN/01				Drinking water standards (desirable – permissible value)
		Didwana Town Date of Sampling: 24.08.2021 to 26.08.21				Makrana Town Date of Sampling: 24.08.2021 to 26.08.21						Ladnu Town Date of Sampling: 26.08.21				
		STP Site	SPS-2	Pipe Laying Site-1	SPS-1, Near Temple	Office near Suncity Hospital	Workmen Colony	STP Site (Borwar Road)	SPS-1 (Near Moksha Dham)	SPS-2 (Matabhar)	Pipe Laying Site, Near Uma hospital	Pipe Laying Site-1	STP Site -2	Pipe Laying Site -2	STP-1	
6	Calcium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75-200
7	Sodium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	Potassium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	Alkalinity	1240	120	80.0	1060	488	252.0	640.0	336.0	620	356.0	420	140.0	160.0	800.0	200-600
10	Chloride	1453.0	29.0	1567.0	624.0	845.0	101.0	399.0	604.0	691.0	170.0	1344.0	114.0	144.0	925.0	250-1000
11	Magnesium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30-100
12	TDS	2440	180	2644	2296	2020	762	2186.0	1480.0	1910	764.0	2680.0	384.0	664.0	2680.0	500-2000
13	TSS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
14	Sulphate	352.0	29	51.0	214	164.0	19.0	84.0	284.0	251.0	58.0	82.0	16.0	30.0	370.0	200-400
15	Phosphate	<0.15	<0.15	<0.15	<0.15	-	-	-	-	-	-	-	-	-	-	
16	Fluoride	8.2	0.38	0.75	2.7	0.52	0.67	1.3	0.52	1	1.2	3.2	0.41	0.39	5.1	1-1.5
17	Oil & Grease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	DO	6.0	5.6	6.2	5.3	5.4	5.4	5.7	5.3	5.4	5.8	5.2	5.7	6.0	5.4	
19	Copper as Cu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
20	Phenolic Compound	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	45-100
21	Nitrate	15.0	28	37	<0.5	4.0	43.0	33.0	86.0	82.0	64.0	36.0	45.0	22.0	8.6	Nil
22	Nitrite	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3-1.0
23	Iron	0.13	0.26	<0.05	0.07	0.21	0.16	<0.05	0.09	0.06	0.21	0.1	0.06	0.36	0.1	
24	Total Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	5-15
25	Zinc	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.05-1.5
26	Cadmium as Cd	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.1-0.3
27	Manganese	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.01-

S. No	Parameter	RSTDIP/DID/01				RSTDIP/MKN/01						RSTDIP/LDN/01				Drinking water standards (desirable – permissible value)
		Didwana Town Date of Sampling: 24.08.2021 to 26.08.21				Makrana Town Date of Sampling: 24.08.2021 to 26.08.21						Ladnu Town Date of Sampling: 26.08.21				
		STP Site	SPS-2	Pipe Laying Site-1	SPS-1, Near Temple	Office near Suncity Hospital	Workmen Colony	STP Site (Borawar Road)	SPS-1 (Near Moksha Dham)	SPS-2 (Matabhar)	Pipe Laying Site, Near Uma hospital	Pipe Laying Site-1	STP Site -2	Pipe Laying Site -2	STP-1	
																0.05
28	Lead	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01-0.05
29	Arsenic	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	10

## Soil Quality Results

S. No	Parameter	Unit	RSTDIP/SHR-ABR/01					RSTDIP/PRT/01			RSTDIP/SRD/01				
			Abu Road (Date of sampling (10.04.2021))					Pratapgarh (Date of sampling (10.04.2021))			Sardarshahar (Date of sampling: 14.07.2021)				
			Santpur STP & WTP	Sewer Network Talhati	Water Network Akarabhata	Manpur STP	Manpur Workman Colony	Labour Yard, Housing Board	Bhatpura Darwaza	At STP, near Ahinsa Circle	Ramnagar Sewage Pipeline Zone 3	STP-2 (3.40 MLD) North Campus	Near Meenaka Kawa Guest House Zone 4B	PHED Campus -CWR (2400 KL) & PH at Hanumanagar Road	STP-1 (2.30 MLD) South Campus
1	pH	-	7.74	7.82	7.67	7.78	7.64	7.56	7.42	7.58	8.05	8.36	8.31	8.26	8.15
2	Electrical Conductivity (at 25°C)	mS/cm	0.345	0.355	0.367	0.380	0.372	612.00	584.00	517.64	0.289	0.342	0.182	0.324	0.285
3	Calcium (as Ca)	mg/Kg	429.58	433.26	420.36	431.80	438.80	9.60	7.50	10.34	126.64	148.63	135.40	144.95	121.37
4	Sodium (as Na)	mg/Kg	86.30	89.91	81.97	86.08	82.93	84.60	92.00	79.30	124.0	119.9	158.9	142.2	138.50
5	Potassium (as K)	Kg/hect.	171.84	156.64	166.12	170.91	177.02	55.86	61.90	48.72	118.94	109.63	148.83	134.95	125.44
6	Organic Carbon	%	0.56	0.59	0.53	0.55	0.57	0.78	0.84	0.64	0.46	0.48	0.52	0.44	0.49
7	Magnesium (as Mg)	mg/Kg	90.71	91.18	98.76	96.33	86.99	5.40	5.20	8.66	94.86	111.13	92.75	115.09	95.03

S. No	Parameter	Unit	RSTDIP/SHR-ABR/01					RSTDIP/PRT/01			RSTDIP/SRD/01				
			Abu Road (Date of sampling (10.04.2021))					Pratapgarh (Date of sampling (10.04.2021))			Sardarshahar (Date of sampling: 14.07.2021)				
			Santpur STP & WTP	Sewer Network Talhati	Water Network Akarabhata	Manpur STP	Manpur Workman Colony	Labour Yard, Housing Board	Bhatpura Darwaza	At STP, near Ahinsa Circle	Ramnagar Sewage Pipeline Zone 3	STP-2 (3.40 MLD) North Campus	Near Meena ka Kawa Guest House Zone 4B	PHED Campus -CWR (2400 KL) & PH at Hanumanagar Road	STP-1 (2.30 MLD) South Campus
8	Total Kjeldhal Nitrogen (as TKN)	mg/Kg	253.67	260.18	241.55	254.76	259.84	212.50	256.20	185.70	339.33	373.71	314.70	385.75	355.02
9	Permeability	Cm/sec	BDL(DL 5.0)	BDL(DL 5.0)	BDL(DL 5.0)	BDL(DL 5.0)	BDL(DL 5.0)	12.30	13.80	17.80	1.65	1.70	1.35	1.38	1.67
10	Moisture Content	%	2.49	2.58	2.72	2.48	2.62	15.80	13.50	14.96	3.14	5.16	3.14	6.14	3.34
11	Phosphate (as PO <sub>4</sub> )	Kg/hect.	15.71	16.21	16.54	14.58	15.42	135.90	142.80	114.50	27.20	26.30	26.33	28.71	25.56
12	Soil texture	-	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam
	Sand		-	-	-	-	-	70.00	73.00	78.00	-	-	-	-	-
	Silt		-	-	-	-	-	9.00	7.00	6.00	-	-	-	-	-
	Clay		-	-	-	-	-	21	20.00	16.00	-	-	-	-	-
13	Oil and grease	Mg/kg	BDL(DL 0.5)	BDL(DL 0.5)	BDL(DL 0.5)	BDL(DL 0.5)	BDL(DL 0.5)	BDL	BDL	BDL	9.20	12.58	9.28	11.68	10.88

## Soil Quality Results (Continued---2)

S. No	Parameter	Unit	RSTDIP/KTR/03							RSTDIP/KMN/02				RSTDIP/MDW/03		
			Khetri Town							Kuchaman Town				Mandawa Town		
			Date of Sampling: 24.06.2021							Date of Sampling: 25.08.2021				Date of sampling: 03.09.2021		
			PHED office Old	Ajeet. Govt Hospital	UP Kosha dhikari Office	JEN Staff Colony	Jai Singh Govt. School	STP Proposed Site	Sidhi Vinayak Temple	RUIDP Office (Near SPS-02)	Near Bus Stand (Near STP)	Old CWR, Near PHED Office	Pachwa Road, Near Pump House	SPS-1	CWR Site-1	STP Site-1
1	pH	-	7.62	7.45	7.64	7.73	7.86	7.68	7.59	7.33	8.29	7.89	7.87	8.51	8.60	8.32
2	Electrical Conductivity (at 25°C)	mS/cm	0.128	0.131	0.134	0.126	0.138	0.141	0.124	158.0	7880	202.0	172.0	0.512	0.577	0.465
3	Calcium (as Ca)	mg/Kg	11.46	10.45	13.65	14.31	12.55	10.97	11.78	1200.0	3800	2600.0	1100.0	25.23	43.32	28.90
4	Sodium (as Na)	mg/Kg	3.1	2.8	3.3	2.7	3.0	2.7	3.3	-	-	-	-	31.9	28.8	34.0
5	Potassium (as K)	Kg/hect.	3.9	3.2	3.8	3.5	3.6	3.4	3.8	123.0	2650.0	146.0	132.0	249.61	234.64	77.0
6	Organic Carbon	%	0.25	0.21	0.20	0.24	0.28	0.22	0.26	0.14	0.96	0.33	0.1	0.79	0.76	0.74
7	Magnesium (as Mg)	mg/Kg	41.31	43.21	40.97	42.61	44.56	46.12	47.32	-	-	-	-	10.97	19.70	13.15
8	Total Kjeldhal Nitrogen (as TKN)	mg/Kg	0.01	0.04	0.02	0.04	0.03	0.01	0.04	720.0	1710.0	450.0	570.0	209.61	211.51	197.28
9	Bulk Density	gm/cc	1.65	1.60	1.63	1.58	1.64	1.67	1.62	-	-	-	-			
10	Moisture Content	%	0.36	0.34	0.22	0.30	0.24	0.26	0.32	12.0	37.0	11.0	14.0	2.75	5.25	8.60
11	Phosphate (as PO <sub>4</sub> )	Kg/hect.	12.8	11.3	13.4	14.6	12.3	13.4	14.7	467.0	728.0	157.0	459.0	39.9	41.30	43.68
12	Soil texture	-	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy Loam	Clay	Sand	Sand	Sandy Loam	Sandy Loam	Sandy Loam
13	Permeability	Cm/S	-	-	-	-	-	-	-	-	-	-	-	0.0014	0.0009	0.0011

## Soil Quality Results (Continued---3)

S. No	Parameter	Unit	RSTDIP/DID/01					RSTDIP/MKN/01					RSTDIP/LDN/01			
			Didwana Town: 01.09.2021					Makrana Town					Ladnu Town			
			Date of Sampling: 28.08.2021 to 29.08.21					Date of Sampling: 26.08.21					Date of Sampling: 26.08.21			
			STP Site	SPS-2	Pipe Laying Site-1	Pipe Laying Site, Jal Vibhag	SPS-1, Near Temple	Workmen Colony	STP Site (Borawar Road)	SPS-1 (Jhalara Road)	SPS-2 (Matabhar)	Pipe Laying Site, Near Umahospital	Pipe Laying Site-1	STP-2, Ladnu	Pipe Laying Site-2	STP-1
1	pH	-	7.98	8.24	8.30	8.28	8.06	7.62	8.10	8.05	8.16	8.07	8.46	8.41	8.08	8.63
2	Electrical Conductivity (at 25°C)	mS/cm	2670	152.0	252.0	647.0	210.0	110.0	153.0	193.0	164.0	188.0	254.0	158.0	308.0	198.0
3	Calcium (as Ca)	mg/Kg	4700	2750	3700	4100	2000	1000	2100	2700	1250	1200	1650	3050	2800	2750
4	Sodium (as Na)	mg/Kg	1582	27.0	57.0	262.0	29.0	108.0	45.0	112.0	46.0	106.0	37.0	39.0	41.0	114.0
5	Potassium (as K)	Kg/hect.	793.0	411.0	476.0	614.0	602.0	265.0	292.0	532.0	312.0	376.0	532.0	378.0	478.0	369.0
6	Organic Carbon	%	0.41	0.15	0.23	0.22	0.29	0.16	0.18	0.51	0.11	0.19	0.15	0.12	0.25	0.1
7	Magnesium (as Mg)	mg/Kg	420.0	120.0	270.0	240.0	90.0	150.0	60.0	240.0	120.0	180.0	150.0	150.0	120.0	150.0
8	Total Kjeldhal Nitrogen (as TKN)	mg/Kg	314.0	224.0	258.0	269.0	302.0	235.0	246.0	342.0	157.0	179.0	202.0	185.0	291.0	140.0
9	Bulk Density	gm/cc	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Moisture Content	%	19.0	8.6	17.0	16.0	13.0	10.0	8.8	17.0	8.6	12.0	10.0	11.0	14.0	7.9
11	Phosphate (as PO <sub>4</sub> )	Kg/hect.	279.0	135.0	224.0	232.0	268.0	111.0	118.0	278	144.0	125.0	192.0	134.0	273.0	133.0
12	Soil texture	-	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy	Sandy
	Sand	%	50.0	85.0	72.0	75.0	78.0	85.0	86.0	46.0	87.0	85.0	89.0	91.0	85.0	92.0
	Silt	%	16.0	11.0	12.0	10.0	8.0	10.0	9.0	22.0	9.0	8.0	6.0	5.0	8.0	5.0
	Clay	%	34.0	4.0	16.0	15.0	14.0	5.0	5.0	32.0	4.0	7.0	5.0	4.0	7.0	3.0
13	Oil & Grease	Mg/kg	6.6	<5.0	5.2	5.3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
14	Permeability	cm/S	1.1	4.2	3.5	3.6	3.8	4.2	4.3	1.2	4.7	4.1	4.4	4.8	4.5	4.9

**APPENDIX 11: LETTER FROM PMU TO ESTABLISH GRM IN ALL PIUS**

**RUIDP**

**Government of Rajasthan**  
**Office of Project Director**  
**Rajasthan Urban Infrastructure Development Project**  
 AVS Building, Jawahar Circle, JLN Marg, Jaipur - 302017

Tel No.: 0141-2721966, Fax No.: 0141-2721919, email : mail@ruidp.gov.in, web site : www.ruidp.gov.in

F3(301)(50)RUIDP/PMU/PH-IV/WS/GENERAL/ 1282 Dated: 04.2018  
 04/05/18

**Office - Order**

**Subject:-** Grievance Redress Mechanism for Rajasthan Secondary Town Development Program (RSTDIP) - RUIDP Phase IV

**Reference: -** Agreed Resettlement & Environmental framework -3183 IND (RUIDP Phase IV) <https://www.adb.org/projects/42267-026/main#project-documents>

It is directed that Grievance Mechanism of RUIDP Phase III will be replicated in RUIDP Phase IV accordingly, PIU will maintain/ ensure proper records of safeguard related Grievances received in their town. PIU ensure that the safeguard related Grievances received are resolved as per Grievance Redress Mechanism prescribed in RP which is summarized as under (for ready reference):-

Methodology of multi-tier GRM	Responsibility/Action to be taken	Time Frame	Record Keeping
<b>1st level:</b> Grievances that are immediate and urgent in the perception of the complainant, the contractor, and supervision personnel from PIU will provide the most easily accessible or first level of contact for quick resolution of grievances	SE/EE PIU will resolve issues in consultation with supervision personnel, Contractor	PIU will resolve issues within 3 days of receipt of a complaint/ grievance.	The grievance register will be maintained by all field agencies for implementation of EMP and
<b>2nd level:</b> All grievances that cannot be redressed within 3 days at field will be referred to PMU through PO Social/Environment by PIU.	Project Officers (Environment/Social) PMU in consultation with PMU, PIU and the Contractor will resolve the issues referred.	PMU will resolve issues within 7 days of receipt of a complaint/ grievance	PIU will keep records of grievances referred to PMU and will ensure outcome of each grievance is recorded in the Grievance Register.
<b>3rd level:</b> All the grievances that are not addressed by PMU within 7 days, will be brought to the notice of Grievance Redress Committee (GRC). The City Level Committee (CLC), which will be established in every project town will act as GRC	SE/EE PIU will coordinate with PO Social/ Environment or other official of PMU and will prepare agenda for the GRC meeting accordingly and ensure keeping the same in GRC	The GRC will resolve the grievance within 15 days of receiving the complaint	PIU will be responsible for the process of redressal of grievance and document it
<b>4th level:</b> Very major issues that are beyond the jurisdictional authority of the CLC or those that have the potential to cause social conflicts or environmental damage or those that remain unresolved at PMU/CLC level, will be referred to the Empowered Committee (EC).	SE/EE PIU will assist PMU officials to prepare agenda for the Empowered committee meeting		SE/EE PIU will keep records of grievances referred to EC and ensure documentation of

Please note that an aggrieved person shall have access to the country's legal system at any stage, and accessing the legal system can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM

PIUs will be responsible to ensure redressal of grievances as per GRM procedures summarized above and inform the complainant.

Contractors will keep information board depicting Grievance registration numbers at each working site and will maintain Grievance Registers (refer annexure 1 & 2).





Government of Rajasthan  
Office of Project Director



Rajasthan Urban Infrastructure Development Project (Unit of RUDSICO)

AVS Building, Jawahar Circle, JLN Marg, Jaipur - 302017

Tel No.: 0141-2721906,

Fax No.: 0141-2721919,

email: mailruidp@gmail.com, mail.ruidp@rajasthan.gov.in

web site : <https://urban.rajasthan.gov.in/ruidp>

No F3 (301) (60)/RUIDP/PMU/PH-IV/ ADB S. Safeguard /Gen adm./2020-21/11364 Date: 18/12/2020

Suprintending Engineer/Executive Engineer

PIU- Abu Road, Sirohi, Ratangarh,  
Fatehpur, Laxmangarh, Sardarsahar,  
Kuchaman, Ladnu, Makrana, Didwana,  
Khetri, Mandawa, Pratapgarh and  
Banswara.

**Subject:-** Nomination of Safeguard and Safety Officer (SSO) of each PIUs for proper monitoring of Environmental and Resettlement issues and addressing of safeguard related Grievances through Grievance Redress Mechanism.

**Reference:-** Agreed Environmental Resettlement framework and EARF of RSTDSP.

All PIUs are directed to issue an office order to nominate one engineer from PIU to works as Safeguard and Safety Officer (SSO). It will be additional responsibility of Safeguard and Safety Officer (SSO), PIU to ensure day to day monitoring of implementation of Environmental Management and Monitoring Plan (EMMP) provisions, Implementation & Monitoring Resettlement Plan (RP) and ADB Safeguard Policy & Safety compliance in concern town.

Further it is directed that all the PIU should maintain proper separate records of safeguard related Grievances received in their town and ensure that the safeguard related Grievances received are resolved as per Grievance Redress Mechanism (GRM) prescribed in EARF/RF which is summarized as under (for ready reference)

Methodology of multi-tier GRM	Responsibility/Action to be taken	Time Frame	Record Keeping
<p><b>1st level:</b> Grievances that are immediate and urgent in the perception of the complainant, the contractor, and supervision personnel from PIU and CMSC on-site will provide the most easily accessible or first level of contact for quick resolution of grievances</p>	<p>EE PIU will resolve issues in consultation with supervision personnel (ACM), Safeguard and Safety Officer (SSO) PIU, Contractor, and Safeguard staff of CMSC. If required, city level monitoring committee (CLMC) will be involved in resolution of grievances at the 1st level.</p>	<p>PIU will resolve issues within 7 days of receipt of a complaint/ grievance.</p>	<p>Safeguard Support of CMSC will oversee the matters and prioritize / follow up the issues with PIU/Contractor.</p> <p>Safeguard and Safety Officer of PIUs, Safeguard Support of CMSC will record Grievances timely in the format enclosed as Annexure 1.</p> <p>Contractor/ Safeguard Support of CMSC will enter the general Grievance received (in a summarized manner) in Grievance Register (format enclosed as Annexure 2) on receipt form public forwarded to head of PIU or Safeguard and Safety Officer (SSO) for resolve in time and provide summarized information as and when require.</p> <p>The grievance register will be endorsed by all field agencies involved in implementation of EMP and</p>

slp  
21/12/20

Project Management and Capacity Building Consultancy (PMCB, RSTDSP (RUIDP-V))			
Received on 21/12/2020		Inward No 1600	
TL	OTL/MS	GIS	SDS
STRE	FE	FE	GIS
PO	FE	FE	IF
CB	FE	FE	Acc.
PC	OM	ENV	SOCIAL

Methodology of multi-tier GRM	Responsibility/Action to be taken	Time Frame	Record Keeping
<b>2nd level:</b> All grievances that cannot be redressed within 7 days at field/PIU level will be brought to the notice of Zonal PIU headed by Additional Chief Engineer (ACE).	The ACE at zonal PIU will resolve issues in consultation with SE/EE PIU, assistant safeguard officer (ASO), field level PIU, CMSC, and the contractor.	The ACE at zonal PIU will resolve the grievance within 7 days of receipt of complaint/grievance.	RP. Environmental and Social Safeguards Personal of CMSC will keep all the records referred to zonal PIU and after compilation, all the details will be submitted to PMU.
<b>3rd level:</b> All the grievances that are not addressed by Zonal PIU within 7 days of receipt will be brought to the notice of the PMU.	Project Officer (Social/Environment) at PMU will resolve the grievance with necessary coordination of Zonal PIU and CMSC and guidance/instruction of additional project director (APD-PMU).	PMU will resolve the grievance within 15 days of receipt of grievance.	Safeguard Support of PMCBC will keep all the records referred to PMU.
<b>4th level:</b> Grievances not redressed through this process within/at the project level within stipulated time period will be referred to the CLC/grievance redress committee (GRC).	Zonal PIU will inform the CLC regarding any grievances required to be resolved urgently.	The GRC will resolve the grievance within 15 days of receiving the complaint.	Environmental and Social Safeguards Personal of CMSC will keep all the records.
Please note that an aggrieved person shall have access to the country's legal system at any stage, and accessing the country's legal system can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM.			

PIU Safeguard and Safety Officer (SSO) will monitor the entire process and all decisions taken by the PIU, zonal officers, PMU and GRC and will be communicated to the APs by Safeguard Support of CMSC.

It is also directed that names and contact number of the concerned Safeguard and Safety Officer (SSO) of PIU, contractors, safeguard support staff of CMSC will be posted at all construction sites at visible locations.

All PIUs will ensure timely issuance of order with a copy to Project Officer (Social & Environment), PMU. Further PIUs will be responsible to ensure redressal of grievances as per GRM procedures summarized above.



Chief Engineer, RUIDP

No. F3 (301) (60)/RUIDP/PMU/PH-IV/ Social Safeguard/General Adm./2020-21/ Date: 18/12/2020  
Copy to the following for information and necessary action please:- 18368-76

1. ACE-I & II Phase-IV, RUIDP zone Jaipur & Jodhpur
2. TL, PMCBC, Phase-IV, RUIDP
3. TL CMSC-01/02 Phase-IV, RUIDP zone Jaipur & Jodhpur

  
18/12/2020  
(K. M. Mandawaria)  
PO (Co-ord. & Social)

## APPENDIX 12: ACCIDENT, INCIDENT, NEAR MISS AND FIRST AID CASES IN PROJECT TOWNS DURING REPORTING PERIOD

**Town: Abu Road**

**Contractor: Larsen & Toubro Construction Limited (L&T)**

**Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
April 2021	0	0	0	0
May 2021	0	0	0	0
June 2021	0	0	0	0
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	1

### Details of first aid cases-

S. No.	Month	Number of first aid cases	Nature of first aid cases and their number	Action taken
1.	Sep. 2021	01	Cut injury	First aid given and instructed worker to use hand gloves

**B. Town: Sirohi**

**Contractor: Larsen & Toubro Construction Limited (L&T)**

**Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
April 2021	0	0	0	0
May 2021	0	0	0	0
June 2021	0	0	0	0
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	0

**C. Town: Sardarshahar**

**Contractor: Larsen & Toubro Construction Limited (L&T)**

**Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
April 2021	0	0	0	0
May 2021	0	0	0	0
June 2021	0	0	0	0
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	0

**D. Town: Fatehpur****Contractor: Larsen & Toubro Construction Limited (L&T)****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
April 2021	0	0	0	0
May 2021	0	0	0	0
June 2021	0	0	0	0
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	0

**E. Town: Ratangarh****Contractor: Larsen & Toubro Construction Limited (L&T)****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
April 2021	0	0	0	0
May 2021	0	0	0	0
June 2021	0	0	0	0
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	0

**F. Town: Laxmangarh****Contractor: Larsen & Toubro Construction Limited (L&T)****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
April 2021	0	0	0	0
May 2021	0	0	0	0
June 2021	0	0	0	0
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	0

**G. Town: Pratapgarh****Contractor: Larsen & Toubro Construction Limited (L&T)****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
April 2021	0	0	0	0
May 2021	0	0	0	0
June 2021	0	0	0	0
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	0

**H. Town: Banswara****Contractor: BIPL-SC-HP Joint Venture****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	0

**I. Town: Kuchaman****Contractor: Larsen & Toubro Construction Limited (L&T)****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	0

**J. Town: Ladnu****Contractor: Larsen & Toubro Construction Limited (L&T)****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	0

**K. Town: Makrana****Contractor: Larsen & Toubro Construction Limited (L&T)****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	1

**L. Town: Didwana****Contractor: Larsen & Toubro Construction Limited (L&T)****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	1

**M. Town: Khetri****Contractor: M/s Lahoty LNA (JV), Jaipur****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
July, 2021	0	0	0	0
August, 2021	0	0	2	0
September, 2021	0	0	1	1

**N. Town: Mandawa****Contractor: LNA R&B JV****Duration: 1<sup>st</sup> July to 30<sup>th</sup> September, 2021**

Month	Nos. of Accident cases	Nos. of Incident Cases	Nos. of Near miss cases	Nos. of first aid cases
July, 2021	0	0	0	0
August, 2021	0	0	0	0
September, 2021	0	0	0	0

**xxxxxxxx- END OF REPORT-xxxxxxxx**

---