



Environmental Monitoring Report

Project Number: 40031
June 2009

IND: Rajasthan Urban Sector Development Investment Program

Prepared by Local Self Government Department

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I. INTRODUCTION

A. Background

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

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

B. Project Purpose

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

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

C. Project Profile

5. Till 30th June 2009, 7 sub-projects under Tranche 1 have been awarded. Out of seven sub-projects 3 packages each in Alwar and Jaisalmer have been started and 1 package of water supply started at Jhalwar-Jhalrapatan. Actual field work started for 6 sub-projects. **Table 1** shows the project components, starting date of implementation, schedule date of completion etc. along with physical progress.

Table 1: Sub-project status- Tranche 1

Locations	Sub-projects components (Package No.)	Starting date of Implementation	Projected months of completion	Schedule date of completion	Physical progress (%) as on 30.06.09
Alwar	Water Supply- Replacement of in-efficient pumping machinery of pump houses and tube wells including electrical equipments; replacement of riser pipes and submersible cables in tube wells; providing and installation of chlorination equipments, etc. in Alwar. {RUSDIP/TR-01/ALW-JHL/WS-01 Lot-1 (Alwar)}	23.06.2008	12	22.06.2009	98%
Alwar	Water Supply - Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the strengthening of distribution system and replacement of Leaking pipelines and rising main pipelines; Construction and Commissioning of Elevated Service Reservoirs. {RUSDIP/TR-01/ ALW/WS-02}	09.09.2008	24	08.09.2010	15%
Alwar	Waste water - Providing, Laying, Jointing, Testing and Commissioning part of outfall sewer of 1000 mm dia HDPE pipe including construction of all necessary manholes, appurtenances, etc. and restoration of roads as per detailed specification in Alwar. {RUSDIP/ TR-01/ ALW/WW/01- Lot2}	15.12.2008	12	14.12.2009	Nil
Jaisalmer	Water Supply - Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the strengthening of distribution system and rising main pipeline; Construction and Commissioning of Elevated service reservoirs	09.09.2008	24	08.09.2010	4%

Locations	Sub-projects components (Package No.)	Starting date of Implementation	Projected months of completion	Schedule date of completion	Physical progress (%) as on 30.06.09
	and providing pumping system and ancillary works {RUSDIP/TR-01/ JSL/WS-02}				
Jaisalmer	Waste water - Sewerage and Waste stabilization Ponds in Phase-I in Jaisalmer {RUSDIP/TR-01/ JSL/WW-01}	11.08.2008	30	10.02.2011	2%
Jaisalmer	Drainage - Construction of new drains and minor bridges in Jaisalmer {RUSDIP/TR-01/ JSL/DR-01}	08.07.2008	18	07.01.2010	45%
Jhalawar-Jhalrapatan	Water Supply - Improvement of intake structures; Replacement of pumping machinery; rehabilitation of old WTP's; Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the distribution system and rising mains; Construction and Commissioning of SRs {RUSDIP/TR-01/ JHL/WS-02}	02.09.2008	24	01.09.2010	15.8 %

6. It is expected that construction of Tranche -2 sub-projects will be started around August 2009.

II. IMPLEMENTATION PROGRESS

A. Major Works and Progress

7. On date project works started in 3 towns under Tranche 1 for water supply, waste water and drainage sector. In most of the towns works just commenced. Significant physical progress will be expected during next quarter. **Table 2** shows summary of the scope of works along with present work status. Also expected changes from the approved objectives, remedial measures for fulfillment of objective and key risks/ assumption for attainment of objectives are mentioned in the table.

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

Table 2: Major works and progress

Locations	Sub-projects Components (Package No.)	Listing of works under the package	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
Alwar	Water Supply- Replacement of inefficient pumping machinery of pump houses and tube wells including electrical equipments; replacement of riser pipes and submersible cables in tube wells; providing and installation of chlorination equipments, etc. in Alwar. { RUSDIP/TR-01/ALW-JHL/WS-01 Lot-1 (Alwar) }	<ul style="list-style-type: none"> o Replacement of pumps at 7 locations- Tuleda, HKM nagar, Malviya nagar, Manu marg, scheme no 2, Kala Kuan and Sivaji park o Submersible pump sets - replacement of pipes & machinery- 104 nos. o uPVC rising main for tube well – 13.15 km o Chlorinator at 4 locations – Tuleda, Vijay mandir, Kala kuan, Malviya nagar 	<ul style="list-style-type: none"> o Construction of 4 Chlorinator buildings is just completed o Rising pipe line 10.331 Km laid- rest under progress o Pumping machinery of 69 TWs replaced o For feeder panel installation of 107 No. completed. o 16 numbers centrifugal pump installed. 	<p>The length of rising pipe reduced to 10.3 km as per site condition instead of 13.15 km</p> <p>One centrifugal pump have replaced at Manu marg instead of Kala kuan</p> <p>No other changes expected on date</p>	<ul style="list-style-type: none"> o Effective monitoring and application of EMP 	No risk
Alwar	Water Supply - Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the strengthening of distribution system and replacement of Leaking pipelines and rising main pipelines; Construction and Commissioning of Elevated service reservoirs. { RUSDIP/TR-01/ALW/WS-02 }	<ul style="list-style-type: none"> o Rising mains DI pipe 100- 300 dia. of 8.9 km, uPVC pipe of 3.5 km o Distribution mains of DI pipe 100 – 450 mm dia. of 3.13 km; uPVC pipe of 90- 315 mm dia. of 70.5 km o 2 CWRs at Ladia bagh and Kala kuan o 9 OHSRs at Ashok vihar, Scheme 2, Scheme 10, Tej Mandi, Johda Patel nagar, Pratap school, 	<p>OHSR</p> <ul style="list-style-type: none"> o Column height bottom doom ring beam completed at Tej Mandi, Scheme No. 2- work in progress for next stage o Raft completed at Scheme -10 o 1st bracing completed at Manu marg and Ashok Vihar o 2nd bracing completed at Pratap School. <p>Pipe Laying</p>	<p>For Scheme no. 1 OHSR alternate land has been identified in Public Park in front of Hari Baba Satsang Bhawan - <i>No Environmental impact expected</i></p> <p>No other change is expected on date</p>	<ul style="list-style-type: none"> o Effective monitoring and application of EMP o Approval of new land for Scheme No 1 OHSR site 	Soil bearing capacity testing at Ladia bagh CWR site has been done. Clarification report is awaited. Also alternative site selection under process

Locations	Sub-projects Components (Package No.)	Listing of works under the package	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
		<p>Kala kuan, Manu marg, Scheme no. 1</p> <ul style="list-style-type: none"> ○ New pump house at Ladia bagh (2 pumps) ○ Replacement of pumps at Manu marg and Bank colony ○ House connection 20 mm – 1000 nos. (excluding meter) 	<ul style="list-style-type: none"> ○ Laying of pipeline including service line – 9.0 km completed rest under progress <p>Pump House</p> <ul style="list-style-type: none"> ○ One pump replaced at Kala Kuan instead of Manu marg 			
Alwar	<p>Waste water - Providing, Laying, Jointing, Testing and Commissioning part of outfall sewer of 1000 mm dia HDPE pipe including construction of all necessary manholes, appurtenances, etc. and restoration of roads as per detailed specification in Alwar.</p> <p>{RUSDIP/ TR-01/ ALW/WW/01- Lot2}</p>	<ul style="list-style-type: none"> ○ HDPE outfall of 1550 m through trench less technology 	<ul style="list-style-type: none"> ○ Approval for Design of HDPE pipe line under process ○ Confirmatory survey completed. 	No change is expected	○ Not required till date	No risk
Jaisalmer	<p>Water Supply - Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the strengthening of distribution system and</p>	<ul style="list-style-type: none"> ○ Rising main of 7.5 km – 200- 350 mm dia. DI pipe ○ Construction testing & commissioning of 3 nos. ESR's at Union Circle, Gafur Bhatta & Jai Narayn Vyas colony. 	<ul style="list-style-type: none"> ○ Total of 2390 m pipe line is laid - rest under progress ○ Total Supply of Pipes for 2989 m. ○ Total procurement is 5112 m. 	No change is expected till date.	<ul style="list-style-type: none"> ○ Effective monitoring and application of EMP ○ Permission of land for ESR 	Delay in getting permission will affect the time period for completion of job

Locations	Sub-projects Components (Package No.)	Listing of works under the package	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
	rising main pipeline; Construction and Commissioning of Elevated service reservoirs and providing pumping system and ancillary works {RUSDIP/TR-01/ JSL/WS-02}	<ul style="list-style-type: none"> o 62.3 km distribution pipeline of 90 to 315 mm dia uPVC o New pumping station at Guffur Bhata o Arrangement of new pumps at WTP sites for Union Circle and Gausala 			at JNV Colony & Union Circle is still pending	
Jaisalmer	Waste water - Sewerage and Waste stabilization Ponds in Phase-I in Jaisalmer {RUSDIP/TR-01/ JSL/WW-01}	<ul style="list-style-type: none"> o 10 MLD STP (WSP technology) near village Kishan Ghat o Outfall sewer (700 – 1000 mm dia) of 5384 m o Sub mains- laterals – (350- 600 mm dia.) of 44.3 km 	<ul style="list-style-type: none"> o 920 m RCC pipes has been laid – rest under progress o Total Supply of Pipes for 3490m. o Total procurement is 4410 m. o Excavation work in progress for one Anaerobic pond 	No change is expected	<ul style="list-style-type: none"> o Dust emissions are being controlled by spray of water over the excavated soil. o Effective monitoring and application of EMP 	No risk
Jaisalmer	Drainage - Construction of new drains and minor bridges in Jaisalmer {RUSDIP/TR-01/ JSL/DR-01}	<ul style="list-style-type: none"> o Construction of drain sections- Drain 1: Left Side of Jaisalmer-Jodhpur Railway line beyond Ramgarh Bye-Pass Road (850 m long), Drain 2: Opposite BSF HQ & 	<ul style="list-style-type: none"> o Construction of drain 1, 3 and 4 in progress, Drain 1: 750 m executed. Rest under progress Drain 3: 1400 m executed. Rest under progress Drain 4: 840 m executed. Rest 	No change is expected	<ul style="list-style-type: none"> o Effective monitoring and application of EMP o Permission from railways for drain 4 	Delay in getting Permission

Locations	Sub-projects Components (Package No.)	Listing of works under the package	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives-Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
		<p>Left Side of Bikaner - Jaisalmer N.H. - To in Between BSF & Baba Baori-To Ramgarh Bye-Pass Road (1463 m long),</p> <p>Drain 3: Right side of Jaisalmer - Jodhpur Railway Line beyond Ramgarh Bye Pass Road (2250 m long),</p> <p>Drain 4: Opposite Gulab Sagar & Left Side of Jaisalmer-Bikaner N.H. in Railway Boundary upto Ramgarh Bye-Pass Road (1150 m long)</p> <ul style="list-style-type: none"> o Construction of bridges <p>Bridge1: Bridge at RD 550 of drain No 2 across Bikaner - Jaisalmer National Highway No. 15 at its Km 326.950</p> <p>Bridge 2: Bridge at RD 1150 of drain No 4 across Ramgarh Bye pass road</p> <ul style="list-style-type: none"> o Reconstruction of BT road 	under progress		<p>still waited. Only verbal permission has been provided by concern railway office.</p> <ul style="list-style-type: none"> o Permission from Army for small stretch of land for drain 3 is still awaited 	
Jhalawar-Jhalrapatan	Water Supply - Improvement of intake structures; Replacement of pumping machinery; rehabilitation of old	Intake pump replacement/rehabilitation work at Kali Sindh River intake - Peepa ji ki Dev (Jhalawar), Bhawarsa Deh (Jhalrapatan)	Jhalawar Intake Works: Railing works in progress at Pipaji-Ki-Deh. Lab Building: Lintel Beam casting over and works in	No change is expected.	<ul style="list-style-type: none"> o Effective monitoring and application of EMP o Possession of 	Non availability of land for 2 ESRs-will affect progress of the work

Locations	Sub-projects Components (Package No.)	Listing of works under the package	What type of works continued at present	Expected changes from approved scope	Fulfillment of objectives- Type of remedial measures needed	Key assumptions and risks that affect attainment of the objectives
	WTP's; Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the distribution system and rising mains; Construction and Commissioning of SRs { RUSDIP/TR-01/JHL/WS-02 }	<p>Rising mains of 5.1 km of 400 mm dia. DI pipe</p> <p>9 new ESRs - Jhalawar 6 and Jhalrapatan 3 - at Radi ke Balaji, Dhanwara, Near Balaji ki Chhatri, Police station, Garh palace, housing board colony, Senior Sec. School, S.T.C ground, Subhash colony</p> <p>Rehabilitation of old WTP's , rehabilitation of pump house at Radi ke Balaji , Mundliya Kheri</p> <p>Distribution mains of 80-200 mm dia DI pipes of 76.8 km</p> <p>Water Testing Laboratory at Balaji ki Chhatri campus of PHED</p>	<p>progress</p> <p>ESRs</p> <p>Housing Board Colony: Casting of column upto bottom of top ring beam</p> <p>Radi-Ke- balaji: Casting of column upto bottom of First bracing</p> <p>Dhanwara: Casting of coloumn upto bottom of second bracing</p> <p>Balaji-ki-chatri: Casting of first bracing completed</p> <p>Police Station/ PHED: Excavation under progress</p> <p>Jhalarapatan Intake Works - Rail Both Side completed at Banswara.</p> <p>ESRs</p> <p>Subash Nagar: Excavation is in progress</p> <p>STC Ground: Excavation is in progress</p> <p>Pipe laying works under progress and details as follows</p> <p>– Rising Main: Jhalawar – 4.09 km laid. Jhalarapatan- 0.71 km laid Distribution Line: 3.63 km laid at Jhalawar</p>		land for 2 ESRs (Garah & Senior Secondary School) yet to be obtained.	

9. During the last quarter from March to June 2009 few new sub-projects are selected for awarding. Till 30th June Letter of Acceptance issued to the contractors for 2 new additional sub-projects under Tranche 1 and 4 new sub-projects under Tranche 2. The scopes of the works of those 6 sub-projects have been reviewed from DPR and Bid document and presented below.

Table 3: New Sub-projects under award process

Locations	Sub-projects (Package No.)	Components	Listing of works under the package (As per Bid document)	Present work status
TRANCHE 1				
Alwar	Waste water- Providing, Laying, Jointing, Testing and Commissioning of outfall/ trunk sewers of 800 to 1200 mm RCC pipe including construction of all necessary manholes, appurtenances, etc. and restoration of roads as per detailed specification in Alwar. {RUSDIP/ TR-01/ ALW/WW/02 Lot-1}		<ul style="list-style-type: none"> ➤ Laying of Outfall/ trunk sewer 800- 1200 mm dia. for the length of 16.525 km ➤ Construction of manholes, appurtenances ➤ Restoration of roads as impacted 	Letter of Acceptance issued to contractor on 12.06.09 After signing of agreement work will be started shortly
Jaisalmer	Water supply- Design, Supply, Construction, installation and Commissioning of Raw Water pumping Station at Mohangarh, Jaisalmer and providing, laying, jointing and commissioning of 600 mm dia pipeline approx. 57 Km from Mohangarh to WTP Gajroopsar, Jaisalmer and O & M (RUSDIP/TR-01/ JSL/WS-01)		<ul style="list-style-type: none"> ➤ Construction of new pumping station at Mohangarh ➤ Laying, jointing and commissioning of 600 mm dia. raw water pipeline from Mohangarh to WTP at Gajroopsar 	Letter of Acceptance issued to contractor on 11.06.09 After signing of agreement work will be started shortly
TRANCHE 2				
Sikar	Drainage - Construction of storm water drainage in Sikar (RUSDIP/TR-2/SKR/DR/01)		<ul style="list-style-type: none"> ○ New drain (approx. 1.935 km) from Roadways Bus stand to Dujod Gate- different sections as follows <ul style="list-style-type: none"> ➤ Drain starts from Housing Board colony along Road ways bus stand ends at corner of Bus stand ➤ Drain- Bus stand area ➤ Drain – from bus stand circle goes to Bajaj Circle along Devipura road and ends at Bajaj Circle. ➤ Drain from Bajaj Circle goes to Ajmer Bus stand along Devipura road and ends at road triangle at Ajmer bus Stand. ➤ Drain from Ajmer bus stand goes to Dujod Gate and ends to 	Letter of Acceptance issued to contractor on 11.06.09 After signing of agreement work will be started shortly

Locations	Sub-projects (Package No.)	Components	Listing of works under the package (As per Bid document)	Present work status
			<ul style="list-style-type: none"> existing drain near Bur Tree o Rehabilitation of Existing drain from Raiji's Well to the end of drain near forest land. 	
Sikar	Waste water - Design, Construction, Supply, erection testing, commissioning and five years operation & maintenance of Sewage Treatment plant 10 MLD near (UASB)132KVGSS including all civil, electrical, mechanical, pumping and other allied works and Supply, laying, joining, testing, commissioning of pipe lines (RUSDIP/ TR-02/ SKR/ WW/01)		<ul style="list-style-type: none"> o 10 MLD capacity STP (UASB technology) - 1 inlet chamber, 1 no. cross screen channel, 1 no. fine screen channel, 2 nos. grit channel, 1 distribution chamber, 2 nos. reactor, 2 nos. degassing aeration tanks and 2 nos. polishing tanks o Trunk main dia varying from 700mm to 900mm dia - 2.169 km o Collection network dia varying from 200mm to 600mm dia- 76.835 km 	Letter of Acceptance issued to contractor on 19.06.09 After signing of agreement and obtaining consent to establish from State pollution control Board work will be started shortly
Chittorgarh	River Bridge - Construction of 2 nos. high level bridge on river Gambhiri & Bedach in Chittorgarh (RUSDIP/TR-02/CHT/BR/01)		<ul style="list-style-type: none"> ➤ Construction of two river bridges of 2 lane capacity ➤ Widening and upgradation of approach part of the existing bridge 	Letter of Acceptance issued to contractor on 15.06.09 After signing of agreement work will be started shortly
Karauli	Water supply - Construction of OHSRs and balancing reservoir including Providing, Laying, Jointing, Testing and Commissioning of DI pipelines in Distribution system and Transmission system; and replacing of existing leaking pipelines; Replacement of Water Meters (RUSDIP/ TR-02/ KRL/WS/01)		<ul style="list-style-type: none"> o Gravity main - 18.34 km of gravity main of 150-600 mm dia - <i>from off-take point of Chambal-Nadoti project up to CWR/OHSR at city</i> o New pipe line and replacement of old pipe line of 67.6 km of 150-300 mm dia. in different parts of the city o CWR sump of 1 lakh lit near Head work at Mandrayel road o OHSRs of 4 nos. of capacity at Krishi Upaj Mandi (500KL), Sainath (1250KL), RTO Office (1250KL), Bus stand (500KL) o 3 nos. Chlorinator- 1 no Chlorinator at Mandrayel road CWR and 2 Chlorinators at furthest OHSRs 	Letter of Acceptance issued to contractor on 19.06.09 After signing of agreement work will be started shortly

III. ENVIRONMENTAL PROCEDURE REVIEW

A. Environmental Legal Requirements

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

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

11. The specific requirements to ensure compliance by these components and subprojects are shown in **Table 4**.

Table 4: Action Required Ensuring Subprojects Comply with National Environmental Laws

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

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

B. Compliance with Environmental Regulations

12. **Table 5** and **6** below shows present clearance status for different sub-projects under **Tr- 1** and **Tr-2** respectively. As per the present status consent to establish awaited only for Dholpur WTP and Sikar STP. For others, consent obtained during the said quarter. Environmental clearance for construction of landfill at Jaisalmer, Jhalawar and Alwar is still pending.

Table 5: Present Status of Environment and Forest & Other Clearances (upto 30th June 2009)- Project 1

City	Work (Package No.)	Applicable Legislation/ Type of clearance	Clearance given by and date	Subject / Issue	Remarks/ Action needed
Alwar (Tr-1)	Alwar Waste Water (RUSDIP/Tr-01/ALW-/WW-01)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 20 MLD STP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2009-2010/Group I/50 dated 12.05.09 Consent valid upto 31.08.2011		Complied
	Alwar Solid Waste ((RUSDIP/Tr-01/ALW-/SW-01))	EIA notification 2006 EC applied on 01.10.08 (for categorisation submitted to RPCB on 04.09.08)		Discussion in SEAC meeting held on 17.11.08 again it is discussed in 3 rd meeting of SEAC on 26.12.08	Status pending – Follow up necessary

City	Work (Package No.)	Applicable Legislation/ Type of clearance	Clearance given by and date	Subject / Issue	Remarks/ Action needed
Jaisalmer (Tr-1)	Waste Water (RUSDIP/TR-01/JSL/WW-01)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 10 MLD STP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2009-2010/Group II/66 dated 18.05.09 Consent valid upto 30.09.2011		Complied
	Jaisalmer Solid Waste ((RUSDIP/Tr-01/JSL-/SW-01))	EIA notification 2006 EC applied on 01.10.08 (for categorisation submitted to RPCB on 02.09.08)		Discussion in SEAC meeting held on 17.11.08 again it is discussed in 3 rd meeting of SEAC on 26.12.08	Status pending – Follow up necessary
Jhalawar-Jhalrapatan (Tr-1)	Jhalwar Solid Waste (RUSDIP/Tr-01/JHL-/SW-01)	EIA notification 2006 EC applied on 13.01.08		Discussion in SEAC meeting held on 26.03.09	Status pending – Follow up necessary

Table 6: Present Status of Environment and Forest & Other Clearances (upto 30th June)- Project II

City	Work (Package No.)	Applicable Legislation/ Type of clearance	Clearance given by and date	Subject / Issue	Remarks/ Action needed
Sawai Madhopur (Tr-2)	Waste Water (RUSDIP/TR-02/SMD/WW-01)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 10 MLD STP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2009-2010/Group I/45 dated 30.04.09 Consent valid upto 31.10.2011 Consent to Establish DG set at STP obtained from PCB- Order no. 2009-2010/Group I/57 dated 21.05.09. Consent valid upto 31.10.2010		Complied
Rajsamand (Tr-2)	Water supply (RUSDIP/TR-	Water (Prevention and	Consent to Establish		Complied

City	Work (Package No.)	Applicable Legislation/ Type of clearance	Clearance given by and date	Subject / Issue	Remarks/ Action needed
	02/RSM/WS-01)	Control of Pollution) Act. 1974/ Consent to establish of 17 MLD WTP from Pollution Control Board Consent to operate will be required before operation	obtained from Pollution Control Board – Order No. RPCB/ROU/Raj/W-4/6155 dated 27.11.08 received on 02.04.09		
Dholpur (Tr-2)	Waste Water (RUSDIP/TR-02/DLP/WW-01)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 10 MLD STP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2009-2010/Group I/51 dated 12.05.09 Consent valid upto 31.10.2011		Complied
Dholpur (Tr-2)	Water supply (RUSDIP/TR-02/DLP/WS-01)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 15 MLD WTP from Pollution Control Board Consent to operate will be required before operation		Filled consent form submitted to pollution control board of Rajasthan on 11.06.08 Consent fees submitted to pollution control board on 23.10.2008	Awaiting for consent – Follow up necessary
Sikar (Tr-2)	Waste Water (RUSDIP/TR-02/SKR/WW-01)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 10 MLD STP from Pollution Control Board Consent to operate will be required before operation		Filled consent form submitted to pollution control board of Rajasthan (Jaipur office) on 10.12.08. Clarification for certain observations raised by RSPCB are submitted on 29.05.09	Awaiting for consent – Follow up necessary
Bundi (Tr-2)	Waste Water (RUSDIP/TR-02/BND/WW-01)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 8 MLD	Consent to Establish obtained from Pollution Control Board – Order No. 2009-2010/Group I/19 dated 23.03.09		Complied

City	Work (Package No.)	Applicable Legislation/ Type of clearance	Clearance given by and date	Subject / Issue	Remarks/ Action needed
		STP from Pollution Control Board Consent to operate will be required before operation	Consent valid upto 31.11.2011		
Nagaur (Tr-2)	Waste Water (RUSDIP/TR-02/NGR/WW-01)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 8 MLD STP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2009-2010/Group II/67 dated 18.05.09 Consent valid upto 31.12.2011		Complied
Barmer (Tr-2)	Waste Water (RUSDIP/TR-02/BMR/WW-02)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 10 MLD STP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2009-2010/Group II/69 dated 19.05.09 Consent valid upto 31.12.2011		Complied
Rajsamand (Tr-2)	Waste Water (RUSDIP/TR-02/RSM/WW-01)	Water (Prevention and Control of Pollution) Act. 1974/ Consent to establish of 5 MLD STP from Pollution Control Board Consent to operate will be required before operation	Consent to Establish obtained from Pollution Control Board – Order No. 2009-2010/Group II/60 dated 08.05.09 Consent valid upto 31.12.2011		Complied

C. Compliance of Environmental Loan Covenants

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

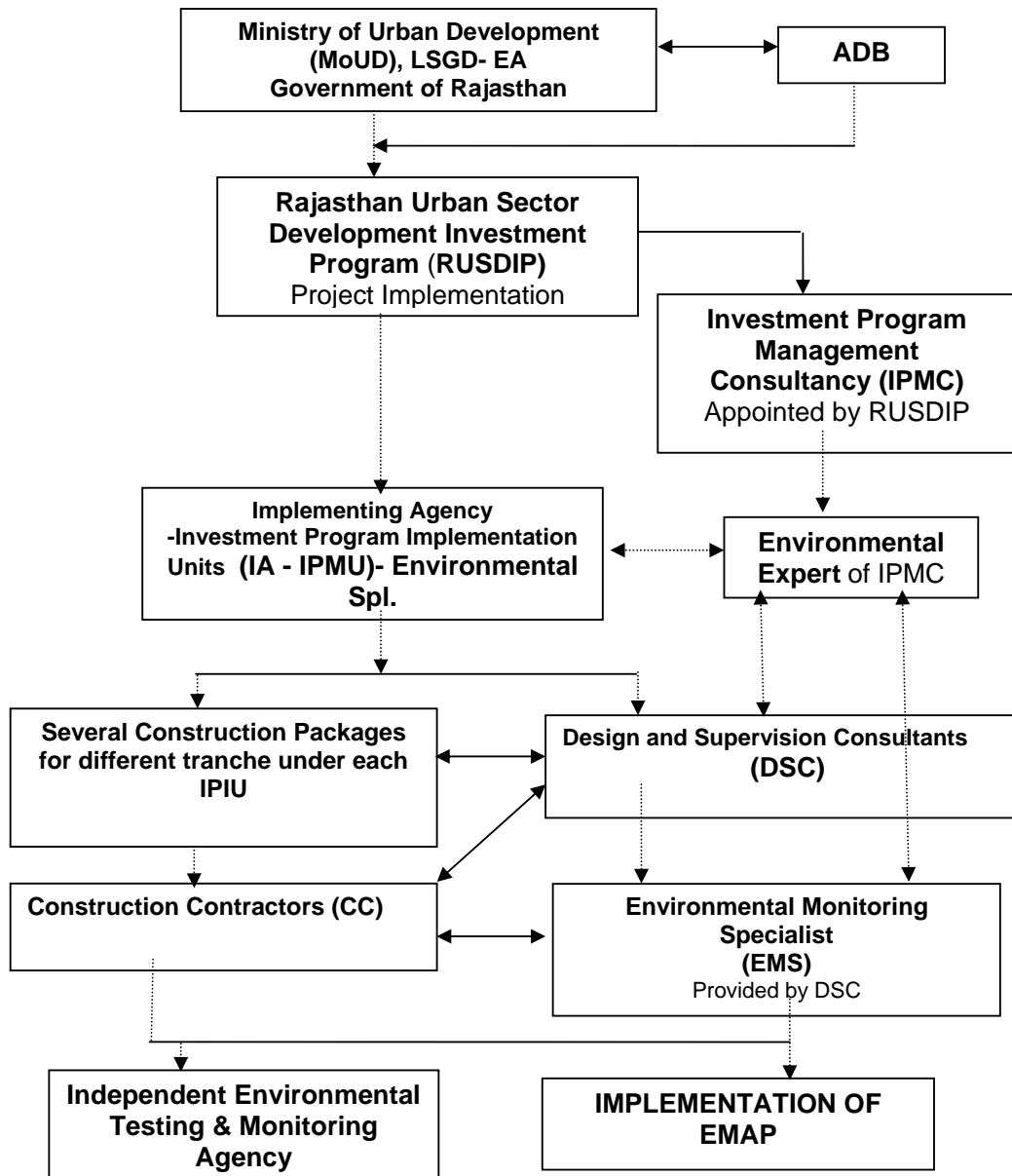
Project Specific Covenants	Status / Issues
Environmental	
1.The EA shall ensure that: (LA Sched 5 Para 13) (a) the project is carried out and all subproject facilities designed, constructed, operated, maintained, and monitored in compliances with the environmental law and regulations of the Borrower, the state, ADB's Environmental Policy (2002), and the EARF;	Under compliance in accordance with ADB Environmental Policy and Environmental Assessment Guidelines

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

D. Environmental Organization and Management

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

Figure 1: Institutional Responsibility- Environmental Organisation RUSDIP



15. EMP shows that most of the mitigation activities are the responsibility of the Construction Contractors (CC) employed to build the infrastructure during the

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

16. A program of monitoring would be conducted to ensure that all parties take the specified action to provide the required mitigation, to assess whether the action has adequately protected the environment, and to determine whether any additional measures may be necessary. This would be conducted by a qualified Environmental Monitoring Specialist (EMS) from the DSC. The EMS responsible for all monitoring activities and reporting the results and conclusions to the IPMU, and recommend remedial action if measures are not being provided or are not protecting the environment effectively. The EMS may be assisted by environmental specialist in particular technical fields, and junior or medium-level engineers who can make many of the routine observations on site. Post-construction monitoring will be conducted by the relevant Government Agency (GA) to whom responsibility for the infrastructure will pass once it begins to operate¹.

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

IV. IMPLEMENTATION STATUS OF MITIGATION MEASURES

18. At present there are 7 sub-projects awarded to the contractors. Field activities are started in 6 sub-projects. EMP has been implemented in all the running projects as per IEE report. The detail mitigation measures against impacts on air, water, soil environment and safety aspects are shown in **Annexure 2**. Overall compliance status of EMP application and actions needed are discussed below and shown in **Table 7**.

19. It is noted that works just commenced in most of the sub-project locations. For implementation of EMP, arrangement of human safety, procurement of PPE, arrangement of sprinkler system are under process or started. Training has been given to the contractors, DSC's monitoring specialist and IPIU representative on environmental safeguard requirement. Moreover instruction is given to contractors to follow the specified clause of BID document to mitigate environmental and social impacts.

20. **Annexure 3** shows the instruction sheet for the contractor on application of EMP.

21. "Pollution under Control certificate" for the engaged vehicles have been obtained for Alwar, Jhalawar, Jhalrapatan and for Jaisalmer. Sample copies of those are shown in last quarter report.

¹ In the operational period some infrastructure will be the responsibility of the Municipal Boards/Councils, whilst others will be the responsibility of the appropriate branch of the State government (such as PWD, PHED, etc)

Table 7: Compliance Status with Environmental Management and Monitoring Plans as stipulated in the Environmental Documentation

Sites	Name of Sub Project	EMP being Implemented (Yes / No)	Overall Status of EMP Implementation (Excellent/Satisfactory/Partially Satisfactory/Below Satisfaction/Poor/Very Poor)	Actions Proposed/Additional Corrective Measures Required
Alwar	Water Supply- Replacement of in-efficient pumping machinery etc.; providing and installation of chlorination equipments, etc. in Alwar. {RUSDIP/TR-01/ALW-JHL/WS-01 Lot-1 (Alwar)}	Yes	Satisfactory	<ul style="list-style-type: none"> o Implementation of EMP o Complete utilisation of PPE o Proper disposal of old pipes/ machinery
Alwar	Water Supply - Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the strengthening of distribution system; Construction and Commissioning of Elevated service reservoirs. {RUSDIP/TR-01/ ALW/WS-02}	Yes	Partially Satisfactory	<ul style="list-style-type: none"> o Complete Implementation of EMP through awareness and monitoring o Complete utilisation of PPE o Collection of Pollution Under Control (PUC) certificate by the contractor from concerned dept. o Quick disposal of excess earth/ waste o Proper barricading, use of safety tape
Alwar	Waste water - Providing, Laying, Jointing, Testing and Commissioning part of outfall sewer of 1000 mm dia HDPE pipe etc. in Alwar. {RUSDIP/ TR-01/ ALW/WW/01- Lot2}	Field work yet to start		
Jaisalmer	Water Supply - Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the strengthening of distribution system and rising main pipeline; Construction and Commissioning of Elevated service reservoirs and providing pumping system and ancillary works {RUSDIP/TR-01/ JSL/WS-02}	Yes	Partially Satisfactory	<ul style="list-style-type: none"> o The compliance status of EMP implementation has improved at site in compared to last quarter but still partially satisfactory and improvement is needed. o Supply of complete set of PPE to all the workers and their use by the workers during works need to be ensured by the contractor o First-Aid box at work sites o Maintaining the safety arrangement
Jaisalmer	Waste water - Sewerage and Waste stabilization Ponds in Phase-I in Jaisalmer {RUSDIP/TR-01/ JSL/WW-01}	Yes	Partially Satisfactory	<ul style="list-style-type: none"> o The compliance status of EMP implementation has improved at site in compared to last quarter but still partially satisfactory and improvement is needed.

Sites	Name of Sub Project	EMP being Implemented (Yes / No)	Overall Status of EMP Implementation (Excellent/Satisfactory/Partially Satisfactory/Below Satisfaction/Poor/Very Poor)	Actions Proposed/Additional Corrective Measures Required
				<ul style="list-style-type: none"> ○ Supply of complete set of PPE to all the workers and their use by the workers during works need to be ensured by the contractor ○ First-Aid box at work sites ○ Maintaining the safety arrangement
Jaisalmer	Drainage - Construction of new drains and minor bridges in Jaisalmer {RUSDIP/TR-01/ JSL/DR-01}	Yes	Satisfactory	<ul style="list-style-type: none"> ○ Implementation of EMP ○ Supply of complete set of PPE to all the workers and their use by the workers during works need to be ensured by the contractor ○ First-Aid box at work sites ○ Pollution Under Control (PUC) certification for JCB, Tractors, and other equipments also
Jhalawar-Jhalrapatan	Water Supply - Improvement of intake structures; Replacement of pumping machinery; rehabilitation of old WTP's; Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the distribution system and rising mains; Construction and Commissioning of SRs {RUSDIP/TR-01/ JHL/WS-02}	Yes	Partially Satisfactory	<ul style="list-style-type: none"> ○ Complete Implementation of EMP through awareness and monitoring ○ Complete utilisation of PPE ○ Collection of Pollution Under Control (PUC) certificate by the contractor from concerned dept.(for rest of the vehicles/ equipments) ○ Chemical testing of old filter media of WTP before disposal

V. ENVIRONMENTAL MONITORING AND EVALUATION

22. For effective monitoring, selected environmental parameters have been identified as indicators which may be qualitatively and quantitatively measured and compared over a period of time in order to assess/ensure the compliance of EMP. The environmental performance indicators are physical, biological and social characteristics identified as most important in affecting the environment at critical locations all along the sub-project corridors. The parameters identified as performance indicators are:

- Air, noise and water quality
- Compliance to EMP

- Compliance to local/state/national environmental regulations
23. As per the requirement of environment compliance it is necessary to test old filter media of WTP at Jhalawar/Jhalarapatan before disposal. At present concerned work (replacement of filter media) is not started. Testing will be carried out before disposal of filter media at the MoEF/NABL approved laboratory.
24. Instruction is given to the contractors to do chemical test for following parameters.

Parameter	
pH	Copper, mg/l
Total salt content (%)	Zinc, mg/l
Arsenic, mg/l	Nickel, mg/l
Mercury, mg/l	Cyanide, mg/l
Lead mg/l	Chloride, mg/l
Cadmium, mg/l	Fluoride, mg/l
Total Chromium, mg/l	Phenolic Compounds, mg/l
Hexavalent Chromium, mg/l	

25. Handling and disposal plan for water treatment plant sludge of Jhalawar and STP sludge of Jaisalmer have been developed as per Detailed Project Report and depicted in **Annexure 4**.
26. After starting of construction work for STP air pollutants should be measure at core and buffer zone of the proposed STP site. If any water body exist near the STP physico-chemical properties of the water should be measure as part of base line environment. At present STP work is not started at Alwar and just started for Jaisalmer, hence monitoring not required presently but with progress of work monitoring should be done. Environment monitoring parameters are shown in **Annexure 5**.
27. At drainage project sites of Jaisalmer soil erosion not occurred. Similar observation recorded at present excavated area.

VI. MAJOR PROJECT ISSUES AND PROBLEMS

28. Field activity of the sub-projects under Tranche-1 is under progress. Till date no as such major issues and problems arise at the project locations.

VII. CONSULTATIONS AND RECOMMENDATIONS

29. For protection of local environment during construction phase application of mitigation measures started as per specified EMP. Pubic consultation during construction/implementation phase have been carried out for Jaisalmer and Jhalawar. The issues and public opinion are shown in **Annexure 6**. The general recommendations as per present observations are given in Table below.

Table 8: Recommendations and Suggestions

S. No.	Issues	Recommendations & Suggestions
1	Execution of works non-compliant to EMP	Effective implementation of Environmental Management Plan has to be ensured by Contractors where the present status is partial satisfactory Environmental Safety Officers to be mobilized by Contractors for all sub-projects to carry out the environmental monitoring, reporting and other related jobs which need an expert input.

S. No.	Issues	Recommendations & Suggestions
2	Procedural delays in obtaining clearances	Applications route through different offices within the same department and despite rigorous follow up more than 4-5 months are taken by concerned authorities to grant permission/clearance. Undue time for clearance may lead to the extension of works and levy heavy idling charges. To expedite the clearance process a time frame has to be fixed with respective departments and is being followed at all levels.
3	Debris disposal	In some cases the proper debris disposal need to be carried out.

30. The action plan considered for satisfactory environmental compliance as per the present sub-project activities are given in **Table 9**.

Table 9: Action plan consider for Satisfactory Environmental Compliance

Action	To be taken by	Time frame
Instruction to contractors and monitoring for <ul style="list-style-type: none"> o Proper disposal of debris and quick disposal o excavated surplus earth material o Complete use of PPE o Restoration of road/lane after pipe laying – at earliest o Camp site management o Water sprinkling at dry period o Collection of PUC certificate o Use of safety tape/ barricade/ caution board 	IPIU, DSC, Contractors	Continuous
Testing of old filter media before disposal-applicable for rehabilitation of WTP sub-projects	Contractor, IPIU, DSC	After execution of work and before disposal of filter media
Generation of base line data on air quality and water (surface & ground) at STP site	Contractor, IPIU	Within next quarter (as per progress of the work)
Public consultation during construction	IPIU, DSC, Capacity building team	Started for Jaisalmer and Jhalawar attached as Annexure 5.
Follow up action for environmental clearances/ consent	IPMU, IPIU	At earliest

ANNEXURE 1

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

Environmental Legislation and Pollution Control Acts

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

○ **The Environment Protection act, 1986 and the EIA Notification, 1994**

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

○ **The Forest (Conservation) Act, 1980**

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

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

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

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

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

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

ANNEXURE - 2**Application of EMP (March to June 2009)****JHALAWAR & JHALRAPATAN**

Project : Improvement of Intake structures; replacement of pumping machinery; rehabilitation of old WTP's; Providing, Laying, Jointing, Testing & commissioning of water pipeline for the distribution system and rising mains; Construction and Commissioning of Elevated service reservoirs and Construction of new laboratory etc. in Jhalawar & Jhalrapatan (**Pacakage – RUSDIP/ Tr -01 / JHL/WS – 02**)

Progress: As on 30.06.2009 – Casting of Column upto bottom of top ring beam over at Housing Board ESR, Casting of Column upto bottom of 11th bracing over at Dhanwara ESR and casting of column upto bottom of 1st bracing over for Radi – ke – Balaji & Balaji – ki- Chhatri ESRs, Land was allotted for Police Station/PHED ESR site and others in progress for rest ESRs, Lintel beam casted for construction of Lab building, Laying of rail completed at J.Patan intake site (Bhanswara) and one side rail, one side MS Pipe, CC road of 184 mts in length was completed at Jhalawar intake site (Pipaji ki Deh) and remaining works under progress. Pipe laying work in progress

(Physical progress: 15.82% as on 30.06.09)

S. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
PRECONSTRUCTION STAGE				
		YES	NO	
1	Site preparation work completed by IPIU including necessary clearance	YES		Only rehabilitation of existing WTP is proposed and there is no clearances are required from Pollution Control Board. In most of the cases land made available by IPIU. Only possession of land for 2 ESRs awaited Rising main of 400 mm dia raw water pipeline from Intake site (Pipaji-ki-deh) to Radi-ke-Balaji WTP en-routed adjacent to forest land along the available road (Gagron Road). Application for obtaining NOC from Forest Dept. was submitted by IPIU. Reasonably complied
CONSTRUCTION STAGE				
2	Establishment of temporary camps with sanitary and solid waste management arrangement		NR	Most of the workforces are being hired locally. Presently the workers come in morning and leaves in the evening. With the progress of work and as per requirement temporary camps with adequate facilities will be set up.
3	Removal of overburden and excavated material from working site and use / preservation of the same – as per mitigation measures	YES		Presently the excavated materials are dumped near the site premises with access spaces provided between the mounds of soil and will be utilized beneficially for backfilling.
4	Water sprinkling at construction site for arresting dust		NA	Sprinkling of water not done at present since not required as per nature of work. Also necessary instruction given to the contractor for arrangement of sprinkler at working site.
5	Materials carrying vehicle are covered	YES		During the haulage of dry soil & cement bags the vehicles are covered to avoid spillage and dust emissions to the environment. Presently the

S. No.	Environmental components related to project activities	Compliance	Explanation (in case of done or not done justification necessary)
			vehicles carrying stones are not covered and also which is not a source of emission.
6	All vehicles and equipments mobilized to construction site and producing emission, have Pollution Control Board certification	YES	Contractor instructed to collect PUC certificate for equipments and vehicles. Also few PUC certificates was collected and collection for others in process. Reasonably complied
7	At sensitive locations enclosures provided around generator set and concrete mixture or other noise producing machinery	Yes	The existing constructional activities being carried out mostly at available govt. lands. Also instructions given to the contractor to provide necessary precautions to curtail noise pollution.
8	Regular maintenance of noise producing equipment done	YES	Done as per requirement. Complied.
9	Arrangement of drainage of waste water and arresting solid waste from waste water generated at construction site		NA Not applicable at present due to nature of work
10	Felling of trees done (if necessary) with mitigation measures i.e. planting of three trees for each tree fell.		NR Removal of trees is not anticipated presently. Also the contractor is instructed to avoid removal of trees during pipe laying works.
11	Local flooding from watering of excavation, flushing pipes etc.		NA Not applicable at present due to nature of work
12	Ensure use of Personal Protective Equipment like helmet, gumboot, gloves, safety tape, nose musk and earplugs at work place	YES	Presently the workers at construction sites are wearing helmets and gumboots. Also it is instructed that the contractors to maintain the same.
13	Provide Health and Safety training to all personnel and implement H & S plan	YES	Contractor was instructed to nominate one representative for Health and safety. Also the contractor was instructed periodically to ensure the health and safety of the workers at the constructional site and to abide the H&S norms strictly. Partially complied
14	Plan truck routes to avoid Jhalawar Town, narrow or congested roads, important or fragile buildings, religious and tourist sites		NR Trucks involved in the haulage of constructional materials and allied activities are less. This may not impose any additional load in the existing traffic volume of the town. Also this will be considered in future at the time of works in narrow / congested roads. Not required at present
15	Plan transport of waste to avoid peak traffic and tourist season		NR Presently there is no major generation of waste materials at the constructional sites. The excavated materials will be utilized beneficially for backfilling. Hence there is no impact on tourist season traffic.
16	Suitable short term traffic diversion and implementation of traffic management plan at construction site		NR Works are being carried out without causing any congestion to the existing traffic condition. Also traffic diversions will be provided at necessary juncture.

S. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
17	Increase workforce in inhabited areas to finish work quickly		NR	Presently the major works are at government land premises and increasing of work force will be considered when necessary
18	Inform businesspeople and residents of work site in advance		NR	Presently the major works are at government land premises and information will be pass to business people/ residents as per necessity
19	Consult town authority and avoid existing infrastructure	YES		Consulted authorities concerned. Presently the major works are at government land premises
20	Consideration of public safety - as per prescribed mitigation measures	YES		Barricading and use of safety tape is reasonably done. Training has been given to contractor for implementation of public safety arrangement at work sites. Also the contractor was instructed periodically to ensure the health and safety of the public and also the workers at the constructional site and to abide the H&S norms strictly.
21	Provide bridges/ wooden platform to allow people & vehicles to cross trenches		NR	No major interference caused to the existing traffic conditions presently and may be some temporary interference anticipated during the pipe laying works, which is inevitable and being mitigated by providing alternative arrangement.
22	Locate water and sewer pipes on opposite sides of roads	YES		The laying of water supply pipelines and sewerage lines are planned at opposite sides of the road.
23	Integrate subprojects to conduct trenching at same time	YES		Integrated approach with the consultation of the local authorities is being adopted for trenching related works.
24	Plan work with town authorities – work when traffic is light	YES		Works will be carried out without causing any congestion to the existing traffic condition.
25	Request archaeological authorities to assess potential of all sites		NR	Not Required
26	Select alternatives if sites have medium or high potential risk		NR	Not Required
27	Include state and town historical authorities as stakeholders		NR	Not Required
28	Develop and apply archaeological protocol to protect chance finds		NR	Not Required
29	Avoid using pneumatic drills near buildings at risk from vibration		NR	There are no pneumatic drills proposed.
30	Employ at least 50% of workforce from communities near sites	YES		Most of the workforce is hired locally.
31	Continuous monitoring on implementation of mitigation measures	YES		Continuous monitoring is being carried out on implementation of Environmental safeguards /Health & Safety norms at the work sites. Also the preparation and submission of Monthly/Quarterly Environmental Monitoring Report is in practice.

NA- Not applicable, NR- Not required

JAISALMER

Jaisalmer Drainage

Project :Construction of new drains and minor bridges in Jaisalmer (**DRAINAGE**)
Package No.: RUSDIP/TR-01/ JSL/DR-01
Progress: Both construction and excavation work going on (Physical progress - 45% on 30.06.09)

Sr. No.	Environmental components related to project activities	Compliance		Explanation * (in case of done or not done- justification necessary)
		YES	NO	
PRECONSTRUCTION STAGE				
1	Site preparation work completed by IPIU including necessary clearance	YES		Railway permission For drain No. 4 and permission from defence for drain No. 3 pending, other permission obtained
CONSTRUCTION STAGE				
2	Establishment of temporary camps with sanitary and solid waste management arrangement		NR	Mostly Local labors are engaged. so Labor camp, are not required
3	Removal of overburden and excavated material from working site and use / preservation of the same – as per mitigation measures	YES		Is disposed at low laying area as decided by ULB(open dumping site).
4	Felling of tree done (if necessary) with precaution as mentioned in mitigation measures	YES		Only few Babul trees and scrubs are removed under the package. Felling of big trees not required till date
5	Water sprinkling at construction site for arresting dust	Yes		Water Sprinkling on regular basis is used to control the dust problem
6	Materials carrying vehicle are covered	YES		At present stone carrying trucks are not covered (not required).But cement carrying trucks are fully covered. Partly complied
7	Use of PPE at working site	YES		Use of PPE like helmet, gumboot noted
8	At sensitive locations enclosures provided around generator set and concrete mixture or other noise producing machinery		NA	Generators not used in this package Use of concrete machine started. Since present location away from the city (habitation area) enclosures not required.
9	Regular maintenance of noise producing equipment done		NA	Not applicable presently
10	All vehicles and equipments mobilized to construction site and producing emission, have Pollution Control Board certification	YES		PUC certificate are obtained for vehicles but for equipments it is yet to be obtained. Contractor has been instructed to collect PUC certificate for equipments at earliest
11	Suitable short term traffic diversion and implementation of traffic management plan at construction site done		NR	As per present site condition implementation of traffic management plan not required When work will start within the city traffic diversion will be considered
12	Chances of water bodies pollution from construction		NR	No such condition exist at site
13	Drainage crossing National Highways and railways - done without any		NA	Not done yet. Permission awaited from railways.

Sr. No.	Environmental components related to project activities	Compliance		Explanation * (in case of done or not done- justification necessary)
		YES	NO	
	disturbance through construction of culvert etc.			
14	Disposal of construction debris if any as per mitigation measures done		NR	No debris produced at site. The overburdens and excavated earths are being utilized for backfilling and leveling of undulated grounds.
15	Arrangement for drainage of waste water and arresting solid waste from waste water generated at construction sites		NR	Not generated at present
16	Consideration of public safety –use of safety tape, barricade, caution board or as per prescribed mitigation measures	YES		Caution signboards, barricadings, delineators, safety tape etc. deployed at site as per requirements
17	Adequate provision for disposal of drainage silt		NA	In the package no de-siltation of existing drain considered The Scope of the sub-project is construction of new storm water drain only
18	Continuous monitoring on implementation of mitigation measures	Yes		Continuous Monitoring of implementation of safeguard measures ensured

Jaisalmer Water Supply

<p>Project: Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the strengthening of distribution system and rising main pipelines; Construction and Commissioning of Elevated Service Reservoirs and providing pumping system and ancillary works in Jaisalmer</p> <p>Package No: RUSDIP/TR-01/ JSL/WS-02</p> <p>Progress: 1.Pipe Laying of rising mains started at Transport Nagar Circle to WTP, 2. Pipe Laying of rising mains started at Gadisar Circle to Union Circle., 3. Pipe Laying of rising mains started at BP Tank to Air Force Circle. (Physical progress - 4% as on 30.06.09)</p>
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Sr. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
		YES	NO	
PRECONSTRUCTION STAGE				
		YES	NO	
1	Site preparation work completed by IPIU including necessary clearance	YES		No clearances are required from Pollution Control Board for pipe laying land is made available by IPIU. Out of 3 OHSR land allotment for 2 OHSR is still pending
CONSTRUCTION STAGE				
2	Establishment of temporary camps with sanitary and solid waste management arrangement	YES		The Labour camp has been provided with drinking water facilities (bore well), electric supply, separate toilets for ladies and gents
3	Removal of overburden and excavated material from working site and use / preservation of the same – as per mitigation measures	YES		Overburden and excavated materials from construction sites are being utilized in backfilling of trenches and leveling of low lying area as per direction of ULB
4	Water sprinkling at construction site for arresting dust	YES		Sprinkling of water is being carried out as per requirement at site

Sr. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
5	Materials carrying vehicle are covered		NR	At present material carrying activities not started, because only laying of pipe is in progress
6	All vehicles and equipments mobilized to construction site and producing emission, have Pollution Control Board certification	YES		PUC certificate has been obtained for vehicles however the PUC certificate for equipments is pending till date. Partly complied
7	At sensitive locations enclosures provided around generator set and concrete mixture or other noise producing machinery		NR	Concerned work not yet started. Will be considered at the time of specific work
8	Regular maintenance of noise producing equipment done		NR	Not required at present
9	Arrangement of drainage of waste water and arresting solid waste from waste water generated at construction site		NR	At present this is not required.
10	Felling of trees done (if necessary) with mitigation measures i.e. planting of three trees for each tree fell.		NR	There is no tree felling necessary till date
11	Local flooding from watering of excavation, flushing pipes etc.		NA	Not applicable at present due to nature of work
12	Ensure use of Personal Protective Equipment like helmet, gumboot, gloves, safety tape, nose musk and earplugs at work place	YES		Supply of complete set of PPE to labourers has been done. They are using PPE partly Partly complied
13	Provide Health and Safety training to all personnel and implement H & S plan	YES		Training for health and safety measures have been given to contractor. Regular awareness is necessary. The contractor has nominated one representative for H & S (safety of workers/public) to abide the H & S norms strictly.
14	Plan truck routes to avoid Town, narrow or congested roads, important or fragile buildings, religious and tourist sites	YES		The contractor has provided diversion routes to avoid such problems
15	Plan transport of waste to avoid peak traffic and tourist season	YES		The contractor has provided all necessary preventive measures to avoid this problem
16	Suitable short term traffic diversion and implementation of traffic management plan at construction site	YES		Till date work is going on outside the city parallel to road with proper caution boards, sign boards and safety tapes. traffic diversions will be provided at necessary points in future and as per requirement
17	Consideration of public safety - as per prescribed mitigation measures	YES		Barricading, safety tapes and delineators have been adequately provided at work fronts as public safety measures. Training has been given to contractor for implementation of public safety arrangement at work sites and contractor

Sr. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
				has nominated a person as Environment & Safety representative
18	Employ at least 50% of workforce from communities near sites	YES		Local labourers have been mainly engaged for construction works.
19	Continuous monitoring on implementation of mitigation measures	YES		Regular monitoring of implementation of mitigation measures have been ensured

Jaisalmer Waste Water

Project: Construction of Sewerage and waste stabilization pond Phase – I n Jaisalmer

Package No: RUSDIP/TR-01/ JSL/WW-01

Progress: laying of laterals in progress (Physical progress – 2 % as on 30.06.09)

Sr. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
PRECONSTRUCTION STAGE				
		YES	NO	
1	Site preparation work completed by IPIU including necessary clearance	YES		Consent for STP is obtained from State Pollution Control Board
CONSTRUCTION STAGE				
2	Establishment of temporary camps with sanitary and solid waste management arrangement	YES		Labour camps are made with drinking water facilities (bore well), separate toilets for ladies and gents.
3	Removal of overburden and excavated material from working site and use / preservation of the same – as per mitigation measures	YES		The contractor is stock piling the over burdens and excavated materials on nearby area along the trenches and most of these materials are being used for refilling. The unusable extra excavated materials and over burdens are being disposed at low laying area as per direction of ULB
4	Trenches have filled up and surface protection done, pavement surface restored	YES		Trenches have been filled up Pavement restoration work is not started. Partially complied
5	Water sprinkling at construction site for arresting dust	YES		Sprinkling of water is done regularly at construction site for arresting fugitive dust
6	Materials carrying vehicle are covered		NR	At present material carrying activities not started in full. Only pipes are transported at working site.
7	All vehicles and equipments mobilized to construction site and producing emission, have Pollution Control Board certification	YES		PUC certificate are collected for vehicles and Instruction are given to the contractor to collect PUC certificate for equipments also. Partly complied
8	At sensitive locations enclosures provided around generator set and concrete mixture or other noise producing machinery		NR	Concerned work not yet started. Will be considered at the time of specific work
9	Regular maintenance of noise producing equipment done		NR	Not required at present

Sr. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
10	Arrangement of drainage of waste water and arresting solid waste from waste water generated at construction site		NA	Not applicable at present due to nature of work
11	Felling of trees done (if necessary) with mitigation measures i.e. planting of three trees for each tree fell.		NR	There is no tree felling necessary till date
12	Local flooding from watering of excavation, flushing pipes etc.		NA	Not applicable at present due to nature of work
13	Laying of sewer pipeline crossing National Highways and railways - done without any disturbance through trench-less construction method		NR	Not applicable at present due to nature of work
14	Ensure use of Personal Protective Equipment like helmet, gumboot, gloves, safety tape, nose musk and earplugs at work place	YES		Labourers are using PPE Partly complied
15	Provide Health and Safety training to all personnel and implement H & S plan	YES		Training for Health and safety measures has been given to contractor. Regular awareness is necessary. The contractor has nominated one representative for H&S (safety of workers/public) to abide the H&S norms strictly.
16	Plan truck routes to avoid Town, narrow or congested roads, important or fragile buildings, religious and tourist sites		NR	As per present site condition - not required When work will start within the town, traffic diversion will be considered. All preventive measures will be taken when required.
17	Plan transport of waste to avoid peak traffic and tourist season	YES		As per present site condition - not required When work will start within the town, traffic diversion will be considered
18	Suitable short term traffic diversion and implementation of traffic management plan at construction site		NR	Till date work is going on outside the city parallel to road with proper caution boards, sign boards and safety tapes. traffic diversions will be provided at necessary points in future
19	Consideration of public safety - as per prescribed mitigation measures	YES		Barricading and use of safety tape are practiced at excavated site. Training has been given to contractor for implementation of public safety arrangement at work sites and contractor has nominated a person as health safety representative
20	Adequate facility provided for disposal of sewage sludge from STP	YES		Considered in DPR
21	Adequate provision for disposal of silt from sewer line	YES		Considered in DPR
22	Adequate provision for discharge of treated effluent to irrigated land		NA	As per site condition provision will be considered

Sr. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
23	Suitable measures considered as per mitigation plan for maintaining ecological stability – though plantation at impacted sites and maintaining green buffer zone		NA	Plantation will be considered after construction Not applicable at present
24	Suitable measures within the STP including acoustics panels and vegetation cover around STP		NA	Plantation will be considered after construction Not applicable at present
25	Employ at least 50% of workforce from communities near sites	YES		During earth work local labor will be hired
26	Continuous monitoring on implementation of mitigation measures	YES		Regular monitoring and quarterly reporting will be done

ALWAR

Water Supply

Project: Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the strengthening of distribution system and replacement of Leaking pipelines and rising main pipelines; Construction and Commissioning of Elevated Service Reservoirs.

Package No: RUSDIP/TR-01/ ALW/WS-02

Progress: - Concreting work going on- at **Tej Mandi** (Physical progress - 30% as on 30.06.09)

Concreting work going on- at **Scheme-2** (Physical progress - 30% as on 30.06.09)

Concreting work going on – at **Ashok Vihar** (Physical progress - 12% as on 30.06.09)

Concreting work going on – at **Manu Marg** (Physical progress - 15% as on 30.06.09)

Excavation work going on- at **Pratap School** (Physical progress – 20% as on 30.06.09)

Excavation work going on –at **Scheme -10** (Physical progress – 5% as on 30.06.09)

Pipe laying – under progress

(Overall physical progress- 15% upto 30.06.09)

Sr. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
		YES	NO	
PRECONSTRUCTION STAGE				
		YES	NO	
1	Site preparation work completed by IPIU including necessary clearance	YES		No clearances are required from Pollution Control Board. In most of the cases land made available by IPIU/ Line department
CONSTRUCTION STAGE				
2	Establishment of temporary camps with sanitary and solid waste management arrangement		NR	At present local labour employed. No need to establish camp at present
3	Removal of overburden and excavated material from working site and use / preservation of the same – as per mitigation measures	YES		The contractor is stock piling the overburden excavated materials on nearby grounds for refilling activities. Extra earth will be given to local people for filling up low laying areas
4	Water sprinkling at construction site for arresting dust	YES		Sprinkling of water is being done partially
5	Materials carrying vehicle are covered	YES		At present material carrying activities started and most of the vehicles are covered while transportation of materials
6	All vehicles and equipments mobilized to construction site and producing emission, have Pollution Control Board certification	YES		Few PUC certificates are submitted by contractors and remaining will be submitted soon
7	At sensitive locations enclosures provided around generator set and concrete mixture or other noise producing machinery		NO	Construction is going on. Contractor will arrange very soon
8	Regular maintenance of noise producing equipment done		NO	It will be done very soon
9	Arrangement of drainage of waste water and arresting solid waste from waste water generated at construction site		NA	Not applicable at present Instruction given to the contractor and contractor is ready to make the arrangement

Sr. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
10	Felling of trees done (if necessary) with mitigation measures i.e. planting of three trees for each tree fell.		NR	There is no tree felling necessary
11	Local flooding from watering of excavation, flushing pipes etc.		NA	Not applicable at present. Instruction is given to the contractor for proper arrangement to avoid the water flooding at the site.
12	Ensure use of Personal Protective Equipment like helmet, gumboot, gloves, safety tape, nose musk and earplugs at work place	YES		Contractor using the safety equipment like helmet as per the requirement of site Partially complied
13	Provide Health and Safety training to all personnel and implement H & S plan	YES		Construction work started. Training has been given to contractor. Regular awareness is necessary. The contractor is asked to nominate one representative for H&S (safety of workers/public) and instructed to abide the H&S norms strictly. Partially complied
14	Plan truck routes to avoid Town, narrow or congested roads, important or fragile buildings, religious and tourist sites	YES		The trucks following the roads having less traffic and material is being transported during less traffic hours
15	Plan transport of waste to avoid peak traffic and tourist season	YES		Waste material transport during off peak hours But as per present site condition contractor partially using proper diversion & cautionary board to ensure safe work activity on site
16	Suitable short term traffic diversion and implementation of traffic management plan at construction site		NA	Works will be carried out without causing any congestion to the existing traffic condition.
17	Consideration of public safety - as per prescribed mitigation measures	YES		Necessary safety measures are being adopted. Barricading & safety ribbon used partially. Training has been given to contractor for implementation of public safety arrangement at work sites
18	Employ at least 50% of workforce from communities near sites	YES		At present most of the workforce is hired locally.
19	Continuous monitoring on implementation of mitigation measures	YES		Regular monitoring and quarterly reporting will be continued

Water Supply

Project: Replacement of in-efficient pumping machinery etc.; providing and installation of chlorination equipments, etc. in Alwar
Package No: RUSDIP/TR-01/ALW-JHL/WS-01 Lot-1 (Alwar)
Progress: Pump replacement is under progress, rising main pipeline laying under progress
(Physical progress - 98% as on 30.06.09)

Sr. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
		YES	NO	
PRECONSTRUCTION STAGE				
1	Site preparation work completed by IPIU including necessary clearance	YES		No clearances are required from Pollution Control Board. In most of the cases land made available by IPIU.
CONSTRUCTION STAGE				
2	Establishment of temporary camps with sanitary and solid waste management arrangement		NR	At present local labour employed. No need to establish camp at present
3	Removal of overburden and excavated material from working site and use / preservation of the same – as per mitigation measures	YES		The contractor is stock piling the overburden excavated materials on nearby grounds for refilling activities. Extra earth will be given to local people for filling up low laying areas
4	Water sprinkling at construction site for arresting dust	YES		The contractor is stock piling the overburden excavated materials on nearby grounds for refilling activities. Extra earth will be given to local people for filling up low laying areas Partially water sprinkler in use
5	Materials carrying vehicle are covered		NR	No material carrying vehicles are covered-not required as per nature of materials
6	All vehicles and equipments mobilized to construction site and producing emission, have Pollution Control Board certification	YES		Partially complied
7	At sensitive locations enclosures provided around generator set and concrete mixture or other noise producing machinery		NA	Will be considered at the time of specific work
8	Regular maintenance of noise producing equipment done		NR	Not required at present
9	Arrangement of drainage of waste water and arresting solid waste from waste water generated at construction site		NA	Not applicable at present due to nature of work
10	Felling of trees done (if necessary) with mitigation measures i.e. planting of three trees for each tree fell.		NR	There is no tree felling necessary till date
11	Local flooding from watering of excavation, flushing pipes etc.		NA	Not applicable at present due to nature of work
12	Ensure use of Personal Protective Equipment like helmet, gumboot, gloves,		NR	Not required at present due to nature of work

Sr. No.	Environmental components related to project activities	Compliance		Explanation (in case of done or not done justification necessary)
	safety tape, nose musk and earplugs at work place			
13	Provide Health and Safety training to all personnel and implement H & S plan	YES		Training has been given to contractor. Regular awareness is necessary. The contractor is asked to nominate one representative for H&S (safety of workers/public) and instructed to abide the H&S norms strictly. Partially complied
14	Plan truck routes to avoid Town, narrow or congested roads, important or fragile buildings, religious and tourist sites	YES		As per present site condition contractor using proper diversion and cautionary board to ensure safe work activity at site
15	Plan transport of waste to avoid peak traffic and tourist season		NR	As per present site condition - not required
16	Suitable short term traffic diversion and implementation of traffic management plan at construction site		NA	Works will be carried out without causing any congestion to the existing traffic condition. Traffic diversions will be provided at necessary points in future (if required)
17	Consideration of public safety - as per prescribed mitigation measures	YES		Works will be carried out without causing any congestion to the existing traffic condition. Public safety like use of caution board , safety tape is partially complied
18	Employ at least 50% of workforce from communities near sites	YES		At present most of the workforce is hired locally.
19	Continuous monitoring on implementation of mitigation measures	YES		Regular monitoring and quarterly reporting will be continued

EMP for other projects at Alwar- Field work not yet started at present

- **Waste water** - Providing, Laying, Jointing, Testing and Commissioning part of outfall sewer of 1000 mm dia HDPE pipe etc. in Alwar.
{RUSDIP/ TR-01/ ALW/WW/01- Lot2}

ANNEXURE 3**Instructions for Contractor- Environmental Safeguard**

- Setting up camp office with proper sanitation condition, solid waste management facility and sufficient drinking water supply. Non cutting of trees during setting up camp
- Removal / disposal of overburden earth/ stone materials at earliest without any accumulation at working sites
- Proper disposal of other construction waste
- Proper storage of construction materials
- Requirement of blasting permission with specification of blasting time as required
- Filling up trenches and open excavated part before monsoon
- Felling of trees if done to be compensated by plantation
- Scheduling of work without any social impact – movement of pedestrian (particularly during tourist/ festive seasons) or other disturbances etc.
- Regular water sprinkling at construction site
- Covering of materials carrying vehicles
- Personnel safety of workforce – use of ear plugs, nose musk, safety belt, helmet, gloves, gumboots etc at working sites
- Instruction to material supplier/ contractor to arrange pollution under control certificate for material carrying vehicles
- Regular maintenance of noise producing machinery
- Providing enclosure for noise producing equipment like generator, concrete mixture
- Implementation of traffic diversion measures including use of safety tape/ barricade/ caution board at working sites
- Proper drainage of waste water/ rain water from working sites
- Arrangement of common medicine and Fast Aid box at camp site
- Awareness program on HIV/AIDS

ANNEXURE 4

Handling and disposal plan for WTP sludge for Jhalawar

1. Project & location of proposed plant:

Project Name: Water Supply - Improvement of intake structures; Replacement of pumping machinery; **rehabilitation of old WTP's**; Providing, Laying, Jointing, Testing & Commissioning of water pipe line for the distribution system and rising mains; Construction and Commissioning of SRs

Package No.: RUSDIP/TR-1/JHL/WS-02

The proposed rehabilitation work for the existing WTP, located at Radi – ke – Balaji, Jhalawar.

2. Existing environmental status in and around the treatment plant:

The existing WTP is located away from human settlements in a barren land with no vegetation nearby. Some Guava (Amrut) farms are located 100 – 200 away from the existing WTP. There is no forest area, water body and river located near to the site. Radi – ke- balaji (temple) is located approximately 150 meters away from the existing WTP.

3. Amount of sludge to be generated (daily/ monthly/ annually):

Approximately an amount of 0.75 - 1 m³ of sludge being generated

4. Handling and disposal plan as per DPR/ or modified plan:

Presently the generated sludge is being disposed to the nearby small drain. Construction of one ESR at WTP site, few mechanical and civil works was proposed in this package and there is no proposal for enhancing the existing capacity of WTP. Hence there is no additional disposal plan given for sludge.

5. Requirement of permission from Pollution Control Board for disposal of sludge:

No permission is required for rehabilitation of old WTP plant.

6. Disposal plan (including approx. amount) for debris/ empty chlorine cylinder/ filter bed of water treatment plan:

Not Applicable

7. Permission regarding disposal of debris etc.

Likely there is no major generation of debris. Constructional debris will be utilized for backfilling.

Handling and disposal plan for STP sludge for Jaisalmer

1. Project & location of proposed plant:

Project Name: Waste water - Sewerage and Waste stabilization Ponds in Phase-I in Jaisalmer

Package No.: RUSDIP/TR-01/ JSL/WW-01

At present, the Jaisalmer town lack of proper sewerage system and there is no Sewage Treatment plant. A new Sewage treatment plant (STP) of 10 MLD capacity has been proposed on 31.78 ha area of Kishangad village situated towards North East of Jaisalmer town, about 8 km away along Jetway Road.

2. Existing environmental status in and around the treatment plant:

The existing proposed area is non productive land and devoid of any significant environmental features within or around the site. The proposed STP site is located about 8 Km away from Jaisalmer town and there is no human settlements in the vicinity of the proposed site. No significant vegetation is recorded around the proposed STP site. There is no forest area, water body and river located near to the project site.

3. Amount of sludge to be generated (daily/ monthly/ annually)

Approximately an amount of 2000 m³ of sludge is estimated to be generated on annual basis.

4. Handling and disposal plan as per DPR/ or modified plan:

The sludge generated from STP will mainly organic in nature, which acts as excellent organic manure. The sludge will be allowed to dry out naturally in the pond and the solid sludge shall be collected periodically from the pond manually. The collected sludge shall be transported through a covered containers/vehicles to the landfill site, where the composting plant is proposed,. The handling and transporting of sludge will be done in conformation with the CPCB/MoEF requirements. The sludge shall be tested for bacteria or other pathogens. The solid sludge shall be properly packed and sold to the farmer as manure after necessary treatment, if required.

5. Requirement of permission from Pollution Control Board for disposal of sludge:

Only consent for establishment and operation of STP shall be required. The consent for establishment of STP has already been obtained.

6. Disposal plan (including approx. amount) for debris/ empty chlorine cylinder/ filter bed of water treatment plan:

Not Applicable since no new WTP is proposed under the said project.

7. Permission regarding disposal of debris etc.

No disposal of debris is anticipated during construction of STP. During excavation of ponds overburden soils will be generated. The constructional debris and soil will be reused for backfilling as well as for filling of low laying areas within the proposed site for filling up undulations. The top soil unsuitable for construction shall be used for plantation around the STP.

ANNEXURE 5

Testing parameters

- Air pollution monitoring – for STP- 2 locations nearby STP site for 4 days 24 hrs. for SPM, RSPM, SO₂, NO_x and CO
- Surface water quality- Atleast 2 surface water quality (pond, river, *nala*) samples in and around STP (if location exist)

Parameter
Turbidity NTU
pH
Total Suspended Solid mg/l
Total Dissolved Solid mg/l
Total Hardness as CaCO ₃ mg/l
Dissolved Oxygen mg/l
Biological Oxygen Demand mg/l
Chemical Oxygen Demand mg/l
Chloride mg/l
Sulphate mg/l
Nitrate mg/l
Sodium mg/l
Potassium mg/l
Calcium mg/l
Magnesium mg/l
Iron mg/l
Manganese mg/l
Cadmium mg/l
Arsenic mg/l
Chromium mg/l
Copper mg/l
Mercury mg/l
Lead mg/l
Selenium mg/l
Aluminium mg/l
Zinc mg/l
Boron mg/l
Fluorine mg/l
Chlorine (residual free) mg/l
Phenolic Compound mg/l
Cyanide mg/l
Phosphate mg/l

ANNEXURE 6

PUBLIC CONSULTATION ON ENVIRONMENTAL ISSUES DURING CONSTRUCTION/ IMPLEMENTATION

JAISALMER

A Public consultation meeting was held on 26th June, 2009 in Dhiba Para mohalla in Ward No. 10 of Jaisalmer town where laying of sewer line is under progress. The public consultation was aimed to understand the public opinion about the project and to identify the significant environmental issues encountered during the execution of works in order to address those unwanted issues properly and to record their suggestions and concerns to be taken care off in

PLACE OF CONSULTATION	Dhiba Para, Ward No.:-10
DATE OF CONSULTATION	26.06.09
PROJECT NAME	Waste Water
PACKAGE NO.	RUSDIP/TR-01/JSL/WW-01
NAME OF THE FIELD SUPERVISOR	Mr. Anil Kumar

future.

SL.NO.	Points Discussed	Yes	No	Opinion Expressed
01.	Whether dust control measures are taken up by contractor as and when required?	√		The contractor is applying water sprinkling to control dust during construction and dust suppression activity is satisfactory
02.	Whether traffic movement affected during construction?	√		This is observed to some extent but is manageable since alternate routes are available.
03.	Is there any problem due to influx of outside people (labourer)?		√	Local labourers are engaged
04.	Is there any problem, if storage area is in public place?		√	No such problem has arrived
05.	Is there any problem during transportation of materials?		√	The problem is to some extent but manageable
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?		√	No such operating equipments have been observed, however if this is brought to the site proper safety precautionary measures required.
07.	Whether construction work affects local drainage system/ water supply system?		√	Not yet, may occur in future and the Contractor should make suitable arrangement in advance for immediately repairing in case of any damage of these public utilities Some septic tanks are coming in the route of pipelines and needs to be replaced properly prior to construction
08.	Whether movement of locals/pedestrian affected during construction?	√		Some problems in movements are there, but manageable through alternate routes.
09.	Whether generated noise affects the normal life of locals?		√	No as such effect
10.	Overall opinion on construction (Excellent/ Satisfactory/ Below			Satisfactory

SL.NO.	Points Discussed	Yes	No	Opinion Expressed
	satisfaction/ Poor)			

Following persons were present during consultation:

SL.NO.	NAME OF THE PERSONS	ADDRESS
1.	Mr. Imamdin	Dhiba Para, Ward No.:-10
2.	Mr. Atta Mohmad	Dhiba Para, Ward No.:-10
3.	Mr. Nabi Began	Dhiba Para, Ward No.:-10
4.	Mr. Kamal Khan	Dhiba Para, Ward No.:-10
5.	Mr. Rahim Khan	Dhiba Para, Ward No.:-10
6.	Mr. Samsheer Khan	Dhiba Para, Ward No.:-10
7.	Mr. Navrang Khan	Dhiba Para, Ward No.:-10

The local residents, where work is in progress, have expressed favorable remarks for the project. They are of the opinion that proper drainage and sewerage system is very much required in Jaisalmer town and the project is in the benefit of the residents. They are mostly satisfied with the safeguard measures taken by the Contractor so far. However, they expressed their difficulty to some extent due to excavations in narrow lanes as it interferes with the movement of public in the area but so far is manageable through use of alternate routes. The local residents are extending their cooperation with the Contractor and have not significant complaints against the working of contractor. The local residents have shown concern about damages of utilities such as water supply system, septic tanks coming within the alignment of pipelines, and local drains. They are of the opinion that the residents should be informed in advance if water supply is required to be stopped for facilitating the works and an alternative arrangements must be ensured in the area. Another issue raised was regarding septic tanks coming in close vicinity or within the proposed alignment. They want proper safety arrangements prior to excavation to avoid any damage to such structures.

JHALAWAR –JHALARAPATAN

Consultation 1:

PLACE OF CONSULTATION	Jhalawar – Near Housing Board Colony ESR
DATE OF CONSULTATION	29.06.09
PROJECT NAME	Jhalawar – J.Patan Water Supply Scheme
PACKAGE NO.	RUSDIP/TR-01/ JHL/WS-02
NAME OF THE FIELD SUPERVISORS	S. Esakki Raj / karthick. R
NAME OF THE PERSONS	Mr. Suresh Kashyap
ADDRESS	No.1H-7, Housing Board Colony, Jhalawar.

S.No.	POINTS DISCUSSED	PUBLIC OPINION
01.	Whether dust control measures are taken up by contractor as and when required?	There is no dust problem to the surrounding area
02.	Whether traffic movement affected during construction?	No, there is no hindrances to the traffic during the constructional activities
03.	Is there any problem due to influx of outside people (laborer)?	No, there is no problem due to the constructional labors.
04.	Is there any problem, if storage area is in public place?	All constructional materials stored inside premises of the constructional site. Hence there is no problem to the public places for access.
05	Is there any problem during transportation of materials?	No problem rose due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	There is no problem due to the usage of concrete mixture/ hot mix plant or movement of equipment like JCB.
07	Whether construction work affects local drainage system/ water supply system?	There is no such waste generated due to the constructional activities.
08	Whether movement of locals/pedestrian affected during construction?	There is no impact on the movement of locals/pedestrians.
09	Whether generated noise affects the normal life of locals?	No such impacts due to noise generated during constructional time.
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

Consultation 2:

PLACE OF CONSULTATION	Jhalawar - Near Housing Board Colony ESR
DATE OF CONSULTATION	29.06.09
PROJECT NAME	Jhalawar – J.Patan Water Supply Scheme
PACKAGE NO.	RUSDIP/TR-01/ JHL/WS-02
NAME OF THE FIELD SUPERVISORS	S. Esakki Raj / karthick. R
NAME OF THE PERSONS	Mr. Wasim
ADDRESS	Dairy Shop, Near Housing Board ESR, No.2A-10, Housing Board Colony, Jhalawar.

S.No.	POINTS DISCUSSED	PUBLIC OPINION
01.	Whether dust control measures are taken up by contractor as and when required?	No dust problem to the nearby area
02.	Whether traffic movement affected during construction?	No hindrances to the existing traffic during the constructional activities
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the constructional labors.
04.	Is there any problem, if storage area is in public place?	No hindrance to the public places due to the storage of constructional materials.

05	Is there any problem during transportation of materials?	No problem rose due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	There is no problem due to the usage of concrete mixture/ hot mix plant or movement of equipment like JCB.
07	Whether construction work affects local drainage system/ water supply system?	No such waste generated due to the constructional activities.
08	Whether movement of locals/pedestrian affected during construction?	No hindrances caused to the movement of locals/pedestrians.
09	Whether generated noise affects the normal life of locals?	No distinguished noise generated during constructions.
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

Consultation 3:

PLACE OF CONSULTATION	Jhalawar – Opp. to Lab Building / Balaji-ki-Chatrri ESR
DATE OF CONSULTATION	30.06.09
PROJECT NAME	Jhalawar – J.Patan Water Supply Scheme
PACKAGE NO.	RUSDIP/TR-01/ JHL/WS-02
NAME OF THE FIELD SUPERVISORS	S. Esakki Raj / Karthick. R
NAME OF THE PERSONS	Mr. Wasim Khan
ADDRESS	Rudraksh Enterprises, Kota Stone Distributors, Opp. to Balaji – ki- Chatrri PHED Building, Jhalawar.

S.No.	POINTS DISCUSSED	PUBLIC OPINION
01.	Whether dust control measures are taken up by contractor as and when required?	No dust problem to the adjacent areas.
02.	Whether traffic movement affected during construction?	No hindrances to the existing traffic condition due to constructional activities
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the constructional labors.
04.	Is there any problem, if storage area is in public place?	No storage of constructional materials in the public places.
05	Is there any problem during transportation of materials?	No problems noticed due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	No such emissions noted in the proximate areas.
07	Whether construction work affects local drainage system/ water supply system?	No such impacts to the existing systems.
08	Whether movement of locals/pedestrian affected during construction?	No hindrances caused to the movement of locals/pedestrians.
09	Whether generated noise affects the normal life of locals?	No distinguished noise generated during constructions.
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

Consultation 4:

PLACE OF CONSULTATION	Jhalawar - Opp. to Lab Building / Balaji-ki- Chatrri ESR
DATE OF CONSULTATION	30.06.09
PROJECT NAME	Jhalawar – J.Patan Water Supply Scheme
PACKAGE NO.	RUSDIP/TR-01/ JHL/WS-02
NAME OF THE FIELD SUPERVISORS	S. Esakki Raj / karthick. R
NAME OF THE PERSONS	Mr. Istyath Ali
ADDRESS	Standard Auto Centre & Service,

	Opp. to Balaji – ki- Chatri PHED Building, Jhalawar.
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S.No.	POINTS DISCUSSED	PUBLIC OPINION
01.	Whether dust control measures are taken up by contractor as and when required?	No dust problem due to constructional activities.
02.	Whether traffic movement affected during construction?	No, there is no affect to the existing traffic conditions.
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the constructional labors.
04.	Is there any problem, if storage area is in public place?	No such problems and all materials stored inside the constructional site.
05.	Is there any problem during transportation of materials?	No problems noticed due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	No emissions due to the running of concrete mixture/ hot mix plant.
07.	Whether construction work affects local drainage system/ water supply system?	No such impacts to the existing systems.
08.	Whether movement of locals/pedestrian affected during construction?	No hindrances caused to the movement of locals/pedestrians.
09.	Whether generated noise affects the normal life of locals?	No distinguished noise generated during constructions.
10.	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

Consultation 5:

PLACE OF CONSULTATION	Jhalawar – Khandiya Colony – Distribution Line works
DATE OF CONSULTATION	30.06.09
PROJECT NAME	Jhalawar – J.Patan Water Supply Scheme
PACKAGE NO.	RUSSIP/TR-01/ JHL/WS-02
NAME OF THE FIELD SUPERVISORS	S. Esakki Raj / karthick. R
NAME OF THE PERSONS	Mr. Om Prakash
ADDRESS	Kandiya Colony, Kanpur Road, Jhalawar.

S.No.	POINTS DISCUSSED	PUBLIC OPINION
01.	Whether dust control measures are taken up by contractor as and when required?	No dust problem due to constructional activities.
02.	Whether traffic movement affected during construction?	Only some temporary impact and which is inevitable.
03.	Is there any problem due to influx of outside people (laborer)?	No problem caused due to constructional labors.
04.	Is there any problem, if storage area is in public place?	No such problems.
05.	Is there any problem during transportation of materials?	No problems noticed due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	Only pipe laying works.
07.	Whether construction work affects local drainage system/ water supply system?	No such impacts to the existing systems.
08.	Whether movement of locals/pedestrian affected during construction?	No hindrances caused to the movement of locals/pedestrians.
09.	Whether generated noise affects the normal life of locals?	No distinguished noise generated during constructions.
10.	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

Consultation 6:

PLACE OF CONSULTATION	Jhalawar - Khandiya Colony – Pipe laying works
DATE OF CONSULTATION	29.03.09
PROJECT NAME	Jhalawar – J.Patan Water Supply Scheme
PACKAGE NO.	RUSDIP/TR-01/ JHL/WS-02
NAME OF THE FIELD SUPERVISORS	S. Esakki Raj / karthick. R
NAME OF THE PERSONS	Mr. Kadiyalal Prajapathi
ADDRESS	Near RTO Office, Kandiya Colony, Kanpur Road, Jhalawar.

S.No.	POINTS DISCUSSED	PUBLIC OPINION
01.	Whether dust control measures are taken up by contractor as and when required?	No dust emissions due to pipe laying activities.
02.	Whether traffic movement affected during construction?	Only temporary interference.
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the constructional labors.
04.	Is there any problem, if storage area is in public place?	No such problems and all materials stored inside the constructional site.
05.	Is there any problem during transportation of materials?	No problems noticed due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	No emissions due to the running of concrete mixture/ hot mix plant.
07.	Whether construction work affects local drainage system/ water supply system?	No such impacts to the existing drainage and water supply systems.
08.	Whether movement of locals/pedestrian affected during construction?	No hindrances caused to the movement of locals/pedestrians.
09.	Whether generated noise affects the normal life of locals?	No distinguished noise generated during constructions.
10.	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

Consultation 7:

PLACE OF CONSULTATION	Jhalawar – Near Dhanwara ESR site.
DATE OF CONSULTATION	29.03.09
PROJECT NAME	Jhalawar – J.Patan Water Supply Scheme
PACKAGE NO.	RUSDIP/TR-01/ JHL/WS-02
NAME OF THE FIELD SUPERVISORS	S. Esakki Raj / karthick. R
NAME OF THE PERSONS	Mr. Jamil
ADDRESS	Near Dhanwara ESR, Dhanwara, Jhalawar.

S.No.	POINTS DISCUSSED	PUBLIC OPINION
01.	Whether dust control measures are taken up by contractor as and when required?	No dust problem due to constructional activities.
02.	Whether traffic movement affected during construction?	No, there is no affect to the existing traffic conditions.
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the constructional labors.
04.	Is there any problem, if storage area is in public place?	No such problems.

05	Is there any problem during transportation of materials?	No problems noticed due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	No emissions due to the running of concrete mixture/ hot mix plant.
07	Whether construction work affects local drainage system/ water supply system?	No such impacts to the existing systems.
08	Whether movement of locals/pedestrian affected during construction?	No hindrances caused to the movement of locals/pedestrians.
09	Whether generated noise affects the normal life of locals?	No distinguished noise generated during constructions.
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

Consultation 8:

PLACE OF CONSULTATION	Jhalawar – Dhanwara - ESR site.
DATE OF CONSULTATION	29.06.09
PROJECT NAME	Jhalawar – J.Patan Water Supply Scheme
PACKAGE NO.	RUSDIP/TR-01/ JHL/WS-02
NAME OF THE FIELD SUPERVISORS	S. Esakki Raj / karthick. R
NAME OF THE PERSONS	Mr. Emraj
ADDRESS	Near Dhanwara ESR, Dhanwara, Jhalawar.

S.No.	POINTS DISCUSSED	PUBLIC OPINION
01.	Whether dust control measures are taken up by contractor as and when required?	No dust problem caused due to the constructional works.
02.	Whether traffic movement affected during construction?	No affect on the existing traffic.
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the constructional labors.
04.	Is there any problem, if storage area is in public place?	No such problems and all materials stored inside the constructional site.
05	Is there any problem during transportation of materials?	No problems noticed due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	No emissions due to the running of concrete mixture/ hot mix plant.
07	Whether construction work affects local drainage system/ water supply system?	No such impacts to the existing systems.
08	Whether movement of locals/pedestrian affected during construction?	No hindrances caused to the movement of locals/pedestrians.
09	Whether generated noise affects the normal life of locals?	No distinguished noise generated during constructions.
10	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

Consultation 9:

PLACE OF CONSULTATION	Jhalawar – Near existing WTP/Radi –ki- Balaji ESR
DATE OF CONSULTATION	30.06.09
PROJECT NAME	Jhalawar – J.Patan Water Supply Scheme
PACKAGE NO.	RUSDIP/TR-01/ JHL/WS-02
NAME OF THE FIELD SUPERVISORS	S. Esakki Raj / karthick. R
NAME OF THE PERSONS	Mr. Suresh Chand

ADDRESS	Near backside of Radi –ki- Balaji, Jhalawar.
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S.No.	POINTS DISCUSSED	PUBLIC OPINION
01.	Whether dust control measures are taken up by contractor as and when required?	No dust problem due to constructional activities.
02.	Whether traffic movement affected during construction?	No, impact on the existing traffic conditions.
03.	Is there any problem due to influx of outside people (laborer)?	No problem identified due to constructional labors.
04.	Is there any problem, if storage area is in public place?	No such problems and all materials stored inside the constructional site.
05.	Is there any problem during transportation of materials?	No problems noticed due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	No emissions due to the running of concrete mixture/ hot mix plant.
07.	Whether construction work affects local drainage system/ water supply system?	No such impacts to the existing systems.
08.	Whether movement of locals/pedestrian affected during construction?	No hindrances caused to the movement of locals/pedestrians.
09.	Whether generated noise affects the normal life of locals?	No distinguished noise generated during constructions.
10.	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

Consultation 10:

PLACE OF CONSULTATION	Jhalawar - Near existing WTP/Radi –ki- Balaji ESR
DATE OF CONSULTATION	29.06.09
PROJECT NAME	Jhalawar – J.Patan Water Supply Scheme
PACKAGE NO.	RUSDIP/TR-01/ JHL/WS-02
NAME OF THE FIELD SUPERVISORS	S. Esakki Raj / karthick. R
NAME OF THE PERSONS	Mr.Babulal Kashyap
ADDRESS	Near Radi –ki- Balaji, Jhalawar.

S.No.	POINTS TO BE DISCUSSED	REMARKS
01.	Whether dust control measures are taken up by contractor as and when required?	No dust problem due to constructional activities.
02.	Whether traffic movement affected during construction?	No interference to the existing traffic conditions.
03.	Is there any problem due to influx of outside people (laborer)?	No problem due to the constructional labors.
04.	Is there any problem, if storage area is in public place?	No such problems and all materials stored inside the constructional site.
05.	Is there any problem during transportation of materials?	No problems noticed due to the transportation of constructional materials.
06.	Is there any problem due to the running of concrete mixture/ hot mix plant or movement of equipment like JCB?	No emissions due to the running of concrete mixture/ hot mix plant.
07.	Whether construction work affects local drainage system/ water supply system?	No such impacts to the existing systems.
08.	Whether movement of locals/pedestrian affected during construction?	No hindrances caused to the movement of locals/pedestrians.
09.	Whether generated noise affects the normal life of locals?	No distinguished noise generated during constructions.
10.	Overall opinion on construction (Excellent/ Satisfactory/ Below satisfaction/ Poor)	Satisfactory

The major outcome of the consultation is as follows:-

- There is no generation of dust and other related issues to the nearby residents due to the constructional activities
- No interference caused to the existing traffic conditions due to the constructional activities and trucks carrying constructional materials
- Majority of constructional labors are hired locally and there is no problem identified due to influx of constructional labors
- All materials stored inside the premises of work sites without any hindrance to public places
- There is no major emission during the usage of concrete mixture/ hot mix plant or movement of equipment like JCB. But temporary disturbances of low magnitude is noted, though which is inevitable considering essentiality of the project
- Presently no impact caused to the existing drainage and water supply system
- There is no disturbances created due to generation of noise during constructional activities

In overall the local people are satisfied over the present safeguard (mitigation) measures considered by the contractor.

PHOTO ILLUSTRATION

ALWAR



Photo 1: Column casting at TEJ MANDI OHSR for ALW/WS/02- Utilisation of PPE like helmet, safety belt noted



Photo 2: Safety ribbon, barricade at Pratap school, water supply project pack WS-02



Photo 3: First Aid Box- at Tej Mandi, OHSR site



Photo 4: Covered materials during Transportation- Tej Mandi site



Photo 5: Utilisation of helmet at OHSR site



Photo 6: Safety awareness for labourer

JHALAWAR



Photo 7: Works under progress at Housing Board Colony ESR- utilization of PPE noted



Photo 8: Pipe laying Works Near NH 12- safety ribbon and use of PPE noted



Photo 9: Railing works under progress in Pipaji – ka-Deh, Intake site, Jhalawar



Photo 10: Construction works under progress at Housing Board colony ESR- utilization of safety belt noted



Photo 11: Constructional works under progress at Balaji – ki Chattri ESR - personal safety considered



Photo 12: Public consultation Housing Board colony

JAISALMER



Photo 13: Use of PPE at water supply Package Pipe laying site- Jaisalmer



Photo 14: Use of PPE at Sewerage project site - pipe laying work in progress



Photo 15: Caution Board – at project site



Photo 16: Barricading and movement platform at project site