



Environmental Monitoring Report

Project Number: 47229-001
May 2015

IND: Uttarakhand Emergency Assistance Project

Submitted by

Project implementation Unit -Tourism (Garhwal), UEAP, Dehradun

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Dated: **12/5/15**

To,
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Indian Resident Mission
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Sub : ADB Loan No. 3055-IND, UEAP (Tourism Sector Subprojects) Submission of Semi-Annual Environmental Monitoring Report (July 2014 to December 2014)

Dear Madam,

Reference to the subject matter, kindly find enclosed herewith one copy in hard form and CD of "Semi-Annual Environmental Monitoring Report (July 2014 to December 2014)" for Uttarakhand Emergency Assistance Program (Tourism Sector Subprojects) for your information and record.

Yours sincerely

Encl: As above

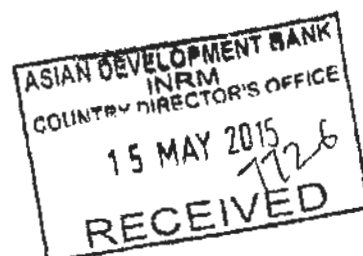
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Semi-Annual Environmental Monitoring Report

(July 2014-December 2014)

Loan Number : 3055-INDIA

Month Year: December 2014

IND: Uttarakhand Emergency Assistance Programm (Tourism Sector Subprojects)

Prepared by:- State Disaster Management Authority, Government of Uttarakhand, for
the Asian Development Bank

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ABBREVIATIONS

ADB	-	Asian Development Bank
BOD	-	Biological Oxygen Demand
CO	-	Carbon monoxide
CPCB	-	Central Pollution Control Board
DSC	-	Design and Supervision Consultant
EA	-	Executing Agency
EAC	-	Expert Appraisal Committee
EARF	-	Environment Assessment and Review Framework
EIA	-	Environmental Impact Assessment
EMP	-	Environment Management Plan
ES	-	Environmental Specialist
FPIU	-	Field PIU, Kumaon Mandal Vikas Nigam
FRP	-	Fiber Reinforced Plastic
GC	-	General Conditions
GMVN	-	Garhwal Mandal Vikas Nigam
Gol	-	Government of India
GoUK	-	Government of Uttarakhand
IDIPT	-	Infrastructure Development Investment Program for Tourism
IEE	-	Initial environmental examination
INR	-	Indian Rupee
KMVN	-	Kumaon Mandal Vikas Nigam
PUC	-	Pollution under Control Certificate
MLD	-	Million Liters per day
MoEF&CC	-	Ministry of Environment, Forests and Climate Change
MFF	-	Multi- Tranche Financing Facility
NGO	-	Non-Governmental Organization
NO _x	-	Nitrogen oxide
PD	-	Project Director
PIU	-	Project Implementation Unit
PM	-	Particulate Matter
PMU	-	Project Management Unit
PUF	-	Polyurethane Foam
RP	-	Resettlement Plan
RPM	-	Reparable Particulate Matter
SC	-	Scheduled Castes
SEAC	-	State Expert Appraisal Committee
SEIAA	-	State Environmental Impact Assessment Authority
SO ₂	-	Sulphur- di- oxide
SPM	-	Suspended Particulate Matter
SPS	-	Safeguard Policy Statement
ST	-	Scheduled Tribe
UEPPCB	-	Uttarakhand Environmental Protection and Pollution Control Board
UJS	-	Uttarakhand Jal Sansthan

I. INTRODUCTION

A. Background

1. Uttarakhand being a tourist and pilgrimage State attracts a large number of tourist and pilgrims. A major disaster during 15-17th June 2013 resulted in severe damages in several parts of Uttarakhand, which has a mountainous terrain and a fragile geology. Several towns have been washed away by the unprecedented flash floods and landslides, and a large number of houses, public buildings, roads, bridges, urban, rural, and tourism infrastructure, power generation and distribution facilities have been damaged. The impact on the affected population due to the loss of connectivity has been manifold.
2. Based on the request of India, a Rapid Joint Damage and Needs Assessment (RJDNA) was undertaken by Asian Development Bank (ADB) and the World Bank. ADB agreed to assist the Government of India (GOI) with reconstruction and rehabilitation efforts for which the Uttarakhand Emergency Assistance (Sector) Project (UEASP) has been formulated as a multi-sector emergency loan in sector loan modality. The executing agency (EA) for the UEASP (Tourism Sector) is Government of Uttarakhand (GOU) and State Disaster Management Authority (SDMA). The primary implementing agencies is (Department of Tourism (DOT) through Kumaon Mandal Vikas Nigam Limited and Garhwal Mandal Vikas Nigam Limited for tourism infrastructure,
3. Under tourism sub project rehabilitation and reconstruction of affected tourism infrastructure in the 3 affected districts (Chamoli, Rudraprayag and Uttarkashi) of Garhwal Region were undertaken by Garhwa Manadal Vikas Nigam and in 2 districts (Bageshwar and Pithoragarh) of Kumoan region were undertaken by Kumoan Manadal Vikas Nigam in the state i.e. Bageshwar, Chamoli, Pithoragarh, Rudrapraya and Uttarkashi were undertaken.

B. Project Objectives:

4. Tourism was worst hit in the state with destruction of tourism infrastructure on one hand and loss of livelihoods on the other due to heavy rains in June, 2013. The tragedy besides claiming thousands lives badly hit the industry stakeholders especially, those involved in Religious and Adventure Tourism on account of the major portion of the season of the Char Dham Yatra being washed out. According to estimates from the Uttarakhand Hotel and Restaurant Association, the floods washed away over 100 small hotels which were constructed right on the riverbanks.
5. As a part of Tourism Restoration Drive, it was decided to construct dwelling units in the form of cottages/ tented accommodation made of eco- friendly FRP material in disaster affected Districts. This would compensate for the loss of tourist accommodation units and would involve minimum concrete works thus saving time and would be in tune with the ecological balance of the region. It would also strengthen state's coping mechanism and help in reviving tourism in the affected region. Thus construction of environmentally sustainable, affordable

accommodation for tourists with eco-friendly material would help in bridging the gap in the shortage of accommodation in the State during the tourist season. Provision of affordable accommodation to tourists at various destinations in the form of cottages which are aesthetically and eco-friendly designed, taking into consideration the natural landscape of the area will be a boost for tourism sector. These accommodation facilities would encourage tourists to stay at most frequented locations. These huts can be either extension to existing Tourist Rest Houses or new units, en route some popular destinations in the affected areas.



Figure 1. District of Uttarakhand depicting in Garhwal and Kumaon regions

C. Project Purpose

6. The purpose of the project is to improve, restore and reconstruct basic public and social infrastructure, disaster preparedness, project management and institutional. Under this about 1,800 km of state highways (SH) () and major district roads (MDR); rehabilitation and capacity augmentation of the existing water treatment and reconstruct affected tourism infrastructure in 5 affected districts by which tourism facilities in surrounding towns and villages near the gateways to major destinations. For which the primary implementing agencies (IA) are be Public Works Department (PWD) for roads, bridges, urban roads, and trekking routes including eco-trails Department of Tourism (DOT) through Kumaon Mandal Vikas Nigam Limited, and Garhwal Mandal Vikas Nigam Limited for tourism infrastructure, Uttarakhand Civil Aviation Development Authority (UCADA) for helipads; and Uttarakhand Jal Sansthan (UJS) for urban water supply, or any successor hereto.
7. The nature of the sub-projects may change during their subsequent development, particularly during detailed design. This report is the Environmental Monitoring Report (EMR) for tourism sector project to describe the implementation of the mitigation measures and monitoring recommended in the IEE and summary Initial Environmental Examination (SIEE).

D. Project Profile

8. At the end of December, 2014 out of six packages contracts for four packages have been signed. The construction work in these four packages is in different stage. **Table 1** shows the project components, and physical progress of all the packages.

Table 1: Details and status of the work

Locations	Package Code	Sub-project	Physical progress
Pithoragarh	UK/UEAP-T(KMVN)NTL/01(R2)	Construction of 100 Prefabricated Fiber-reinforced Plastic (FRP) at 16 different location in Dharchula and Munsyari Tehsil.	No construction activity/work initiated at the site.
Bageshwar	UK/UEAP-T(KMVN)/NTL/02(R2)	Construction of 25 Prefabricated Fiber-reinforced Plastic (FRP) at 5 locations and 20 Hybrid huts and 4 locations.	No civil work initiated.
Uttarkashi	UK/UEAP-T(GMVN)DDN/03	Construction of 15 Hybrid huts at 4 locations and 7 Prefabricated Fiber-reinforced Plastic (FRP) at 2 locations.	Geo Tech Investigations has been completed. Bid for package no. 03, 04 & 05 has been awarded to M/s ACME Cleantech Solution Pvt. Ltd. Contract has been signed and Notice To Proceed has been issued on 01.10.2014. Contractor has visited the site. No construction activity/work initiated at the site.
Rudraprayag	UK/UEAP-T(GMVN)/DDN/04	Construction of 10 Hybrid Huts at one location in Rudraprayag district of Garhwal Region	Bid for package has been awarded to M/s ACME Cleantech Solution Pvt. Ltd. Contract has been signed and Notice To Proceed has been issued on 01.10.2014. Contractor has visited the site. No construction activity/work initiated at the site.
Chamoli	UK/UEAP-T(GMVN)/DDN/05	Construction of 31 hybrid huts at 5 locations.	Geo Tech Investigations has been completed. Bid for package has been awarded to M/s ACME Cleantech Solution Pvt. Ltd. Contract has been signed and Notice To Proceed has been issued on 01.10.2014. Contractor

Locations	Package Code	Sub-project	Physical progress
			has visited the site. No construction activity/work initiated at the site.
Rudraprayag	UK/UEAP-T(GMVN)/DDN/06+A10-	Construction/Reconstruction of Tourism Assets in LGFS Structure in Various Locations at Rudraprayag District, Garhwal Region	Geo Tech Investigations has been completed. No construction activity/work initiated at the site.. Bid for package has been awarded to M/s Loom Crafts Shade System Pvt. Ltd. and contract has been signed on 27.09.2014 and Notice To Proceed has been issued on 30.09.2014. Sampling for Baseline data is under process. No construction activity/work initiated at the site.

Table 2: Status of Sub-project Implementation under UEAP- Tourism Subprojects (Upto 31st December 2014)

Locations	Sub-projects components (Package No.)	Expected Starting date of Implementation	Projected months of completion (as per Work order)	Schedule date of completion (Extended date of completion)	Physical progress
Pithoragarh	UK/UEAP-T(KMVN)NTL/01(R2)- Construction of FRP Huts in Pithoragarh district of Kumaon Region	7.02.2015	24	6.02.2017	0%
Bageshwar	UK/UEAP-T(KMVN)NTL/02(R2)- Construction of FRP and Hybrid Huts in Bageshwar of Kumaon Region.	7.02.2015	24	6.02.2017	0%
Uttarkashi	UK/UEAP-T(GMVN)DDN/03 Construction of FRP and Hybrid Huts in Uttarkashi, Garhwal Region.	01.10.2014	18	9.04.2016	0%
Rudraprayag	UK/UEAP-T(GMVN)/DDN/04 Construction of Hybrid Huts in Rudraprayag district of Garhwal Region	01.10.2015	18	9.10.2016	0%
Chamoli	UK/UEAP-T(GMVN)/DDN/05 Construction of Hybrid Huts in Chamoli district of Garhwal Region	01.10.2014	18	9.04.2016	0%

Locations	Sub-projects components (Package No.)	Expected Starting date of Implement ation	Projected months of completion (as per Work order)	Schedule date of completion (Extended date of completion)	Physical progress
Rudraprayag	UK/UEAP-T(GMVN)/DDN/ 06+A10 Construction/Reconstruction of Tourism Assets in LGFS Structure in Various Locations at Rudraprayag District, Garhwal Region	27.09.2014	18	8.04.2016	0%

II. IMPLEMENTATION PROGRESS

E. Major Works and Progress

- Under tourism sector till December, 2014 contracts of six sub-projects has been awarded, out of which work on three packages have started, site development plan for one packages has been done and revision of the layout plan/drawings for FRP/hybrids huts for rest of the two packages is under progress. **Table 3** shows the work progress status format. Work scope for the package for which Work Order has been issued is given hereunder. Monitoring and reporting on Environmental safeguard will be started shortly.

Table 3: Status of the Sub project 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
Pithoragarh	UK/UEAP-T(KMVN)NTL/01(R2)- Construction of FRP Huts in Pithoragarh district of Kumaon Region.	Construction of 100 Prefabricated Fiber-reinforced Plastic (FRP) at 16 different location in Dharchula and Munsyari Tehsil.	Work is yet to be started	At this stage there is no such changes are expected from the approved scope.	Instruction has been issued to contractor for collection of Baseline data before start of construction.	
Bageshwar	UK/UEAP-T(KMVN)NTL/02(R2)- Construction of FRP and Hybrid Huts in Bageshwar of Kumaon Region.	Construction of 25 Prefabricated Fiber-reinforced Plastic (FRP) at 5 locations and 20 Hybrid huts and 4 locations and its associated facilities.	There is no activity/ work started at the sites.	At this stage there is no such changes are expected from the approved scope.	Instruction may be issued to contractor for collection of Baseline data before start of construction.	
Uttarkashi	UK/UEAP-T(GMVN)DDN/03- Construction of FRP and Hybrid Huts in Uttarkashi, Gharwal Region.	Construction of 15 Hybrid huts at 4 locations and 7 Prefabricated Fiber-reinforced Plastic (FRP) at 2 locations.	No activity/ work has initiated.	At this stage there is no such changes are expected from the approved	Instruction has been issued to contractor for collection of Baseline data before start of	

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
				scope.	construction.	
Rudraprayag	UK/UEAP-T(GMVN)/DDN/04 Construction of Hybrid Huts in Rudraprayag district of Garhwal Region.	Construction of Hybrid Huts in one location in Rudraprayag district of Garhwal Region	No activity/ work has initiated.			
Chamoli	UK/UEAP-T(GMVN)/DDN/05 Construction of Hybrid Huts in Chamoli district of Garhwal Region	Construction of 31 hybrid huts at 5 locations.	No activity/ work has initiated.	As the work is in initial stage, no change of work is anticipated.	Instruction has been issued to contractor for collection of Baseline data before start of construction.	No risk anticipated
Rudrprayag	UK/UEAP-T(GMVN)/DDN/06 Construction/Reconstruction of Tourism Assets in LGFS Structure in Various Locations at Rudraprayag District, Garhwal Region.	Construction of LGFS huts single/ duplex, Multipurpose Hall and Night shelter along with site development at 6 locations.	No activity/ work has initiated.		Instruction has been issued to contractor for collection of Baseline data before start of construction.	No risk anticipated as of now at any of site

F. Compliance of Safeguard Loan Covenants

1. The status of compliance of ADB's major Loan Covenants related to Safeguard issues is shown below:

Serial no. as per loan agreement	Program Specific Covenants	Status / Issues
Environment		
9	The Borrower shall ensure or cause the EA and IAs to ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project facilities comply with (i) all applicable laws and regulations of the Borrower and State relating to environment, health, and safety; (ii) the Environmental Safeguards of ADB; and (iii) all measures and requirements set forth in the EARF, EIA/ IEE as applicable, and the EMMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.	<p>Under compliance</p> <p>Documents are prepared by complying all relevant State and National Laws, Safeguard Policy Statement (SPS 2009) of ADB, Environment Assessment Review Framework (EARF): Initial Environmental Examination (IEE), Environment Management Plan (EMP) report prepared and approved by ADB. In case of any change of scope and locations IEE will be revised.</p> <p>All measures and requirements as prescribed in IEE and EMP will be considered during implementation. Corrective or preventive action plans which will be reflected in Environment Monitoring Report and project implementation authority will be taken care.</p>
Human and Financial Resources to Implement Safeguards Requirements		
12	The Borrower shall ensure or cause the EA and relevant IA to ensure (a) that all necessary budgetary and human resources to fully implement the EMMP as required, are made available; and (b) One official has been designated to supervise implementation of the EMMP at IA-Tourism Sector Subprojects.	<p>Under compliance</p> <p>Budgetary provisions have been included in EMPs One officer will be designated to supervise implementation of the EMMP at IA-Tourism Sector Subprojects.</p>
Safeguards – Related Provisions in Bidding		

Documents and Works Contracts	
13	<p>Borrower shall ensure or cause the EA and each IA to ensure that all bidding documents and contracts for Works contain provisions that require contractors to:</p> <p>(a) comply with the measures and requirements relevant to the contractor set forth in the EIA/IEE, the EMMP, the RPs and any IPP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report;</p> <p>(b) make available a budget for all such environmental and social measures;</p> <p>(c) provide the relevant IA with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks if any, or impacts that arise during construction, implementation or operation of the project that were not considered in the EIA/IEE, the EMMP, and the RP or the IPP if any;</p> <p>(d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and</p> <p>(e) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.</p>
	<p>Under compliance</p> <p>(a) Approved IEEs, EMPs and RPs are attached in Bidding documents. In case of any change of scope, revised IEEs, EMPs will be prepared and corrective measures will be disclosed to contractor and same will be reflected in the "Environment Monitoring Report"</p> <p>(b) All IEEs indicate budgetary provisions for implementation of EMPs</p> <p>(c) With the development of sub project and implementation, in case of additional impacts/risks due to change in scope/area, that will be reflected in the revised IEEs, EMPs and Environment Monitoring Report and accordingly project Executing Agency will inform the Construction Agency for taking relevant corrective measures.</p> <p>(d) Haul roads will be marked properly (by avoiding residences and agricultural land) before commencement of transportation of materials.</p> <p>(e) Pathways, land which are likely to be affected for a short period during implementation of the sub project will be restored by concerned construction agency before acceptance of the work. Restoration status will be reflected in post construction</p>

		monitoring report
Safeguards Monitoring and Reporting		
14	<p>The Borrower shall ensure or cause the EA and each IA to ensure the following:</p> <p>(a) submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;</p> <p>(b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE/EIA, the EMMP, the RPs or any IPP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and</p> <p>(c) report any breach of compliance with the measures and requirements set forth in the EMMP, the RPs or any IPP promptly after becoming aware of the breach.</p>	<p>Under compliance</p> <p>(a) This is 1st semi-annual Environment Monitoring Report, prepared for the period July to December 2014. Next semi-annual report is due on 30th June 2015.</p> <p>(b) With the development of project and implementation, in case of additional impacts/risks due to change in scope/area, will be reflected in revised IEEs, EMPs and accordingly Executing Agency (EA) will inform the ADB along with corrective action plan which will be reflected in the Monitoring Report.</p> <p>(c) In case of any breach of compliance with the measures and requirements set forth in the EMP; EA will promptly inform ADB and suitable corrective action plan will be planned.</p>
Prohibited List of Investments		
15	<p>The Borrower shall ensure or cause the EA and each IA to ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.</p>	<p>Complied</p> <p>For selection of sub projects there is no violation of prohibited investment activities as per ADB SPS (2009) Appendix 5.</p>
Labor Standards		
16	<p>The EA through each IA shall ensure that civil works contracts under the Project follow all applicable labor laws of the Borrower and State and that these further include provisions to the effect that contractors; (i) carry out</p>	<p>Complied in document and to be complied during implementation</p> <p>Provision are included (as per EMP & BID document) to carry out HIV/AIDS awareness programs for construction</p>

	<p>HIV/AIDS awareness programs for labor and disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; and</p> <p>(ii) follow and implement all statutory provisions on labor (including not employing or using children as labor, equal pay for equal work), health, safety, welfare, sanitation, and working conditions. Such contracts will also include clauses for termination in case of any breach of the stated provisions by the contractors.</p>	<p>contractor, application of all relevant labour laws for health and safety including child labour law and engagement of local labours (preferably from economically backward group) covering women labours.</p> <p>In case of any breach of provision, necessary corrective measures as per contract clauses shall be taken.</p> <p>All activities including awareness program will be reflected in "Monitoring Report".</p>
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G. Environmental and Social Organization and Management along with Implementation Arrangements

10. The institutional arrangements specify the arrangements for the implementation of environmental provisions of the proposed subproject. The Executing Agency (EA), State Disaster Management Authority (SDMA) will work closely with the Implementing Agency (IA) Kumoan Mandal Vikas Nigam, KMVN (in district Bageshwar and Pithoragarh) and Garhwal Mandal Vikas Niga, GMVN (in district Uttarkashi, Chamoli and Rudraprayag) for effective implementation of environmental safeguards related requirements of the sub projects. The institutional arrangements and responsibilities are detailed below.
11. The subproject will be implemented and monitored by GMVN & KMVN as Implementing agency and implemented through its Field PIU's supported by DSC (also working as Engineer) and overall management support shall be provided by PMU, UEAP.
12. The Safeguard Staff of UEAP SDMA (EA) in PMU & IA will monitor the implementation of environmental covenants with assistance of Engineer (DSC).
13. UEAP SDMA (EA) shall be responsible for ensuring compliance to environmental requirements of the ADB as well as central/state governments and reporting the same to ADB. A relevant portion of EMMP will be a part of contract with the civil works contractors engaged for execution of the works. The primary responsibility of implementation of EMMP is of the IA during pre-construction and operation and maintenance phases; and of the civil works contractor during the construction phase as defined in the EMMP. The responsibility of supervision of EMMP

implementation is of the DSC; and it would guide the IA and the civil works contractors in this regard. DSC with IA and EA, UEAP will act as monitoring agency as delegated in EMMP. All applicable statutory environmental clearances, consents, and/or permits (at national, state and local levels) as required for the implementation of the subproject would be obtained by the IA or by the civil works contractor in line with India's national/state/local laws and regulations, and in accordance with ADB's SPS 2009 requirements. Redressal of grievances shall be the responsibility of UEAP SDMA (EA). Apart from the mechanism for the grievances receiving and redressal at the level of EA, the provision shall be kept in the EMP of the subprojects wherein the contractor will depute one Environmental Safeguard Officer who shall be responsible for implementation of EMP, reporting and grievance redressal on day-to-day basis. The grievances/complaints received at the level of contractor shall be recorded on the Complaints Register and the same shall be forwarded to the DSC (Engineer of the Contract) within 48 hours along with the details of action taken to redress the grievance. The Team Leader of DSC shall immediately try to resolve the issues and forward the details to the FPIU / IA. If the action taken by Contractor and DSC is found to be inadequate, then necessary instructions shall be issued by the FPIU/IA for implementation of rectification measures.

III. ENVIRONMENTAL PROCEDURE REVIEW

H. Environmental Legal Requirement – Environmental Legislation and Pollution Control Acts

14. 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 few applicable acts with the project, are described in the following sub-sections.

Sl. No.	Sources	Legislation
1	EIA Notification	The Ministry of Environment and Forests has revised the EIA notification, 1994, and issues the revised EIA notification on 14th September 2006
2	Environment	The Environment (Protection) Act, 1986
3	Forest/ Tree resources	The Forest (Conservation) Act, 1980
4	Water Pollution	The Water (Prevention and Control of Pollution) Act, 1974, as amended in 1988
5	Air Pollution	The Air (Prevention and Control of Pollution) Act, 1981, as amended by Amendment Act, 1987
6	Noise Pollution	The Noise Pollution (Regulation and Control) Rules, 2000
7	Public Liability	The Public Liability Insurance Act, 1991 The Public Liability Insurance Rules, 1991
8	Conservation, construction and reuse in and around the protected monuments	The Ancient Monuments and Archaeological Sites and Remains Act, 1958, and the rules, 1959
9	Hazardous Waste	<ul style="list-style-type: none"> ➤ Hazardous Waste (Management and Handling) Rules, 1989 ➤ Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 ➤ Emergency Planning Preparedness and Response for Chemical Disasters Rules, 1995 ➤ Hazardous Microorganisms and Genetically Modified Organisms (Manufacture, Use Import Export and Storage) Rules, 1999
10	Use and Management of Explosive	The Explosives Act, 1884 and The Explosives Rules, 1983

15. Prominent acts are discussed below:-

The Environment Protection act, 1986 and the EIA Notification, 2006

16. The Environmental (Protection) Act, 1986 is the umbrella legislation providing for the protection of environment in the country. This Act provided for the Environment (Protection) Rules, which have been formulated under

the act "The Environmental Impact Assessment Notification, 1994 and the Amendments / Revised EIA notification on 14th September 2006".and Year 2009.

17. The Water (Prevention and Control of Pollution) Act 1974 as amended in 1988 AND AIR (Prevention and Control of Pollution) Act, 1981 as amended by Amendment Act, 1987.
18. 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.

The Noise Pollution (regulation and control) rules, 2000, as amended

19. Use of heavy machinery and vehicles ambient noise levels may increase during the construction phase. It is considered necessary to regulate and control noise producing and generating sources with the objective of maintaining the ambient air quality standards in respect of noise. The occupier of subprojects have to take measures for abatement of noise pollution ensuring that the existing noise levels do not exceed the standards specified under the Noise Pollution (regulation and control) rules, 2000, as amended.
20. The specific requirements to ensure compliance by these components and subprojects are shown in **Compliance with Environmental Regulations**.
21. Clearance status for subprojects is given in **Table 5** below.
22. Environmental compliance status for the running project is enclosed in Annexure 1.

**Table 4: Present Status of Environment, Forest & other clearances
(December 2014)**

Work (Package No.)	Applicable Legislation/ Type of clearance	Subject / Issue	Clearance given by and date	Remarks/ Action needed
UK/UEAP-T(KMVN)NTL/01(R2) Construction of FRP Huts	The Environment Protection act, 1986 and the EIA		During the preparation of IEE and EMMP it	Implementation of the project will not have any bearing on ecology and environment of the

Work (Package No.)	Applicable Legislation/ Type of clearance	Subject / Issue	Clearance given by and date	Remarks/ Action needed
<p>in Pithoragarh district of Kumaon Region.</p> <p>Construction of 100 Prefabricated Fiber-reinforced Plastic (FRP) at 16 different location in District Pithoragarh of Kumaon region.</p>	<p>Notification, 1994.</p> <p>The water (Prevention and Control of Pollution) Act, 1974</p> <p>AIR (Prevention and Control of Pollution) Act, 1981</p> <p>The Water (Prevention and Control of Pollution) Act 1974.</p> <p>The Noise Pollution (regulation and control) rules, 2000, as amended</p>		was observed that no statutory and legislative clearance is required.	<p>locality. Since the structure will be constructed in vacant government lands it will not involve any displacement of people or disruption of any economic activity. All the infrastructure units are proposed to be constructed outside ecological sensitive area. The design and constructions are consistent with the surrounding landscape. The construction activity will involve only minor building foundation excavation which will be filled up with soil after the construction. The project will not influence the flora or fauna of the locality in any way</p>
<p>UK/UEAP-T(KMVN)/NTL/02(R2)</p> <p>Construction of FRP and Hybrid Huts in Bageshwar of Kumaon Region.</p> <p>Construction of 25 Prefabricated Fiber-reinforced Plastic (FRP) at 5 locations and 20 Hybrid huts and 4 locations and site developments in district Bageshwar</p>	<p>The Environment Protection act, 1986 and the EIA Notification, 1994.</p> <p>The water (Prevention and Control of Pollution) Act, 1974</p> <p>AIR (Prevention and Control of Pollution) Act, 1981</p> <p>The Water (Prevention and Control of Pollution) Act 1974.</p> <p>The Noise Pollution (regulation and control) rules, 2000, as amended</p>		During the preparation of IEE and EMMP it was observed that no statutory and legislative clearance is required.	<p>Implementation of the project will not have any bearing on ecology and environment of the locality. Since the structure will be constructed in vacant government lands it will not involve any displacement of people or disruption of any economic activity. All the infrastructure units are proposed to be constructed outside ecological sensitive area. The design and constructions are consistent with the surrounding landscape. The construction activity will involve only minor building foundation excavation which will be filled up with soil after</p>

Work (Package No.)	Applicable Legislation/ Type of clearance	Subject / Issue	Clearance given by and date	Remarks/ Action needed
				the construction. The project will not influence the flora or fauna of the locality in any way
UK/UEAP-T(GMVN)DDN/03- Construction of FRP and Hybrid Huts in Uttarkashi, Gharwal Region. Construction of 15 Hybrid huts at 4 locations and 7 Prefabricated Fiber-reinforced Plastic (FRP) at 2 locations in district Uttarkashi of Garhwal region.	The Environment Protection act, 1986 and the EIA Notification, 1994. The water (Prevention and Control of Pollution) Act, 1974 AIR (Prevention and Control of Pollution) Act, 1981 The Water (Prevention and Control of Pollution) Act 1974. The Noise Pollution (regulation and control) rules, 2000, as amended		During the preparation of IEE and EMMP it was observed that no statutory and legislative clearance is required.	Implementation of the project will not have any bearing on ecology and environment of the locality. Since the structure will be constructed in vacant government lands it will not involve any displacement of people or disruption of any economic activity. All the infrastructure units are proposed to be constructed outside ecological sensitive area. The design and constructions are consistent with the surrounding landscape. The construction activity will involve only minor building foundation excavation which will be filled up with soil after the construction. The project will not influence the flora or fauna of the locality in any way
UK/UEAP-T(GMVN)DDN/04 Construction of Hybrid Huts in Rudraprayag district of Garhwal Region. Construction of Hybrid Huts at Kanakchauri in Rudraprayag district of Garhwal Region	The Environment Protection act, 1986 and the EIA Notification, 1994. The water (Prevention and Control of Pollution) Act, 1974 AIR (Prevention and Control of Pollution) Act, 1981 The Water (Prevention and Control of Pollution)		During the preparation of IEE and EMMP it was observed that no statutory and legislative clearance is required.	Implementation of the project will not have any bearing on ecology and environment of the locality. Since the structure will be constructed in vacant government lands it will not involve any displacement of people or disruption of any economic activity. All the infrastructure units are proposed to be constructed outside ecological sensitive area. The design and

Work (Package No.)	Applicable Legislation/ Type of clearance	Subject / Issue	Clearance given by and date	Remarks/ Action needed
	Act 1974. The Noise Pollution (regulation and control) rules, 2000, as amended			constructions are consistent with the surrounding landscape. The construction activity will involve only minor building foundation excavation which will be filled up with soil after the construction. The project will not influence the flora or fauna of the locality in any way
UK/UEAP-T(GMVN)/DDN/05 Construction of Hybrid Huts in Chamoli district of Garhwal Region. Construction of 31 hybrid huts at 5 locations	The Environment Protection act, 1986 and the EIA Notification, 1994. The water (Prevention and Control of Pollution) Act, 1974 AIR (Prevention and Control of Pollution) Act, 1981 The Water (Prevention and Control of Pollution) Act 1974. The Noise Pollution (regulation and control) rules, 2000, as amended		During the preparation of IEE and EMMP it was observed that no statutory and legislative clearance is required.	Implementation of the project will not have any bearing on ecology and environment of the locality. Since the structure will be constructed in vacant government lands it will not involve any displacement of people or disruption of any economic activity. All the infrastructure units are proposed to be constructed outside ecological sensitive area. The design and constructions are consistent with the surrounding landscape. The construction activity will involve only minor building foundation excavation which will be filled up with soil after the construction. The project will not influence the flora or fauna of the locality in any way
UK/UEAP-T(GMVN)/DDN/06 Construction/Reconstruction of Tourism Assets in LGFS Structure in Various Locations at Rudraprayag District, Garhwal Region. Construction of LGFS huts	The Environment Protection act, 1986 and the EIA Notification, 1994. The water (Prevention and Control of Pollution)		During the preparation of IEE and EMMP it was observed that no statutory and	Implementation of the project will not have any bearing on ecology and environment of the locality. Since the structure will be constructed in vacant government lands it will not involve any

Work (Package No.)	Applicable Legislation/ Type of clearance	Subject / Issue	Clearance given by and date	Remarks/ Action needed
single/ duplex, Multipurpose Hall and Night shelter along with site development at 6 locations.	Act, 1974 AIR (Prevention and Control of Pollution) Act, 1981 The Water (Prevention and Control of Pollution) Act 1974. The Noise Pollution (regulation and control) rules, 2000, as amended		legislative clearance is required.	displacement of people or disruption of any economic activity. All the infrastructure units are proposed to be constructed outside ecological sensitive area. The design and constructions are consistent with the surrounding landscape. The construction activity will involve only minor building foundation excavation which will be filled up with soil after the construction. The project will not influence the flora or fauna of the locality in any way

IV. IMPLEMENTATION STATUS OF ENVIRONMENT MEASURES

23. Field activities have not been started till 31st December 2014. Application of EMP will be commenced as per IEE report. The compliance monitoring format for application of mitigation measures against impacts on air, water, soil environment, social and safety aspects is enclosed in **Annexure 2**. Format for summary compliance status of EMP application and actions/ corrective measures presented in **Table 5** below.

Table 5: Summary Compliance status of Environment Management and Monitoring Plan (31.12.2014)

Location	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 or continued/Additional Corrective Measures Required
Pithoragarh	UK/UEAP-T(KMVN)NTL/01(R2) Construction of 100 Prefabricated Fiber-reinforced Plastic (FRP) at 16 different location in District Pithoragarh of Kumaon region.	No (to be started soon)	-	No physical progress

Bageshwar	UK/UEAP-T(KMVN)/NTL/02(R2) Construction of 25 Prefabricated Fiber-reinforced Plastic (FRP) at 5 locations and 20 Hybrid huts and 4 locations in district Bageshwar	No (to be started soon)	-	No physical progress
Uttarkashi	UK/UEAP-T(GMVN)DDN/03- Construction of 15 Hybrid huts at 4 locations and 7 Prefabricated Fiber-reinforced Plastic (FRP) at 2 locations in district Uttarkashi of Garhwal region.	No (to be started soon)	-	No physical progress
Rudraprayag	UK/UEAP-T(GMVN)/DDN/04 Construction of Hybrid Huts at Kanakchauri in Rudraprayag district of Garhwal Region	No (to be started soon)	-	No physical progress
Chamoli	UK/UEAP-T(GMVN)/DDN/05 Construction of Hybrid Huts in Chamoli district of Garhwal Region	No (to be started soon)	-	No physical progress
Rudraprayag	UK/UEAP-T(GMVN)/DDN/06 Construction/Reconstruction of Tourism Assets in LGFS Structure in Various Locations at Rudraprayag District, Garhwal Region	No (to be started soon)	-	No physical progress

V. ENVIRONMENTAL MONITORING AND EVALUATION

24. For effective monitoring, selected environmental parameters have been identified as indicators which will 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 subproject locations. The parameters identified as performance indicators are:

- Air, noise and water quality

- Compliance to EMP
 - Compliance to local/state/national environmental regulations
25. During implementation process, performance monitoring fact sheet is being prepared against each possible environmental impact and attached with the monitoring report. **Annexure 3** shows the Performance Fact Sheet for implementation of EMP.
26. Base line air and noise quality monitoring will be carried out at working areas as per scope of work. Base line monitoring format of ambient air quality data is presented in **Table 6**.
27. In case of involvement of water source as working components water quality monitoring will also be conducted at project locations.
28. "During construction" monitoring will be carried out as per Environment Management and Monitoring Plan.

VI. MAJOR PROJECT ISSUES AND PROBLEMS ENVIRONMENTAL CONTEXT

29. No construction activity in the sub-projects has started yet. Till date, no major issues and problems have been encountered with, at the sub project locations.

VII. CONSULTATIONS AND RECOMMENDATIONS ENVIRONMENTAL CONTEXT

30. For protection of local environment during construction phase, application of mitigation measures will be done as per specified EMP. Pubic consultation during construction/ implementation phase will be planned as per the requirement. **Annexure 4** shows the blank consultation format for recording.

VIII. GRIEVANCE REDRESSAL

31. A joint social and environmental redress mechanism will be implemented under the project. Grievances and suggestions from local and affected people may come-up related to inappropriate implementation of the project and components of EMP. The expected range of grievances to be handled through this mechanism will encompass but not limited to the following: i) nuisance from noise, dust, and temporary blocking of access; ii) contamination of receiving water from runoff; iii) emissions from increase vehicular traffic and stationary sources like construction machineries; iv) conflict between local residents and migrant workers; v) ownership of vegetation for clearing; and vi) damage compensation. These issues will be addressed through acknowledgement, evaluation and corrective action and response approach. Grievances from public or stakeholders concerning the project and EMP implementation will be received by the concerned Executive Engineer of UEAP division. The Executive Engineer shall refer the application to Construction Supervision Consultants (DSC) who then assess the grievances/suggestions and if they are found to be genuine and

acceptable, will be resolved at division level itself within 15 to 30 days from the date of receipt. In case, the issue is unable to be resolved, the matter will be forwarded to the PMU, UEAP (Head quarter). This mechanism is non-judicial in nature and does not preclude the affected people coursing their grievances to the courts. The corrective action will be started as per the action plan indicated to the stakeholder. The action taken and the outcome shall form a part of quarterly report to ADB.

32. Till date no GR committee is set up under UEAP at UJS. Process has been initiated for setting up GR committee and which will be completed shortly.

IX. ISSUES AND ACTION PLAN

33. Tourism is a one of the fastest growing industries and a major driver of economic growth and livelihood promotion in Uttarakhand. The contribution of tourism to the State Gross Domestic Product is about 22.48%. The sector witnesses active participation of the private sector and the local host communities and is a major source of employment and income/revenue generation. Uttarakhand needs to be reconstruct and restore damaged tourism assets at important locations where large numbers congregate regularly in the name of tourism. Tourists must be dispersed throughout the state and across the year by promoting more tourism.
34. As a part of Tourism Restoration Drive, construction of FRP/Hybrid huts are proposed in the five disaster affected districts and to provide improved accommodation facilities to the tourist/pilgrims visiting this area. Thus construction of environmentally sustainable, affordable accommodation for tourists with eco-friendly material would help in bridging the gap in the shortage of accommodation in the State during the tourist season. Provision of affordable accommodation to tourists at various destinations in the form of cottages which are aesthetically and eco-friendly designed, taking into consideration the natural landscape of the area will be a boost for tourism sector.
35. It is important to mention in this context that the final detailed engineering design in each sub project of UEAP have been prepared keeping in mind to avoid or minimize social and environmental impact as far as possible.
36. With the development of project the action plan will be considered for timely and satisfactory environmental compliance. Sample suggestion & action plan format is shown in **Table 6**.

**Table 6: Suggestion & Action plan considered for satisfactory
Environmental Compliance**

Sr. No.	Issues	Suggestion recommendation and	Action to be taken by	Time Frame
1	Application of EMP			
2	Health and Safety			
3	Restoration of the construction area			
4	Social relationship and public safety			

Annexure 1: Environment Forest and other Compliance (December 31st, 2014)

Package	EIA Clearance	Wet Land	Forest Clearance	Wild Life Act applicability	Tree Cutting Permission	Permission from State/ National Archaeological dept.	Consent for establishment of crusher from quarry material supplier	CTE/CTO	Authorization	Ground Water Permission	PUC	Date of Environmental Monitoring
UK/UEAP-(KMVN)NTL/01(R2)] Pithoragarh Construction of 100 Prefabricated Fiber-reinforced Plastic (FRP) at 16 different location in District Pithoragarh of Kumaon region.	NR	NR	NR	NR	NR	NR	NR	NR	NA	NR	NR	To be started
UK/UEAP-(KMVN)/NTL/02(R2) Bageshwar Construction of 25 Prefabricated Fiber-reinforced Plastic (FRP) at 5 locations and 20 Hybrid huts and 4 locations in district Bageshwar	NR	NR	NR	NR	NR	NR	NR	NR	NA	NR	NR	To be started
UK/UEAP-T(GMVN)DDN/03-Uttarkashi Construction of 15 Hybrid huts at 4 locations and 7 Prefabricated Fiber-reinforced Plastic (FRP) at 2 locations in district Uttarkashi of Garhwal region.	NR	NR	NR	NR	NR	NR	NR	NR	NA	NR	NR	To be started
UK/UEAP-T(GMVN)DDN/04 Rudraprayag Construction of Hybrid Huts at Kanakchauri in Rudraprayag district of Garhwal Region	NR	NR	NR	NR	NR	NR	NR	NR	NA	NR	NR	To be started
UK/UEAP-T(GMVN)DDN/05 Chamoli Construction of Hybrid Huts in Chamoli district of Garhwal Region	NR	NR	NR	NR	NR	NR	NR	NR	NA	NR	NR	To be started
UK/UEAP-T(GMVN)DDN/06 Rudraprayag Construction/Reconstruction of Tourism Assets in LGFS Structure in Various Locations at Rudraprayag District, Garhwal Region	NR	NR	NR	NR	NR	NR		NR	NA	NR	NR	To be started

Annexure – 2: Compliance of Application of EMMP- Sample format

Project: Tourism -

Package No:

Progress:

Physical progress :

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
Site Establishment and Preliminary Activities phase									
1	Legislation, Permits and Agreements	In all instances, EA, IA contractors and consultants must remain in compliance with relevant environmental legislation of India at the national, state and local levels.							
2	Education of site staff on general and Environmental Conduct	Ensure that all site personnel have a basic level of environmental awareness training. Staff operating equipment (such as excavators, loaders, etc.) shall be adequately trained and sensitized to any potential hazards associated with their task No operator shall be permitted to operate critical items of mechanical equipment without having been trained by the Contractor. All employees must undergo safety training and wear the necessary protective clothing							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		<p>/equipment.</p> <p>A general regard for the social and ecological well-being of the site and adjacent areas is expected of the site staff. Workers need to be made aware of the following general rules:</p> <ul style="list-style-type: none"> • No alcohol / drugs to be present on site; • Measures for abatement of noise due to construction related activities and conduct of work force. • Construction staff are to make use of the facilities provided for them, as opposed to ad-hoc alternatives (e.g. use of firewood for cooking, the use of surroundings as a toilet facility are forbidden) • Trespassing on private / commercial properties adjoining the site is forbidden • Other than pre approved security staff, no workers shall be permitted to live on the construction site. No worker may be forced to do work that is potentially dangerous or for what he / she is not trained to do. 							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
3	Social Impacts	Open liaison channels shall be established between the Site owner, operator, the contractors and interested and affected parties such that any queries, complaints or suggestions pertaining to environmental management aspects can be dealt with quickly and by the appropriate person(s).							
		A communications strategy is of vital importance in terms of accommodating traffic during road closure. The road closure together with the proposed detour needs to be communicated via advertising, pamphlets, radio broadcasts, road signage, etc.							
		Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.							
		Storage facilities, elevated tanks and other temporary structures on site shall be located such that they have as little visual impact on local residents as possible.							
		In areas where the visual							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		environment is particularly important (e.g. along commercial/ tourism routes) or privacy concerns for surrounding buildings exist, the site may require screening. This could be in the form of shade cloth, temporary walls, or other suitable materials prior to the beginning of construction.							
		Special attention shall be given to the screening of highly reflective materials on site.							
4	Lack of sufficient planning to assure long term sustainability of the improvements and ensure protection of the assets created and the architectural/archaeological character of the surroundings	Design will include provisions for ensuring effective maintenance and protection of the assets created so as to ensure the long term sustainability.							
Pre construction/ Design phase									
5	Layout of components to avoid impacts on the aesthetics of the site	The project components siting will avoid impacts on the aesthetics of the site, ensure minimal impacts and in compliance with statutory and							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		regulatory requirements.							
6	Increased storm water runoff from alterations of the site's natural drainage patterns due to landscaping, excavation works, and addition of paved surfaces	Design of proposed components will enable efficient drainage of the sites and maintain natural drainage patterns.							
7	Selection of materials and construction technologies, if not carefully chosen, will adversely impact the aesthetic appeal of the destinations	Selection of materials will be from approved sources and construction technologies proposed will strictly conform to the Uttarakhand architecture. Any new landscaping elements will only utilize native species. Material selection would be done keeping in view that no asbestos (except as allowed), and CFC is used.							
8	Socio cultural resources- Ground disturbance can uncover and damage archaeological and historical remains	Consult Archaeological Survey of India (ASI) and/or concerned Dept. of Uttarakhand Govt. as applicable to obtain an expert assessment of the archaeological potential of the site; Consider alternatives if the site is found to be of							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		medium or high risk; and Develop a protocol for use by the construction contractors in conducting any excavation work, to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved.							
9	Integration of energy efficiency and energy conservation programs in design of sub-project components	The detailed designs for the sub-project components shall ensure that environmental sustainability principles, including energy efficiency, resource recycling, waste minimization, rainwater harvesting etc.							
10	Site clearance activities, including delineation of construction areas	Any removal of vegetation or tree felling shall be done after taking statutory permissions if required. All works shall be carried out such that the damage or disruption of flora other than those identified for cutting is minimum. Only ground cover/shrubs							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		that impinge directly on the permanent works or necessary temporary works shall be removed with prior approval from the Environmental Expert of DSC. All areas used for temporary construction operations will be subject to complete restoration to their former condition with appropriate rehabilitation procedures as per the rehabilitation plan prepared by the contractor and approved by the EE of DSC.							
11	Slope protection near reservoir and intake well	Retaining wall will constructed near reservoir and intake well							
Construction Impacts									
12	Construction Camps - Location, Selection, Design and Layout	Siting of the construction camps shall be as per the guidelines below and details of layout to be approved by DSC. Construction camps shall not be proposed within 500 m from the sensitive receptors, nearest							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		<p>settlements to avoid conflicts and stress over the infrastructure facilities with the local community.</p> <p>Location for stockyards for construction materials shall be identified at least 300 m away from watercourses.</p> <p>Construction camps will be located away from settlements and drainage from and through the camps will not endanger any domestic or public water supply. Construction camps including sanitation facilities must be adequately drained.</p> <p>Sewage management through septic tanks and solid waste management through local ULB system or other alternate measures.</p>							
13	Drinking water availability	Sufficient supply of cold potable water to be provided and maintained.							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		The water quality shall be as per standard norms for drinking water. If the drinking water is obtained from an intermittent public water supply then storage tanks will be provided. The cleanliness of the storage tanks will be ensured and all measures to be taken to avoid any water contamination.							
14	Waste disposal	Pre-identified disposal location (identified by Contractor and approved by EE-DSC) shall be part of Comprehensive Waste Disposal Plan Solid Waste Management Plan to be prepared by the Contractor in consultation and with approval of Environmental Specialist of DSC. The Environmental Specialist of DSC shall approve these disposal sites after conducting a joint inspection on the site with the Contractor.							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		Wherever, possible Solid waste management shall be through local ULB system or other alternate measures. Contractor shall ensure that waste shall not be disposed off near the water course or agricultural land, Orchards and Natural Habitats like Grasslands.							
15	Stockpiling of construction materials	Stockpiling of construction materials does not impact obstruct the drainage and Stockpiles will be covered to protect from dust and erosion.							
16	Quarry operations	Contractor shall finalize the quarry for procurement of construction materials after assessment of the availability of sufficient quantity of materials, quality and other logistic arrangements. The Contractor shall obtain materials from							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		<p>approved quarries only after consent of the Department of Mines and Geology and District Administration.</p> <p>Adequate safety precautions will be ensured during transportation of quarry material from quarries to the construction site. Vehicles transporting the material will be covered to prevent spillage.</p>							
17	Arrangement for construction water	<p>The Contractor shall use ground/surface water as a source of water for the construction with the written consent from the concerned Department.</p> <p>To avoid disruption/ disturbance to other water users, the Contractor shall extract water from fixed locations and consult DSC & line agencies before finalizing the locations.</p> <p>The Contractor shall</p>							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		<p>provide a list of locations and type of sources from where water for construction shall be extracted.</p> <p>The Contractor shall need to comply with the requirements of the State Ground Water Department for the extraction and seek their approval for doing so and submit copies of the permission to DSC.</p>							
18	Soil/Land Erosion	Slope protection measures will be undertaken as per design to control soil erosion.							
19	Water Pollution from Construction Wastes	The Contractor shall take all precautionary measures to prevent entering of wastewater into streams, water bodies or the irrigation system during construction Contractor shall not wash his vehicles in river/stream water and shall not enter riverbed							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		nearby the water resource area for that purpose.							
20	Water Pollution from Fuel and Lubricants	<p>The Contractor shall ensure that all construction vehicle parking locations, fuel/ lubricants storage sites, vehicle, machinery and equipment maintenance and refueling sites shall be located at least 300 m away from rivers/streams and irrigation canal/ponds if any</p> <p>Contractor shall ensure that all vehicle/machinery and equipment operation, maintenance and refueling shall be carried out in such a manner that spillage of fuels and lubricants does not contaminate the ground.</p> <p>Wastewater from vehicle parking, fuel storage areas, workshops, wash down and refueling areas shall be collected and separated through an oil interceptor before</p>							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		discharging it on land or into other treatment system as per specified standards and UEPPCB and ULB norms if any.							
21	Soil Pollution due to fuel and lubricants, construction waste	<p>The fuel storage and vehicle cleaning area will be stationed such that spillage of fuels and lubricants does not contaminate the ground. All pollution parameters will be monitored as per monitoring plan.</p> <p>Wastewater from vehicle parking, fuel storage areas, workshops, wash down and refueling areas shall be collected and separated through an oil intercepto- before discharging it on land or into other treatment system.</p>							
22	Soil Pollution due to fuel and lubricants, construction waste	The fuel storage and vehicle cleaning area will be stationed such that spillage of fuels and lubricants does not contaminate the ground. All pollution parameters							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		will be monitored as per monitoring plan. Wastewater from vehicle parking, fuel storage areas, workshops, wash down and refueling areas shall be collected and separated through an oil interceptor before discharging it on land or into other treatment system							
23	Generation of dust	The Contractor will take every precaution to reduce the levels of dust at construction site. Regular sprinkling of water and Stockpiles of soil will be kept covered in such a manner to minimize dust generation.							
24	Emission from Construction Vehicles, Equipment and Machinery	All vehicles, equipment and machinery used for construction shall conform to the relevant Bureau of India Standard (BIS) norms. The discharge standards promulgated under the Environment Protection Act, 1986 shall be strictly adhered to.							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		<p>The use of silent/quiet equipment compliant with India ambient noise standards and standards specified for manufacturers shall be encouraged in the sub Project.</p> <p>The Contractor shall maintain a record of PUC for all vehicles and machinery used during the contract period which shall be produced for verification whenever required.</p>							
25	Noise Pollution	<p>The Contractor shall confirm that all Construction equipment used in construction shall strictly conform to the MoEFCC/CPCB noise standards and all Vehicles and equipment used in construction shall be fitted with exhaust silencers.</p> <p>At the construction sites noisy construction work such as crushing, operation of DG sets, use</p>							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		<p>of high noise generation equipment shall be stopped during the night time between 10.00 pm to 6.00 am.</p> <p>Noise limits for construction equipment used in this project will be in conformity to the BIS/SPCB/CPCB standards</p> <p>Regular monitoring of ambient noise levels to ensure compliance to Uttarakhand Environment Protection. & Pollution Control Board standards.</p>							
26	Material Handling at Site	<p>Workers Employed on mixing cement, lime mortars, concrete etc., will be provided with protective footwear and protective masks and goggles.</p> <p>Workers, who are engaged in welding works, will be provided with welder's protective eye-shields.</p>							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		<p>Workers engaged in stone breaking activities will be provided with protective goggles, masks, and clothing.</p> <p>The use of any toxic chemical will be strictly in accordance with the manufacturer's instructions and applicable regulations. The Engineer will be given at least 6 working days' notice of the proposed use of any chemical. A register of all toxic chemicals delivered to the site will be kept and maintained up to date by the Contractor.</p>							
27	Disposal of Construction Waste / Debris / Cut Material	The Contractor shall confirm that Safe disposal of the construction waste will be ensured in the pre-identified disposal locations. In no case, any construction waste will be disposed around the project site indiscriminately.							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
28	Safety Measures During Construction	<p>Personal Protective Equipment for workers on the project and adequate safety measures for workers during handling of materials at site will be taken up. The Contractor has to comply with all regulations regarding safe scaffolding, ladders, working platforms, gangway, stairwells, excavations, trenches and safe means of entry and egress.</p> <p>The Contractor has to comply with all regulations for the safety of workers. Precaution will be taken to prevent danger of the workers from fire, etc. First aid treatment will be made available for all injuries likely to be sustained during the course of work. Contractor shall also organize periodic visits by a qualified registered medical practitioner to the</p>							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		<p>site and workers camp. Contact information of Doctor, availability & location of first aid box shall be displayed in appropriate language both at work site and workers camp.</p> <p>The Contractor will conform to all anti-malaria instructions given to him by the Engineer.</p> <p>The Contractor will also ensure that the interests of the community are preferably not disturbed, and if unavoidable then disturbed to the minimum. Provide traffic management personnel, barricade, appropriate signage and safety information in and around the construction site and prevent local people entering into the construction site.</p>							
29	Clearing of Construction of Camps and	Contractor to prepare site restoration plans for approval by the Engineer.							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
	Restoration	<p>The plan is to be implemented by the contractor prior to demobilization.</p> <p>On completion of the works, all temporary structures will be cleared away, all rubbish burnt, excreta or other disposal pits or trenches filled in and effectively sealed off and the site left clean and tidy, at the Contractor's expense, to the entire satisfaction of the Engineer and facility owner.</p>							
30	Risk of archaeological chance finds	<p>Strictly follow the protocol for chance finds in any excavation work;</p> <p>Request FPIU/DSC or any authorized person with archaeological field training to observe excavation;</p> <p>Stop work immediately to allow further investigation if any finds are suspected; and Inform FPIU/DSC,</p>							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		and take any action they require ensuring its removal or protection in-situ.							
31	Conflict with locals	Contractor shall ensure that mostly the local labourers are employed and migratory laborer shall be employed only in case of unavoidable circumstances.							
32	Environment Safeguard Officer	Contractor shall appoint one full-time suitably qualified and experienced Environment and Safety Officer who shall be responsible for assisting contractor in implementation of EMMP, community liaising, consultations with interested/affected parties, reporting and grievance redressal on day-to-day basis. This environment and safety officer will be at site till all works related to the project including demobilization are							

Sr. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Date of Monitoring	Compliance Status/ Explanation
		completed.							

Annexure 3: Environmental Performance Fact Sheet

Name of Contractor		
Date of Signing of Contract		
Signing of Contract		
Date of Completion		
Name of Environmental staff (Contractor) with mobile no.		
Baseline data generated		
Obtained vide No..... Dated.....	Consent to establish (CTE)	Statutory environmental compliance status
Obtained vide No..... Dated.....	Consent to operate (CTO)	
PUC vehicles		
Labour licence		
Workmen compensation Insurance		
Land owner consent for establishment of Plant site, labour camps		
Hard Hats (Helmet)	Personal Protective Equipments	
Safety Jackets		
Boots		
Gloves		
Others		
Barricading and warning signs (Y/N)		
Type of Labour Camps		
Sanitation facilities such as Toilets (Y/N)		
rDebris/Muck Disposal sites (Y/N)		
Quarry (Y/N)		
Water Sprinkling (Y/N)		
Borrow areas (Y/N)		
Air	Status of environmental monitoring	
Water		
Noise		
Soil		

Annexure 4: Public Consultation on Environmental Issues

During Construction/ Implementation

PLACE OF CONSULTATION	
DATE OF CONSULTATION	
PROJECT NAME	
PACKAGE NO.	
NAME OF THE FIELD SUPERVISORS	
NAME OF THE PERSONS	
ADDRESS	

S.No.	POINTS DISCUSSED	REMARKS
01.		
02.		
03.		
04.		
05.		
06.		
07.		
08.		
09.		
10.		

Consultation Summary

Participants

Annexure 5: Sample Grievance Registration Form

(To be available in Hindi and English or local language, if any)

The **Uttarakhand Emergency Assistance Project (UEAP)** welcomes complaints, suggestions, queries and comments regarding project implementation. We encourage persons with grievance to provide their name and contact information to enable us to get in touch with you for clarification and feedback.

Should you choose to include your personal details but want that information to remain confidential, please inform us by writing/typing ***(CONFIDENTIAL)*** above your name. Thank you.

Date		Place of registration			
Contact Information/Personal Details					
Name		Gender	Male Female	Age	
Home Address					
Village / Town					
District					
Phone no.					
E-mail					
Complaint/Suggestion/Comment/Question Please provide the details (who, what, where and how) of your grievance below:					
If included as attachment/note/letter, please tick here:					
How do you want us to reach you for feedback or update on your comment/grievance?					

FOR OFFICIAL USE ONLY

Registered by: (Name of official registering grievance)	
If – then mode: <input type="checkbox"/> Note/Letter <input type="checkbox"/> E-mail <input type="checkbox"/> Verbal/Telephonic	
Reviewed by: (Names/Positions of Official(s) reviewing grievance)	
Action Taken:	
Whether Action Taken Disclosed:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Means of Disclosure:	

GRIVENCES RECORD AND ACTION TAKEN

Sr. No.	Date	Name and Contact No. of Complainer	Type of Complain	Place	Status of Redress	Remarks

परिशिष्ट 5: नमूना शिकायत पंजीकरण फार्म

(हिंदी, उर्दू और अंग्रेजी या स्थानीय भाषा में उपलब्ध हो, यदि कोई हो,)

UEAP शिकायतें, सुझाव, प्रश्नों और परियोजना के कार्यान्वयन के बारे में टिप्पणियों का स्वागत करता है¹ हम लोगों को शिकायत के साथ उनके नाम और संपर्क जानकारी प्रदान करने के लिए प्रोत्साहित करते हैं ताकि हम स्पष्टीकरण और प्रतिक्रिया के लिए आप के साथ संपर्क कर सकें।

आपको अपने व्यक्तिगत विवरण शामिल करने चाहिए लेकिन उस जानकारी को गोपनीय रखा जायगा¹ आपका नाम ऊपर (गोपनीय) • लेखन / टाइपिंग द्वारा हमें सूचित करें धन्यवाद

तारीख			पंजीकरण का स्थान			
संपर्क करने संबंधी जानकारी / व्यक्तिगत विवरण						
नाम		लिंग	पुरुष महिला	आयु		
घर का पता						
गांव / शहर						
जनपद						
फोन नं.						
ई मेल						
शिकायत / सुझाव / टिप्पणी / प्रश्न नीचे अपनी शिकायत का विवरण (जो, क्या, कहाँ और कैसे) प्रदान करें:						
सलगनक / नोट / पत्र के रूप में, शामिल हैं, कृपया यहाँ टिक करें						
हम आप तक प्रतिक्रिया के लिए कैसे पहुँच सकते हैं या अपनी टिप्पणी / शिकायत पर नवीनीकरण?						
केवल कार्यालय उपयोग के लिए						
द्वारा पंजीकृत: (सरकारी पंजीकरण शिकायत का नाम)						
यदि -फिर विधि:						
<input type="checkbox"/> नोट / पत्र <input type="checkbox"/> ई मेल <input type="checkbox"/> मौखिक / टेलीफोन						
से समीक्षित: (नाम / अधिकारी की पोजिशन समीक्षा शिकायत)						
की गई कार्रवाई:						
की गई कार्रवाई का खुलासा:			<input type="checkbox"/> हाँ <input type="checkbox"/> नहीं			
प्रकटीकरण का मतलब:						
शिकायत रिकॉर्ड और की गई कार्रवाई क्रम संख्या	तारीख	नाम और complainer का संपर्क नंबर	शिकायत के प्रकार	जगह	निवारण की स्थिति	टिप्पणियाँ

