

Environmental Monitoring Report

Project Number: 47229-001 December 2015

Period: January 2015 - June 2015

IND: Uttarakhand Emergency Assistance Project (UEAP)

Submitted by Project implementation Unit –UEAP (Civil Aviation Program), Dehradun

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Project Implementation Unit (PIU)

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P.1.U. (CA.) U.E.A.P/2015-16 186 Date:-21 November, 2015 Letter No. To, The Country Director South Asia Department. India Resident Mission (ADB), 4 San Martin Marg, Chankyapuri, New Delhi 110021, India Subject: Loan 3055 IND -- Uttarakahnd Emergency Assistance Project (UEAP): Regarding submission of 2nd Semi-Annual Environmental Monitoring Report (S-AEMR) for the period of January, 2015 to June, 2015.

Dear Madam,

With reference to above mentioned subject and as per ADB's Safeguards Policy Statement 2009, please find herewith enclosed 2nd Semi-Annual Environmental Monitoring Report of PIU (Civil Aviation Sector under UEAP) for the period of January, 2015 to June, 2015 after review of ADB (TA) in Dehradun for your approval.

Enclosure: 2nd Semi-Annual Environmental Monitoring Report (January, 2015 to June, 2015).

Yours Sincerely (Dr. R. Rajesh-Kumar) Program Manager

Copy to:

- 1. Program Director, PMU (UEAP), SIIDCUL Building, IT Park, Sahastradhara Road, Dehradun.
- 2. Team Leader, M/s IIDC Consultants Pvt. Ltd. Race Course, Dehradun
- 3. Mr. Sakib Qadri ADB (TA: Environmental Expert) for kind information.
- 4. Dr. S. D. Tiwari, Officer (Environment), PIU (CA Sector), Dehradun

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Government of Uttarakhand

Project Management Unit

State Disaster Management Authority (SDMA) Uttarakhand Civil Aviation Development Authority (UCADA)

Uttarakhand Emergency Assistance Project (UEAP)

Civil Aviation Sub-projects (ADB Loan No: 3055-IND)

Second (2nd) Report

SEMI-ANNUAL ENVIRONMENTAL MONITORING REPORT (January, 2015 to June, 2015)

> Project Implementation Unit Civil Aviation Sector

> > November, 2015

Semi-Annual Environmental Monitoring Report (January, 2015 to June, 2015) for Civil Aviation Sector (UEAP)

Loan Number : 3055-IND Month Year : November, 2015

IND: Uttarakhand Emergency Assistance Programme

Design, Planning and Supervision of Construction Works for Civil Aviation Sector towards Disaster Preparedness (Helipads, Heliports or Helidromes with associated facilities, and Amenities like Multipurpose Halls/Shelters, etc.)

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ABBREVIATIONS

ADB	Asian Development Bank
BOD	Biological Oxygen Demand
CTE	Consent to Establishment
CTO	
	Consent to Operate
DGs	Diesel Generators
DOT	Department of Tourism
DSC	Design and Supervision Consultant
EA	Executing Agency
EARF	Environment Assessment and Review Framework
EC	Electrical Conductivity
EHS	Environment Health & Safety
EIA	Environmental Impact Assessment
EMMP	Environmental Management and Monitoring Plan
EMP	Environment Management Plan
EMR	Environmental Monitoring Report
ESO	Environmental Safeguard Officer
FATO	Final Approval and Take Off Area
Gol	Government of India
GoU	Government of Uttrakhand
GR	Grievance Redressal
IA	Implementation Agency
IEE	Initial Environmental Examination
JRDNA	Joint Rapid Damage and Needs Assessment
MoEFCC	Ministry of Environment, Forests and Climate Change
NABL	National Accreditation Board for Testing and Calibration of Laboratories
O&M	Operations & Maintenance
PIU	Project Implementation Unit
PMU	Project Management Unit
PMC	Project Management Consultant
PPEs	Personal Protective Equipments
PUC	Pollution under Control Certificate
RP	Resettlement Plan
RPM	Respirable Particulate Matter
SDMA	State Disaster Management Authority
SIEE	Summary of Initial Environmental Examination
SO ₂	Sulphur- di- oxide
SPS	Safeguard Policy Statement
UCADA	Uttarakhand Civil Aviation Development Authority
UEAP	Uttarakhand Emergency Assistance Program
UEPPCB	Uttarakhand Environmental Protection & Pollution Control Board
UJS	Uttarakhand Jal Sansthan
000	

I. INTRODUCTION

A. Background

1. Uttarakhand being a tourist and pilgrimage State attracts a large number of tourist and pilgrims. Recent disaster of unprecedented floods in June, 2013 in the state of Uttarakhand, devastated many towns and villages on the banks of rivers Mandakini, Bhagirathi, Pindar, Alaknanda and Saryu. Infrastructure facilities like roads, power supply, communication, buildings, and water supply had been affected severely. Though the state government had taken up many steps to temporarily restore the facilities, it is envisaged to take up permanent measures to restore and rehabilitate the facilities.

B. Project Objectives

- 2. Uttarakhand being a tourist and pilgrimage State attracts a large number of tourist and pilgrims. A major disaster during 15-17 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.
- 3. The Natural Disaster of June 2013 has resulted in huge loss of lives of tourists/residents and severe damage to infrastructural facilities in the region, highlighting the requirement to strengthen the disaster preparedness by creating proper rescue/relief/evacuation mechanism through aerial route in such eventualities in the difficult Himalayan terrain
- Based on the request of India, a Joint Rapid Damage and Needs Assessment 4. (JRDNA) 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 Project (UEAP) has been formulated as a multi-sector emergency loan in sector loan modality. The executing agency (EA) for the UEAP is Government of Uttarakhand (GoU) and State Disaster Management Authority (SDMA). The primary Implementing Agencies (IAs) are be Public Works Department (PWD) for roads, bridges, urban roads, and trekking routes including eco-trails. The 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. Some other state agencies such as Forest Department, are likely to be entrusted with some works under UEAP under these primary IAs.
- 5. While the disaster affected almost all districts within the state, the main focus of the assessment was on five districts that were most affected: Bageshwar, Chamoli, Pithoragarh, Rudraprayag, and Uttarkashi. However, to strengthen the disaster preparedness capability and to restore visitor's faith/confidence in the tourism safety through provision of better connectivity and presence of rescue, relief, and evacuation mechanisms, as per the indicative list of sub-projects in PAM under "Section II". Tourism Amenities and Helipads" and its Sub-section 1. The main theme of PIU (CA) is to "Construction and Upgradation of Helipads, Heliports or Helidromes in the state of Uttarakhand. A first priority of 12 such helipads or heliports only has been identified in 7 Districts of Uttarakhand under UEAP (Phase 1: Civil Aviation Program). These would be developed under three categories of helipads (i.e. H4 = 4, H3 = 4, and H2 = 4 Nos.).

The nature of civil work would be construction of 11 new helipads in 6 Districts, and upgradation of 1 helipad in 1 District (existing Helipad at Auli in District Chamoli).

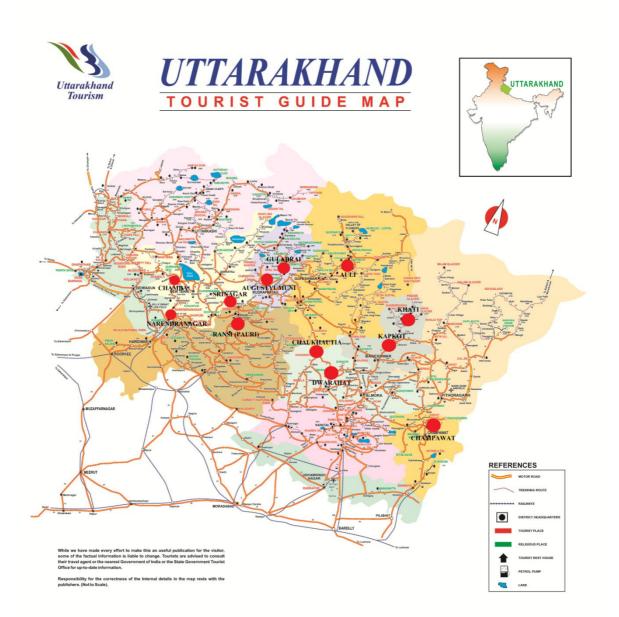


Figure - 1. District of Uttarakhand depicting in Garhwal and Kumaon regions

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 (MDRs); 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 Sanstahan (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 Uttarakhand Civil Aviation Development Authority (UCADA) for helipads 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. Till end of June 2015, all the sub-projects/packages of Phase 1 has been awarded, out of which two sub-projects are in Rudraprayag district, two sub-projects are in Pauri district, two in Tehri district and one in Chamoli distict in Garhwal division; two in Almora district, two in Bageshwar district and one in Champawat district in Kumaon Division. The construction work is under progress and in different stage. **Table 1** shows the project components, starting date of implementation, schedule date of completion etc.

Locations	Sub-projects (Package No.)	Starting date of Implementation	Projected months of completion (as per Work Order)	Schedule date of completion	Physical progress	
Garhwal Divisi	Garhwal Division					
Budrapravag	UK/UEAP- CA/DSC-01(R) (Augustymuni)	20 th March 2015	15	19 th June 2016	Layout done on 20.5.2015. Work started on 31.5.2015 but the Work held up due to local issue.	
Rudraprayag	UK/UEAP- CA/DSC-01(R) (Gulabrai)	20 th March 2015	15	19 th June 2016	Layout done on 20.5.2015. Work started on 24.5.2015 but the Work held up due to local issue.	
Pauri	UK/UEAP- CA/DSC-01(R) (Ransi)	20 th March 2015	15	19 th June 2016	Work yet to start	
Garhwal	UK/UEAP- CA/DSC-01(R) (Srinagar)	20 th March 2015	15	19 th June 2016	Work yet to start	
Tehri Garhwal	UK/UEAP- CA/DSC-01(R) (Narendranagar)	20 th March 2015	15	19 th June 2016	Layout done on 21.5.2015.Work started on 25.5.2015. Sub base completed, DLC is in	

Table - 1: Details and status of the work

Locations	Sub-projects (Package No.)	Starting date of Implementation	Projected months of completion (as per Work Order)	Schedule date of completion	Physical progress
					progress in FATO area.
	UK/UEAP- CA/DSC-01(R) (Chamba)	20 th March 2015	15	19 th June 2016	Layout done on 22.5.2015.Work started on 25.5.2015. Earth work and excavation is in progress in FATO area.
Chamoli	UK/UEAP- CA/DSC-01(R) (Auli)	20 th March 2015	15	19 th June 2016	Work yet to start
Kumaon Divis	ion		-		
	UK/UEAP- CA/DSC-01(R) (Dwarahat)	20 th March 2015	15	19 th June 2016	Layout done on 17.5.2015.Work started on 17.5.2015. Earth work and excavation is in progress.
Almora	UK/UEAP- CA/DSC-01(R) (Chaukhotiya)	20 th March 2015	15	19 th June 2016	Layout done on 22.5.2015.Work started on 22.5.2015. DLC completed and PQC is in progress.
Pagwaahwar	UK/UEAP- CA/DSC-01(R) (Kapkot)	20 th March 2015	15	19 th June 2016	Work yet to start
Bagweshwar	UK/UEÁP- CA/DSC-01(R) (Khati)	20 th March 2015	15	19 th June 2016	Work yet to start
Champawat	UK/UEAP- CA/DSC-01(R) (Champawat)	20 th March 2015	15	19 th June 2016	Work yet to start

II. IMPLEMENTATION PROGRESS

E. Major Works and Progress

- 9. Under Civil Aviation sector till 30th June, 2015 a single contracts of twelve sub-projects has been awarded, out of which work on two sub-projects in Tehri Garhwal district and two sub-projects in Almora district are under progress. **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.
- 10. Monitoring and reporting on Environmental safeguard have been started. At present as such no adverse effect of project activities on social and environmental components is anticipated.

Table - 2: Major Works under 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
Garhwal Region					-	
Rudraprayag	UK/UEAP-CA/DSC-01(R) (Augustymuni)	Constructions of H3 type Helipads and its associated facilities.	Work held up due to local issue.	Yes	-	-
nuuraprayag	UK/UEAP-CA/DSC-01(R) (Gulabrai)	Constructions of H2 type Helipads and its associated facilities.	Work held up due to local issue.	Yes	-	-
Pauri Garhwal	UK/UEAP-CA/DSC-01(R) (Ransi)	Constructions of H2 type Helipads and its associated facilities.	Work is yet to be started	-	-	-
Fault Garriwai	UK/UEAP-CA/DSC-01(R) (Srinagar)	Constructions of H2 type Helipads and its associated facilities.	Work is yet to be started	-	-	-
Tehri Garhwal	UK/UEAP-CA/DSC-01(R) (Narendranagar)	Constructions of H4 type Helipads	Sub base completed, DLC is in progress in FATO area	As the work is in initial stage, no change of work is anticipated.	Effective monitoring and application of EMP. Dust emissions are being controlled by spray of water over the excavated soil as and when required. As of now Safety norms are partially followed at site.	-
	UK/UEAP-CA/DSC-01(R) (Chamba)	Constructions of H4 type Helipads	Earth work and excavation is in progress in FATO area	As the work is in initial stage, no change of work is anticipated.	Effective monitoring and application of EMP Dust emissions are being controlled by spray of water over	-

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
					the excavated soil as and when required.	
					As of now Safety norms are partially followed at site.	
Chamoli	UK/UEAP-CA/DSC-01(R) (Auli)	Constructions of H3 type Helipads and its associated facilities.	Work is yet to be started	-	-	-
Kumaon Regio	on		1	1		1
Almora	UK/UEAP-CA/DSC-01(R) (Dwarahat)	Constructions of H3 type Helipads and its associated facilities.	Earth work and excavation is in progress	As the work is in initial stage, no change of work is anticipated.	Effective monitoring and application of EMP Dust emissions are being controlled by spray of water over the excavated soil as and when required. As of now Safety norms are partially followed at site.	-
	UK/UEAP-CA/DSC-01(R) (Chaukhatiya)	Constructions of H3 type Helipads and its associated facilities.	DLC completed and PQC is in progress.	As the work is in initial stage, no change of work is anticipated.	Effective monitoring and application of EMP. Dust emissions are being controlled by spray of water over the excavated soil as and when required. As of now Safety norms are partially	-

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
					followed at site.	
Bageshwar	UK/UEAP-CA/DSC-01(R) (Kapkot)	Constructions of H3 type Helipads and its associated facilities.	Work is yet to be started	-	-	-
	UK/UEAP-CA/DSC-01(R) (Khati)	Constructions of H4 type Helipads	Work is yet to be started	-	-	-
Chapawat	UK/UEAP-CA/DSC-01(R) (Champawat)	Constructions of H2 type Helipads and its associated facilities.	Work is yet to be started	-	-	-

III. ENVIRONMENTAL PROCEDURE REVIEW

F. Environmental Legal Requirements

- 11. **Annexure I** representing the list of the relevant 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 subprojects likely to be developed under UEAP, it is expected that most subprojects should not fall within the scope of these legal instruments as most of the subproject is located on government land. 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 under notified area by MoEFCC.
 - Construction work/facilities within 10 km of the boundary of protected areas (such as National Parks, Sanctuaries, Notified areas and Biosphere Reserves);
 - Mobile diesel generators.

G. Environmental Performance Indicators

- 12. For effective monitoring, selected environmental parameters have been identified as indicators which may be qualitatively and quantitatively measured and compared over a period of time in order to assess/ensure the compliance to environmental management plans (EMPs). The environmental performance indicators selected are physical, biological and social characteristics identified as most important in affecting the environment at critical locations all along the sub-project corridors. The parameters identified as performance indicators are:
 - Compliance with environmental management and monitoring plans.
 - Compliance to state/national environmental regulations.
 - Monitoring of ambient air quality, water quality and noise levels and comparison with baseline environmental quality and state/national standards.
 - Biological parameters like survival success rate of plants and bio-indicators (like frogs etc as good indicator of changing environment) in case of deep trenching work.

Со	mponent	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, Forests & Climatic Change (MoEFCC) and Wildlife Board of India.	
2.	Construction of temporary labour camp in	Forest (Conservation) Act 1980; Wildlife (protection) Act 1972	Permission from local forest office	No action is required as none of the labour camp is located or proposed to be

Table - 3: Action Required Ensuring Subprojects Comply with NationalEnvironmental Laws

Со	mponent	Applicable Legislation	Compliance	Action Required
	forest area		-	established in forest area.
3.	Disposal of Construction derbies in forest area	Forest (Conservation) Act 1980; Wildlife (protection) Act 1972	Permission from local forest office	At present it is not required; most of the excavated material is being used for refilling/leveling and site development work within project site.
4.	Construction work/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, Forests & Climatic Change (MoEFCC)	No action required as none of the subproject is located within 10 km boundary or within Environmental Sensitive Zone of any National park, biosphere reserve of area having similar environmental sensitivity.
5.	Mobile diesel generators	Air (Prevention and Control of Pollution) Act 1981	CTE and CTO from UEPPCB, Dehradun	CTO renewal every year based on performance

13. The status of compliance with environmental loan covenants is presented below:

Table - 4: Compliance status with the environmental covenants as stipulated in
the Loan Agreement.

Serial No. as per the Loan	Program Specific Covenants	Status / Issues
Agreement 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 regulation 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.	been considered in the sub- projects. Project Implementation Authority will be taken care all corrective and preventive action set forth in
Human and Financia	I Resources to Implement Safeguards R	Safeguard Monitoring Report.
12	The Borrower shall ensure or cause the	Complied
	EA and relevant IA to ensure (a) that all necessary budgetary	(a) Budgetary provisions have been included in EMMP
	and human resources to fully implement the EMMP as required, are made available;	and are made available in implementation of sub- projects.

Serial No. as per	Program Specific Covenants	Status / Issues
the Loan		
Agreement		
	and (b) One official has been designated to supervise implementation of EMMP at IA- Civil Aviation Sector Sub-	(b) One official has been designated for supervising implementation of EMMP at IA-Civil Aviation Sector Sub-projects.
O (manual D lated	projects	
	Provisions in Bidding Documents and W	
13	Borrower shall ensure or cause the EA and each IA to ensure that all bidding documents and contracts for work contain provisions that require contractors to:	(a) Approved IEEs, EMPs and RPs are attached as Bidding documents of the Project- Complied
	 (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 	(b) IEEs reflects budgetary provision for implementation of EMP- Complied
	 any corrective or preventive actions set out in a Safeguards Monitoring Report; (b) make available a budget for all such environmental and social measures; (c) provide the relevant IA with a written notice of any unanticipated environmental, resettlement or indigenous people risks if any, or impacts that arise during construction, implementation or operation of the project that were not 	 (c) With the development and implementation of sub- projects, any impacts/risks arises due to change in scope, will be reflected in the revised IEEs, EMPs and Environmental Monitoring Report and accordingly Executive Agency (EA) will inform the construction Agency for taking corrective measures.
	 consider in the EIA/IEE, the EMMP and the RP or the IPP if any; (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials 	(d) Haul road are marked properly for sub-projects without disturbing residence and agriculture land- Complied
Cofegurardo Marcin	and construction; and (e) Fully reinstate pathways, other local infrastructure land to at least their pre-project condition upon the completion of construction.	 (e) Pathways, lands which are affected for the subprojects will be restored by concerned construction agency after before the operation of sub-project.
Safeguards Monitor		
14	The borrower shall ensure or cause the EA and each IA to ensure the following: (a) submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission; (b) if any unanticipated	 (a) This is the 2nd Semi-Annual Monitoring Environment Report for the period January to June 2015. Next Semi-Annual Monitoring Environment Report is due on 31st December 2015.
	environmental and / or social	(b) With the development and

Serial No. as per	Program Specific Covenants	Status / Issues
the Loan Agreement		
Agreement	 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 (c) Report any breach of compliance with the measures set forth in the EMMP, the RPs or any IPP promptly after becoming aware of the breach. 	 implementation of sub- projects, any impacts/risks arises due to change in scope, will be reflected in the revised IEEs, EMPs and Environmental Monitoring Report and accordingly Executive Agency (EA) will inform to ADB along with corrective action plan and will be reflected in Monitoring Report. (c) In case of any breach of Compliance with the
		Compliance with the measures and requirement set forth in the EMPs; EA will promptly inform ADB and suitable corrective action measures will be planned.
Prohibited List of Inv		O a mare l'a d
15	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 ADB's SPS (2009)	Complied For the selection of sub-projects there are no violations of prohibited investment activities as per ADB's SPS (2009).
Labour Standards		
16	The EA through each IA shall 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 HIV/AIDS awareness programs for labor and disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; and (ii) follow and implement all statutory provision 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 the stated provisions by the contractors.	Complied in documents Provisions are included in EMPS and Bid documents to carry out HIV/AIDS awareness program for construction labours, application of all relevant laws for health and safety, child labour law, engagement of local labour. In case of any breach of provision, necessary corrective measures shall be taken.

Table - 5: Compliance Status with Environmental Management and Monitoring Plans as stipulated in the	environmental
Documentation.	

SI. No.	Name of Sub-project	Statutory Environmental Requirements	Status of Compliance	Actions Required			
Garhwa	Garhwal Region						
1	UK/UEAP-CA/DSC- 01(R) (Augustymuni)	 Appointment of Environmental Staff. Baseline Data Generation 	 Contractor mobilized but wok stopped due some local issues. Environmental Safeguard Officer (ESO) has been deputed by the contractor Pre-construction baseline monitoring has been generated except ambient air 	Contractor is required to generate baseline monitoring for ambient air quality			
		Labour Licence	quality.				
		Workmen Compensation	Not submitted/under progress				
		• Land owner Consent for establishment of Plant site,	Arranged				
		Labour Camps	 Work stopped by local people 				
		Personal Protective Equipments	Arranged when the Civil work will start	Letter to be send to DM			
		Barricading and warning	 Work Stopped by local people 	Rudraprayag to sort out the			
		Type of Labour camps	 Work Stopped by local people 	expectation of local people.			
		 Debris and Muck Disposal Sites 	 Work Stopped by local people 				
		Water sprinklings	Work Stopped by local people				
2	UK/UEAP-CA/DSC- 01(R) (Gulabrai)	Appointment of Environmental Staff.Baseline Data Generation	Contractor mobilized but wok stopped due some local issues. Environmental Safeguard Officer (ESO) has been deputed by the contractor	Contractor is required to generate baseline monitoring for ambient air quality			
			Pre-construction baseline monitoring has been generated except ambient air				
		Labour Licence	quality.				
		Workmen Compensation	Not submitted/under progress				
		• Land owner Consent for establishment of Plant site,	Arranged				
		Labour Camps	Work stopped by local people				
		Personal Protective Equipments	Arranged when the Civil work will start	Letter to be send to DM			
		Barricading and warning	Work Stopped by local people	Rudraprayag to sort out the			
		Type of Labour camps Debrie and Much Dispersed Sites	Work Stopped by local people	expectation of local people.			
		Debris and Muck Disposal Sites	Work Stopped by local people				
		Water sprinklings	 Work Stopped by local people 				

SI. No.	Name of Sub-project	Statutory Environmental Requirements	Status of Compliance	Actions Required
3	UK/UEAP-CA/DSC- 01(R) (Ransi)	 Appointment of Environmental Staff Baseline Data Generation Labour Licence Workmen Compensation Land owner Consent for establishment of Plant site, Labour Camps Personal Protective Equipments Barricading and warning Type of Labour camps Debris and Muck Disposal Sites Water sprinkling 	 Contractor not mobilized, Environmental Safeguard Officer (ESO) has been deputed by the contractor NABL/MoEFCC Approved Laboratory identified and approved. Not submitted/under progress Arranged 	Contractor is required to generate baseline monitoring data prior to start of civil work.
4	UK/UEAP-CA/DSC- 01(R) (Srinagar)	 Appointment of Environmental Staff Baseline Data Generation Labour Licence Workmen Compensation Land owner Consent for establishment of Plant site, Labour Camps Personal Protective Equipments Barricading and warning Type of Labour camps Debris and Muck Disposal Sites Water sprinkling 	 Contractor not mobilized, Environmental Safeguard Officer (ESO) has been deputed by the contractor Pre-construction baseline monitoring has to be generated except noise monitoring. Not submitted/under progress Arranged 	Contractor is required to generate baseline monitoring data prior to start of civil work except noise monitoring.

SI. No.	Name of Sub-project	Statutory Environmental Requirements	Status of Compliance	Actions Required
5	UK/UEAP-CA/DSC- 01(R) (Narendarnagar)	 Appointment of Environmental Staff. Baseline Data Generation Labour Licence Workmen Compensation Land owner Consent for establishment of Plant site, Labour Camps Personal Protective Equipments Barricading and warning Type of Labour camps Debris and Muck Disposal Sites Water sprinklings 	 Contractor mobilized, Environmental Safeguard Officer (ESO) has been deputed by the contractor Pre-construction baseline monitoring has to be generated except noise monitoring. Not submitted/under progress Arranged Use of existing labour Camp Arranged Available Proper existing camp Not Required as per project development Available 	Contractor is required to generate baseline monitoring data except noise monitoring
6	UK/UEAP-CA/DSC- 01(R) (Chamba)	 Appointment of Environmental Staff. Baseline Data Generation Labour Licence Workmen Compensation Land owner Consent for establishment of Plant site, Labour Camps Personal Protective Equipments Barricading and warning Type of Labour camps Debris and Muck Disposal Sites Water sprinklings 	 Contractor mobilized, Environmental Safeguard Officer (ESO) has been deputed by the contractor Pre-construction baseline monitoring has to be generated except noise monitoring. Not submitted/under progress Arranged Not required Available Local labour, no requirement of labour camp Not Required as per project development Available 	Contractor is required to generate baseline monitoring data except noise monitoring
7	UK/UEAP-CA/DSC- 01(R) (Auli)	Appointment of Environmental Staff	 Contractor not mobilized, Environmental Safeguard Officer (ESO) has been deputed by the contractor Pre-construction baseline monitoring has 	Contractor is required to generate baseline monitoring for ambient air quality data prior to start of civil work.

SI. No.	Name of Sub-project	Statutory Environmental Requirements	Status of Compliance	Actions Required
		 Baseline Data Generation Labour Licence Workmen Compensation Land owner Consent for establishment of Plant site, Labour Camps Personal Protective Equipments Barricading and warning Type of Labour camps Debris and Muck Disposal Sites Water sprinkling 	 been generated except ambient air quality. Not submitted/under progress Arranged 	
Kumao	n Region			
8	UK/UEAP-CA/DSC- 01(R) (Dwarahat)	 Appointment of Environmental Staff. Baseline Data Generation Labour Licence Workmen Compensation Land owner Consent for establishment of Plant site, Labour Camps Personal Protective Equipments Barricading and warning Type of Labour camps Debris and Muck Disposal Sites Water sprinklings 	 Contractor mobilized and Environmental Safeguard Officer (ESO) has been deputed by the contractor Pre-construction baseline monitoring has been generated except ambient air quality. Not submitted/under progress Arranged Not required Available Local labour, no requirement of labour camp Not Required as per project development Available 	Contractor is required to generate baseline monitoring for ambient air quality
9	UK/UEAP-CA/DSC- 01(R) (Chaukhatiya)	 Appointment of Environmental Staff. Baseline Data Generation 	 Contractor mobilized and Environmental Safeguard Officer (ESO) has been deputed by the contractor Pre-construction baseline monitoring has been generated except ambient air quality. 	Contractor is required to generate baseline monitoring for ambient air quality

SI. No.	Name of Sub-project	Statutory Environmental Requirements	Status of Compliance	Actions Required
10		 Labour Licence Workmen Compensation Land owner Consent for establishment of Plant site, Labour Camps Personal Protective Equipments Barricading and warning Type of Labour camps Debris and Muck Disposal Sites Water sprinklings 	 Not submitted/under progress Arranged Not required Arranged Available Rented house Not Required as per project development Available 	Contractor in required to
10	UK/UEAP-CA/DSC- 01(R) (Kapkot)	 Appointment of Environmental Staff Baseline Data Generation Labour Licence Workmen Compensation Land owner Consent for establishment of Plant site, Labour Camps Personal Protective Equipments Barricading and warning Type of Labour camps Debris and Muck Disposal Sites Water sprinkling 	 Contractor not mobilized, Environmental Safeguard Officer (ESO) has been deputed by the contractor Pre-construction baseline monitoring has been generated except ambient air quality. Not arranged / under progress Arranged 	Contractor is required to generate baseline monitoring for ambient air quality data prior to start of civil work.
11	UK/UEAP-CA/DSC- 01(R) (Khati)	 Appointment of Environmental Staff Baseline Data Generation Labour Licence Workmen Compensation Land owner Consent for establishment of Plant site, 	 Contractor not mobilized, Environmental Safeguard Officer (ESO) has been deputed by the contractor NABL/MoEFCC Approved Laboratory identified and approved. Not arranged / under progress Arranged 	Contractor is required to generate baseline monitoring data prior to start of civil work.

SI. No.	Name of Sub-project	Statutory Environmental Requirements	Status of Compliance	Actions Required
		Labour Camps Personal Protective Equipments Barricading and warning Type of Labour camps Debris and Muck Disposal Sites Water sprinkling		
12	UK/UEAP-CA/DSC- 01(R) (Champawat)	 Appointment of Environmental Staff Baseline Data Generation Labour Licence Workmen Compensation Land owner Consent for establishment of Plant site, Labour Camps Personal Protective Equipments Barricading and warning Type of Labour camps Debris and Muck Disposal Sites Water sprinkling 	 Contractor not mobilized, Environmental Safeguard Officer (ESO) has been deputed by the contractor NABL/MoEFCC Approved Laboratory identified and approved. Not arranged / under progress Arranged 	Contractor is required to generate baseline monitoring data prior to start of civil work.

14. The compliance status with environmental management and monitoring plans of proposed Helipads is shown in the following table:

Table - 6: Compliance status with Environmental Management and Monitoring Plan (EMMP) as stipulated in the environmental documentation as agreed with ADB.

SI. No.	Sub-project Name	EMP Part of Contract Documents (Yes/No)	EMP Being Implemented (Yes/No)	Status of EMP Implementation (Excellent/ Satisfactory/ Partially Satisfactory/ Below Satisfaction)	Actions Proposed/ Additional Corrective Measures Required
GARH	WAL REGION				
1.	UK/UEAP-CA/DSC-01(R) (Augustymuni)	Yes	Construction work stopped	-	Contractor should start the work as soon as possible Baseline study of ambient air to be done
2.	UK/UEAP-CA/DSC-01(R) (Gulabrai)	Yes	Construction work stopped	-	Contractor should start the work as soon as possible Baseline study of ambient air to be done
3.	UK/UEAP-CA/DSC-01(R) (Ransi)	Yes	Work yet to be start	-	Contractor should mobilized as soon as possible Baseline monitoring of environment to be done
4.	UK/UEAP-CA/DSC-01(R) (Srinagar)	Yes	Work yet to be start	-	Contractor should mobilized as soon as possible Baseline monitoring of ambient air to be done
5.	UK/UEAP-CA/DSC-01(R) (Narendranagar)	Yes	Yes	Partially Satisfactory	As the sub-project work is in initial stage significant corrective measure is required except due attention on safety and sanitation.
6.	UK/UEAP-CA/DSC-01(R) (Chamba)	Yes	Yes	Partially Satisfactory	As the sub-project work is in initial stage significant corrective measure is required except due attention on safety.
7.	UK/UEAP-CA/DSC-01(R) (Auli)	Yes	Work yet to start	-	Contractor should mobilized as soon as possible Baseline monitoring of ambient air to be done
KUMAG	ON REGION				

SI. No.	Sub-project Name	EMP Part of Contract Documents (Yes/No)	EMP Being Implemented (Yes/No)	Status of EMP Implementation (Excellent/ Satisfactory/ Partially Satisfactory/ Below Satisfaction)	Actions Proposed/ Additional Corrective Measures Required
8.	UK/UEAP-CA/DSC-01(R) (Dwarahat)	Yes	Yes	Partially Satisfactory	As the sub-project work is in initial stage significant corrective measure is required except due attention on safety.
9.	UK/UEAP-CA/DSC-01(R) (Chaukhatiya)	Yes	Yes.	Partially Satisfactory	As the sub-project work is in initial stage significant corrective measure is required except due attention on safety.
10.	UK/UEAP-CA/DSC-01(R) (Kapkot)	Yes	Work yet to start	-	Contractor should mobilized as soon as possible Baseline monitoring of ambient air to be done
11.	UK/UEAP-CA/DSC-01(R) (Khati)	Yes	Work yet to start	-	Contractor should mobilized as soon as possible Baseline monitoring of environment to be done
12.	UK/UEAP-CA/DSC-01(R) (Champawat)	Yes	Work yet to start	-	Contractor should mobilized as soon as possible Baseline monitoring of environment to be done

IV. ENVIRONMENTAL MONITORING AND IMPLEMENTATION STATUS

- 15. To achieve the satisfactory level of EMP implementation at all the sub-project sites the safeguard nodal officers of IA are visiting all the sites of the concern periodically to review the EMP implementation. The environmental safeguard specialist of DSC also reviews the sites periodically and provides formal and informal training to contractors and labours. The daily observation report of each sub-project is discussed at IA in each quarter.
- 16. For implementation of EMP, arrangement of human safety, procurement of PPE, arrangement of sprinkler system are under process or started. The Contractors have nominated the safety personnel at their sites.
- 17. Training has to be given to the contractors; DSC's monitoring specialist and PIU 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.
- 18. "Pollution under Control certificate" for the engaged vehicles have been obtained for the four (4) nos. sub-projects sites under construction. Instruction has been given in this regard to the concerned contractor for obtaining PUC of other eight (8) sub-projects sites before start of construction.
- 19. Concerned staff of DSC carries scheduled visits to the construction sites and report to Team Leader DSC about issues/problems related to environmental non-compliance. Necessary directions in the form of corrective action measures, in case of non-compliances, are being issued to the contractors on the site and through letters about the procedures to resolve problems/issues or requirements.
- 20. Apart from this, regular meetings on environmental issues are being taken by Program Director, UEAP with consultants.

V. ENVIRONMENTAL MONITORING AND EVALUATION

- 21. 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 (surface and ground) quality
 - Compliance to EMP
 - Compliance to local/state/national environmental regulations

H. Monitoring basis:

22. Baseline data for Environmental Parameters were done at nine sub-project sites to check the environmental status and which will be helpful to assess any adverse impact due to the construction activities in future. These parameters were as per the monitoring plan. The monitoring of environmental parameters was being carried out as per the agreed Environmental Monitoring Plan.

I. Type of environmental receptor/attribute to be monitored

23. As per contractor agreement document environmental attributes monitored include the air, noise and water quality parameters at the proposed construction sites in subproject. The air quality parameters will be monitored, which include PM₁₀, PM_{2.5}, SO₂, NO₂ and CO. The water quality parameters include temperature, pH, electrical conductivity (EC), dissolved oxygen (DO), biochemical oxygen demand (BOD₅), total suspended solids (TSS), total dissolved solids (TDS), Turbidity, Total Alkalinity, Total hardness, Calcium Hardness and Magnesium Hardness, etc. In case of noise the day time L_{eq} values are monitored.

VI. MAJOR PROJECT ISSUES AND PROBLEMS

24. Civil work and related field activities of the sub-projects under progress in different sub-projects as stated in **Table 1**. Till date, some issues regarding the land problem has been raised by local people at Augustymuni and Gulabrai.

VII. CONSULTATIONS AND RECOMMENDATIONS

25. For protection of local environment during construction phase application of mitigation measures started as per specified EMP. Pubic consultation during construction/implementation phase required to be carried out however at present most of the sub-project work is being carried out in the Government land. In next report the issues and public opinion are proposed to be carried out and record will be presented in report. **Annexure – VII** shows the blank consultation format for recording.

VIII. GRIEVANCE REDRESSAL

- 26. As per ADB's new safeguard policy the project authority will establish a mechanism to receive and facilitate resolution of affected persons' concerns, complaints and grievances about the project's environmental performance. The grievances mechanism should be scaled to the risks and adverse impacts of the project. It will be addressed affected peoples' concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all the affected people at no cost and without retribution. The affected people will be informed by appropriate mechanism.
- 27. 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.
- 28. Sample Grievance Registration Format is enclosed as **Annexure VIII.**

The GRCs have been formulated in each district of Uttarakhand State (Annexure – IX.) to resolve the complaints related to social issues. The leaflet used during public consultation has been enclosed as Annexure – X.

IX. ISSUES AND ACTION PLAN

- 30. Experience from ADB-funded urban projects show complex social, economic, legal, institutional, and management issues in urban development largely derived from realities of urban life in developing countries like India. Urban projects typically consist of a variety of infrastructure such as roads, water, sewerage, solid waste, and slum improvement/upgrading activities. 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.
- 31. The process performance monitoring fact sheet against each possible environmental impacts has been prepared and attached as **Annexure IV**.
- 32. The general recommendations as per present observations are given in **Table 7**.

SI. 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
2	Procedural delays in obtaining clearances	Applications route through different offices within the same department and despite rigorous follow up more than 2-3 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/permission process a time frame has to be fixed with respective departments and is being followed at all levels.
3	Debris disposal	In some cases where significant excavation is required, proper debris disposal need to be carried out.

Table 7: Recommendation and Suggestions

33. The action plan considered for satisfactory environmental compliance as per the present sub-project activities are given in **Table 8**.

Action	To be taken by	Time frame
 Instruction to contractors and monitoring for Proper disposal of debris and quick disposal of excavated surplus earth material Complete use of PPE Restoration of road/lane after construction of helipads – at earliest Camp site management Water sprinkling at dry period Collection of PUC certificate Use of safety tape/ barricade/ caution board 	IA, DSC, Contractors	Continuous
Public consultation during construction	IA, DSC, Capacity building team	To be continued

 Table - 8: Action plan consider for Satisfactory Environmental Compliance

ANNEXURE - I: ENVIRONMENTAL LEGISLATION AND POLLUTION CONTROL ACTS

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.

SI. 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	 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 Expert and Storage) Rules, 1999 Bio- Medical Waste (Management and Handling) Rules, 2000 		
7	Municipal Solid Waste	Municipal Solid Waste (Management and Handling) Rules, 2000 Recycled Plastics Manufacturing and Usage Rules, 1999		
8	EIA Notification	The Ministry of Environment and Forests has revised the EIA notification, 1994, and issues the revised EIA notification on 14th September 2006		
9	Use and Management of Explosive	The Explosives Act, 1884 and The Explosives Rules, 1983		

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

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

• The Forest (Conservation) Act, 1980

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

- If the area of forests to be cleared or diverted exceeds 40 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 40 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 – II: ENVIRONMENT, FOREST AND OTHER COMPLIANCES (30th June, 2015)

Package No.	EIA Clearance	Wet Land	Forest Clearance	Wild Life Act applicability	Tree Cutting Permission	Permission from State/ National Archaeological dept.	CTE/ CTO	Labour License	Workmen Compensation Insurance	PUC	Base line data generated	Status of Environmental Monitoring
Augustymuni (Contract No.UK/UEAP- CA/P1/01 R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Work stopped	Pre- Construction Environmental monitoring done in May, 2015	No Ambient Air Quality Monitoring done during pre- construction stage. Environmental monitoring during construction phase to be done after commencement of civil work
Auli (UK/UEAP- CA/P1/01 R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Work yet to be started	Pre- Construction Environmental monitoring done in May, 2015	No Ambient Air Quality Monitoring done during pre- construction stage. Environmental monitoring during construction phase to be done after commencement of civil work
Gulabrai (UK/UEAP- CA/P1/01R	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Work stopped	Pre- Construction Environmental monitoring done in May, 2015	No Ambient Air Quality Monitoring done during pre- construction stage. Environmental monitoring during construction phase to be done after

Package No.	EIA Clearance	Wet Land	Forest Clearance	Wild Life Act applicability	Tree Cutting Permission	Permission from State/ National Archaeological dept.	CTE/ CTO	Labour License	Workmen Compensation Insurance	PUC	Base line data generated	Status of Environmental Monitoring
												commencement of civil work
Chamba (UK/UEAP- CA/P1/01R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Obtained	Pre- Construction Noise monitoring done in April, 2015	No Ambient Air Quality, Water Quality and Soil quality Monitoring done during pre- construction stage. Environmental monitoring during construction phase to be done.
Narendranagar (UK/UEAP- CA/P1/01 R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Obtained	Pre- Construction Noise monitoring done in April, 2015	No Ambient Air Quality, Water Quality and Soil quality Monitoring done during pre- construction stage. Environmental monitoring during construction phase to be done.
Srinagar (UK/UEAP- CA/P1/01R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Work yet to be started	Pre- Construction Noisel monitoring done in April, 2015	No Ambient Air Quality, Water Quality and Soil quality Monitoring done during pre- construction stage. Environmental monitoring during construction phase to be done after commencement of civil work

Package No.	EIA Clearance	Wet Land	Forest Clearance	Wild Life Act applicability	Tree Cutting Permission	Permission from State/ National Archaeological dept.	CTE/ CTO	Labour License	Workmen Compensation Insurance	PUC	Base line data generated	Status of Environmental Monitoring
Ransi (UK/UEAP- CA/P1/01 R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Work yet to be started	Not done	Pre-construction Environmental Monitoring to be done.
Dwarahat (UK/UEAP- CA/P1/01R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Obtained	Pre- Construction Environmental monitoring done in April, 2015	No Ambient Air Quality Monitoring done during pre- construction stage. Environmental monitoring during construction phase to be done.
Chaukhutiya (UK/UEAP- CA/P1/01 R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Obtained	Pre- Construction Environmental monitoring done in April, 2015	No Ambient Air Quality Monitoring done during pre- construction stage. Environmental monitoring during construction phase to be done.
Kapkot (UK/UEAP- CA/P1/01R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to	Work yet to be started	Pre- Construction Environmental monitoring done in April, 2015	No Ambient Air Quality Monitoring done during pre- construction stage. Environmental monitoring during construction

Package No.	EIA Clearance	Wet Land	Forest Clearance	Wild Life Act applicability	Tree Cutting Permission	Permission from State/ National Archaeological dept.	CTE/ CTO	Labour License	Workmen Compensation Insurance	PUC	Base line data generated	Status of Environmental Monitoring
									6.1.2016			phase to be done after commencement of civil work
Khati (UK/UEAP- CA/P1/01R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Work yet to be started	Not done	Pre-construction Environmental Monitoring to be done.
Champawat (UK/UEAP- CA/P1/01R)	NR	NR	NR	NR	NR	NR	NR	To be obtained	Workmen Compensation Insurance has been arranged by Woodhill Infrastructure Ltd. Dated 7.1.2015 to 6.1.2016	Work yet to be started	Not done	Pre-construction Environmental Monitoring to be done.

NR- Not required

ANNEXURE - III: PHOTO ILLUSTRATION





ANNEXURE - IV: COMPLIANCE OF APPLICATION OF EMMP

Name of Sub-Project: Construction and Upgradation of Helipad and associated facilities at Narendranagar in the district of Tehri under UEAP Package No: UK/UEAP-CA/P1/01(R) Physical Progress: Layout and sub-base completed, DLC is in progress in FATO area.

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
Site E	stablishment and Pr	eliminary 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. Proof of compliance to statutory requirements must be forwarded by the facility owner and/or contractor to PMU/PIU in relation to hot mixing, stone crushers, diesel generators etc. A copy of the EMP must be kept on site during the construction period	EMP at site NOC from Competent Authority	All project sites	DSC/PIU	Observation and document checking	Environment Specialist of DSC and Environment Officer of PMU	NOC not required EMP available with PIU
2	Education of site staff on general and Environmental Conduct	Ensure that all site personnel have a basic level of	Documentation – Training and Awareness	-	DSC/PIU	Materials and records on awareness training program	Environment Specialist of DSC and Environment Officer of PMU	To be comply Not done
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). Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Sign boards Project Information Dissemination	-	DSC/PIU	Materials and records on awareness training program	DSC and Environment Officer of PMU	To be comply Not done
4	Lack of sufficient	Design will include provisions for ensuring effective	Maintenance	-	PMU/PIU	Observation	Environment	Complied in

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
	planning to assure long term sustainability of the improvements and ensure protection of the assets created and the architectural/arch aeological character of the	maintenance and protection of the assets created so as to ensure the long term sustainability.	procedure as per design			and document checking	Specialist of DSC and Environment Officer of PMU	design
Decian	surroundings and Pre-construct	ion Imposto						
5	Layout of components and its location to avoid impacts on the aesthetics, sensitive environmental areas / attributes 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 regulatory requirements.	Layout of components	All project locations	PMU/PIU/ DSC	Observation and document checking	Environment Specialist of DSC and Environment Officer of PMU	Complied in design and EMP
6	Selection of materials and construction technologies, if not carefully chosen, will adversely impact the aesthetic appeal of the destinations	Selection of materials will be according to specification and from approved sources Procurement of all material according to the material specification of the contract document and sourced from licensed and approved sources.	 List of approved quarry sites and sources of materials Construction Contractor documentation 	Material source sites	Contractor, PIU, DSC	 Checking of records Visual inspection of sites 	PMU	Under compliance Approval obtained/ or to be obtained from PMU and DSC.
7	Socio cultural resources- Ground disturbance can uncover and	There is not such location anticipated on the project site. In case of chance of finding such location, consult Archaeological Survey of India (ASI) and/or concerned dept. of Uttarakhand Govt. as	Chance find protocol	-	PIU, PMU	Site observation, document checking	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
	damage archaeological and historical remains`	applicable to obtain an expert assessment of the archaeological potential of the site						
8	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.	Detailed design	-	DSC, PMU	Document checking and site feasibility	PMU	Under compliance
9	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 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	Necessary permission/ NOC	-	DSC, PIU	Document checking	Environment Specialist of DSC and Environment Officer of PMU	Tree cutting not required. Restoration will be done.
Const	ruction phase	pian						
10	Construction Camps - Location, Selection, Design and Layout	Siting of the construction camps, labour camp, and stockpiles shall be as per the guidelines of UEPPCB, ULB, village panchayat and any other applicable guideline to the local site. The contractor will assess the impact of the construction camp and should be acceptable to the PIU/ IA/PMU. 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	Selected location for construction work camps and stockpile area,	Construction camp site	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Workers are rented in the existing camps provided by the police line in the constructed area. All facilities- toilet,

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		sanitation facilities must be adequately drained. Sewage management though septic tanks and solid waste management though local ULB system or other alternate measures.						drinking water provided as per EMP
11	Drinking water availability	Sufficient supply of potable water to be provided and maintained as per the standards, requirements, test methods and sampling procedure according to IS:10500.	Availability of drinking water	Working and camp site	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Provided at working sites
12	Waste disposal	Pre-identified disposal location (identified by Contractor in compliance to relevant regulation and approved by DSC) shall be part of Comprehensive Waste Disposal Plan Solid Waste Management Plan. Contractor shall ensure that waste shall not be disposed off near the water course or agricultural land, Orchards and Natural Habitats like Grasslands.	 Waste Management List Complaints from sensitive receptors 	Project Locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Big Excavation is not required for the project at present. Most of the excavated material is being used on site for levelling purpose.
13	Stockpiling of construction materials	Stockpiling of construction materials and excavated earth or silt in case of construction of river bed filtration does not impact obstruct the drainage and Stockpiles will be covered to protect from dust and erosion.	Selected location and facility	Project Locations	Contractor	Site checking	Environment Specialist of DSC and Environment Officer of PMU	Instruction given to contractor
14	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 approved quarries only after consent of the Department of Mines and Geology and District Administration.	 List of approved quarry sites and sources of materials Construction Contractor documentation 	Quarries and material source areas	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Complied Approval obtained from PMU and DSC. Purchase from local markets
15	Arrangement for Construction Water	The contractor shall use ground/surface water as a source of water for the construction with the written consent from the concerned Department.	Water source locations	Project locations	Contractor	Site observation	Environment Specialist of DSC and	Arranged

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		The Contractor shall provide a list of locations and type of sources from where water for construction shall be extracted.					Environment Officer of PMU	
16	Soil/land Erosion	Slope protection measures will be undertaken as per design to control soil erosion. There shall be a periodic checking of the site's drainage system by DSC, PIU/IA and PMU to ensure that the water flow is unobstructed.	Slope protection work	Construction locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Will be done as per requirement and site condition
17	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. Waste will be disposed of to a suitable waste site in accordance with Hazardous Wastes (Management, Handling and Transboundary movement) Rules, 2008 and amendments till date and applicable norms	 Water pollution Complaint from sensitive receptors 	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Arranged near water source
18	Water Pollution from Fuel and Lubricants	The Contractor shall ensure that all construction vehicle parking locations, fuel/ lubricants storage sites, vehicle, machinery and equipment maintenance and refuelling sites shall be located at least 300 m away from rivers/streams and irrigation canal/ponds if any	 Water pollution Complaint from sensitive receptors 	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement.
19	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 will be monitored as per monitoring plan.	 Soil pollution- contamination of ground 	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement.
20	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	 Location of stockpiles Complaints from sensitive receptors Monitoring data Water sprinkling arrangement Cover materials 	Project locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Complied Location of stockpiles selected. Covering of materials will be considered Water sprinkling is

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation available in
21	Emission from Construction Vehicles, Equipment and Machinery	All vehicles, equipment and machinery used for construction shall confirm to the relevant Bureau of India Standard (BIS) norms. The discharge standards promulgated under the Environment Protection Act, 1986 shall be strictly adhered to. The use of silent/quiet equipment compliant with India ambient noise standards and standards specified for manufacturers shall be encouraged in the sub Project. 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.	 Heavy equipment and machinery with air pollution control Availability of PUC certificate 	Project locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	the site for prevention of dust. Base line air quality monitoring to be done and during construction monitoring will be done after monsoon and as per EMP PUC certificate not submitted by contractor
22	Noise Pollution	The Contractor shall confirm that all Construction equipment used in construction shall strictly conform to the MoEF/CPCB noise standards and all Vehicles and equipment used in construction shall be fitted with exhaust silencers. At the construction sites noisy construction work such as crushing, operation of DG sets, use of high noise generation equipment shall be stopped during the night time between 10.00 pm to 6.00	 Complaints from sensitive receptors Use of silencers in noise-producing equipment and sound barriers Monitoring data 	Project Locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Complied No such noise producing machinery mobilized at site Workers are using PPEs

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		am. Noise limits for construction equipment used in this project will be in conformity to the BIS/SPCB/CPCB standards Regular monitoring of ambient noise levels to ensure compliance to Uttarakhand Environment Protection & Pollution Control Board standards.						at construction sites, when ever required as per nature of work. Instruction has been given to insure PPE to each and every workers and supervisors to use proper PPE. Base line monitoring done. During construction monitoring to be done
23	Material Handling at Site	Workers Employed on mixing cement, lime mortars, concrete etc., will be provided with protective footwear and protective masks and goggles. Workers, who are engaged in welding works, will be provided with welder's protective eye-shields. Workers engaged in stone breaking activities will be provided with protective goggles, masks, and clothing. All concrete mixing must take place on a designated, impermeable surface.	Available protective equipments	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Partially complied. Instruction given to contractor for full compliance
24	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.	 Waste Management List Complaints from sensitive receptors 	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Complied Utilization of excess earth and demolish waste done

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
25	Safety Measures During Construction	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. 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 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. 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.	 Site-specific Health and Safety (H&S) Plan Equipped first-aid stations; Medical insurance coverage for workers Supplies of potable drinking water; Record of H&S orientation trainings Personal protective equipments Sign boards for comply public safety Complaints from sensitive receptors Number of signages placed at subproject location 	Project Locations	Contractor	Document check and visual observation	Environment Specialist of DSC and Environment Officer of PMU	PPE used by contractor First aid box are available at all working locations Safety tape / barricade are provided at all excavated sites
26	Clearing of Construction of Camps and Restoration	Contractor to prepare site restoration plans for approval by the Engineer. The plan is to be implemented by the contractor prior to demobilization.	Site restoration plan	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Workers are given informal Health and Safety training by DSC/IA at site.
27	Risk of archaeological chance finds	Strictly follow the protocol for chance finds in any excavation work; Request FPIU/DSC or any authorized person with	Chance find protocol	Project Locations	Contractor	Checking of record	Environment Specialist of DSC and	Not required till date

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		archaeological field training to observe excavation; Stop work immediately to allow further investigation if any finds are suspected; and Inform FPIU/DSC, and take any action they require ensuring its removal or protection in situ.					Environment Officer of PMU	
28	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.	Employment record	Project Locations	Contractor	Checking of records	Environment Specialist of DSC and Environment Officer of PMU	Complied Local labours are employed
29	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 EMP, community liaisoning, 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 completed.	Available Environment and safety officer	Project site/ Office	Contractor	Observation, checking of presence and activity	Environment Specialist of DSC and Environment Officer of PMU	Complied

Name of Sub-Project: Construction and Upgradation of Helipad and associated facilities at Chamba in the district of Tehri under UEAP Package No: UK/UEAP-CA/P1/01 (R)

Physical Progress: Layout completed, Earthwork and excavation is in progress in FATO area.

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
Site Es	stablishment and Pr	eliminary 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. Proof of compliance to statutory requirements must be forwarded by the facility owner and/or contractor to PMU/PIU in relation to hot mixing, stone crushers, diesel generators etc. A copy of the EMP must be kept on site during the construction period	EMP at site NOC from Competent Authority	All project sites	DSC/PIU	Observation and document checking	Environment Specialist of DSC and Environment Officer of PMU	NOC not required EMP available with PIU
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.	Documentation – Training and Awareness	-	DSC/PIU	Materials and records on awareness training program	Environment Specialist of DSC and Environment Officer of PMU	To be comply Not done
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). Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Sign boards Project Information Dissemination	-	DSC/PIU	Materials and records on awareness training program	Environment Specialist of DSC and Environment Officer of PMU	To be comply Not done
4	Lack of sufficient planning to assure long term	Design will include provisions for ensuring effective maintenance and protection of the assets created	Maintenance procedure as per design	-	PMU/PIU	Observation and document checking	Environment Specialist of DSC and	Complied in design

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
	sustainability of the improvements and ensure protection of the assets created and the architectural/arch aeological						Environment Officer of PMU	
	character of the surroundings							
Desigr	and Pre-construct	ion Impacts						
5	Layout of components and its location to avoid impacts on the aesthetics, sensitive environmental areas / attributes 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 regulatory requirements.	Layout of components	All project locations	PMU/PIU/ DSC	Observation and document checking	Environment Specialist of DSC and Environment Officer of PMU	Complied in design and EMP
6	Selection of materials and construction technologies, if not carefully chosen, will adversely impact the aesthetic appeal of the destinations	Selection of materials will be according to specification and from approved sources Procurement of all material according to the material specification of the contract document and sourced from licensed and approved sources.	 List of approved quarry sites and sources of materials Construction Contractor documentation 	Material source sites	Contractor, PIU, DSC	 Checking of records Visual inspection of sites 	PMU	Under compliance Approval obtained/ or to be obtained from PMU and DSC.
7	Socio cultural resources- Ground disturbance can uncover and damage archaeological	There is not such location anticipated on the project site. In case of chance of finding such location, 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	Chance find protocol	-	PIU, PMU	Site observation, document checking	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
	and historical remains`							
8	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.	Detailed design	-	DSC, PMU	Document checking and site feasibility	PMU	Under compliance
9	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 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	Necessary permission/ NOC	-	DSC, PIU	Document checking	Environment Specialist of DSC and Environment Officer of PMU	Tree cutting not required. Restoration will be done.
	uction phase	-						
10	Construction Camps - Location, Selection, Design and Layout	Siting of the construction camps, labour camp, and stockpiles shall be as per the guidelines of UEPPCB, ULB, village panchayat and any other applicable guideline to the local site. The contractor will assess the impact of the construction camp and should be acceptable to the PIU/ IA/PMU. 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. Sewage management though septic tanks and	Selected location for construction work camps and stockpile area,	Construction camp site	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Local labours are working in the construction sites.

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		solid waste management though local ULB system or other alternate measures.						
11	Drinking water availability	Sufficient supply of potable water to be provided and maintained as per the standards, requirements, test methods and sampling procedure according to IS:10500.	Availability of drinking water	Working and camp site	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Provided to workers at construction sites.
12	Waste disposal	Pre-identified disposal location (identified by Contractor in compliance to relevant regulation and approved by DSC) shall be part of Comprehensive Waste Disposal Plan Solid Waste Management Plan. Contractor shall ensure that waste shall not be disposed off near the water course or agricultural land, Orchards and Natural Habitats like Grasslands.	 Waste Management List Complaints from sensitive receptors 	Project Locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Big Excavation is not required for the project at present. Most of the excavated material is being used on site for levelling purpose.
13	Stockpiling of construction materials	excavated earth or silt in case of construction of river bed filtration does not impact obstruct the drainage and Stockpiles will be covered to protect from dust and erosion.	Selected location and facility	Project Locations	Contractor	Site checking	Environment Specialist of DSC and Environment Officer of PMU	Instruction given to contractor
14	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 approved quarries only after consent of the Department of Mines and Geology and District Administration.	 List of approved quarry sites and sources of materials Construction Contractor documentation 	Quarries and material source areas	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Complied Approval obtained from PMU and DSC. Purchase from local markets
15	Arrangement for Construction Water	The contractor shall use ground/surface water as a source of water for the construction with the written consent from the concerned Department. The Contractor shall provide a list of locations and type of sources from where water for construction	Water source locations	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Arranged

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		shall be extracted.						
16	Soil / land Erosion	Slope protection measures will be undertaken as per design to control soil erosion. There shall be a periodic checking of the site's drainage system by DSC, PIU / IA and PMU to ensure that the water flow is unobstructed.	Slope protection work	Construction locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Will be done as per requirement and site condition
17	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. Waste will be disposed of to a suitable waste site in accordance with Hazardous Wastes (Management, Handling and Transboundary movement) Rules, 2008 and amendments till date and applicable norms	 Water pollution Complaint from sensitive receptors 	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Arranged near water source
18	Water Pollution from Fuel and Lubricants	The Contractor shall ensure that all construction vehicle parking locations, fuel/ lubricants storage sites, vehicle, machinery and equipment maintenance and refuelling sites shall be located at least 300 m away from rivers/streams and irrigation canal/ponds if any.	Water pollution Complaint from sensitive receptors	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement.
19	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 will be monitored as per monitoring plan.	Soil pollution- contamination of ground	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement.
20	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.	 Location of stockpiles Complaints from sensitive receptors Monitoring data Water sprinkling arrangement Cover materials 	Project locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Complied Location of stockpiles selected. Covering of materials will be considered Water sprinkling are available in the site for prevention of

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
								dust. Base line air quality monitoring to be done and during construction monitoring will be done after monsoon and as per EMP
21	Emission from Construction Vehicles, Equipment and Machinery	All vehicles, equipment and machinery used for construction shall confirm to the relevant Bureau of India Standard (BIS) norms. The discharge standards promulgated under the Environment Protection Act, 1986 shall be strictly adhered to. The use of silent/quiet equipment compliant with India ambient noise standards and standards specified for manufacturers shall be encouraged in the sub Project. 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.	 Heavy equipment and machinery with air pollution control Availability of PUC certificate 	Project locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	PUC certificate not submitted by contractor
22	Noise Pollution	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. At the construction sites noisy construction work such as crushing, operation of DG sets, use of high noise generation equipment shall be stopped during the night time between 10.00 pm to 6.00 am. Noise limits for construction equipment used in this project will be in conformity to the BIS / SPCB /	 Complaints from sensitive receptors Use of silencers in noise-producing equipment and sound barriers Monitoring data 	Project Locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Complied No such noise producing machinery mobilized at site Workers are using PPEs at construction sites, when

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		CPCB standards Regular monitoring of ambient noise levels to ensure compliance to Uttarakhand Environment Protection & Pollution Control Board standards.						ever required as per nature of work. Instruction has been given to insure PPE to each and every workers and supervisors to use proper PPE. Base line monitoring done. During construction monitoring to be done
23	Material Handling at Site	Workers Employed on mixing cement, lime mortars, concrete etc., will be provided with protective footwear and protective masks and goggles. Workers, who are engaged in welding works, will be provided with welder's protective eye-shields. Workers engaged in stone breaking activities will be provided with protective goggles, masks, and clothing. All concrete mixing must take place on a designated, impermeable surface.	Available protective equipments	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Partially complied. Instruction given to contractor for full compliance
24	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.	 Waste Management List Complaints from sensitive receptors 	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Complied Utilization of excess earth and demolish waste done
25	Safety Measures During Construction	Personal Protective Equipment for workers on the project and adequate safety measures for workers during handling of materials at site will be taken	Site-specific Health and Safety (H&S) Plan	Project Locations	Contractor	Document check and visual	Environment Specialist of DSC and	PPE used by contractor First aid box

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		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. 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 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. 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.	 Equipped first-aid stations; Medical insurance coverage for workers Supplies of potable drinking water; Record of H&S orientation trainings Personal protective equipments Sign boards for comply public safety Complaints from sensitive receptors Number of signages placed at subproject location 			observation	Environment Officer of PMU	are available at all working locations Safety tape / barricade are provided at all excavated sites
26	Clearing of Construction of Camps and Restoration	Contractor to prepare site restoration plans for approval by the Engineer. The plan is to be implemented by the contractor prior to demobilization.	Site restoration plan	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Workers are given
27	Risk of archaeological chance finds	Strictly follow the protocol for chance finds in any excavation work; Request FPIU/DSC or any authorized person with archaeological field training to observe excavation; Stop work immediately to allow further investigation if any finds are suspected; and Inform FPIU/DSC, and take any action they require	Chance find protocol	Project Locations	Contractor	Checking of record	Environment Specialist of DSC and Environment Officer of PMU	Not required till date

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		ensuring its removal or protection in situ.						
28	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.	Employment record	Project Locations	Contractor	Checking of records	Environment Specialist of DSC and Environment Officer of PMU	Complied Local labours are employed
29	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 EMP, community liaisoning, 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 completed.	Available Environment and safety officer	Project site / Office	Contractor	Observation, checking of presence and activity	Environment Specialist of DSC and Environment Officer of PMU	Complied

Name of Sub-Project: Construction and Upgradation of Helipad and associated facilities at Chaukhutiya in the district of Almora under UEAP Package No: UK/UEAP-CA/P1/01(R)

Physical Progress: Layout completed, PQC is in progress.

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
Site Es	stablishment and Pr	eliminary 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. Proof of compliance to statutory requirements must be forwarded by the facility owner and/or contractor to PMU/PIU in relation to hot mixing, stone crushers, diesel generators etc. A copy of the EMP must be kept on site during the construction period	EMP at site NOC from Competent Authority	All project sites	DSC/PIU	Observation and document checking	Environment Specialist of DSC and Environment Officer of PMU	NOC not required EMP available with PIU
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.	Documentation – Training and Awareness	-	DSC/PIU	Materials and records on awareness training program	Environment Specialist of DSC and Environment Officer of PMU	To be comply Not done
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). Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Sign boards Project Information Dissemination	-	DSC/PIU	Materials and records on awareness training program	Environment Specialist of DSC and Environment Officer of PMU	To be comply Not done
4	Lack of sufficient planning to assure long term	Design will include provisions for ensuring effective maintenance and protection of the assets created	Maintenance procedure as per design	-	PMU/PIU	Observation and document checking	Environment Specialist of DSC and	Complied in design

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
	sustainability of the improvements and ensure protection of the assets created and the architectural/arch				5		Environment Officer of PMU	
	aeological character of the surroundings							
Design	and Pre-construct	ion Impacts						
5	Layout of components and its location to avoid impacts on the aesthetics, sensitive environmental areas / attributes 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 regulatory requirements.	Layout of components	All project locations	PMU/PIU/ DSC	Observation and document checking	Environment Specialist of DSC and Environment Officer of PMU	Complied in design and EMP
6	Selection of materials and construction technologies, if not carefully chosen, will adversely impact the aesthetic appeal of the destinations	Selection of materials will be according to specification and from approved sources Procurement of all material according to the material specification of the contract document and sourced from licensed and approved sources.	 List of approved quarry sites and sources of materials Construction Contractor documentation 	Material source sites	Contractor, PIU, DSC	 Checking of records Visual inspection of sites 	PMU	Under compliance Approval obtained/ or to be obtained from PMU and DSC.
7	Socio cultural resources- Ground disturbance can uncover and damage archaeological	There is not such location anticipated on the project site. In case of chance of finding such location, 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	Chance find protocol	-	PIU, PMU	Site observation, document checking	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
	and historical remains`							
8	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.	Detailed design	-	DSC, PMU	Document checking and site feasibility	PMU	Under compliance
9	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 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	Necessary permission/ NOC	-	DSC, PIU	Document checking	Environment Specialist of DSC and Environment Officer of PMU	Tree cutting not required. Restoration will be done.
Const	ruction phase							
10	Construction Camps - Location, Selection, Design and Layout	Siting of the construction camps, labour camp, and stockpiles shall be as per the guidelines of UEPPCB, ULB, village panchayat and any other applicable guideline to the local site. The contractor will assess the impact of the construction camp and should be acceptable to the PIU/ IA/PMU. 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. Sewage management though septic tanks and	Selected location for construction work camps and stockpile area,	Construction camp site	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Local labours are working in the construction sites.

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		solid waste management though local ULB system or other alternate measures.						
11	Drinking water availability	Sufficient supply of potable water to be provided and maintained as per the standards, requirements, test methods and sampling procedure according to IS:10500.	Availability of drinking water	Working and camp site	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Provided to workers at construction sites.
12	Waste disposal	Pre-identified disposal location (identified by Contractor in compliance to relevant regulation and approved by DSC) shall be part of Comprehensive Waste Disposal Plan Solid Waste Management Plan. Contractor shall ensure that waste shall not be disposed off near the water course or agricultural land, Orchards and Natural Habitats like Grasslands.	 Waste Management List Complaints from sensitive receptors 	Project Locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Big Excavation is not required for the project at present. Most of the excavated material is being used on site for levelling purpose.
13	Stockpiling of construction materials	Stockpiling of construction materials and excavated earth or silt in case of construction of river bed filtration does not impact obstruct the drainage and Stockpiles will be covered to protect from dust and erosion.	Selected location and facility	Project Locations	Contractor	Site checking	Environment Specialist of DSC and Environment Officer of PMU	Instruction given to contractor
14	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 approved quarries only after consent of the Department of Mines and Geology and District Administration.	 List of approved quarry sites and sources of materials Construction Contractor documentation 	Quarries and material source areas	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Complied Approval obtained from PMU and DSC. Purchase from local markets
15	Arrangement for Construction Water	The contractor shall use ground/surface water as a source of water for the construction with the written consent from the concerned Department. The Contractor shall provide a list of locations and type of sources from where water for construction	Water source locations	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Arranged

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		shall be extracted.						
16	Soil / land Erosion	Slope protection measures will be undertaken as per design to control soil erosion. There shall be a periodic checking of the site's drainage system by DSC, PIU / IA and PMU to ensure that the water flow is unobstructed.	Slope protection work	Construction locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Will be done as per requirement and site condition
17	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. Waste will be disposed of to a suitable waste site in accordance with Hazardous Wastes (Management, Handling and Transboundary movement) Rules, 2008 and amendments till date and applicable norms	 Water pollution Complaint from sensitive receptors 	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Arranged near water source
18	Water Pollution from Fuel and Lubricants	The Contractor shall ensure that all construction vehicle parking locations, fuel/ lubricants storage sites, vehicle, machinery and equipment maintenance and refuelling sites shall be located at least 300 m away from rivers/streams and irrigation canal/ponds if any.	Water pollution Complaint from sensitive receptors	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement.
19	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 will be monitored as per monitoring plan.	Soil pollution- contamination of ground	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement.
20	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.	 Location of stockpiles Complaints from sensitive receptors Monitoring data Water sprinkling arrangement Cover materials 	Project locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Complied Location of stockpiles selected. Covering of materials will be considered Water sprinkling is available in the site for prevention of

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
								dust. Base line air quality monitoring to be done and during construction monitoring will be done after monsoon and as per EMP
21	Emission from Construction Vehicles, Equipment and Machinery	All vehicles, equipment and machinery used for construction shall confirm to the relevant Bureau of India Standard (BIS) norms. The discharge standards promulgated under the Environment Protection Act, 1986 shall be strictly adhered to. The use of silent/quiet equipment compliant with India ambient noise standards and standards specified for manufacturers shall be encouraged in the sub Project. 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.	 Heavy equipment and machinery with air pollution control Availability of PUC certificate 	Project locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	PUC certificate not submitted by contractor
22	Noise Pollution	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. At the construction sites noisy construction work such as crushing, operation of DG sets, use of high noise generation equipment shall be stopped during the night time between 10.00 pm to 6.00 am. Noise limits for construction equipment used in this project will be in conformity to the BIS / SPCB /	 Complaints from sensitive receptors Use of silencers in noise-producing equipment and sound barriers Monitoring data 	Project Locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Complied No such noise producing machinery mobilized at site Workers are using PPEs at construction sites, when

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		CPCB standards Regular monitoring of ambient noise levels to ensure compliance to Uttarakhand Environment Protection & Pollution Control Board standards.						ever required as per nature of work. Instruction has been given to insure PPE to each and every workers and supervisors to use proper PPE. Base line monitoring done. During construction monitoring to be done
23	Material Handling at Site	Workers Employed on mixing cement, lime mortars, concrete etc., will be provided with protective footwear and protective masks and goggles. Workers, who are engaged in welding works, will be provided with welder's protective eye-shields. Workers engaged in stone breaking activities will be provided with protective goggles, masks, and clothing. All concrete mixing must take place on a designated, impermeable surface.	Available protective equipments	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Partially complied. Instruction given to contractor for full compliance
24	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.	 Waste Management List Complaints from sensitive receptors 	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Complied Utilization of excess earth and demolish waste done
25	Safety Measures During Construction	Personal Protective Equipment for workers on the project and adequate safety measures for workers during handling of materials at site will be taken	 Site-specific Health and Safety (H&S) Plan 	Project Locations	Contractor	Document check and visual	Environment Specialist of DSC and	PPE used by contractor First aid box

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		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. 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 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. 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.	 Equipped first-aid stations; Medical insurance coverage for workers Supplies of potable drinking water; Record of H&S orientation trainings Personal protective equipments Sign boards for comply public safety Complaints from sensitive receptors Number of signages placed at subproject location 			observation	Environment Officer of PMU	are available at all working locations Safety tape / barricade are provided at all excavated sites
26	Clearing of Construction of Camps and Restoration	Contractor to prepare site restoration plans for approval by the Engineer. The plan is to be implemented by the contractor prior to demobilization.	Site restoration plan	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Workers are given informal Health and Safety training by DSC/IA at site.
27	Risk of archaeological chance finds	Strictly follow the protocol for chance finds in any excavation work; Request FPIU/DSC or any authorized person with archaeological field training to observe excavation; Stop work immediately to allow further investigation if any finds are suspected; and Inform FPIU/DSC, and take any action they require	Chance find protocol	Project Locations	Contractor	Checking of record	Environment Specialist of DSC and Environment Officer of PMU	Not required till date

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		ensuring its removal or protection in situ.						
28	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.	Employment record	Project Locations	Contractor	Checking of records	Environment Specialist of DSC and Environment Officer of PMU	Complied Local labours are employed
29	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 EMP, community liaisoning, 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 completed.	Available Environment and safety officer	Project site / Office	Contractor	Observation, checking of presence and activity	Environment Specialist of DSC and Environment Officer of PMU	Complied

Name of Sub-Project: Construction and Upgradation of Helipad and associated facilities at Dwarahat in the district of Almora under UEAP Package No: UK/UEAP-CA/P1/01 (R)

Physical Progress: Layout completed, Earthwork and excavation is in progress.

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
Site Es	stablishment and Pr	reliminary 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. Proof of compliance to statutory requirements must be forwarded by the facility owner and/or contractor to PMU/PIU in relation to hot mixing, stone crushers, diesel generators etc. A copy of the EMP must be kept on site during the construction period	EMP at site NOC from Competent Authority	All project sites	DSC/PIU	Observation and document checking	Environment Specialist of DSC and Environment Officer of PMU	NOC not required EMP available with PIU
2	Education of site staff on general and Environmental Conduct	Ensure that all site personnel have a basic level of	Documentation – Training and Awareness	-	DSC/PIU	Materials and records on awareness training program	Environment Specialist of DSC and Environment Officer of PMU	To be comply Not done
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). Provide sign boards for pedestrians to inform nature and duration of construction works and contact numbers for concerns/complaints.	Sign boards Project Information Dissemination	-	DSC/PIU	Materials and records on awareness training program	Environment Specialist of DSC and Environment Officer of PMU	To be comply Not done
4	Lack of sufficient planning to assure long term		Maintenance procedure as per design	-	PMU/PIU	Observation and document checking	Environment Specialist of DSC and	Complied in design

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
	sustainability of the improvements and ensure protection of the assets created and the architectural/arch aeological						Environment Officer of PMU	
	character of the surroundings							
Desigr	and Pre-construct	ion Impacts						
5	Layout of components and its location to avoid impacts on the aesthetics, sensitive environmental areas / attributes 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 regulatory requirements.	Layout of components	All project locations	PMU/PIU/ DSC	Observation and document checking	Environment Specialist of DSC and Environment Officer of PMU	Complied in design and EMP
6	Selection of materials and construction technologies, if not carefully chosen, will adversely impact the aesthetic appeal of the destinations	Selection of materials will be according to specification and from approved sources Procurement of all material according to the material specification of the contract document and sourced from licensed and approved sources.	 List of approved quarry sites and sources of materials Construction Contractor documentation 	Material source sites	Contractor, PIU, DSC	 Checking of records Visual inspection of sites 	PMU	Under compliance Approval obtained/ or to be obtained from PMU and DSC.
7	Socio cultural resources- Ground disturbance can uncover and damage archaeological	There is not such location anticipated on the project site. In case of chance of finding such location, 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	Chance find protocol	-	PIU, PMU	Site observation, document checking	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
	and historical remains`							
8	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.	Detailed design	-	DSC, PMU	Document checking and site feasibility	PMU	Under compliance
9	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 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	Necessary permission/ NOC	-	DSC, PIU	Document checking	Environment Specialist of DSC and Environment Officer of PMU	Tree cutting not required. Restoration will be done.
Const	ruction phase							
10	Construction Camps - Location, Selection, Design and Layout	Siting of the construction camps, labour camp, and stockpiles shall be as per the guidelines of UEPPCB, ULB, village panchayat and any other applicable guideline to the local site. The contractor will assess the impact of the construction camp and should be acceptable to the PIU/ IA/PMU. 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. Sewage management though septic tanks and	Selected location for construction work camps and stockpile area,	Construction camp site	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Local labours are working in the construction sites.

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		solid waste management though local ULB system or other alternate measures.						
11	Drinking water availability	Sufficient supply of potable water to be provided and maintained as per the standards, requirements, test methods and sampling procedure according to IS:10500.	Availability of drinking water	Working and camp site	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Provided to workers at construction sites.
12	Waste disposal	Pre-identified disposal location (identified by Contractor in compliance to relevant regulation and approved by DSC) shall be part of Comprehensive Waste Disposal Plan Solid Waste Management Plan. Contractor shall ensure that waste shall not be disposed off near the water course or agricultural land, Orchards and Natural Habitats like Grasslands.	 Waste Management List Complaints from sensitive receptors 	Project Locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Big Excavation is not required for the project at present. Most of the excavated material is being used on site for levelling purpose.
13	Stockpiling of construction materials	Stockpiling of construction materials and excavated earth or silt in case of construction of river bed filtration does not impact obstruct the drainage and Stockpiles will be covered to protect from dust and erosion.	Selected location and facility	Project Locations	Contractor	Site checking	Environment Specialist of DSC and Environment Officer of PMU	Instruction given to contractor
14	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 approved quarries only after consent of the Department of Mines and Geology and District Administration.	 List of approved quarry sites and sources of materials Construction Contractor documentation 	Quarries and material source areas	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Complied Approval obtained from PMU and DSC. Purchase from local markets
15	Arrangement for Construction Water	The contractor shall use ground/surface water as a source of water for the construction with the written consent from the concerned Department. The Contractor shall provide a list of locations and type of sources from where water for construction	Water source locations	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Arranged

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		shall be extracted.						
16	Soil / land Erosion	Slope protection measures will be undertaken as per design to control soil erosion. There shall be a periodic checking of the site's drainage system by DSC, PIU / IA and PMU to ensure that the water flow is unobstructed.	Slope protection work	Construction locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Will be done as per requirement and site condition
17	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. Waste will be disposed of to a suitable waste site in accordance with Hazardous Wastes (Management, Handling and Transboundary movement) Rules, 2008 and amendments till date and applicable norms	 Water pollution Complaint from sensitive receptors 	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Arranged near water source
18	Water Pollution from Fuel and Lubricants	The Contractor shall ensure that all construction vehicle parking locations, fuel/ lubricants storage sites, vehicle, machinery and equipment maintenance and refuelling sites shall be located at least 300 m away from rivers/streams and irrigation canal/ponds if any.	 Water pollution Complaint from sensitive receptors 	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement.
19	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 will be monitored as per monitoring plan.	 Soil pollution- contamination of ground 	Project locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	To be comply as per requirement.
20	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.	 Location of stockpiles Complaints from sensitive receptors Monitoring data Water sprinkling arrangement Cover materials 	Project locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Complied Location of stockpiles selected. Covering of materials will be considered Water sprinkling is available in the site for prevention of

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
								dust. Base line air quality monitoring to be done and during construction monitoring will be done after monsoon and as per EMP
21	Emission from Construction Vehicles, Equipment and Machinery	construction shall confirm to the relevant Bureau of India Standard (BIS) norms. The discharge	 Heavy equipment and machinery with air pollution control Availability of PUC certificate 	Project locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	PUC certificate not submitted by contractor
22	Noise Pollution	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. At the construction sites noisy construction work such as crushing, operation of DG sets, use of high noise generation equipment shall be stopped during the night time between 10.00 pm to 6.00 am. Noise limits for construction equipment used in this project will be in conformity to the BIS / SPCB /	 Complaints from sensitive receptors Use of silencers in noise-producing equipment and sound barriers Monitoring data 	Project Locations	Contractor	 Checking of records Visual inspection of sites 	Environment Specialist of DSC and Environment Officer of PMU	Complied No such noise producing machinery mobilized at site Workers are using PPEs at construction sites, when

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		CPCB standards Regular monitoring of ambient noise levels to ensure compliance to Uttarakhand Environment Protection & Pollution Control Board standards.						ever required as per nature of work. Instruction has been given to insure PPE to each and every workers and supervisors to use proper PPE. Base line monitoring done. During construction monitoring to be done
23	Material Handling at Site	Workers Employed on mixing cement, lime mortars, concrete etc., will be provided with protective footwear and protective masks and goggles. Workers, who are engaged in welding works, will be provided with welder's protective eye-shields. Workers engaged in stone breaking activities will be provided with protective goggles, masks, and clothing. All concrete mixing must take place on a designated, impermeable surface.	Available protective equipments	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Partially complied. Instruction given to contractor for full compliance
24	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.	 Waste Management List Complaints from sensitive receptors 	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Complied Utilization of excess earth and demolish waste done
25	Safety Measures During Construction	Personal Protective Equipment for workers on the project and adequate safety measures for workers during handling of materials at site will be taken	 Site-specific Health and Safety (H&S) Plan 	Project Locations	Contractor	Document check and visual	Environment Specialist of DSC and	PPE used by contractor First aid box

SI. No.	Field /Issue	Mitigation Activities and Method	Parameters monitored	Location	Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		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. 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 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. 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.	 Equipped first-aid stations; Medical insurance coverage for workers Supplies of potable drinking water; Record of H&S orientation trainings Personal protective equipments Sign boards for comply public safety Complaints from sensitive receptors Number of signages placed at subproject location 			observation	Environment Officer of PMU	are available at all working locations Safety tape / barricade are provided at all excavated sites
26	Clearing of Construction of Camps and Restoration	Contractor to prepare site restoration plans for approval by the Engineer. The plan is to be implemented by the contractor prior to demobilization.	Site restoration plan	Project Locations	Contractor	Site observation	Environment Specialist of DSC and Environment Officer of PMU	Workers are given
27	Risk of archaeological chance finds	Strictly follow the protocol for chance finds in any excavation work; Request FPIU/DSC or any authorized person with archaeological field training to observe excavation; Stop work immediately to allow further investigation if any finds are suspected; and Inform FPIU/DSC, and take any action they require	Chance find protocol	Project Locations	Contractor	Checking of record	Environment Specialist of DSC and Environment Officer of PMU	Not required till date

SI. No.	Field /Issue	Mitigation Activities and Method Parameters Lo monitored			Responsible for Mitigation	Monitoring Method	Responsible for Monitoring	Compliance Status/ Explanation
		ensuring its removal or protection in situ.						
28	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.	Employment record	Project Locations	Contractor	Checking of records	Environment Specialist of DSC and Environment Officer of PMU	Complied Local labours are employed
29	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 EMP, community liaisoning, 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 completed.	Available Environment and safety officer	Project site / Office	Contractor	Observation, checking of presence and activity	Environment Specialist of DSC and Environment Officer of PMU	Complied

ANNEXURE – V: ENVIRONMENT PERFORMANCE FACT SHEET

SI.	Sub Project	Name of	EMP Part	EMP being	Overall Status	Envir	onmenta	I Conse	nts / Clea	arances F	Required	Nomination of	Dust Control	Labour Camp	Workers Safety
No.		Contractor	of contract Document (Yes / No)	Implemented (Yes / No)	of EMP implementation (Excellent, Satisfactory, Partially Satisfactory, Below Satisfactory)	Tree Cutting	Crusher	Batching Plant	Hot Mix Plant	Diesel Generator Set	Pollution Under Control (PUC) Certificates for Contractor's Vehicles	Environmental & Social Safeguard Officer by Contractor (Nominated / Yet to be Nominated)	(Excellent, Satisfactory, Partially Satisfactory, Below Satisfaction)	Management (Excellent, Satisfactory, Partially Satisfactory, Below Satisfaction)	Measures (Excellent, Satisfactory, Partially Satisfactory, Below Satisfaction)
1.	Augustymuni (UK/UEAP- CA/P1/01 R)	Woodhill Infrastructure Limited	Yes	Construction work stopped	Construction work Stopped due to local people	NR	NR	NR	NR	NR	To be obtained	Nominated	Construction work stopped by local public	Construction work stopped by local public	Contractor will arrange at the time of construction
2.	Auli (UK/UEAP- CA/P1/01 R)	Woodhill Infrastructure Limited	Yes	Work yet to start	Work yet to be start	NR	NR	NR	NR	NR	To be obtained	Nominated	Work yet to start	Work yet to start	Contractor will arrange at the time of construction
3.	Gulabrai (UK/UEAP- CA/P1/01R)	Woodhill Infrastructure Limited	Yes	Construction work stopped	Construction work Stopped due to local people	NR	NR	NR	NR	NR	To be obtained	Nominated	Construction work stopped by local public	Construction work stopped by local public	Contractor will arrange at the time of construction
4.	Chamba (UK/UEAP- CA/P1/01R)	Woodhill Infrastructure Limited	Yes	Yes	Debris / Muck generated during the excavation are being used for the land filling and site development	NR	NR	NR	NR	NR	Obtained	Nominated	Satisfactory	Local; labour, no requirement of labour camp	Arranged, Satisfactory
5.	Narendra Nagar (UK/UEAP- CA/P1/01 R)	Woodhill Infrastructure Limited	Yes	Yes	Debris / Muck generated during the excavation are being used for the land filling and site development	NR	NR	NR	NR	NR	Obtained	Nominated	Satisfactory	Satisfactory Arranged in Police line building with al basic facilities.	Arranged, Satisfactory
6.	Srinagar (UK/UEAP- CA/P1/01R)	Woodhill Infrastructure Limited	Yes	Work yet to start	Work yet to be start	NR	NR	NR	NR	NR	To be obtained	Nominated	Work yet to start	Work yet to start	Contractor will arrange at the time of construction
7.	Ransi (UK/UEAP- CA/P1/01R)	Woodhill Infrastructure Limited	Yes	Work yet to start	Work yet to be start	NR	NR	NR	NR	NR	To be obtained	Nominated	Work yet to start	Work yet to start	Contractor will arrange at the time of construction
8.	Dwarhat (UK/UEAP- CA/P1/01R)	Woodhill Infrastructure Limited	Yes	Yes	Debris / Muck generated during the excavation are being used for the land filling and site development		NR	NR	NR	NR	Obtained	Nominated	Partially Satisfactory	Local; labour, no requirement of labour camp	Partially Satisfactory Arranged but some workers are using.
9.	Chaukhatiya (UK/UEAP- CA/P1/01 R)	Woodhill Infrastructure Limited	Yes	Yes	Debris / Muck generated during the excavation are being used for the land filling and site development	NR	NR	NR	NR	NR	Obtained	Nominated	Satisfactory	Labour stays at rented houses Partially satisfactory	Partially Satisfactory Arranged but some workers are using.

10.	Kapkot (UK/UEAP- CA/P1/01R)	Woodhill Infrastructure Limited	Yes	Work start	yet to	Work start	yet to	be	NR	NR	NR	NR	NR	To be obtained	Nominated	Work yet to start	Work yet to start	Contractor will arrange at the time of construction
11.	Khati (UK/UEAP- CA/P1/01R)	Woodhill Infrastructure Limited	Yes	Work start	yet to	Work start	yet to	be	NR	NR	NR	NR	NR	To be obtained	Nominated	Work yet to start	Work yet to start	Contractor will arrange at the time of construction
12.	Champawat (UK/UEAP- CA/P1/01R)	Woodhill Infrastructure Limited	Yes	Work start	yet to	Work start	yet to	be	NR	NR	NR	NR	NR	To be obtained	Nominated	Work yet to start	Work yet to start	Contractor will arrange at the time of construction

ANNEXURE - VI: ENVIRONMENTAL MONITORING DATA

1. NOISE MONITORING

SI.	Noise Monitoring Location	Date of	Type of	Descripti	on of Noise	Ambient Noise Level Standards		
No.		Sampling	Area	Average	Maximum	Minimum	Leq dB(A)	as per CPCB Guidelines
1.	Play ground of NIT, Srinagar	14.04.2015	Commercial	44.59	47.10	41.30	44.79	65
2.	Police Line Ground, Chamba	14.04.2015	Commercial	41.94	48.50	36.20	42.14	65
3.	PTC Camp Ground, Kanda	14.04.2015	Commercial	35.45	38.50	32.30	35.65	65
	Village, Narendranagar							
4.	Chaukhatiya	28.04.2015	Commercial	48.84	53.90	45.10	49.04	65
5.	Uncha Village, Dwarahat	28.04.2015	Commercial	62.29	79.50	51.00	62.49	65
6.	Near Saryu River Bridge, Kapkot	29.04.2015	Commercial	51.38	52.60	50.20	51.58	65

Note:

The above Noise Monitoring has been conducted by the Contractor and the data has been summarised on the basis of the test results provided by them.

2. SOIL MONITORING

SI.	Parameters	Unit			Re	sults		
No.			Centre of Helipad, Dwarahat	Safe Zone of Helipad, Dwarahat	Centre of Helipad, Chaukhatiya	Khachar Gadhera Side, Chaukhatiya	Centre of Helipad, Kapkot	Saryu River side, Kapkot
1	Colour	-	Brown	Brownish	Brownish	Brownish	Brownish	Grayish
2	Alkalinity	m eq/Kg	12.5	14.24	16.56	11.82	9.28	10.54
3	Iron	mg/Kg	14.2	11.32	16.54	14.24	7.38	18.68
4	Chloride	mg/Kg	1728	926	1628	152	949	1912
5	Sulphates	mg/Kg	192	142	242	146	96	213
6	Calcium	mg/Kg	847	1328	612	776	1426	796
7	Magnesium	mg/Kg	284	413	296	326	292	292
8	Nickel	mg/Kg	<0.5	<0.5	<0.5	<0.5	0.32	<0.05
9	Chromium	mg/Kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
10	Copper	mg/Kg	0.82	0.11	0.32	0.32	0.42	0.13
11	Lead	mg/Kg	0.32	0.39	0.11	<0.05	0.18	0.10
12	Cadmium and its compound	mg/Kg	<0.1	0.08	<0.1	<0.1	<0.1	<0.1
13	Zinc	mg/Kg	4.32	3.04	6.32	6.20	2.68	6.32
14	Sodium	mg/Kg	415	352	512	498	342	574
15	Potassium	mg/Kg	68.0	48	76	77	52	84
16	Nitrates	mg/Kg	72.0	39	82	94	32	69
17	Phosphates	mg/Kg	108	172	112	163	68	166
18	Nitrogen	mg/Kg	164	83	138	142	53	122
19	Moisture	%	2.78	3.59	14.84	13.72	0.92	4.68
20	Manganese	mg/Kg	3.18	2.98	4.93	3.76	3.26	2.84
21	pH	-	7.65	7.95	8.12	8.95	7.72	7.82
22	Specific Gravity	-	1.42	172	1.52	1.49	1.36	1.46

*Note:

The above Soil Quality Monitoring has been conducted by the Contractor and the data has been summarised on the basis of the test results provided by them.

3. WATER QUALITY MONITORING

SI. No.	Parameters	Unit				Drinking Water Standards (IS: 10500: 2012)			
			Saryu River, Kapkot	Saryu River, Kapkot Bridge	Kachar Gadhera, Near Tehsil, Chaukhatiya	Kachar Gadhera, Near Tehsil, East Side, Chaukhatiya	Hand Pump near Dwarahat	Desirable Limit	Permissible Limit
1	Color	Hazen	< 5	< 5	< 5	< 5	< 5	5 max	15 max
2	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	< 1	< 1	< 1	< 1	< 1	1 max	5max
5	pН	-	7.32	7.19	7.21	7.24	7.18	6.5-8.5	No Relaxation
6	Total Dissolved Solids (TDS)	mg/L	206.94	214.8	217.32	224.42	218.8	500 max	2000 max
7	Total Alkalinity	mg/L	126	119.5	113.6	121.5	117.6	200 max	600 max
8	Total hardness	mg/L	71.2	91.32	83.1	86	96.4	200 max	600 max
9	Residual Free Chlorine	mg/L	Nil	Nil	Nil	Nil	Nil	0.2 min	1.0 max
10	Iron (Fe)	mg/L	0.17	0.16	0.14	0.19	0.18	0.3 max	No Relaxation
11	Chlorine (CI)	mg/L	36.52	25.54	23.98	29.94	21.32	250 max	1000 max
12	Sulphate (SO4)	mg/L	6.98	6.62	9.12	8.12	7.85	200 max	400 max
13	Calcium	mg/L	17.52	19.12	22.42	21.2	24.48	75 max	200 max
14	Magnesium (Mg)	mg/L	9.55	11.24	8.20	8.62	9.92	30 max	100 max
15	Flouride (F)	mg/L	0.19	0.15	0.16	0.14	0.19	1.0 max	1.5 max
16	Nickel (Ni)	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.02	No Relaxation
17	Total Chromium (As Cr)	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.05	No Relaxation
18	Copper (Cu)	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05 max	1.5 max
19	Lead (Pb)	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01 max	No Relaxation
20	Cadmium (Cd)	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.003 max	No Relaxation
21	Zinc(Zn)	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	5 max	15 max
22	Manganese (Mn)	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1 max	0.3 max
23	Arsenic (As)	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01 max	0.05 max
24	Cyanide (Cn)	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05 max	No Relaxation
25	Alumunium (Al)	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.03 max	0.2 max

SI. No.	Parameters	Unit			Results				king Water (IS: 10500: 2012)
-			Saryu River, Kapkot	Saryu River, Kapkot Bridge	Kachar Gadhera, Near Tehsil, Chaukhatiya	Kachar Gadhera, Near Tehsil, East Side, Chaukhatiya	Hand Pump near Dwarahat	Desirable Limit	Permissible Limit
26	Mercury (Hg)	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001 max	No Relaxation
27	Selenium (Se)	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.01	No relaxation
28	Boron (B)	mg/L	0.11	0.09	0.08	0.08	0.12	0.5 max	0.1 max
29	Barium (Ba)	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1 max	No Relaxation
30	Silver (Ag)	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1	No Relaxation
31	Molybdenum (Mo)	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.07	No Relaxation
32	Nitrate (NO3)	mg/L	0.83	0.53	0.33	0.49	0.64	45 max	No Relaxation
33	Ammonia (as total Ammonia)	mg/L	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.50	No Relaxation
34	Phenolic Compounds	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001 max	0.002 max
35	Anionic Detergents (MBAS)	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.2 max	1.0 max
36	Mineral Oil	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.50 max	No Relaxation
37	Sulphide (H2S)	mg/L	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.05	No Relaxation
38	Pesticides	mg/L	Absent	Absent	Absent	Absent	Absent	Absent	0.001 max
39	Chloromines (Cl2)	mg/L	Absent	Absent	Absent	Absent	Absent	0.4 max	No Relaxation
40	Polynuclear Aromatic Hydrocarbon	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0001	No Relaxation
41	Poly Chlorinated Biphenyls	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0005	No Relaxation
42	Bromoform	mg/L	Absent	Absent	Absent	Absent	Absent	0.1	No Relaxation
43	Dibromochloro Methane	mg/L	Absent	Absent	Absent	Absent	Absent	0.1	No Relaxation
44	Bromodichloro Methane	mg/L	Absent	Absent	Absent	Absent	Absent	0.06 max	No Relaxation
45	Chloroform	mg/L	Absent	Absent	Absent	Absent	Absent	0.2 max	No Relaxation
46	e-coli	mg/L	Absent	Absent	Absent	Absent	Absent	Absent	No Relaxation

SI. No.	Parameters	Unit			Drinking Water Standards (IS: 10500: 201				
			Saryu River, Kapkot	Saryu River, Kapkot Bridge	Kachar Gadhera, Near Tehsil, Chaukhatiya	Kachar Gadhera, Near Tehsil, East Side, Chaukhatiya	Hand Pump near Dwarahat	Desirable Limit	Permissible Limit
47	Total Coliform (MPN)	No/ 100 ml	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	Absent	No Relaxation

*Note:

The above Water Quality Monitoring has been conducted by the Contractor and the data has been summarised on the basis of the test results provided by them.

ANNEXURE – VII: 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	

SI. No.	Points Discussed	Remarks
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Consultation Summary

Participants

<u>ANNEXURE – VIII: SAMPLE GRIEVANCE REGISTRATION FORM</u> (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 registrati	on		
Contact Information	on/Persona	I Details			
Name			Gender	Male/ Female	Age
Home Address					
Village / Town					
District					
Phone no.					
E-mail					
		nent/Question Pleas	se provide the	details (who, wha	t, where and how)
of your grievance	below:				
If included as atta	chment/no	te/letter, please tick	chere:		
How do you want	us to reach	n you for feedback o	or update on y	our comment/grie	vance?

FOR OFFICIAL USE ONLY

Registered by: (Name of official registering grievand	ce)
If – then mode:	
Note/Letter	
E-mail	
Verbal/Telephonic	
Reviewed by: (Names/Positions of Official(s) review	ing grievance)
Action Taken:	
Whether Action Taken Disclosed:	Yes
	No No
Means of Disclosure:	1

GRIVENCES RECORD AND ACTION TAKEN

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

<u> परिशिष्ट – 8</u>

नमूना शिकायत पंजीकरण फार्म

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

UEAP शिकायतें, सुझाव, प्रश्नों और परियोजना कार्कार्यान्वयन का बारामें टिप्पणियों का स्वागत करता हैं1 हम लोगों को शिकायत का साथ उनका नाम और संपर्क जानकारी प्रदान करना का लिए प्रोत्साहित करता हैं ताfक हम स्पष्टीकरण और प्रतिक्रिया का लिए आप का साथ संपर्क कर सकें आपको अपनाव्यक्तिगत विवरण शामिल करना चाहिए लक्रिन उस जानकारी को गोपनीय रखा जायगा आपका नाम ऊपर (गोपनीय) * लाखन / टाइपिंग द्वारा हमें सूचित करें धन्यवाद

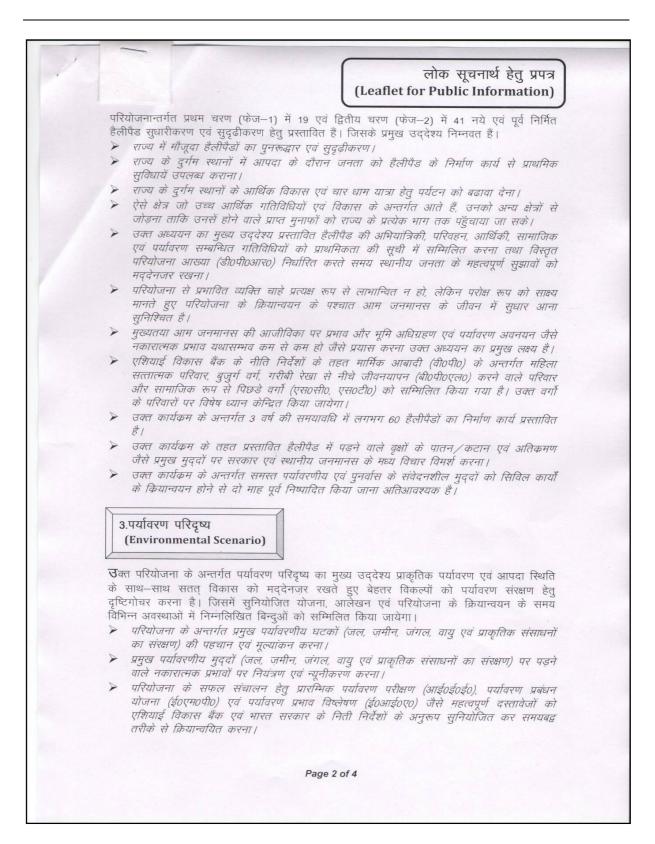
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नाम		í	लिंग	पुरुष महिला	आ	यु	
घर का पता							
गांव / शहर							
जनपद							
फोन नं.							
ई मस							
शिकायत / सुझाव / रि	टेप्पणी	/ प्रश्न नीच	अपनी शिकायत व	का विवरण (जो, क्र	पा, कहां	और कैस) प्रदा	न करें:
सलगनक / नोट /	पत्र क⊔	रूप में, शामि	ल हैं, कृपया यहाँ	टिक करें			
हम आप तक प्रतिब्रि	क्रेया क	लिए कैस प	हुँच संकत हैं या 🕻	अपनी टिप्पणी / शि	ोकायत	पर नवीनीकरण	?
केवल कार्यालय उपर	योेेेेेे के '	लिए					
द्वारा पंजीकृत: (सरव	कारी पं	जीकरण शिव	नयत का नाम)				
यदि -फिर विधि:							
🛱 नोट / पत्र							
🗰 ई मस							
🛱 मौखिक/ट	ट्वीफोन	г					
स समीक्षित: (नाम /	/ अधिव	नरी की पोजि	ोशन समीक्षा शिव	नयत)			
की गई कार्रवाई:							
की गई कार्रवाई का	खुलास	गः		茸 हां			
				🗰 नहीं			
प्रकटीकरण का मतल	ब:						
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गई कार्रवाई क्रम संर	७या		complainer का संपर्क नंबर	प्रकार		स्थिति	

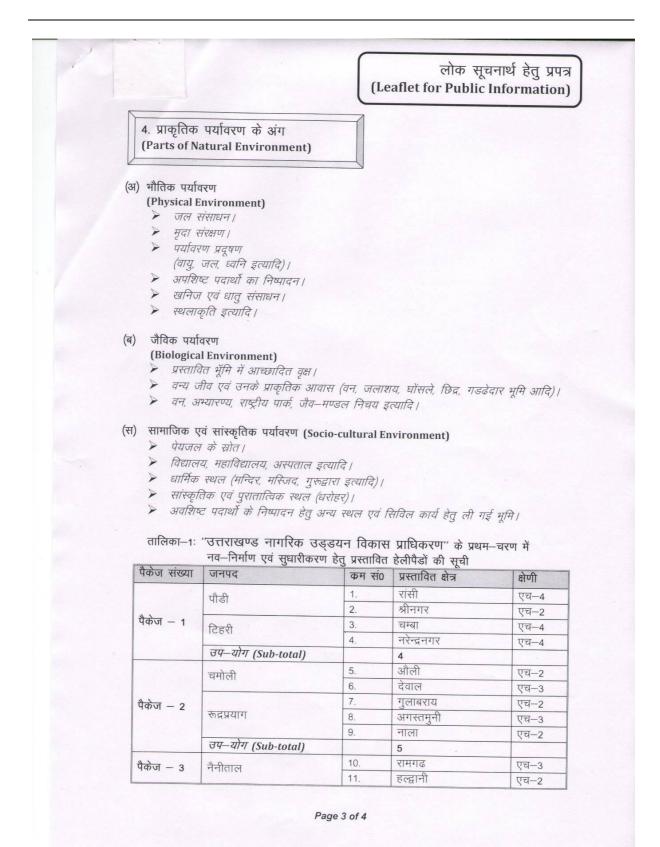
ANNEXURE - IX: GRIEVANCE REDRESSAL CELLS

आपदा राहत एवं पुनर्वास के अन्तर्गत आ की परिसम्पत्तियों, बहुउददेशीय भवनों ए लिये परियोजना प्रबन्धन ईकाई एवं जनप इन संपर्क सूत्रों पर कार्यालय दिवसों	वं एफ.आर.पी. हट्स बनायें जा रहे है। उ द स्तर पर समस्या निवारण प्रकोष्ठ गठित एवं कार्यालय समयावधि में संपर्क कि	जियट) सहस्त्रधारा रोड़ ोपेड़, चिन्हित क्षतिग्रस्त सरकारी भवनों, पर्यटन विमाग उपरोक्त से संबंधित किसी भी समस्या के निवारण के किये गये है, जिनके संपर्क सुत्र निम्नवत है-
केन्द्रीय समस्या निवारण प्रकोष्ठ परियोजना प्रबन्धन ईकाई देरादून		
पारपाजना प्रबंधन रकार करपूर जनपद	नोडल अधिकारी	दूरमाष संख्या
रुद्रप्रयाग	श्री आशीष सेमवाल / राहुल जीमरा श्री नन्द किशोर जोशी	8859504022 / 8859504026 9411352136
चमोली	श्री नेन्द्र पटवाल श्री देवन्द्र पटवाल	9410350338
उत्तरकाशी बागेश्वर	क. रिया संग्री	8193917518
बागरपर पिधौरागढ	श्री आर. एच. राणा	9412079945
अल्माड	श्री राकेश जोशी	9412929707
चम्पावत	श्री मनोज पाण्डे	9412347265
नैनीताल	श्री शैलेश कुमार	7417170470
उद्यमसिंह नगर	श्री अनिल शर्म श्री ब्रिजेश भटद	•
टिहरी	NI INDRE TUC	-
- प्राइग्रिड	सश्री दीपरिखा रावत	9412964936, 0135-2710334
देहरादून पोडी	श्री हविबुर रहमान	9412031195

ANNEXURE X - : LEAFLET FOR PUBLIC INFORMATION

and the second s	
1	लोक सूचनार्थ हेतु प्रपत्र (Leaflet for Public Information)
	एशियाई विकास बैंक द्वारा वित्तपोषित "उत्तराखण्ड आपातकालीन सहायता परियोजना" (Uttarakhand Emergency Assistance Project Aided by ADB)
	प्रथम—चरण परियोजना कियान्वन इकाई : उत्तराखण्ड नागरिक उड्डयन विकास प्राधिकरण – देहरादून (Project Implementation Unit: Uttarakhand Civil Aviation Development Authority) 1.प्रस्तावना (Introduction)
	जित्तराखण्ड एक नवसृजित राज्य है, जो 9 नवम्बर 2000 को पूर्ण रूप से पृथक राज्य के रूप में अस्तित्व में आया। जिसका अधिकांश भाग मध्य हिमालय का पर्वतीय क्षेत्र है। अधिकांश भू–भाग पर्वतीय आंवल में होने के कारण रेल एवं वायुयान जैसी सुविधाओं का यहां प्रायः अभाव रहा है। फलस्वरूप सड़क मार्ग ही एकमात्र आवागमन का सुलभ साधन हैं। राज्य में आवागमन एवं समस्त विकासशील योजनायें सड़कों की उपलब्धता एवं गुणवत्ता पर ही आधारित हैं। परन्तु विगत वर्ष राज्य की विषम भौगोलिक परिस्थिति के कारण 15–17 जून 2013 को राज्य का अधिकांश पर्वतीय भू–भाग आपदा से बुरे तरह क्षतिग्रस्त हुआ। जिसके परिणामस्वरूप लगभग 10000 जानमाल/गुम के साथ, लगभग 3000 भवन एवं कई मोटर मार्ग पूर्ण/आधिक रूप से क्षेत्रियस्त हुए। जो राज्य सरकार के साथ समस्त मानव समुदाय के लिए एक बहुत बडी चुनौती साबित हुई। राज्य के पर्वतीय भू–भाग में मौजूदा सडकों की उपित यह वुनौती सावित हुई। राज्य के पर्वतीय भू–भाग में मौजूदा सडकों की उचित गुणवत्ता न होने के कारण उक्त नवस्त्रित राज्य के चहुंमुखी विकास हेतु राज्य सरकार हारा एशियाई विकास बैंक के वित्तीय सहयोग से उत्तराखण्ड नागरिक उड्डयन विकास प्राधिकरण राज्य में सुत्रभ आवागमन हेतु वियानब के कर्परां प्रायं परियोजना के संचालन हेतु वचनबद्ध है। राज्य सरकार द्वारा परियोजना के संया जनता के मध्य एक महत्वाकांक्षी परियोजना के संचालन हेतु वचनबद्ध है। राज्य सरकार द्वारा परियोजना के जत्मानस के भध्य एक महत्वाकांक्षी परियोजना के संचालन हेतु वचनबद्ध है। राज्य सरकार प्राय सरकार ह्वारा उक्त कार्यक्रम के अन्तर्गत एशियाई विकास बैंक के वित्तीय सहयोग से जतता के मध्य उपरोक्त परियोजना के प्रथम–चरण में लगभग 19 एवं द्वितीय–चरण में 41 हैलीपैड के नव–निर्माण एवं सुधारीकरण राज्य के देरीप सात्र राज्य के दुर्गम स्थलों में आवागमन की सुचारू व्यवस्था हेतु विगत वर्ष की आपदा के देरारा खन्द हैता सि सदिय स्थान संत्र के जिपदि है दोरान क्षतिग्रस्त मार्गों के जिर्जा के साथ–साथ राज्य में मौजूद हैतीपैड के सुधारीकरण एवं सुदुक्करण के साथ नाजा से करना सुनिश्चित हुआ है उक्त कार्य हेतु परियोजना से सम्बर्ध से स्थानी की जाद्य के लाभकर सार स्थान से स्थान्य से मार्य के लाभकर कर सार राज्य के सुचनार्थ एवं महत्वपूर्ण सुझा के लिए इस प्रयत्न के माध्यम से जुतरिक्र के साथ न के सुचनार्थ करना सुनिश्चित हुआ
	2.उद्देश्य (Objectives)
	विकास एवं पर्यावरण एक ही सिक्के के दो पहलू हैं। यदि प्राकृतिक पर्यावरण के संतुलन एवं संवर्द्धन की ओर ध्यान केन्द्रित किया जाए तो निश्चित ही विकास के दुष्प्रभावों को नियंत्रित किया जा सकता है। परन्तु विकास की दौड़ में जहाँ नये मोटर मार्गों का निर्माण कार्य अति आवश्यक है उसी प्रकार से राज्य में दुर्गम एवं पर्वतीय क्षेत्रों में आपदा जैसी समस्या से निपटने के लिए हैलीपैड का निर्माण करना भी अति आवश्यक है। अन्यथा आपदा जैसी दर्घटनाओं से बच पाना सम्भव नहीं होगा। उक्त समस्या के समाधान हेतु उत्तराखण्ड़ राज्य सरकार ने एशियाई विकास बैंक के वित्तीय सहयोग से उपरोक्त
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	1		flet for Public Info	
पैकेज संख्या	जनपद	कम सं0	प्रस्तावित क्षेत्र	क्षेणी
-	अल्मोडा	12.	द्वाराहाट	एच-3
		13.	चौखुटिया	एच-3
	बागेश्वर	14. 15.	कपकोट खाती	एच-3
	चम्पावत	15.	खाता चम्पावत (सर्किट हाउस)	एच-4 एच-2
	उप-योग (Sub-total)	10.	7	<u> </u>
	महायोग (Grand Total) 16	16	
			(डॉ. एस.डी. ति पर्यावरण विशे पी.आई.यू. सिविल देहरादून।	मेवारी) ाषज्ञ एवियेशन