



Environmental Monitoring Report

Project Number: 38255-02
September 2010

IND: Uttarakhand State Road Investment Program (Subproject 1)

Prepared by

Project Management Unit, Public Works Department, Government of Uttarakhand

For

Executing Agency

Public Works Department, Government of Uttarakhand, Uttarakhand

This report has been submitted to ADB by the PMU (ADB (Transport)/Public Works Department), Dehradun, Uttarakhand and is made publicly available in accordance with ADB's public communications policy (2005). It does not necessarily reflect the views of ADB.

Asian Development Bank

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Dated- 27 / 11 /2010

To

The Country Director
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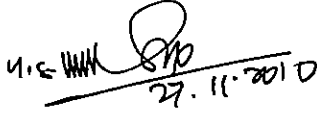
**Sub: Submission of Environmental Monitoring Report for reporting period April 2010 -
September, 2010, USRIP- Project- 1**

Dear Sir,

Please find enclosed herewith the Environmental Monitoring Report for Loan No. 2308, Uttarakhand State Road Investment Programme Project-1, for reporting period April 2010 - September, 2010.

This is for your kind consideration and necessary action please.

Thanks and Best Regards.


27. 11. 2010

(G.S. Bansal)

Project Director/Chief Engineer



Environmental Monitoring Report

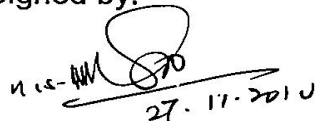
Loan No: 2308 - IND

Reporting Period: April 2010- September 2010

Uttarakhand State Road Investment Programme (USRIP)

Prepared by : Project Management Unit, Public Works Department
Executing Agency : Public Works Department

Signed by:-


27. 11. 2010

(G.S Bansal)

Project Director/Chief Engineer



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1.0. Introduction

The Public Works Department (PWD) of Government of Uttarakhand has initiated Uttarakhand State Road Investment Programme (USRIP) to implement the up-gradation and improvement work of road stretches in the state of Uttarakhand for capacity augmentation for safe and efficient movement of traffic through loans from Asian Development Bank (ADB). The ADB Loan was provided by using Multitranches Financing Facility (MFF). The first project or Phase I of the MFF was approved on 2 January 2007.

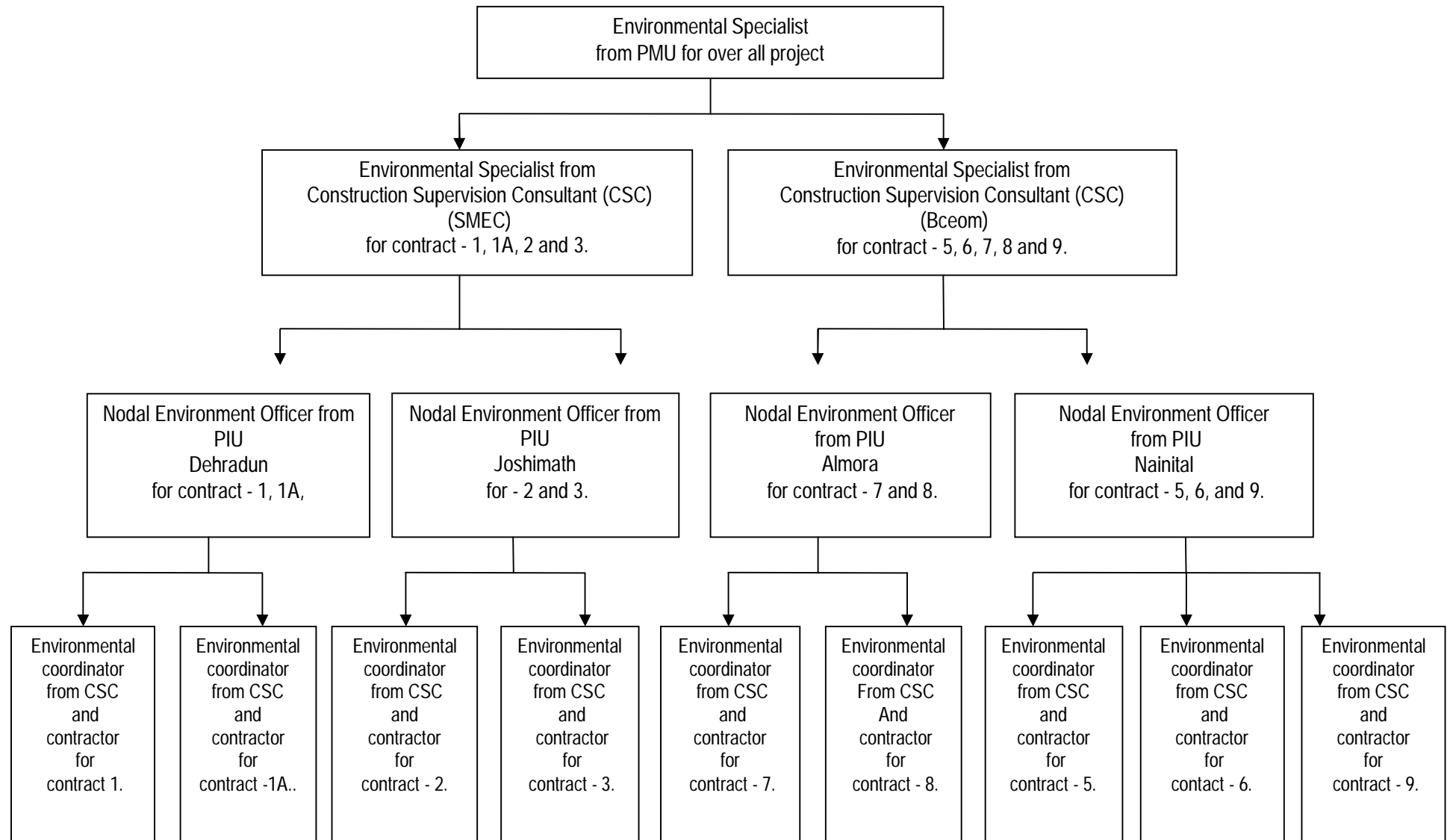
The road improvement will focus on improving the condition of the existing road network by carrying out rehabilitation and reconstruction works, which are mostly confined within the existing right of way (ROW). The project basically comprises of up gradation/improvement of existing road sections under public works department (PWD) involving strengthening /reconstruction of the existing carriageway, bringing the roads to standard width, improvement, of the safety features and making provision of adequate signage's. USRIP Project - 1 is running in eleven districts of districts of Uttarakhand. There are a total of 23 road sections that have been taken under Project - 1 of USRIP. All of the roads are bituminous road except a non-bituminous stretch of road length 16.70 km of Betalghat – Bhatrojkhan. All the identified project roads stretches are located in the State of Uttarakhand, except 2 km stretch of Dhakia-Gulabo-Mukundpur-Paiga (Udham Singh Nagar) road which passes through the adjoining Moradabad district of Uttar Pradesh. The maintenance work of this particular section is also carried out by the Public Works Department of Uttarakhand. As per ADB's Environmental Assessment Guidelines 2003, Project-1 of USRIP has been classified as Environmental Category A, requiring an Environmental Impact Assessment (EIA). The roads for contract - I, IA, II, III, V, VI, and IX were categorized as a category "B" and requiring Initial Environmental Examination (IEE). Therefore it will require environmental monitoring report annually and the roads (Almora – Bageshwar) for contract – VII and (Barechhina – Seraghat) for contract - VIII were categorised as category "A" under ADB's environmental categorization, therefore the project as a whole requires semiannual reporting.

Table – 1: Background and environmental category of USRIP Project – 1.

S. No.	Contract No	District	Road From	Road To	Category of Road	Length (Km)	Environmental Category
1	Contract-I	Dehradun	Kalsi	Chakrata	MDR	41.565	B
2	Contract-IA	Uttarkashi	Kuwa	Kafnol	ODR	47.546	B
3			Naugaon	Purola	ODR	17.89	B
4	Contract-II	Pauri	Fatehpur	Lansdowne	ODR	21.807	B
5			Pathrakhal	Gethicheda	ODR	17.985	B
6	Contract-III	Rudraprayag	Jakholi	Guptkashi	ODR	14.375	B
7			Rudraprayag	Pokhri-Karanprayag	ODR	14.512	B
8		Chamoli	Nandprayag	Ghat	ODR	18.493	B
Sub-total of Package – I Roads (Garhwal Zone)						194.173	B
9	Contract-V	Udhamsingh Nagar	Jaitpur	Dhanori	ODR	10.80	B
10			Dhakia-Gulabo	Mukundpur-Paiga	ODR	25.00	B
11			Zafarpur	Gularbhoj	ODR	13.80	B
12	Contract-VI	Nainital	Ranikhet	Mohan	MDR	70.20	B
13		Almora	Betalghat	Bhatrojkan	ODR	16.70	B
14			Nathuakhan	Suyalbadi	VR	29.00	B
15	Contract- VII	Almora	Almora	Bageshwar	SH	72.90	A
16	Contract-VIII	Almora & Bageshwar	Barechhina	Sheraghat	SH	42.30	A
17		Pithoragarh	UdiyariBend	Kanda	MDR	25.70	B
18			Udiyari Bend	Thal	SH	22.00	B
19	Contract- X	Champawat	Pulla-Chamdeol	Shilling	VR	6.50	B
20			Lohaghat	Chaumel	VR	7.50	B
21			Thuligarh	Bhairav mandir	VR	6.30	B
22			Kakrali	Thuligarh	VR	13.00	B
Sub-total of Package – II Roads (Kumaon Zone)						361.70	
Total		11 Districts	23 Roads (1 Deleted)			555.873	

Note: Pauri - Khirshu – Srinagar road has been deleted because this section has already been improved by state government.

Institutional Setup for Implementation of Environmental Management and Monitoring Plan under USRIP Project -1.



2.0 Overall Project Progress

A comparison of the progress at end of March 2010 is summarized below.

Contract Package	1	1A	2	3	5	6	7	8	9
% Progress	100.0	100.0	100.0	97.0	100	93.0	92.55	77.61	88.0

3.0 Compliance status with National/State/Local statutory environmental requirements

With regard to the phase I, there is no road project requiring environmental clearance from MOEF. There is so far no permit required for permission of using water from the 'Water Board' because Contractor has made independent arrangements for water requirements from natural springs and seasonal streams flowing along the project stretch for construction purpose. The NOC were obtained from the 'State Pollution Control Board' (SPCB) for all 22 road sections under Nine Contract Packages of Garhwal and Kumaon Zone. The NOC from SPCB was granted to PMU on 31/08/2006. In compliance with the conditions stipulated with the NOC issued by SPCB, in Garhwal and Kumaon zone, all the contractors have secured consent for establishment of Hot Mix Plant (HMP). The other statutory requirements such as workmen compensation insurance and consent from land owner are available with the contractors. Labour license is available with all the contractors. Under contract package 5, tree felling was to be done in 3 road sections namely Dhakia-Gulabo-Mukundpur-Paiga, Jafarpur-Gularbhoj, and Jaitpur-Dhanori, therefore it required forest clearance from the state forest department. The required clearance was obtained from the concerned forest department.

4.0 Compliance status with the environmental covenants as stipulated in the Loan Agreement

As per the Loan Agreement for Uttarakhand State-Road Investment Program – Project 1, Environmental Impact Assessment Review Framework under Schedule 5 to the FFA describes the environment assessment requirements and authorities responsibilities. Some of the responsibilities are described below.

Compliance status with the environmental covenants as stipulated in the Loan Agreement

Clause and Para No.	Description	Compliance Status
Schedule 5 2. (a)	The PMU set up by the State under the Facility shall remain adequately staffed and functional for the project and the facility. The PMU shall comprise a Project Director and at least one road design and pavement manager, environment specialist, and social and resettlement specialist and coordinator, to assist implement the RF, IPDF and EARF. The project Director shall report to the Chief Engineer of the PWD. The secretary PWD would be responsible for the interdepartmental coordination and overall supervision of the Investment Programme and the project.	Complied
Schedule 5 2. (b)	The PMU shall be responsible for day to day operation of the project and Investment Programme and periodic functions such as preparation of PFRs for project under the Facility, engagement of consultants and contractors, preparation of reports, approvals from relevant authorities and ADB, and overall supervision of consultants.	Complied
Schedule 5 2. (c)	The EA shall engage Programme Support Consultants, within two months of the Effective Date to assist the PMU to coordinate with supervision and infrastructure management consultants and facilitate timely processing and implementation of the project.	Complied
Schedule 5 3. (b)	Each PIU shall be headed by a superintendent engineer, assisted by an executive engineer and at least two other technical staff including staff with expertise in social development and environment management, and accounts officer and two support/ administrative staff. The head of each PIU shall coordinate and lies with the Project Director of the PMU, and shall be supported as needed, by the Programme Support Consultants.	Complied
Schedule 5 6. (a)	The State shall delegate necessary authority to designated staff of PMU for timely processing of PFRs and implementation of individual projects under the facility. In this regard State shall ensure active coordination with ADB for strict adherence to implementation schedules including, but not limited to, recruitment of consultants and safeguard compliances, as agreed under the facility as well as for individual projects under the facility	Complied
Schedule 5 6. (b)	The EA shall ensure that detailed project reports for all components of subsequent projects under the facility are prepared in accordance with the social, environmental and indigenous people frame works agreed with ADB	Complied

	during processing of the facility, as amended from time to time.	
Schedule 5 7. (a)	Implement the project accordance with the EARF under ADBs environment policy, 2002, and applicable laws and regulation of the borrower and the state.	On going
Schedule 5 7. (b)	Provide training to engineers to be assigned for environmental management and to ensure that the requirements of the EARF are fully implemented in consultation with the relevant contractor and construction supervision consultants.	On going
Schedule 5 9. (a)	Subject to compliance with the requirement of the RF, IPDF and EARF and related RP, IEE / EIA, and IPDP, respectively, it shall (i) make available land and right in land, free from encumbrances, and (ii) clear the utilities, trees and any obstruction on such land, on a timely bases, i.e., strictly in accordance with the schedule as agreed under the related works contract, as required for activities relating to each road or section of a road in the works contract.	Complied
Schedule 5 9. (b)	Subsequent to the award of the contract package to a contractor, ensure that road or section of roads (sites} in that package are not handed over to the contractor unless all provisions of the RF, EARF and IPDF and related RP, IEE and EIA and IPDP (as applicable) respectively, are satisfied.	Complied
Schedule 5 10.	The EA shall provide adequate funding for independent monitoring of activities relating to land acquisition, resettlement, environment and other social issues under the project.	On going

5.0 Compliance status with environmental management and monitoring plans as stipulated in the environmental documentation as agreed with ADB

Project Management Unit though its environmental expert closely monitors the implementation of environmental management and monitoring plan for all the contract packages by conducting meetings with the environmental expert of the supervision consultants. The supervision consultants have designated their existing staff for the environmental coordination and better implementation of the EMMP. The contractors of contract packages 5, 6, 7, 8, and 9 have only designated environmental officers for their respective contract packages for the sound implementation of EMMP.

The supervision consultant submits monthly progress report to PMU which includes information on implementation of EMMP. During the reporting period some areas such as traffic management, and safety arrangements needs to be strengthened.

6.0 Approach and methodology engaged for environmental monitoring of the project

PMU have been ensuring that the monitoring of components such as ambient air quality, water quality and noise levels are being carried out by the civil work contractors as per the agreed monitoring plans. It describes monitoring program for various parameters, methods of monitoring, duration and frequency of monitoring, sampling location and site of monitoring, description of responsibilities and authorities for implementation of mitigation measures and monitoring requirements.

Env. Components	Parameters	Duration/Frequency of monitoring	Instrument used
Air	SPM, SO ₂ , NO _x , and CO	One working day, thrice in a year except monsoon	High Volume sampler, APM 415-411
Water	pH, Turbidity, TDS, TSS, Total hardness, Faecal coliform	Random sample thrice in a year	
Noise	dB(A)	One working day, thrice in a year	Sound level meter SL-4010

7.0 Monitoring of environmental receptors/attributes (e.g., ambient air, surface water, ground water and noise)

During the reporting period none of the bituminous works were carried out due to heavy rains hence environmental monitoring was not performed. From the 9 contract packages, bituminous works have been completed in packages 1, 1A, 2, 3, 5, and 7. The contractor of contract package 6 has conducted monitoring of ambient air, stack and noise during the month of April and for water samples in the month of June. The contractors of contract packages 6, 8 and 9 have been instructed to conduct the environmental monitoring as soon as they operate the hot mix plant.

8.0 Details of Redress Committee and complaints received from public and actions taken thereof to resolve

In Phase 1 no such cases were reported hence Grievance Redress Committee was not constituted. No complaints received so far. If any complaints are received from the public they would be resolved with the help of the representative from the district administration along with executive engineer of PIU, and construction supervision consultants.

9.0 Follow up actions and conclusions

The contractors have been instructed to obtain and fulfill the statutory environmental requirements. The PMU through supervision consultants will follow up with the civil works contractors for ensuring environmental monitoring for contract packages 6, 8, and 9. It will also ensure to work on the traffic management and safety arrangements.