



# Environmental Monitoring Report

---

Project Number: 37143-033  
May 2017  
Part A: Main Report (Pages 1 – 23) and Annexures

Period: January 2016 – June 2016

## IND: North Eastern States Roads Investment Program (Project 2)

Subproject: Road Project MN06-CW1 (Tupul to Bishnupur) and MN06-CW2 (Thoubal to Kasom Khullen)

Submitted by:

Externally Aided Projects, Public Works Department, Government of Manipur

This report has been submitted to ADB by the Externally Aided Projects, Public Works Department, Government of Manipur and is made publicly available in accordance with ADB's Public Communications Policy (2011). It does not necessarily reflect the views of ADB.

This environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

**Asian Development Bank**

RWS

for logging pls

GM/AM

**OFFICE OF THE  
PROJECT DIRECTOR  
EXTERNALLY AIDED PROJECTS (EAP)  
PUBLIC WORKS DEPARTMENT  
GOVERNMENT OF MANIPUR**

Tel No. +91 385 2452837, Fax No.: +91 385 2452837, email : pdoramanipur@gmail.com

Ref. No. :- 9/PD/NESRIP/Forest & Envir/2013/902

Imphal, the 3rd August, 2016

To

The Joint Secretary (ADB)  
Ministry of Development of North Eastern Region,  
Government of India,  
Vigyan Bhawan Ennexe, Maulana Azad Road  
New Delhi - 110011.

ASIAN DEVELOPMENT BANK  
INRM  
08 AUG 2016  
0617  
RECEIVED

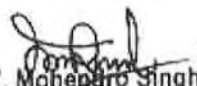
Subject:- Submission of 1<sup>st</sup> Semi Annual Environmental Monitoring Report for the period ending June, 2016 for Manipur Project Roads of NESRIP under Loan No. 3073- IND  
(i). MN06 - CW1: Tupul to Bishrupur. &  
(ii). MN06 - CW2: Thoubal to Kasom Khullen.

Sir,

I am to submit the 1<sup>st</sup> Semi Annual Environmental Monitoring Report for the period ending June, 2016 for the two sub projects in the state under NESRIP for further necessary action please.

Encl: - As above in duplicates.

Yours faithfully,

  
(Y. Mohendra Singh)  
Project Manager  
PIU, EAP, PWD, Manipur

Copy to:

1. The Chief Secretary (Works), Govt. of Manipur.
2. The Chief Engineer, PWD, Manipur.
3. Mr. Arun Mahajan, Project Management Specialist, NESRIP, INRM, 4 San Martin Marg, Chanakyapuri, New Delhi 110021, India. - Copy enclosed.
4. The Chief Coordinator, Archtech Consultant Private Ltd, 11- Shakespare Sarani, Kolkatta.

Room No. 301/A, 2nd Floor, South Block, PWD Complex, Khuyathong, Imphal, Manipur.

ASIAN DEVELOPMENT BANK  
INRM  
2063  
GM 08 AUG 2016  
PA  
RECEIVED

**AECOM**

**ADB**



**Rodic  
Consultants  
Private Limited**

## **GOVERNMENT OF MANIPUR**

# **Semiannual Environmental Monitoring Report**

**Jan 2016 to Jun 2016**

### **MN06-CW1 AND MN06-CW2**

**North Eastern State Roads Investment Program (NESRIP),  
And MDONER**

**Funded by: ADB Loan No.3073-India.**



**Prepared and Submitted by:**  
**AECOM Asia Company Limited**  
In association with  
**Rodic consultant Pvt. Ltd.**

**The Contractor:**  
**M/S DRAIPL – ABCI (JV)**

# INDEX

1	<i>Executive summary.</i>	1
2	<i>Introduction</i>	2
3	<i>Compliance Status with National/State/Local Statutory Environmental requirement</i>	4
4	<i>Environmental Covenant Compliance Requirement as per Loan Agreement and Present Status</i>	5
5	<i>Approach and Methodology engaged for Environmental Monitoring of the Project.</i>	8
6	<i>Compliance status with Environmental Management and Monitoring Plans as stipulated in the environmental documentation as agreed with ADB.</i>	9
7	<i>Changes in project scope</i>	9
8	<i>Overall Compliance status to the EMP implementation (January-2016 to June -2016)</i>	10
9	<i>Summary of Environmental Monitoring</i>	20
10	<i>Conclusion</i>	21
11	<i>Photographs</i>	22
	<i>Annexure – I Statutory NOC/Permissions for MN06-CW1</i>	
	<i>Annexure – II Statutory NOC/Permissions for MN06-CW2</i>	

## 1. Executive Summary:

This semi-annual report covers the period from January 2016 to June 2016 on environmental safeguards compliance of the Tupul-Kasom Khullen Road Project (MN-06) in the state of Manipur. This project has been included in tranche 2 of ADB's multitranchise financing facility (MFF) for North Eastern State Roads Investment Program (NESRIP). This project includes improvement of 97.8 km of existing state roads to intermediate lane (5.5 m carriageway) standard. The project has been divided into two contract packages as CW1: Tupul-Bishnupur (50.8km) and CW2: Thoubal - Kasom Khullen (47.1km). The project is being financed by ADB (under project 2, loan no-3073) at a cost of Rs. 3,606 million.

The Ministry of Development of North Eastern Region (MDONER) is the Executing Agency for the investment program and Public Works Department of Manipur, through Project Implementation Unit (PIU), is the implementing agency for the subproject. The sole civil works contract package under the project was awarded to DRAIPL-ABCL (JV) in December 2013. The Construction Supervision Consultant (CSC) overseeing the supervision of physical works is the JV of AECOM Asia Limited and Rodic Consultant Pvt. Ltd., India. As of June 2016, the total physical accomplishment of works are i) in package CW1 it is 75.2% for roadway excavation, 34.6% GSB 1<sup>st</sup> layer, 25.9% GSB 2<sup>nd</sup> layer, 22.8% WMM 1<sup>st</sup> layer and out of 171 culverts 7 nos completed ii) in package CW2 it is 81.2% for roadway excavation, 69.1% GSB 1<sup>st</sup> layer, 59.7% GSB 2<sup>nd</sup> layer, 56.0% WMM 1<sup>st</sup> layer, 50.4% WMM 2<sup>nd</sup> layer, 35.6% DBM and out of 142 culverts 10 nos completed. The environmental safeguards of the project are being implemented in compliance with the EARF, loan covenants, project agreement and contractor is complying with the proposed mitigation measures described in the Environmental Management Plan (EMP) and the contract specifications. The implementation of environmental safeguards are being monitored at CSC and PIU level. With exception of few issues the project is being implemented in compliance with project requirements. PIU environmental and forest officer is actively involved in coordinating and liaising with statutory agencies and CSC to implement the environmental safeguards of the project. The CSC Environmental Specialist has been working closely with the PIU Environmental and Forest Officer, and conducting site inspections regularly.

During the survey it has been noted that some sections of the road falls at an elevation of more than 1000 m above msl for which environmental clearance is a must as per the environmental regulations of India. PIU has been coordinating with State Environmental Impact Assessment Authority (SEIAA) of Manipur for environmental clearance for the road sections >1000 AMSL for both CW1 and CW2 package. The SEIAA has issued the Environmental clearance for the road sections falling above 1,000m AMSL in March 2015.

Forest clearance (FC) for CW1 and CW2 has been obtained. Permission for roadside tree cutting from forest dept. for MN-CW1 has been obtained and for MN-CW2 is under process. PIU environmental and forest officer is coordinating with forest department to expedite the process to get NOC for roadside tree cutting. Contractor has obtained most of the required permits and NOCs required from various government agencies to establish its facilities.

The construction works are proceeding in accordance with the provisions of the EMP. The environmental monitoring plan is being implemented by the contractor in both the packages.

No environmental quality monitoring has been carried out during the reported period. This is mainly due to unavailability of NABET affiliated monitoring laboratories in the State. State Pollution Control Board of Manipur has also been approached by contractor for this purpose. Contractor in coordination with CSC and PIU has been trying to hire monitoring agencies from other nearby states.

PIU and CSC officials have regularly been meeting with the local people and village heads in the project area to inform them about the construction works. Measures have been taken to address concerns of the local communities such as sprinkling of water on roads, traffic diversion plans, road safety measures, awareness on health and safety etc.

Various proactive measures are being taken to implement project in compliance with requirements, prevent damages to heritage structures, coordinate with relevant agencies, communicate with the public and address grievances of the local public. Contractor has to improve in areas such as coordination with government officials, documentation and reporting need improvement.

There were no significant environmental impacts observed during the reporting period and a few short-comings on dust control, road safety, health and safety of workers, documentation and reporting were observed for which necessary corrective measures have to be taken.

## **2. Introduction:**

Environmental monitoring is part of project implementation process and disclosure of annual or semi-annual monitoring reports is an ADB requirement for environmental category-B projects like North Eastern State Roads Investment Program (NESRIP). The objective of environmental monitoring is to gather information to: i) evaluate the environmental management plan (EMP) progress by establishing compliance status, ii) detect and correct non-conformances, iii) identify unanticipated impacts and implement necessary mitigation measures, and iv) provide evidence to support enforcement of penalty provisions of the civil works contract to deter noncompliance.

The Tupul- Kasom Khullen project is categorised as environmental category B project. Accordingly an Initial Environmental Examination (IEE) including Environmental Management Plan (EMP) has been prepared and disclosed on ADB website prior to project approval. Supervision consultant is preparing and submitting semi-annual monitoring reports to PIU. This semi-annual monitoring report covers the period from January 2016 to June 2016.

The 'North Eastern State Roads Investment Program' is a multi-tranche financing facility (MFF) designed to: improve about 430 kms of priority roads in six states, namely: Assam, Manipur, Meghalaya, Mizoram, Sikkim, and Tripura in the north eastern region (NER) of India; and provide capacity building support to the executing agency, the Ministry of Development of North Eastern Region (MDONER) and implementing agencies, the state public works departments (PWDs) or its equivalent in the six project states. The investment program targets the secondary road network and aimed to enhance the performance of state roads sector in NER through investment project implementation and dedicated capacity building measures. The improved secondary road network will provide important linkage between the primary and tertiary road networks in the region, for which there are ongoing national programs for improvement.

NESRIP 2 (Tranche 2) is categorized by ADB as environment category B. The project MN-06: Tupul- Kasom Khullen is the subject of this environmental monitoring report. MN-06 project is being implemented on 2 civil works packages as CW1: Tupul-Bishnupur (50.7km) and CW2: Thoubal-Kasom Khullen (47.1km).The civil works contract was awarded to M/s. DRAIPL-ABCL (JV) and Construction Supervision is being undertaken by AECOM joint venture with Rodic consultant Pvt. Ltd.

### **Description of project**

Package CW1 takes off from NH-53 at Tupul and ends at NH-150 in Bishnupur, covering a total length of 50.8 km. The road passes through Charoi, Lamdangmei, Thangal, Sangji, Dollang, Zouzangtek, Ngariyan and Chiniingkhoh villages. The existing road alignment generally follows the topography of the terrain which is mainly hilly with land use being forested areas and some agricultural land. There are two major junctions (Tupul with NH-37 at start point and Bishnupur at project end point with NH-2) and a minor junction (Zouzangtek at km.32+200) along the existing alignment.

The Package CW2 comprising of two sections i.e.Thoubal –Yairipok–Mayai Keithel section (length of 14.550 km) in Thoubal District and Mayai Keithel to Kasom Khullen (length of 32.575 km) in Ukhrul District, covering a total length of 47.1 km. It takes off from NH-39 in built up area at Thoubal (approx. 23kms from Imphal) and ends at Kasom Khullen, a Sub-

Divisional Head Quarter. The first section of CW2 package passes through built up areas scattered all along in plain terrain with intermediate lane carriageway. Land use along the road is generally agriculture and there are no major rivers or canal crossings this road section. The geometrics are easy and gradients flat. The second road section passes through hilly terrain, forested areas with few villages enroute; viz. Sambrei, Yeasom, Khamlong, Hongbei and ends at Kasom Khullen. This section of the Project road is single lane and in poor condition due to lack of maintenance and absence of proper drainage system. A number of streams crossing the road are bridged by narrow bridges. There are 4 major junctions Thoubal, Yairipok, Mayai Keithel and Khoiripok and a minor junction at km 96+600 along the existing alignment.

Total length of the project road MN-06 is 97.8 km. The existing roads are mostly gravel / earthen tracks [except 9 km stretch between Thoubal to Yairipok (CW2), which is a state highway with intermediate lane] with single lane carriageway. Average carriageway width is about 3.5m to 5.0 m. The road passes mostly through hilly terrain with hair pin bends and steep gradients. Some of the sections are difficult track, with muddy and slushy roadway during rains and hardly motorable. Both road sections under CW1 and CW2 are proposed for improvement and up gradation to intermediate lane configuration (5.5m carriageway) with side drains on hillside. Total formation width will be restricted to 9.0 m in plain areas and 7.8m in hilly terrain.

### Progress of work

The civil works contracts for both the packages have been signed on 28 December 2013 and work has been commenced on 24 January 2014. The total physical accomplishment of works as of June 2016, are shown in the table below:

#### Status of construction works as of June 2016

Highway lengthwise items							
Sl no.	Item description	Total	Physical progress	Progress in %	Total	Physical progress	Progress in %
		CW1			CW2		
1	Roadway excavation	50.800 km	38.24 km	75.27	47.125 km	38.30 km	81.27
2	GSB 1 <sup>st</sup> layer	50.800 km	17.60 km	34.64	47.125 km	32.58 km	69.13
3	GSB 2 <sup>nd</sup> layer	50.800 km	13.20 km	25.98	47.125 km	28.16 km	59.76
4	WMM 1 <sup>st</sup> layer	50.800 km	11.60 km	22.83	47.125 km	26.40 km	56.02
5	WMM 2 <sup>nd</sup> layer	50.800 km	Yet to start	--	47.125 km	23.79 km	50.48
6	DBM	50.800 km	Yet to start	--	47.125 km	16.80 km	35.65
Structure-wise items							
1	Pipe culverts	145 nos	7 nos	4.82	130 nos	7 nos	5.38
2	Box culverts	26nos	3 nos in progress	--	10 nos	1 no	10
3	Minor Bridges	1 no	Yet to start		7 nos	2 nos in progress	--
4	Slab culverts	NA	NA	NA	2nos	2 nos	100

**3. Compliance Status with National/State/Local Statutory Environmental requirement till Jun 2016.**

<b>S.No.</b>	<b>Statutory Requirements</b>	<b>MN06-CW1</b>	<b>MN06-CW2</b>
1	Environmental Clearance from SEIAA	Obtained	Obtained
2	Permission for the Tree Cutting	Obtained	PIU is following up with forest dept. to obtain the permission at the earliest.
3	Consent to Establish (Stone crusher, Hot mix Plant, Wet mix plant)	Obtained(Annex-I)	Obtained (Annex-II)
4	Consent to Operate(Stone crusher, Hot mix Plant, Wet mix plant)	Obtained(Annex-I)	Obtained (Annex-II)
5	Quarry Operation	In Process	In Process
6	Consent from Land Owners.	Obtained (Annex-I)	Obtained (Annex-II)
7	Ambient Air Monitoring And Analysis Report.	Not complied	Not complied
8	Noise Pollution monitoring report	Not complied	Not complied
9	Drinking water Sample Analysis report	Not complied	Not complied
10	Permission from Jal Nigam	Not required	Not required
11	Labour License	Obtained (Annex-I)	Obtained (Annex-II)
12	Work men compensation insurance	Not complied	Not complied
13	Pollution under Control Certificates	Obtained (Annex-I)	Obtained (Annex-II)



#### 4. Status of Compliance to Environmental Provisions of the Loan Agreement

S.N.	Environmental Provision	Compliance Status
1	<p><b>Schedule 4. Item 5(a) and (d)-</b>            Conditions for award of contract; commencement of works            5. The borrower shall cause the Project Executing Agency to ensure that;            a. No works contract is awarded for a subproject that involves environmental impacts until the relevant Project Executing Agency has incorporated the relevant provisions from the EMP into the works contract.</p> <p>d. No commencement of works is allowed under any subproject that involves environmental impacts and requires environmental clearances, until the relevant Project Executing Agency has obtained the final approval of (i) the IEE from ADB; and (ii) environmental clearance, including approval of the environmental assessment report, from the State Environmental Impact Assessment Authority (SEIAA).</p>	<p>Complied</p> <p>Environmental Management Plan (EMP) is a part of bidding document. Section 6 of Contract Agreement includes condition of contract on EMP, requiring the contractor to implement the EMP.</p> <p>IEE has been approved by ADB.</p> <p>Environmental clearance has been obtained from SEIAA.</p>
2	<p><b>Schedule 5. Item 4: Safeguards: Environment</b></p> <p>The Borrower shall cause the relevant Project Executing Agency to ensure that the preparation, design, construction, implementation and operation of each subprojects comply with (i) all applicable laws and regulations of the Borrower and the relevant State; (ii) the environmental safeguards; (iii) the EARF; and (iv) all measures and requirements set forth in the relevant IEE and EMP, and any corrective or preventive actions set forth in a Safeguards Monitoring Report.</p>	<p>Being complied.</p> <p>Requirements on permits and clearances are being followed.</p> <p>Subproject has been prepared following EARF.</p> <p>Health and Safety aspects being followed.</p> <p>Requirements of IEE and EMP are being implemented.</p>
3	<p><b>Schedule 5. item 8(a) &amp; (b)</b>            Human and Financial Resources to implement Safeguards Requirements            8. (a) The Borrower shall cause the relevant Executing Agency to ensure that all necessary budgetary and human resources to fully implement the EMP, and the RP and the IPP as required, are made available.</p>	<p>Being complied.</p> <ul style="list-style-type: none"> <li>❖ Adequate budget allocation has been made for implementation of safeguards activities.</li> <li>❖ Safeguards cell comprising of 05 officers including one</li> </ul>

	8. (b) Each Project Executing Agency shall designate at least one expert each to supervise implementation of the EMPs, and RPs for subprojects in its State”	<p>environmental and forest officer and one resettlement officer has been established in Manipur State PIU.</p> <ul style="list-style-type: none"> <li>❖ Environmental Expert is part of the PMC and Construction Supervision Consultant team.</li> <li>❖ Contractors’ team also comprised of Environmental and Safety Officers (CW1 and CW2).</li> </ul>
4	<p><b>Schedule 5, item 9 (a), (b) &amp; (c)</b> Safeguards- related provisions in bidding documents and works contracts</p> <p>9. (a) comply with the measures and requirements relevant to the contractor set forth in the IEE, EMP, RP and IPP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report.</p> <p>(b) make available a budget for all such environmental and social measures.</p> <p>(c) provide the Project Executing Agency with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the relevant IEE, EMP, RP or IPP;</p>	<p>Being complied.</p> <p>Safeguards experts of the PMC, CSC and civil works contractor teams are implementing safeguard measures.</p> <p>Adequate budget allocation is being made for implementation of safeguards activities.</p> <p>Being complied. Appropriate measures are being and will be taken to address these issues, as they arise.</p>
5	<p><b>Schedule 5, item 10(a), (b), (c) &amp; (d)</b> Safeguards Monitoring and Reporting</p> <p>10.(a) submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission.</p> <p>(b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in any IEE, EMP, RP or IPP (as applicable), promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan.</p> <p>(c) no later than three months from the commencement of RP implementation of the first Subproject, engage qualified and experienced external experts or qualified non-governmental organizations under a selection process and terms of reference acceptable to ADB, to verify information produced through</p>	<p>Being complied. Since the subproject is Category B project, it is agreed to submit and disclose Annual Monitoring Report. First and second Annual Monitoring Report is submitted to ADB.</p> <p>Being complied.</p> <p>Being complied. An NGO has been engaged.</p>

	<p>the project monitoring process for resettlement, environment and indigenous peoples (if any), and facilitate the carrying out of any verification activities by such external Experts.</p> <p>(d) report any breach of compliance with the measures and requirements set forth in any EMP, RP or IPP promptly after becoming aware of the breach.</p>	<p>Being complied.</p>
	<p><b>Schedule 5. Item 11</b> Prohibited List of Investments 11. The Borrower shall cause the Project Executing Agencies to ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the Safeguard Policy Statement.</p>	<p>Complied.</p>
	<p><b>Schedule 5. Item 12</b> Labour Standards 12. The Borrower shall cause the Project Executing Agencies to ensure that the Works contracts under the Project follow all applicable labour 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 labour and disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; and (ii) follow and implement all statutory provisions on labour (including not employing or using children as labour, equal pay for equal work), health, safety, welfare, sanitation, and working conditions. Such contracts shall also include clauses for termination in case of any breach of the stated provisions by the contractors.</p>	<p>Complied.</p> <p>Various awareness programmes are being conducted .</p> <p>Monthly environmental, physical and general housekeeping training are being conducted.</p>
	<p><b>Schedule 5. Item 17</b> Counterpart Support 17. The Borrower and each State shall provide, as necessary, respective counterpart staff, land facilities, and counterpart funding for the Project and Subprojects in accordance with the financing plan, cost of making land available for the Subprojects and assistance, and implementation and monitoring of EMPs, RPs and IPPs (including unforeseen expenses beyond the estimates), utility relocation, road maintenance, and general Project management expenses in a timely manner through approved annual budget allocations.</p>	<p>Being complied.</p> <p>Counterpart support has been provided by Manipur PWD (as part of PIU) for implementation of EMPs.</p>

## **5. Approach and Methodology engaged for Environmental Monitoring of the Project.**

Various environmental issues are likely to occur during the implementation of such project like air pollution, encroachment into eco-logically sensitive area, loss of agriculture soil, noise and vibration, deforestation, solid and hazardous waste disposal, soil and water contamination etc.

During the project preparation stages efforts were made to identify, mitigate and compensate these likely impacts on the environment. Now, in the construction stages, the environmental quality monitoring provides an opportunity to assess the effectiveness of the environmental management plan.

During January (2016) – June (2016), no major environmental complaint was recorded relating construction activities. The Contractor is the first point contact to lodge public complaints regarding environmental and social related matters. Instructions have been given not only to lodge all public complaints to be entered into the Complaints Register but also to promptly investigate and review environmental complaints and adopt appropriate corrective actions to address or mitigate the cause of the complaints.

All the complaints received are placed before the RE/Grievance Redress Committee and the decision of the TL/RE/Environment Specialist/committee will be implemented. On-site instructions have regularly been given that the site order book to be kept at a convenient place, easily accessible by site engineers like first aid boxes. The overall methodology for the assessment and monitoring of EMP implementation involves following stages:

- Onsite training to workers of Contractor regarding EMP items and their implementation
- Written intimation to RE/Project Manager of Contractor, PMU Offices regarding any non-compliance observed and making them aware regarding the significance of having compliance with statutory and other EMP requirements
- Road inspections by the Environment Specialist, PMU, RE and Project Managers of Contractor to assess EMP Compliance.
- Checking of Contractor's files/records with respect to EMP items.
- Preparation and evaluation of EMP Compliance monitoring checklists in consultation with Project Manager of the Contractor.
- Submission of evaluated compliance status report for verification to Nodal officer of respective PIU.
- Meeting of Environment Specialist PMU, Nodal officers of respective PIU, Team Leader, Resident Engineers, Project Manager, Contractors Environment, Health and safety Officer as and when an issue related with EMP implementation arises.
- Preparation of Environmental compliance reports and communication of the same to PIU Office (Imphal).

## **6. Compliance status with Environmental Management and Monitoring Plans as stipulated in the environmental documentation as agreed with ADB.**

The environmental management and monitoring plans are being implemented with respect to the guidelines defined in the Initial Environmental Examination (IEE) report of ADB. The leading project personnel are trained and aware of the responsibility towards- Adhering to the relevant mitigation measures that are set out in the EMP while planning and implementing the project;

Recording the conditions of roads, agricultural land and other infrastructure prior to transport of materials and construction commencement and upon completion of construction, fully reinstate roads, agricultural land and other infrastructures to their pre-project conditions.

The Environmental Specialist of SC regularly visiting the packages along with the respective Assistant Resident Engineers (SC), Field Engineers (SC), Project Managers (Contractor) and Environment Health and Safety Officer. During the visits, various ongoing activities were observed and reviewed in connection with the environmental health and safety requirements. Following to the reviews, information's were sought from the contractor on various aspects relating to the EHS compliances and reported periodically.

## **7. Changes in project scope:**

According to the Environmental Impact Assessment Notification 2006 (amended 2009) of Govt. of India, all State Highways (construction of new roads or construction of new bypasses) and expansion of state roads in hilly terrain (above 1000 m above msl and or ecologically sensitive areas) fall under category B projects and require Environmental Clearance from State Environmental Impact Assessment Authority.

Further, under the same notification, it is stated that any category B project will be treated as category A if located in whole or in part within 10 km from the boundary of: (i) Protected Areas notified under the Wild Life (Protection) Act, 1972; (ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time; (iii) Notified Eco-sensitive areas; and (iv) interstate boundaries and international boundaries.

Therefore, in this project those terrain which are situated above 1000m AMSL, requires clearances from State Environmental Impact Assessment Authority.

As per above condition the client PWRD IMPHAL had applied and obtained the environmental clearances for road portions above 1000m MSL from State Environmental Impact Assessment Authority.

Forest Clearance from Department of Forests has been obtained for diversion of forest land to non-forest purpose. Prior permission is required from Forests Department to carry out any work within the forest areas and felling of road side trees. Cutting of roadside trees need to be compensated by compensatory afforestation as required by the Forest department. NOC for roadside tree cutting for MN-CW1 has been issued and for MN-CW2 is under process.

8. Overall Compliance status to the EMP implementation (January-2016 to June -2016)

### ***Environmental Monitoring Plan***

***Environment Monitoring Status***

<b>Sl.No.</b>	<b>Parameter</b>	<b>Standards</b>	<b>Location</b>	<b>Frequency</b>	<b>Duration</b>	<b>Implementation</b>	<b>Supervision</b>	<b>STATUS (MN-06-CW1 &amp; CW2 )</b>
(1)	Air quality	National Ambient Quality Standards	(1)Hot mix plant/Batching plant (1 location) (2)Stretch of the road where construction work is in progress or sensitive receptor locations. (3) One location throughout the stretch during operation.	Once in a Half year and as may be instructed by CSC (for 3 years).	Continuous 24 hours/or for 1 full working day.	Contractor	CSC	Not done. Advised Contractor to complete as soon as possible.
2)	Water quality	CPCB Standard	Surface water along the working stretch (e.g. flowing river passes through stretch, Ponds etc.). All parameters of drinking water at camp.	Soon after monsoon	Every season change	Contractor	CSC	Not done. Advised Contractor to complete as soon as possible
(3)	Noise Level	CPCB standard	Noise Level on dB (A) scale near crusher plant, school, Hospital etc.	Equivalent noise levels using an integrated noise level meter kept at a distance of 10-15 m from edge of pavement.	Thrice in a year	Contractor	CSC	Not done. Advised Contractor to complete as soon as possible

## **ENVIRONMENT MANAGEMENT PLAN**

### **Pre – Construction Phase**

<b>S. No.</b>	<b>Environmental Issue</b>	<b>Location /Source</b>	<b>Mitigation Measures</b>	<b>Implementing Agency</b>	<b>Supervising &amp; Monitoring Agency</b>	<b>Comments By CSC ON MN06-CW2</b>	<b>Comments By CSC ON MN06-CW1</b>
(1)	Constricted Sections along the proposed alignment	As Per design requirement	We have restrict the COI for Minimize the adverse effect of Tree cutting and interference to major water bodies.	Contractor	PIU/CSC	Implemented as per site requirements.	Implemented as per site requirements.
(2)	Tree Cutting	As Per design requirement	Restricting tree cutting within construction limit.	Forest Dept./PIU	PIU/CSC	Joint verification had been done. PIU is following up with the forest department to obtain the clearances.	NOC obtained
			Avoiding tree cutting at ancillary sites.			Yes	Yes
			Providing and maintaining compensatory tree plantation at the rate of 1:3 i.e. three times of cutting.			To be implemented by forest department as per the tree cutting and compensatory plantation term and condition.	To be implemented by forest department as per the tree cutting and compensatory plantation term and condition.
(3)	Removal of utilities	Work site clearance	Necessary planning and coordination with concerned authority and local body	Concerned utility agencies/ PIU	PIU/ CSC	Yes	Yes
			Prior notice to and consultation with concerned authority, local body and public to be affected so as to			Yes. PIU is coordinating with the other concerned Departments such as	Yes. PIU is coordinating with other concerned Departments such as

			ensure that work does not get affected and impact on public is minimum.			PHE, Electricity board.	PHE, Electricity board
(4)	Religious places	Work site	Suitable mitigation measures have been incorporated in Social report.	PIU/NGO	CSC/PIU	Shall be implemented as and when required	Shall be implemented as and when required

### Construction Phase

S.No	Environmental Issue	Location /Source	Mitigation Measures	Implementing Agency	Supervising & Monitoring Agency	Comments By CSC ON MN06-CW2	Comments By CSC ON MN06-CW1
(1)	Air Pollution	Construction equipment's, HM plant, Crusher and vehicles	Refer to sub – clause 111.5 and sub – clause 111.13 of Technical Specification of the Contract with contractor.	Contractor	CSC/PIU	Implemented	Implemented
		Temporary diversion	<ul style="list-style-type: none"> <li>Maintaining diversion and detour for road traffic in good shape and traffic regulated.</li> </ul>	Contractor	CSC/PIU	Being Implemented	Being Implemented
			<ul style="list-style-type: none"> <li>Regular sprinkling of water, as necessary.</li> </ul>			Implemented but frequency needs to be increased	Implemented but frequency needs to be increased
		Dust during earth works or from soil dumps.	<ul style="list-style-type: none"> <li>Maintaining adequate moisture at surface of any earthwork layer completed or non – completed unless and until base course is applied, to avoid dust emission.</li> <li>Stockpiling spoil at designated areas and at least 5 m away from traffic lane.</li> </ul>	Contractor	CSC/PIU	Implemented but needs improvement	Implemented but needs improvement
		Borrow pits and haul road.	Refer sub – clause 111.2 of Technical Specification of contract.	Contractor	CSC/PIU	Shall be implemented as and when required	Shall be implemented as and when required



		Storage of construction materials	Sprinkling of water as necessary	Contractor	CSC/PIU	Implemented	Implemented
(2)	Water Pollution	Construction of Bridge or culverts, earthwork and marginal spillage of construction materials causing temporary turbidity and suspended solids.	<ul style="list-style-type: none"> <li>Constructing and maintaining diversion channel, sedimentation basin, dykes etc. as may be required to temporarily channelize water flow of streams/river.</li> </ul>	Contractor	CSC/PIU	Being implemented as per requirement	Being implemented as per requirement
			<ul style="list-style-type: none"> <li>Storage of construction material and excavated soil above high flood level</li> </ul>			Yes, implemented	Yes, implemented
		Construction vehicles	<ul style="list-style-type: none"> <li>Strictly avoiding cleaning/washing of construction vehicle in any water body.</li> </ul>	Contractor	CSC/PIU	YES	YES
		Soil erosion from construction site	<ul style="list-style-type: none"> <li>Proper planning of site clearing and grubbing so as not to keep the cleared site before working for long duration.</li> </ul>	Contractor	CSC	Implemented	Implemented
		Seepage from construction debris	<ul style="list-style-type: none"> <li>Refer Sub – clause 111.17 of Technical Specifications.</li> </ul>	Contractor	CSC	As per requirement, and the Technical Specification	As per requirement, and the Technical Specification
		Construction camp and worker's camp	<ul style="list-style-type: none"> <li>Refer Sub – clause 111.16 of Technical Specifications</li> </ul>	Contractor	CSC	Waste management plan is submitted by contractor and accordingly the work is undertaken.	Waste management plan is submitted by contractor and accordingly the work is undertaken.
3.	Ground Water Pollution	Wastewater logging	All wastewater will be diverted to a ditch that will be managed for the period of construction and after construction such ditches will be filled and restored to original condition.	Contractor	CSC/PIU	In progress	In progress

		Borrow pit excavation	Excavation of borrow pit should not touch the aquifer	Contractor	CSC/PIU	Implemented	Does not arise
		Human wastes and wastewater at construction camp	Providing septic tanks for treating sewage from toilets before discharging through soak pits.	Contractor	CSC	Yes	Yes
			Locating soak pits at least 50m from any ground water sources	Contractor		Yes	Yes
			Decanting and or controlled disposal of oil and grease as collected at collection tanks of maintenance yard and chemical storage areas.			Partially implemented	Partially implemented
			Refer Sub – clause 111.16 of Technical Specifications				
4.	Noise		Scheduling of project Activities: Operations will be scheduled to coincide with period when people would least likely to be affected. Construction activities will be avoided between 9 P.M. and 6A.M.nearresidential areas.	Contractor		Implemented	Implemented
			Protection devices (ear plugs or ear muffs) will be provided to the workers operating in the vicinity of high noise generating machines.	Contractor		Implemented at crusher plant	Implemented at crusher plant
			Construction equipment and machinery should be fitted with silencers and maintained properly.	Contractor		YES, Implemented	YES, Implemented
			<ul style="list-style-type: none"> <li>• Source control through proper maintenance of all equipment.</li> <li>• Use of properly designed engine enclosures and intake silencers.</li> <li>• Noise measurement should be carried out along the road to ensure the effectiveness of mitigation measures.</li> </ul>	Contractor		Partially implemented	Partially implemented
			<ul style="list-style-type: none"> <li>• Vehicles and equipment used should confirm to the prescribed noise pollution Norms.</li> </ul>			Yes	YES

			Constructing noise barriers as proposed for schools and hospitals prior to taking up road construction activities at those sections.			Shall be implemented, as and when required	Shall be implemented, as and when required
			Movements of heavy construction vehicles and equipment near public properties will be restricted.	Contractor		Yes	Yes
			Comply with set up criteria for stone crusher, Hot Mix Plants and concrete batching plants and installations and maintenance of pollution control devices as mentioned in sub-clause 111.5 of Technical Specifications.			Being implemented	Shall be implemented
			Refer Sub-clause 111.3 of Technical specifications for identifications, and operation of quarry areas and adopting controlled blasting.			Implemented	Implemented
5	Land Pollution	Spillages from plants and equipment at construction camp	Providing impervious platform and oil and grease trap for collection of spillage from construction equipment vehicle maintenance platform.	Contractor	CSC	In progress	In progress
			Collection oil and lubes drips in container during repairing construction equipment vehicles.			Yes care has been taken	Yes care has been taken
			Providing impervious platform and collection tank for spillage of liquid fuel and lubes at storage area.			Implemented	In progress
			Providing bulk bituminous storage tank instead of drums for storage of bitumen and bitumen emulsion	Contractor	CSC	Practically not feasible. Due care has been taken in storing the bitumen drums	Practically not feasible. Due care has been taken in storing the bitumen drums
			Providing impervious base at bitumen and emulsion storage area and regular clearing of any bitumen spillage for controlled disposal.	Contractor	CSC	Proper care has been taken	Proper Care has been taken

			Reusing bitumen spillage	Contractor	CSC	Shall be implemented, as and when required	Shall be implemented, as and when required
			<ul style="list-style-type: none"> <li>Disposing non-usable bitumen spills in a deep trench providing clay lining at the bottom and filled with soil at the top(for at least 0.5 m)</li> <li>Refer Sub – clause 111.16 of Technical specification.</li> </ul>	Contractor	CSC	Shall be implemented, as and when required	Shall be implemented, as and when required
		Domestic solid waste and liquid waste generated at camp	Collecting Kitchen waste at separate bins and disposing of in a pit at designated area/s	Contractor	CSC	Partially Implemented	Partially Implemented
			Collecting plastics in separate bins and disposing in deep trench at designated areas for recycling.	Contractor	CSC	Not implemented	Not implemented
			Collecting cottons, clothes etc. at separate bins and burning in a pit(with sand bed)	Contractor	CSC	Not implemented	Not implemented
		Borrow pits	Controlled operation and redevelopment of borrow pits to avoid water logging and land contamination.	Contractor	CSC	Implemented	Does not arise
6.	Loss of Topsoil	All construction sites	The topsoil from all areas of cutting and all areas to be permanently covered shall be stripped to be specified depth of 150 mm and stored in stockpiles. At least 10% of the temporarily acquired area shall be earmarked for storing topsoil.	Contractor		Partially implemented (Due to steepness of slope it is practically not possible to implement 100%)	Partially implemented (Due to steepness of slope it is practically not possible to implement 100%)
			The stockpile shall be designed such that the slope does not exceed 1:2(vertical to horizontal), and the height of the pile be restricted to 2m.To retain soil and to allow percolation of water, the edge of the pile shall be protected by silt fencing.			Implemented	Implemented

			Stockpiles will not be surcharged or otherwise loaded and multiple handling will be kept to a minimum to ensure that no compaction will occur. The stockpiles shall be covered with gunny bag or tarpaulin.			Care has been taken	Care has been taken
			<ul style="list-style-type: none"> <li>It shall be ensured by the contractor that the topsoil will not be unnecessarily trafficked either before stripping or when in stockpiles.</li> <li>Such stockpiled topsoil will be returned to cover the disturbed area and cut slopes. Residual topsoil will be distributed on adjoining /proximate barren/rocky areas as identified by the SC in a layer of thickness of 75mm-150 mm. Top soil shall also be utilized for redevelopment of borrow areas, landscaping along slopes, medians and incidental spaces.</li> </ul>	Contractor		Shall be implemented	Shall be implemented
7	Compaction of soil	All construction sites	<ul style="list-style-type: none"> <li>Construction vehicle, machinery and equipment shall move or be stationed in the designated area (ROW or COW, as applicable) only. While operating on temporarily acquired land for traffic detours, storage, material handling or any other construction related or incidental activities, topsoil from agricultural land will be preserved as mentioned above.</li> </ul>	Contractor		Implemented	Implemented
8	Ecology	Site clearance	Restricting tree cutting within corridor of impact.	Contractor		To be implemented as per requirement.	Implemented as per requirement.
		Ancillary sites	<ul style="list-style-type: none"> <li>Minimizing tree cutting and vegetation clearance during site selection.</li> <li>Preservation of trees within ancillary sites and avoiding impact on forest</li> </ul>	Contractor		Implemented	Implemented

			<p>resources</p> <ul style="list-style-type: none"> <li>• Providing buffer area from boundary of PF, RF, National Park and wildlife sanctuary of 1.5 km for locating construction plants, construction camp and quarry and 500m for borrow areas.</li> </ul>				
			Providing cooking at camp for discouraging and prohibiting use of fire wood i.e. cutting of trees by workers.	Contractor		Implemented	Implemented
9	Occupational health and safety of workers.	Construction camp	Water supply, sanitation, drainage and medical health facilities at camp site.	Contractor		Partially Implemented	Partially Implemented
			Providing and using PPEs.	Contractor		Implemented but needs improvement	Implemented but needs improvement
			Using working reverse horn for all construction equipment and vehicles.	Contractor	CSC	Yes	Yes
			Providing earth link circuit breaker (ECLB) for all electrical connections.	Contractor	CSC	Yes, provided	Yes, provided
			Maintaining first aid at construction sites.	Contractor	CSC	Yes	Yes
			Maintaining emergency response system.	Contractor	CSC	Implemented	Shall be implemented
			Refer sub – clause 111.16 of Technical Specification.	Contractor	CSC		
10	Accidents and safety	Construction sites	Providing and maintaining traffic management comprising diversion, warning, guiding and regulatory signage, channelizes and delineators, lighting, flagman, dust control system etc. as specified in the contract.	Contractor	CSC	Being implemented as and when required but needs improvement	Being implemented as and when required but needs improvement

			Providing adequate light at construction site when working during night hours if permitted by the engineer.	Contractor	CSC	Working at day only, will be provided as and when required	Working at day only, will be provided as and when required
			Conducting induction and periodic training for all workers and supervisors.	Contractor	CSC	Implemented	Implemented
		Construction camp	Conducting periodic mock drilling on critical accident prone activities.	Contractor	CSC	Conducted periodically	Conducted periodically
			Conducting periodic training for all personnel working at plant site.	Contractor	CSC	Implemented	Implemented

## **9. Summary of Environmental Monitoring**

During the reporting period, the following issues were reviewed and the contractor was advised / instructed to take required action for improvement/compliance:

- 1) Provision of safety measures for road users at work sites.
- 2) Proper drainage system within camp premises.
- 3) Provision and ensure use of PPE for workers.
- 4) Ambulance and medical aid facility within camps.
- 5) Monitoring of environmental baseline quality data.
- 6) Provision of emergency response system.

### **Monitoring of Ambient Air, Noise and Water Quality**

No environmental quality data collection (monitoring) has been carried out till date. This is mainly due to unavailability of NABET affiliated monitoring laboratories in the State. Contractor in coordination with CSC and PIU has been trying to engage monitoring agencies from nearby states. In the meantime contractor is implementing various measures to control dust, noise and water pollution. The mitigation measures, which have adopted to reduce the air pollution, are: transportation of construction materials in covered manner, sprinkling of water on the roads and plant areas, vehicle speed restriction to 5-10 km/hrs at site, tyre washing facility for cleaning of vehicles at camps. To control noise pollution construction vehicles and machineries are being maintained regularly, timely scheduling of construction activities and controlled movement of construction vehicles.

## **PUBLIC CONSULTATIONS AND ADDRESSING OF GRIEVANCES**

Consultations are being held regularly with the local people, village chiefs, and affected peoples in the project area including relevant government agencies. PIU has taken all possible measures to ensure that following concerns are regularly addressed:

- a) Controlled construction activities in settlement locations,
- b) Traffic diversion during construction, and
- c) Inclusion of all key stakeholders.

During the reporting period the no major grievances were recorded. Contractor is addressing the issues in consultation with PIU and CSC. Other minor onsite grievances are being addressed in consultation with local communities and village chiefs. The complaints and grievances are being addressed as per the project provisions and in consultation with communities.

### **UNANTICIPATED ENVIRONMENTAL ISSUES**

During the reporting period no major unanticipated environmental issues were encountered. Only issues of NOC for tree cutting (MN-CW2) from forest dept. and utility shifting from other concerned depts. were discussed. Contractor has requested the PIU to take appropriate action to resolve the aforementioned issues.



## 10. CONCLUSION

The implementation of environmental management measures in this project face some difficulties but it can be concluded that the overall progress of implementing environmental safeguard measures show a good level. CSC environmental specialist has been working closely with the environmental officer of the PIU and conducting regular site inspections. PIU environmental officer is active in coordinating the implementation of environment safeguards.







### **Problems Identified and Actions Recommended**

During the reporting period (January 2016- June 2016) some issues have been identified such as compliance with statutory requirements, monitoring of environmental quality data, impacts of dust emissions on air quality, handling of waste/used oil, inadequate road safety and health safety measures, proper documentations and record keeping, information disclosure.

Following actions were recommended to address these problems.

- ❖ Follow-up with forest department to obtain NOC for roadside tree cutting for Thoubal-Kasom Khullen (CW2) road section.
- ❖ Follow-up with government agencies to get pending approvals/permits for contractor's facilities.
- ❖ Expedite hiring of environmental monitoring agency to conduct monitoring of air, water and noise quality along the project road.
- ❖ Awareness to workers on use of PPEs and health and safety aspects.
- ❖ Proper storage and handling of used oil in the vehicle maintenance area.
- ❖ Consultation with public, village chiefs and affected communities to clearly explain the precautionary measures being taken to protect environment and on road safety including traffic management plans.
- ❖ Improvement in health care and sanitation facilities at construction and labour camps.
- ❖ Improvements in maintenance of records and reporting.

## 11. PHOTOGRAPHS: MN06- CW1&CW2.

	
1. Excavation work in progress (CW1)	2. Laying of GSB (CW2)
	
3. Base camp (CW1)	4. Safety barricades & boards required (CW2)
	
5. Culvert work in progress (CW1)	6. GSB at 43+500 (CW-1)



7. Fire extinguisher available at camp.(CW2)



8.Safety from land slide is a major issue at both the stretches.



9. Security post with police force available at camp.



10.Proper handling of used oil/grease required.



11.Proper use of PPEs required (CW2)



12.Water sprinkling required at crusher area (CW-2)

# **ANNEXURE- I**

**Statutory NOC/Permissions for MN06-CW1**



Sl. No. 0436

# Manipur Pollution Control Board

Lamphelpat, Imphal-795004

## Certificate

Consent to Establish/Operate



Consent No. 193/2016

Consent is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended (herein-after referred to as 'the Act') and Rules made there under to Shri Shrimati/Messrs. M/s. DRAIPL-ABCI (JV) for setting up & operation of WMM Plant at Ngariyan Village, Old Cachar Rd., Churachandpur District. (here-in after referred to as 'the Applicant') authorising him to establish their plant in the Air Pollution Control Areas(s) notified.

This is subject to the provisions of the Act and Rules and orders made there-under and further subject to the terms and conditions annexed hereto.

The consent shall be valid for a period ending with the 17<sup>th</sup> day of March, 2017

Dated: this 18<sup>th</sup> day of March, 2016

For and on behalf of the Manipur Pollution Control Board.

  
Member Secretary

Member Secretary  
Manipur Pollution Control Board  
Government of Manipur



Sl. No. 0196

# Manipur Pollution Control Board

Lamphelpat, Imphal-795004

## Certificate

Consent to Establish/Operate



Consent No. 406/2015

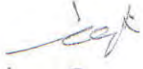
Consent is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended (herein-after referred to as 'the Act') and Rules made there under to Shri Shrimati/Messrs. M/s. DRAIPL-ABCI (JV) for setting up and operation of a Stone Crusher at Ngarian Village, Churachandpur Dist., Manipur. Senior General Manager: Mr. Dilip Kumar (here-in after referred to as 'the Applicant') authorising him to establish their plant in the Air Pollution Control Areas(s) notified.

This is subject to the provisions of the Act and Rules and orders made there-under and further subject to the terms and conditions annexed hereto.

The consent shall be valid for a period ending with the 6<sup>th</sup> day of Dec., 2016

For and on behalf of the  
Manipur Pollution Control Board.

Dated: this 7<sup>th</sup> day of Dec., 2015

  
Member Secretary

Member Secretary  
Manipur Pollution Control Board  
Government of Manipur

Sl. No. 0434

# Manipur Pollution Control Board

Lamphelpat, Imphal-795004

## Certificate

Consent to Establish/Operate



Consent No. ...192/2016.....

Consent is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended (herein-after referred to as 'the Act') and Rules made there under to Shri Shrimati/Messrs. M/s.....DRAIPL-ABCI (JV) for setting up & operation of Hot Mix Plant at Ngariyan Village, Old Cachar Rd., Churachandpur District......


(here-in after referred to as 'the Applicant') authorising him to establish their plant in the Air Pollution Control Areas(s) notified.

This is subject to the provisions of the Act and Rules and orders made there-under and further subject to the terms and conditions annexed hereto.

The consent shall be valid for a period ending with the .....17<sup>th</sup> day of March, 2017.....

For and on behalf of the  
Manipur Pollution Control Board.

Dated: this .....18<sup>th</sup> day of March, 2016.....

  
Member Secretary

Member Secretary  
Manipur Pollution Control Board  
Government of Manipur

**Manipur Pollution Control Board**  
**Lampelpat, Imphal-795004**

**Certificate**

Consent to Operate



Consent No. 186/2015


Consent is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended (herein - after referred to as 'the Act') and Rules made there under to Shri/Shrimati/Messrs **M/S DRAIPL-ABCI (JV) for operation of Stone Crusher at Tupul, PO/PS-Noney, Tamenglong District, Manipur.** (here-in after referred to as 'the Applicant') authorising him/her to operate the plant in the Air Pollution Control Area(s) as notified.

This is subject to the provisions of the Acts and Rules and orders made there-under and further subject to the terms and conditions annexed hereto.

The consent shall be valid for a period ending with the **23<sup>rd</sup> day of July, 2016.**

For and on behalf of the  
Manipur Pollution Control Board

Dated: this 24<sup>th</sup> day of July, 2015

  
Member Secretary

Member Secretary  
Manipur Pollution Control Board  
Government of Manipur



**Manipur Pollution Control Board**  
**Lamphelpat, Imphal-795004**

**Certificate**

Consent to Operate

Consent No. 185/2015



Consent is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended (herein - after referred to as 'the Act') and Rules made there under to Shri/Shrimati/Messrs **M/S DRAIPL-ABCI (JV) for operation of Base Camp at Ngariyan Village, Old Cachar Road, Churachandpur District, Manipur.** (here-in after referred to as 'the Applicant') authorising him/her to operate the plant in the Air Pollution Control Area(s) as notified.

This is subject to the provisions of the Acts and Rules and orders made there-under and further subject to the terms and conditions annexed hereto.

The consent shall be valid for a period ending with the **23<sup>rd</sup> day of July, 2016.**

For and on behalf of the  
Manipur Pollution Control Board

Dated: this 24<sup>th</sup> day of July, 2015

  
Member Secretary

Member Secretary  
Manipur Pollution Control Board  
Government of Manipur



मणिपुर मणिपुर MANIPUR

01AA 045157

DEED OF LEASE

THIS AGREEMENT OF LEASE is made on this the \_\_\_\_ day of DECEMBER 2015,

BETWEEN

SRI KAGADUN, aged 33 years, S/o. Sri KAPALUM, resident of Village NGRIAN, Bihhnupur, District CHURCHUNDPUR – 795126, MANIPUR, (hereinafter called the LESSOR)

AND

M/S. ABCI INFRASTRUCTURES PVT LTD., a company incorporated under the companies act, having its Head office at Kolkata and Work site office at Ngrian Village, PO: Bihhnupur, Churhandpur Dist., Manipur, represented through its **General Manager, Sri C.S. NAIR**, S/o Sri T.S. Bhaskaran Nair AGED 58 YEARS (hereinafter called the LESSEE).

WHEREAS the above named Sri KAGADUN, the LESSOR is the absolute OWNER of the plot measuring 160 Sq.ft., bearing Dag No. \_\_\_\_\_ and Patta No. \_\_\_\_\_ and a house constructed on it having 3 Rooms.

WHEREAS the LESSEE M/s. ABCI Infrastructures Pvt Ltd., has approached the LESSOR Mr. KAGADIN and expressed their willingness to take the above-said house and the vacant land as prescribed above of the LESSOR on Lease for a period of 5 years or until completion of the Road work which has been undertaken by the Lessee from PWD, Government of Manipur.

x G. adun.

WHEREAS the LESSOR SRI KAGADUN having agreed to lease out the said premises to the LESSEE M/s. ABCI Infrastructures Pvt Ltd., for a period of 5 years from the date of execution of this Lease Agreement or until completion of the contract work of the Lessee; both the parties hereby agreed to execute this agreement of lease under the conditions as hereunder.

Terms & Conditions:-

1. Both the parties have mutually agreed to execute the lease agreement for a period of 5 years or until completion of the contract work of the Lessee whichever is earlier.
2. The LESSOR has agreed to remove the PAN SHOP and unnecessary sheds if any from plot of land except the house constructed on it.
3. The LESSOR has also agreed to allow the Lessee to construct their Office, Labour and Staff Quarters, bathrooms, toilets etc., as per their requirements in the vacant land.
4. In consideration of said leasing out the said premises the Lessee shall pay a total sum of Rs.1.35 lacs for the total period of 5 years or until completion of the contract work (whichever is earlier) and the LESSOR hereby acknowledge having received the amount of Rs. 1,35,000/- (Rupees one lakh forty five thousand only) in full.
5. Both the parties (LESSOR & LESSEE) hereby agree that neither the LESSOR will ask the LESSEE to vacate the said premises during the currency of the Lease Deed nor the LESSEE will vacate the premises during the currency of their contract with the ~~Government~~ PWD, Manipur.
6. In the event of any dispute that may arise between the parties will be amicably settled through a third party.
7. The LESSOR shall keep the LESSEE indemnified from any kind of outside interference and will allow them to complete their contract work with ~~PWD~~ peacefully.

IN WITNESS WHERE OF both parties after mutually agreeing to all the above points sign this Deed of Lease on this the 06 day of JANUARY 2016.

SRI KAGADUN

×

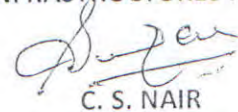
GADUN

WITNESSES:

1. L. Lungthueingam

2. Th. Pranjit Singh

For & On behalf of  
ABCI INFRASTRUCTURES PVT LTD

  
C. S. NAIR

General Manager



This agreement is made on 22nd day of March, 2014 year between Mr. Ningmei Kamei, aged about 43 yrs S/O K. Laukei of Charoi Chagotlong -II ( Charoi Tupul) Village, P.O/P.S- Noney, Nungba Sub Division, Tamenglong Dist. Manipur, and (1) Mr Dilip Kumar, Sr. General Manager M/S ABCI Infrastructures Pvt. Ltd. Club Road Silchar Assam at Present at Athokpam Opp. DC Thoubal C/O Athokpam Tomba Singh house owner PO/PS Thoubal District Manipur (2) Mr. Thongam Bikel Singh, Sr. Project Engineer.....do.....

Whereas the above named Lesser is the real owner/possessor of the land measuring about One Acre situate at Charoi Chagotlong -II ( Charoi Tupul) Village, Tamenglong Dist. Manipur. which is more fully mentioned below. And whereas the above named lessee (1) & (2) are the official /staffs of the above mentioned Company and they are the authority of the same in executing this Deed, in the name of the said company. Both the above named parties hereby agreed to execute this agreement under the conditions as here under,

Terms and Conditions:-

1. The parties have settled to lease out the said area of one Hectare which is situated at above named village under the right and possession of the lesser, for a period of 4 (four) years from the date of execution of deed.
2. The parties hereby agreed to pay four year rent charge at rate of Rs.2 5,000/- (Rupees twenty five thousand) only, per year at time of agreement. (Cheque no. 014381)
3. The Parties have agreed to construct necessary any structures such as, Crusher Plant, Office room, Worker room, Lab, Workshop, Kitchen, Toilet and Bathroom, other plants etc. which are required for Road constructions, at their own cost. At surrounding areas necessary domestic utilities namely, electricity and water will also be arranged by M/S ABCI Infrastructures Pvt. Ltd. at their own cost of land.
4. As party (lesser) is agreed to provide the lessee that the land shall be free from any encroachment.

*Ningmei Kamei*  
Signature of Owner.

Authorized Signatory  
M/S ABCI Infrastructures Pvt. Ltd.

Witnessed by:-

1. *Gaitoni Kamei*
2. *Terangwanglung Kamei*
3. *Ranjit Singh*

