

Sir.





GOVERNENT OF ANDHRA PRADESH FOREST DEPARTMENT

From Sri. Vignesh Appavu G, I.F.S., Deputy Director, Project Tiger, Markapur.

То

The Regional Officer, Ministry of Road Transport &Highways, Vijayawada.

Rc.No.1484/2017/DM, Dated. 05.02.2024

DEMAND NOTICE

Sub:- APFD – PT, Markapur - F (C) Act 1980 - Diversion of 38.60 ha forest land falling in Mutukur and Markapur RF, Markapur WL Division (presently PT, Markapur Division) in favour of the Regional Officer, MoRTH, Vijayawada Division for rehabilitation and up-gradation of NH-565 from Davupalli to Mallapalem Junction(Km 133.922 to Km 154.900) to two lanes with paved shoulders the state of AP under NHDP-IV- In Principle / Stage – I approval accorded – issuance of revise demand notice for payment of Compensatory levies as per Stage-I approval accorded by GoI – Requested of – Regarding.

Ref:- 1) DD, PT, Markapur Rc.No.1484 / 2017 / DM Dated:05.12.2023
2) CF & FDPT, Nandyala Rc.No.1558 / 2021 / TO, Dated:18.12.2023.
3) DD, PT, Markapur Rc.No.1484 / 2017 / DM Dated:06.01.2024.
4) PCCF (WL) & CWLW, AP, Mangalagiri Rc.No.21024 / 28 / 2022 / WL - 2, Dated:22.01.2024.

5) Gol, MoEF & CC, NTCA, RO (SZ), Bengaluru F.No.8-6(Vol.II/2012-NTCA(ROSZ)/801, Dated:17.08.2023

In continuation to this office reference 3rd cited, it is to inform that vide reference 4th cited, the Principal Chief Conservator of Forests (WL) & Chief Wildlife Warden, AP, Mangalagiri has issued instructions to revise Demand notice based on the approved mitigation plan for Rs.830.00 lakhs to be deposited in Wildlife Conservation Projects & CSR (WLC & CSR) account.

In this regard, it is to inform that the Biodiversity Impact Assessment Report for the proposed Project on ' diversion of 54 ha of forest land falling in Mutukur RF and Markapur RF of Markapur WL Division for Rehabilitation and Upgradation of NH 565 from Km.133.922 to 154.900 to two lanes with paved shoulders in the state of Andhra Pradesh under NHDP IV', INCLUDING THE 'Project Specific Mitigation Plan' in Chapter 6 with a Financial Outlay of Rs.1000.00 lakhs for a period of 10 years from 2022-23 to 2031-32, duly signed by the Dy.Director, PT Division, Markapur the Chief Conservator of Forests & Field Director, PT Circle, Srisailam.

Further, it is to inform that, as per stage - I guidelines issued by the Government of India and also issued instructions by the Principal Chief Conservator of Forests (WL) & Chief Wildlife Warden, AP, Mangalagiri, the undersigned has prepared all the levies as per revised rates of Gol, New Delhi F.No.5-3/2011-FC (Vol – I), dt.06.01.2022, along with tree extraction / translocation charges to be deposited by the user agency. The details of all the levies are furnished hereunder

S	Condition No. stipulated in the stage-I of Gol/GoAP	Category	Unit per Rate In Rs. (where ever applicable)	Area	Total Amount (Rs. In lakhs)	Remarks
1	2	3	4	5	6	7
1	Gol, MoEF & CC RO Chennai (Sub – Office at Vijayawada F.No.4 – APA208 / 2023 – Vij / 1371, Dated:06.11.2023 (Condition No V)	the money. (Eco Class – III,	12,28,590 / ha	38.6	2371.1787	-
2	Condition No.III	CA	10,68,300 / ha	90 ha	961.540	CA Scheme approved by the CCF & FDPT, Nandyala Rc.No.1558 / 2021 / TO, Dated:28.08. 2023
3		Safety Zone				
4		Penal CA/ ACA				
5		CAT				
5		Any other(Please specify)				

	tigation easures	 Total	830.00 4162.7187	The user agency shall to pay the amount in favour of Wildlife Conservation Projects & CSR (WLC & CSR) under the control of PCCF (WL) & CWLW, AP, at O/o the PCCF & HoFF, AP, Mangalagiri.
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Further, it is to inform that, the Government of India has mentioned certain condition no.vii in Stage – I approval of Wildlife Mitigation plan as follows.

vii. All the funds received from the user agency under the project shall be transferred / deposited to CAMPA fund only through e – portal (<u>https: // Parivesh.nic.in</u>).

In this regard, the levies pertaining to NPV and CA as mentioned below shall be deposited by the user agency in CAMPA funds.

SI. No	Condition No. stipulated in the stage-I of Gol/GoAP	Category	Unit per Rate in Rs (where ever applicable)	Total Area ha	Total Amount (Rs. In Iakhs)	Remarks
1	2	3	4	5	6	7
1	Gol, MoEF & CC RO Chennai (Sub – Office at Vijayawada F.No.4 – APA208 / 2023 – Vij / 1371, Dated:06.11.2023 (Condition No V)	NPV (Five times of the money. (Eco Class – III, Dense Vegetation)	12,28,590 / ha	38.6	2371.1787	

Total 3332.7187

Moreover, the revised levies pertaining to mitigation plan shall be deposited by the user agency in Wildlife Conservation Projects & CSR (WLC & CSR) for implementation of mitigation measures in Y Palem and V P South Ranges of PT, Markapur and the details are as follows.

SI. No	Condition No. stipulated in the stage-I of Gol/GoAP	Category	Unit per Rate in Rs. (where ever applicable)	Total Area ha	Total Amount (Rs. In lakhs)	Remarks		
1	2	3	4	5	6	7		
7	Condition No. VIII	Mitigation Measures			830.00	The user agency shall to pay the amount in favour of Wildlife Conservatio n Projects & CSR (WLC & CSR) under the control of PCCF (WL) & CWLW, AP, at O/o the PCCF & HoFF, AP, Mangalagiri.		
	Total 830.00							

The account details of Wildlife Conservation Projects & CSR (WLC & CSR) is furnished here under.

Name of the account :	Wildlife Conservation Projects & CSR (WLC & CSR)				
	Union Bank of India, Kannavarithota Branch, Guntur,				
Name of the Bank	Andhra Pradesh.				
Account No.	024210100114054.				
IFSC code:	UBIN0802425				

Further, it is to inform that, there are 3421 trees to be felled for the said project activity. Accordingly the tree extraction/ translocation charges shall be remitted by the user agency to the account of Deputy Director, PT, Markapur and the details are furnished hereunder.

	Total Amount	Deputy Director Bank Account details for
SI.No.	(in Rs.)	depositing the money
	Rs.4.00 /- lakhs	Name of the Bank: State Bank of India
1	Tree extraction /	Branch location: Tarlupadu road, Markapur
	translocation charges in	Account Number:11013289553
	Y Palem and V P South	IFSC Code: SBIN0000873.
	Ranges.	

Further, , it is to inform that vide reference 5th cited, the site appraisal report of NTCA Committee have inspected the proposed diversion area on 14.07.2023 and suggested the certain mitigation measures on subject cited project. The copy of site appraisal report are enclosed for perusal and the user agency is requested to strictly adhere to the mitigation measures proposed by the said committee without any deviation.

Hence, the Regional Officer, Ministry of Road transport & Highways, Vijayawada is requested to pay the all levies as per aforesaid instructions and comply with all the conditions stipulated by the Government of India and to publish the orders at the cost of the project proponent and submit condition wise compliance report to this office immediately for taking further course of action

The User Agency is also requested to comply with all conditions stipulated by the Government of India letter and in addition they shall comply with the following in accordance with the Government of India instructions issued vide Rc.No. Gol, MoEF & CC RO CHN, Sub Division, F.No.4 – APA208 / 2023 – Vij / 1371, Dated: 06.11.2023. communicated vide Principal Chief Conservator of Forests & HoFF, AP, Guntur Rc.No.EFS02 – 15034 / 35 / 2021 – FCA SEC – PCCF / FCA – 1, Dated: 15.11.2023 and instructions issued to publish the orders at the cost of the project proponent.

- Publish the entire forest clearance granted in variation along with the condition and safe guards impose by the Central Government in two widely circulated daily news papers one in vernacular language and another in English language so as to make people aware of the permission granted to the project proponents for use of forest land for non forestry purpose.
- The copies of the forest clearance should also be submitted to the heads of local bodies, Panchayath's, and municipal bodies by the project proponents in addition to the relevant offices of the Government who in turn has to display the same for 30days.
- 3. The User Agency is requested to deposit the above said amounts as early as possible for further course of action.

This is submitted for information and necessary action.

Encl: As above

Yours faithfully Sd- Vignesh Appavu.G, Deputy Director Project Tiger, Markapur.

Copy submitted to the Principal Chief Conservator of Forests & Head of Forest Force, AP, Mangalgiri for favour of information.

- Copy submitted to the Principal Chief Conservator of Forests (WL) & CWLW, AP, Mangalagiri for favour of information.
- Copy submitted to the Conservator of Forests & Field Director, Project Tiger Circle, Nandyala for favour of information.

Copy to the Forest Range Officers Y Palem and V P South for information.

Sd- Vignesh Appavu.G, Deputy Director Project Tiger, Markapur

// T.C.B.O //

N. University College

Government of India Ministry of Environment, Forests and Climate Change National Tiger Conservation Authority Regional Office (Southern Zone) Bengaluru-560 076

> Doresanipalya Forest Campus, Bannergatta Road, Arekere Mico layout, IIMB (PO), Bengaluru-560 076. Telephone: 080-26596211 E-mail: aigsouth-ntca@nic.in

F. No.8-6(Vol II)/2012-NTCA(ROSZ)/801 Dated 17th August, 2023

To

The ADGF (PT) & Member Secretary National Tiger Conservation Authority 7th Floor, B-1, Wing Pt. Deendayal Anthodaya Bhawan CGO – Complex, Lodhi road New Delhi – 110 003.

Sub: Constitution of a team in connection with proposal for diversion of 54 ha of forest land for rehabilitation and upgradation of NH-565 from Km. Km 133.922 to Km 154.900 (Davupally to Mallapalem Section), having a total length of 20.978 km in the State of Andhra Pradesh - reg.

Ref: NTCA Hq. O.M. F. NO.7-47I2023-NTCA, New Delhi dated 05th July, 2023.

Sir,

Kind attention is invited to the subject and reference cited above. In this regard, please find enclosed herewith the site appraisal report of the committee constituted to suggest the mitigation measures pertaining to the **proposal for diversion of 54 ha of forest land for rehabilitation and upgradation of NH-565 from Km. Km 133.922 to Km 154.900 (Davupally to Mallapalem Section), having a total length of 20.978 km in the State of Andhra Pradesh** for your kind information and necessary action. The report is being submitted on behalf of the committee after obtaining concurrence from the committee members.

Encl.: As above

Yours faithfully,

(Harini Venugopal) Assistant Inspector General of Forests



Site Inspection Report of NTCA Committee in connection with proposal for diversion of 54 ha of forest land for rehabilitation and upgradation of NH-565 from Km 133.922 to Km 154.900 (Davupally to Mallapalem Section), having a total length of 20.978 km in the State of Andhra Pradesh

Submitted to



August, 2023

Background of the constitution of the committee and terms of reference: Rehabilitation and Upgradation of the reach from Davupally to Mallapalem Junction i.e., from Km 133.922 to Km 154.900 is approved by the Ministry of Road Transport & Highways (MoRT&H), Gol. NH-565 is an important Highway starting from Nakrekal (in Telangana State) on NH-65 connecting Nalgonda, Macherla, Yerragondapalem, Kanigiri, Rapur, Venkatagiri, and terminating at its junction with NH 71 near Yerpedu in the state of Andhra Pradesh. Widening and improvement of this section of NH-565 would further improve connectivity in terms of achieving smooth and safe traffic flow and improve level of service.

While examining the proposal for wildlife clearance for NBWL, it was observed that mitigation plans were proposed by three different agencies viz. i) National Highway Authorities, ii) Andhra Pradesh Forest Department and iii) Greentech Enviros, Hyderabad in the Biodiversity Impact Assessment Report for the Project. Dimensions of proposed animal underpasses were also not in adherence to WII guidelines at many places.

In light of this, a committee was constituted by NTCA (vide OM F. No. 7-47/2023-NTCA dated July 5, 2023) with the following members:

- Sh. Vignesh Appavu G., Deputy Director, Project Tiger, Markapur, Nagarjunasagar Srisailam Tiger Reserve (Representative of Chief Wildlife Warden, Andhra Pradesh)
 Member
- 2. Sh. Gaddam Sanjeeva Rayudu, Executive Engineer (R&B), NH Division, Vijayawada (Representative of NH Authorities) Member
- 3. Dr. Kausik Banerjee, Scientist, NTCA-WII Tiger Cell, New Delhi Member
- 4. Ms. Harini Venugopal, AIGF, NTCA, Regional Office South Zone, Bengaluru Member Convenor

The terms and reference of the said team were to cause site appraisal and suggest appropriate mitigation measures.

Field Visit: The Committee made the site visit on 14-07-2023 and inspected the entire stretch of the highway alignment passing through Nagarjunasagar Srisailam Tiger Reserve (**Fig. 1**) along with other officials of Andhra Pradesh Forest Department and National Highway Authorities.

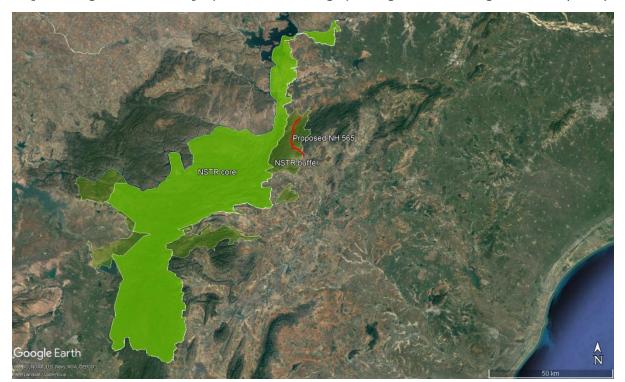
Methodology adopted:

- 1. Joint site visit and inspection of the entire stretch of the highway passing through the Tiger Reserve.
- 2. Detailed discussion among the team members regarding placement of mitigation structures and their engineering feasibility and ecological efficacy.
- 3. Thorough scrutiny of the existing structures and proposed structures by all three agencies by the team members for their effectiveness of being useful animal passages. Committee recommendations were based on concurrence arrived at by all members during the field visit.
- 4. A draft report was shared among all committee members on August 3, 2023 soliciting comments and suggestions. All comments received were duly incorporated in the final draft and concurrence of all committee members on the final draft report for submission was obtained through email communications.



Fig 1: Glimpses of the Committee and other officials causing site appraisal

Map showing location of the project site within Nagarjunasagar Srisailam Tiger Reserve (NSTR)



Observations made by the Committee and suggested mitigation measures:

- 1. Widening proposed for 21.45 m average width which includes 10 m for bituminous surface and remaining area for earthen shoulders and side slopes. The proposed road passes through Mutukuru Reserve Forest (KM 134/922 to KM 143/000) in VP South Range of Palnadu (erstwhile Guntur) district and Markapur Reserve Forest (KM 143/000 to KM 154/900) in Y Palem Range of Prakasam district entailing a diversion of 54 ha of forest land in the buffer of NSTR.
- 2. With increasing tiger population in NSTR, the Committee observed that the landscape is more frequently being utilized by tigers for dispersal and even for breeding. Other endangered large mammals reported from the area include leopard, sloth bear, chital, sambar, chinkara, wild pig and nilgai.
- 3. The Committee acknowledged that currently there is a population of elephant in Andhra Pradesh near Rollamadugu in Annamaya Forest Division which is approximately 200 km away from the current highway. The Committee opined that with elephants being long ranging animals having capabilities of dispersing over hundreds of kilometres, the possibility of colonization of NSTR landscape by elephants in future cannot be overruled. Similar incidents have been reported from Madhya Pradesh where a small elephant population from Chhattisgarh have colonized parts of eastern Madhya Pradesh during last 4-5 years and very recently occupied several hundreds of square kilometres covering Bandhavgarh Tiger Reserve, Sanjay-Dubri Tiger Reserve and parts of Kanha Tiger Reserve.
- 4. With this context, the Committee thoroughly examined the mitigation plans proposed by all three agencies and recommended the mitigation structures as evidenced in **Table 1**.

SL. NO.	Km Chainage	Proposed structure	Proposed dimension	Remarks				
	VP South Range							
1	134+505	Minor Bridge	14 m span X 5 m height					
2	135+991	Underpass	7 m span X 5 m height					
3	136+319	Animal Underpass	5 m span X 4 m height					
4	136+700	Minor Bridge	24 m span X 5 m height					
5	137+100	Slab/box culvert	1.5 m span X 1.5 m height	Agricultural field				
6	137+705	Minor Bridge	18 m span X 8 m height	This section also needs to be mitigated with speed breakers/rumble strips				
7	138+165	Animal Underpass	30 m span X 6-8 m height	Height to be finalized considering the over ground power transmission line				
8	140+350	Major bridge	75 (3X25) m span X 6.5 m height	Cross drainage structure				
9	140+520	Major bridge	75 (3X25) m span X 6-7 m height	Height to be finalized considering the over ground power transmission line				
10	140+915	Animal Underpass	100 m span X 8 m height					
11	141+572	Slab culvert	8 m span X 5 m height					
Y Palem	Y Palem Range							
12	142+300 to 142+350	Speed breakers/rumble strips		Proposed canopy and land bridges to be replaced by speed breakers/rumble strips				
13	142+516	Animal Underpass	8 m span X 5 m height					

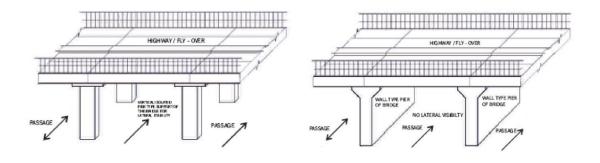
Table 1: Mitigation measures proposed by NTCA Committee for NH 565 (Davupally to Mallapalem section), Andhra Pradesh

SL. NO.	Km Chainage	Proposed structure	Proposed dimension	Remarks
14	142+727	Slab/box culvert	8 m span X 5 m height	
15	143+179	Slab/box culvert	8 m span X 5 m height	
16	143+300	Animal Underpass	130 m span X 8 m height	
17	143+605	Slab/box culvert	1.5 m span X 1.5 m height	
18	144+748	Animal Underpass	5 m span X 3 m height	
19	145+220	Animal Underpass	10 m span X 5 m height	
20	145+730	Slab/box culvert	1.5 m span X 1.5 m height	
21	146+770	Animal Underpass	5 m span X 3 m height	
22	146+900	Speed breakers/rumble strips		Proposed land bridges to be replaced by speed breakers/rumble strips
23	148+170	Major bridge	16 m span X 6-7 m height	Height to be finalized considering the over ground power transmission line
24	148+450	Animal Underpass	100 m span X 8 m height	Major zone for tiger and potential elephant movements
25	148+593	Slab/box culvert	8 m span X 4-5 m height	
26	151+585	Slab/box culvert	6 m span X 3 m height	
27	153+285	Animal Underpass	5 m span X 3 m height	

General recommendations

- 1. The NTCA Committee observed that in light of Regional Empowered Committee's (REC) recommendations of reducing the proposed 30 m width without compromising on the safety of the road, NHAI has reduced the RoW and revised the proposal for a diversion 35.9728 ha of forest land instead of 54 ha proposed in the original proposal. However, the NTCA Committee acknowledges that some additional working space would be required by the Project Proponent for constructing the mitigation structures proposed herein. In this context, the revised proposal for diversion area for 38.60 ha is submitted by NH authorities.
- 2. The underpasses should be concrete (RCC) structures so as to enhance their longevity and minimize disturbances caused during annual repair / maintenance of otherwise bitumen structures. The bottom of structures should, as far as possible, have similar substrates to that which would occur naturally in the absence of the structure. The approach to an animal crossing is a crucial factor in determining its use. Appropriate use of vegetation (trees, shrubs and grasses) can play a significant role in enhancing the naturalness of an engineered structure.
- 3. Divisions between the underpasses should be of pillar (isolated pier) type, instead of wall-type (**Fig. 2**). This would significantly improve the acceptability of passage structure by wild animals.

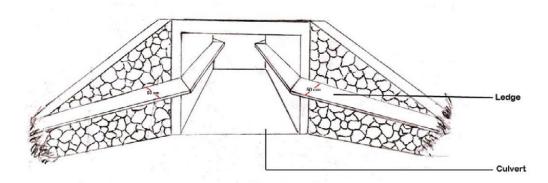
Fig. 2: a) Pillar type and b) wall type division of underpass



- 4. NH Authorities should ensure that all animal underpasses are fortified with integrated options of light and sound barriers (2 m high), camouflaging, and landscaping including restoration of habitat beneath underpasses after construction.
- 5. Chain link mesh fencing should be done by the user agency for 100 m on either side of the animal passages on both sides of the road for funnelling wildlife through the animal passages.
- 6. As far as possible, the minimum height of the underpasses should not be achieved by ground excavation, but by elevating the road. This would prevent water logging during rains.
- 7. The User Agency should ensure that the animal passages are not inundated with water during rains. Regular removal of debris and silts at the passage structures should be done by the project proponent.

- 8. The underpasses must be kept free of all human-related activities and disturbances including foot-trails and roads by Forest Department, as these have a negative influence on the use of crossing structures by wildlife.
- 9. Additional features on crossing structures such as walkways or planks/ledges/shelves (50 cm wide) to be installed by NH Authorities on the interior walls of underpasses/crossing and/or drainage structures (Minor Bridges, Box culverts and Slab culverts) to encourage mammals to use culverts built on natural drainage sites. These structures help animals use the structures in seasons when the culverts may be inundated with water. Ledges/shelves along the inner walls of all crossing and drainage structures are to be constructed for use by small mammals. These structures should extend up to the exit of the structures and brought to ground level (**Fig. 3**).

Fig. 3: Ledges or shelves measuring 50 cm wide are to be installed in all crossing and drainage structures. The ends of the shelves should be brought to ground level.



- 10. A concrete base of 50 cm is to be constructed on which the chain-link mesh fencing should be installed. The height of the fencing should be a minimum of 10 feet height on all sections so that species like leopards and other herbivores cannot cross them to get trapped inside the highway. The bottom 1-1.5 feet of the fences should be fitted with mesh wires so as to prevent small mammals and herpetofauna from crossing the highway. All fences are to be maintained in future by NH Authorities.
- 11. Cattle guards (2 m wide) are to be installed at both ends of the underpasses (including the fenced portions) and other fenced sections of the Highway to prevent wild and domestic animals from getting trapped within the fences/crossing structures (**Fig. 4**).
- 12. About 3,421 trees would have to be cut for upgradation work. These trees should be identified in consultation with the Forest Department before the construction starts and should be properly marked on ground. Attempt should be made that tree cutting is minimal. All trees (in a girth class for which there is technology available for transplantation) should be transplanted by the User Agency with adequate care for maximization of survival.

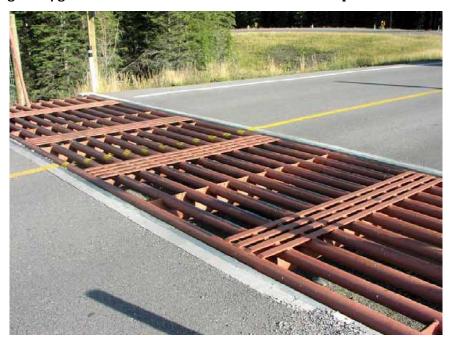


Fig. 4: Cattle guards/grids to be installed at both ends of the underpasses and fenced sections

- 13. Apart from mitigation structures and fenced sections, the remaining portion of the road should be provided with crash barriers on both sides of the Highway and speed breakers/rumble strips at every interval of approximately 500 meters so as to maintain a vehicular speed of 30km/hour within the Tiger Reserve. Speed breakers / rumble strips should be appropriately marked to make them visible to the drivers (both during day and night) so as to avoid vehicular accidents. Sign posts warning about movements of wild animals should also be placed by NH Authorities at regular intervals along the upgraded road. These should be placed where wildlife crossings are maximum and should be determined in consultation with Forest Department.
- 14. Disturbance during construction in the wildlife sensitive areas is to be kept minimum by the following mechanisms:
 - Use of pre-fabricated materials for construction
 - Use of water from sources other than the river
 - Prohibition on procurement of construction materials from forest
 - Disposal of construction-related debris away from the sensitive sites
 - Prohibition on camping of construction personnel near these sites
 - Keeping construction period restricted during daytime
 - No approach road for transport of construction materials
- 15. The CWLW, Andhra Pradesh should have appropriate mechanism in place for compliance of the conditions laid in this report during various phases of project implementation.

(Harini Venugopal) Assistant Inspector General of Forests