

SIX-MONTHLY COMPLIANCE REPORT

of

ENVIRONMENT CLEARANCE

(No. J-12011/26/2012-IA-I dated 4th September, 2019)

for

LOWER KOPILI HYDRO ELECTRIC PROJECT (120 MW), ASSAM

ТО

MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE,

IA.I Division, Indira Paryavaran Bhawan, 3rd Floor, Vayu Wing, JorBagh Road, New Delhi - 110 003

SUBMITTED BY

ASSAM POWER GENERATION CORPORATION LIMITED

June, 2022

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Compliance of stipulated conditions of Environmental Clearance

S1. No.	Standard conditions of Environmental Clearance Status Compliance	
I. St	tatutory compliance:	
i	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	 Stage-I Forest Clearance accorded by MoEF&CC, New Delhi on 5th February, 2019. Stage-II Forest Clearance accorded by MoEF&CC, New Delhi on 04th December, 2020. At Annexure -1
ii	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not Applicable. There is no Wildlife Sanctuary or National Parks within 10 km radius of the project site.
The project proponent shall prepare a Site-Spec Conservation Plan & Wildlife Management Plan approved by the Chief Wildlife Warden, if applicable. recommendations of the approved Site-Spec Conservation Plan / Wildlife Management Plan shall implemented in consultation with the State Fo Department. The implementation report shall furnished along with the six- monthly compliance rep (in case of the presence of Schedule-I species in the str area).		Site Specific Conservation Plan and Wildlife Management Plan submitted to Chief Wildlife Warden, Assam on 25.6. 19. At Annexure -2
iv	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	Agreed. Package 2 Contractor has obtained the CTE and CTO for Crusher, 4 nos of DG sets and Batching Plant along with 4 nos of DG sets. CTO for crusher and DG sets obtained on 7/12.2021 vide Ref no. WB/SLC/T- 1184/21-22/09/1152 and CTO for batching plant and DG sets obtained on 27/12.2021 vide Reference No. WB/SLC/T-1191/21- 22/17. Package 2 Contractor has obtained the CTE for Batching Plant (Dam) on 23rd June 2022 vide No. WB/SLC/T-1191/21-22/24. Applied for CTO for the above plants (Annexure -3 CTO for Batching Plant & 4 DG sets. (Annexure -4 CTO for Crusher and 4 DG sets). Annexure -5 CTE for Batching Plant (Dam)
V	NOC shall be obtained from National Commission of Seismic Design Parameters (NCSDS) of CWC.	Obtained and already submitted.

vi Necessary approval of CEA shall be obtained for those projects having the project cost more than Rs. 1,000 crore.		Obtained and already submitted.
II. A	ir quality monitoring and preservation	
i	Regular monitoring of various environmental parameters viz., Water Quality, Ambient Air Quality and Noise levels as per the CPCB guidelines at designated locations shall be carried out on monthly basis and a detailed database of the same shall be prepared and recorded. This shall be used as a baseline data for post construction EIA / Monitoring purposes.	Regular monitoring done at project site (Environmental Monitoring Reports are enclosed in Annexure-6. The monitoring were carried out by MoEF&CC recognized Lab)
ii	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed standards.	Regular monitoring done at project site. Adequate spraying of water in roads and dust control measures has already been installed in respective dust generation site.
iii	Necessary control measures such as water sprinkling arrangements, etc. bet taken up to arrest fugitive dust at all the construction sites.	Regular monitoring done at project site and water sprinkling done.
III. V	Vater quality monitoring and preservation	
i	Before impounding of the water, Cofferdams for both at the upstream and downstream are to be decommissioned as per EIA/EMP report so that once the project is commissioned; cofferdam should not create any adverse impact on water environment including the rock mass and muck used for the Cofferdam.	Agreed.
ii	Water depth sensors shall be installed at suitable locations to monitor e-flow. Hourly data to be collected and converted to discharge data. The Gauge and Discharge data in the form of Excel Sheet is submitted to the Regional Office, MoEF & CC and to the CWC on weekly basis.	Regular recording of discharge data are taken from Kopili river.
IV. N	loise monitoring and prevention	
i	All the equipment likely to generate high noise shall be appropriately enclosed or inbuilt noise enclosures be provided so as to meet the ambient noise standards as notified under the Noise Pollution (Regulation and Control) Rules, 2000, as amended in 2010 under the Environment Protection Act (EPA), 1986.	Agreed. All the DG sets are with acoustic enclosures.

ii	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	Monitoring reports are enclosed in Annexure 6 and complied the Ambient Noise level standards.
V. C	atchment Area Treatment Plan	
i	Catchment Area Treatment (CAT) Plan as proposed in the EIA/EMP report shall be implemented in consultation with the State Forest Department and shall be implemented in synchronization with the construction of the project.	An Amount of Rs. 28, 29, 67,000.00 (Rupees Twenty Eight Crore Twenty Nine Lakh Sixty Seven Thousand) only already paid to Forest Department for implementation of Catchment Area Treatment Plan (CATP). APGCL is pursuing with Forest Department for implementation. At present implementation of the CAT plan is included in the APO 2022-2023 as informed.
VI.	Waste management	
i	Muck disposal be carried out only in the approved and earmarked sites. The dumping sites shall be located sufficiently away from the HFL of the river. Efforts be made to reuse the muck for construction and other filling purposes and balanced be disposed of at the designated disposal sites. Once the muck disposal sites are inactive, proper treatment measures like both engineering and biological measures be carried out so that sites are stabilized quickly.	At present dumping of excavated earth in 4 locations in Revenue land are going on. Once the muck disposal sites are inactive, proper treatment measures like both engineering and biological measures will be carried out so that sites are stabilized quickly.
ii	Solid waste management should be planned in details. Land filling of plastic waste shall be avoided and instead be used for various purposes as envisaged in the EIA/EMP reports. Efforts are made to avoid one time use of plastics.	Agreed. At present segregation is going on at source and composting process is undertaken at site.
VII. G	reen Belt, EMP Cost, Fisheries and Wildlife Managen	nent
i	Detailed information on species composition particular to fish species from previous study/literature be inventoried and proper management plan shall be prepared for in situ conservation in the streams, tributaries of river and the main river itself for which adequate budget provision be made and followed strictly.	Agreed. Downstream river ecology study will be conducted shortly to update the baseline information and plan will be updated accordingly. Due to the nonoperational two upstream power projects downstream study is postponed.
ii	Wildlife Conservation Plan prepared for both core and buffer zones shall be implemented in consultation with the local State Forest Department, if applicable.	Wildlife Conservation plan has already been submitted to Forest Department for implementation. Annexure 2.
iii	To enrich the habitat of the project site, plantation shall be raised as envisaged in the EIA/EMP report. Plantation to	Agreed. Plantation already initiated.

	be developed along the periphery of the reservoir in multi-layers with local indigenous species in consultation with the local State Forest Department	
iv	with the local State Forest Department. Compensatory Afforestation programme shall be implemented as per the plan approved.	Agreed. An amount of Rs. 15, 94, 23,850.00 (Rupees Fifteen Crore Ninety Four Lakh Twenty Three Thousand Eight Hundred Fifty) plus overhead only already paid to Forest Department for Compensatory Afforestation (CA) in CAMPA head. The 8 patches of Revenue land has already been notified as Reserved Forest by Govt. of Assam.
v	Fish ladder/pass as envisaged in the EIA/EMP report shall be maintained for migration of fishes. Regular monitoring of this facility be carried out to ensure its effectiveness	As the river water is acidic in nature, during the EIA study no fish ladder / pass was proposed. Hence Fish ladder/pass is not considered in this project.
VIII.	Public hearing and Human health issues	
i	Resettlement & Rehabilitation plan be implemented in consultation with the State Govt. as approved by the State Govt., if any.	Agreed. Implementation is going on.
ii	Budget provisions made for the community and social development plan including community welfare schemes shall be implemented in to.	Agreed. Will be implemented as per plan.
iii	Preventive measures viz. fuming and spraying of mosquito control shall be done in and around the labour colonies, affected villages, stagnated pools, etc. Provisions be made to not to create any stagnated pools to avoid creation of breeding grounds of the vector borne diseases.	Agreed. Package 2 contractor has already taken up appropriate measures to control mosquitoes.
iv	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Agreed. Package 2 contractor has already constructed labour camps with the following facilities like - common kitchen, Sanitary and mobile toilets, safe drinking water, medical health care, etc. Camp Camp Staff Canteen

v	Labour force to be engaged for construction works shall be examined thoroughly and adequately treated before issuing them work permit. Medical facilities shall be provided at the construction sites.	Medical facility (First Aid Center) provided by the contractor at site. SUBANSIRI BLOCK SUBANSIRI BLOCK FIRENCE FIRENCE FIRENCE FIRENCE FIRENCE FIRENCE
vi	Early Warning Telemetric system shall be installed in the upper catchment area of the project for advance intimation of flood forecast.	At present Early warning is given by district administration Disaster Management Cell and discharge data is shared by NEEPCO project authority located upstream. Project specific Early Warning Telemetric system will be installed as soon as the JFPR grant is disbursed.
vii	Emergency preparedness plan be made for any eventuality of the dam failure and shall be implemented as per the Dam Break Analysis	Agreed. The Disaster Management Plan is prepared.
IX. C	Corporate Environment Responsibility	
i	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017- IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.	Agreed. Now will be covered under EMP as per OM of MoEF&CC.
ii	Skill mapping be undertaken for the youths of the affected project area and based on the skill mapping, necessary trainings to the youths be provided for their long time livelihood generation	Agreed. NGO has been recruited for various activities including skill mapping.

		,
	The PP shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six- monthly report.	Agreed.
iv	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel are in place.
v	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	Agreed and initiated.
vi	Post EIA and SIA be prepared for the project through a third party and evaluation report be submitted to the Ministry after five years of commissioning of the project.	Agreed. Will be carried out after completion of 5 years.
vii	Multi-Disciplinary Committee (MDC) be constituted with experts from Ecology, Forestry, Wildlife, Sociology, Soil Conservation, Fisheries, NGO, etc. to oversee implementation of various environmental safeguards proposed in EIA/EMP report during construction of the project. The monitoring report of the Committee shall be uploaded in the website of the Company.	Agreed and is in place. 1 st MDC meeting was convened on 6 th May, 2022. Minutes of the meeting is at Annexure 7.
X. N	liscellaneous	
i	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by 5 prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Already done. At Annexure -8
ii	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to	Already done.

	the relevant offices of the Government who in turn has to	
	display the same for 30 days from the date of receipt.	
	The project proponent shall upload the status of	
iii	compliance of the stipulated environment clearance	Agreed.
	conditions, including results of monitored data on their	0
	website and update the same on half-yearly basis.	
	The project proponent shall submit six-monthly reports	
	on the status of the compliance of the stipulated	
iv	environmental conditions on the website of the ministry	Agreed and submitted every six months.
	of Environment, Forest and Climate Change at	
	environment clearance portal.	
	The project proponent shall submit the environmental	
	statement for each financial year in Form-V to the	
	concerned State Pollution Control Board as prescribed	
v	under the Environment (Protection) Rules, 1986, as	Agreed.
	amended subsequently and put on the website of the	
	company.	
	The project proponent shall inform the Regional Office as	
vi	well as the Ministry, the date of financial closure and final	Agroad
VI	approval of the project by the concerned authorities,	Agreed.
	commencing the land development work and start of	
	production operation by the project.	
	The project authorities must strictly adhere to the	
vii	stipulations made by the State Pollution Control Board	Agreed.
	and the State Government.	
	The project proponent shall abide by all the commitments	
	and recommendations made in the EIA/EMP report,	
viii	commitment made during Public Hearing and also that	Agreed.
VIII	during their presentation to the Expert Appraisal	rigiceu.
	Committee.	
	No further expansion or modifications in the plant shall	A successful
ix	be carried out without prior approval of the Ministry of	Agreed.
	Environment, Forests and Climate Change (MoEF&CC).	
	Concealing factual data or submission of false/fabricated	
x	data may result in revocation of this environmental	Agreed.
	clearance and attract action under the provisions of	
	Environment (Protection) Act, 1986.	
	The Ministry may revoke or suspend the clearance, if	
xi	implementation of any of the above conditions is not	Agreed.
	satisfactory.	
•	The Ministry reserves the right to stipulate additional	
xii	conditions if found necessary. The Company in a time	Agreed.
	bound manner shall implement these conditions.	
	The Regional Office of this Ministry shall monitor	
	compliance of the stipulated conditions. The project	
xiii	authorities should extend full cooperation to the officer	Agreed.
	(s) of the Regional Office by furnishing the requisite data	
	/ information/monitoring reports.	
xiv	The above conditions shall be enforced, inter-alia under	Agreed.

	the provisions of the Water (Prevention & Control of	
	Pollution) Act, 1974, the Air (Prevention & Control of	
	Pollution) Act, 1981, the Environment (Protection) Act,	
	1986, Hazardous and Other Wastes (Management and	
	Transboundary Movement) Rules, 2016 and the Public	
	Liability Insurance Act, 1991 along with their	
	amendments and Rules and any other orders passed by	
	the Hon'ble Supreme Court of India / High Courts and	
	any other Court of Law relating to the subject matter.	
	Any appeal against this EC shall lie with the National	
xv	Green Tribunal, if preferred, within a period of 30 days as	Agreed.
AV	prescribed under Section 16 of the National Green	Agreeu.
	Tribunal Act, 2010.	

File No.8-53/2018FC

Government of India Ministry of Environment, Forest and Climate Change (F.C. Division)

> Indira Paryavaran Bhawan, JorBagh Road, Aliganj, New Delhi: 110003,

Dated: 04 December, 2020

To,

The Addl. Secretary (Forests), Government of Assam, Environment and Forest Department, Dispur, Guwahati-6.

Sub: Diversion of 523.046 ha of forest land for construction of Lower Kopili Hydro Electric Project by Assam Power Generation Corporation under Dima Hasao West Division, Halflong and Hamren Division, Assam.

Sir,

I am directed to refer to the Govt. of Assam's letter No. FRS/2018/222 dated 30.07.2018 on the subject mentioned above seeking prior approval of the Central Government under Section-2 of the Forest (Conservation) Act, 1980 and to say that the proposal has been examined by the Forest Advisory Committee constituted by the Central Government under Section-3 of the aforesaid Act. After careful consideration of the proposal by the Forest Advisory Committee (FAC) and after its recommendation, and approval of competent authority in the Ministry, *In-principle/Stage-I* approval was accorded vide this Ministry's letter of even number dated 05.02.2019 subject to fulfillment of certain conditions. The State Government has furnished compliance report in respect of the conditions stipulated in the approval and has requested the Central Government to grant final approval.

2. In this connection, I am directed to say that on the basis of the compliance report furnished by the Govternment of Assam's letters letter No. FRS.152/2018/346 dated 11.09.2020 and No. FRS.152/2018/414 dated 16.10.2020, and clarification on FRA by Ministry of Tribal Affair's letter No.23011/20/2020-FRA dated 30.10.2020, *approval* of the Central Government is hereby accorded under Section-2 of the Forest (Conservation) Act, 1980 for diversion of 523.046 ha of forest land for construction of Lower Kopili Hydro Electric Project by Assam Power Generation Corporation under Dima Hasao West Division, Halflong and Hamren Division, Assam subject to the following conditions:

A: Conditions which need to be complied prior to handing over of forest land :

- The Government of Assam, Environment and Forest Department shall issue final notification for the proposed Compensatory Afforestation (CA) area as Reserved Forest/Protected Forest prior to handing over the land to the user agency. The State Government shall ensure that the CA area in the final notification shall not be changed without prior approval of the Government of India and shall not be less than 525.27 ha as proposed in the notification nos. FRS152/2018/354, FRS152/2018/353, FRS152/2018/352, FRS152/2018/351, FRS152/2018/350, FRS152/2018/349, FRS152/2018/348 and FRS152/2018/347 dated 11.9.2020 of the Government of Assam.
- ii. The State Government shall ensure that the User Agency will implement the R&R Plan as per the R&R Policy of the State Government in consonance with the National R&R Policy, Government of India before the commencement of the project work. The said R&R Plan will be monitored by the State Government/concern Regional Office of MoEF&CC along with

indicators for monitoring and expected observable milestones;

- iii. The State Govt. shall ensure the complete compliance on FRA, 2006.
- iv. The State Govt. ensure that the User Agency shall obtain the Environment Clearance as per the provisions of the Environmental (Protection) Act, 1986, if required;

B: Conditions which need to be complied after handing over of forest land to the user agency :

- i. Legal status of the diverted forest land shall remain unchanged;
- ii. The State Govt. shall ensure that the State Forest Department will raise the Compensatory Afforestation in identified non -forest land in lieu of 523.046 Ha. of forest land, within three years from the issue of approval and maintained thereafter, from the funds deposited by the User Agency. At least 1000 plants per hectare shall be planted as per approved plan/scheme and maintained thereafter subsequently for ten years. The approved Soil and Moisture Conservation (SMC) activities on the CA land shall be carried out by the State Forest Department;
- iii. The State Govt. shall ensure that 198.746 ha out of proposed diversion of 523.046 ha of forest land shall be maintained as Green Belt at the cost of user agency under the supervision of State Forest Department;
- iv. The User Agency shall pay the additional amount of NPV, if so determined, as per the final decision of the Hon'ble Supreme Court of India;
- v. The State Govt. shall ensure that the approved Catchment Area Treatment (CAT) Plan shall be implemented by the State Forest Department from the funds deposited in the account of CAMPA;
- vi. The State Govt. and the User Agency shall ensure that no residential or labour colony/camp shall be constructed over forest land. The User Agency shall provide fuels preferably alternate fuels to the labourers and the staff working at the site so as to avoid any damage and pressure on the nearby forest areas;
- vii. The State Govt. ensure that the User Agency shall carry out muck disposal at pre-designated sites in such a manner so as to avoid its rolling down and the dumping area for muck disposal shall be stabilized and reclaimed by planting suitable species by the user agency at the cost of project under the supervision of State Forest Department. Retaining walls and terracing shall be carried out to hold the dumping material in place. Stabilization and reclamation of such dumping sites shall be completed before handing over the same to the State Forest Department in a time bound manner as per Plan.
- viii. The State Government and the User Agency shall ensure that the tress available between full reservoir level (FRL) and FRL-4 meters are not felled and the User Agency shall carry out afforestation along the periphery of the reservoir;
- ix. The State Govt. and the User Agency shall ensure that period of diversion of the said forest land under this approval shall be for a period co-terminus with the period of the mining lease granted under the Mines and Minerals (Development and Regulation) Act, 1957, as amended and the Rules framed there-under;
- x. The State Govt. shall ensure that the forest land proposed to be diverted shall under no circumstances be transferred to any other agency, department or person without prior approval of the Central Government and the layout plan of the proposal shall not be changed without the prior approval of the Central Government;
- xi. The State Govt. shall ensure that no damage to the flora and fauna of the adjoining area shall be caused;
- xii. The State Govt. shall ensure that the User Agency shall explore the possibility of translocation

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of maximum number of trees identified to be felled and any tree felling shall be done only when it is unavoidable and that too under strict supervision of the State Forest Department;

- xiii. The State Govt. shall ensure that the User Agency shall provide free water for the forestry related projects;
- XiV.It may please note that violation of any of these conditions will amount to violation of Forest (Conservation) Act, 1980 and action would be taken as prescribed in para 1.21 of Chapter 1 of the Handbook of comprehensive guidelines of Forest (Conservation) Act, 1980 as issued by this Ministry's letter No. 5-2/2017-FC dated 28.03.2019;
- XV.The State Govt. shall ensure that the User Agency shall submit the annual self-compliance report in respect of the above stated conditions to the State Government, concerned Regional Office and to this Ministry by the end of March every year regularly; and
- XVI.The State Govt. shall ensure that the User Agency shall comply all the provisions of the all Acts, Rules, Regulations, Guidelines, Hon'ble Court Order (s) and NGT Order (s) pertaining to this project, if any, for the time being in force, as applicable to the project.

Yours faithfully,

-/Sd/-(Sandeep Sharma) Assistant Inspector General of Forests (FC)

Copy to:

- 1. PCCF (HoFF), Government of Assam, Guwahati.
- 2. Nodal Officer (FCA), Office of the PCCF (HoFF) Government of Assam, Guwahati.
- 3. Dy. Director General (Central), Integrated Regional Office, Shillong.
- User Agency.
- 5. Monitoring Cell of FC Division, MoEF&CC, New Delhi.
- 6. Guard file.

Annexure 2

ASSAM POWER GENERATION CORPORATION LIMITED Nilules Bhawan, 2rd floor, Paltan-bazar, Guwahati-781 001, Assam Mr. Ratnajit Biswanath Registered Office: Bijulee Bhawan, 2 Chief Geneeral Manager (Hydro & Civil) Phone-0361-2739522 E-mail: cgmh2010/@yahoo.in Dated: 25/06/2019 No: APGCL/CGM (H)/W/2015/569/Vol-II/04 To,

The PCCF (WL) cum Chief Wildlife Warden, Govt. of Assam, Aranya Bhawan, Panjabari, Guwahati-37

Sub: Approval for Conservation Plan for Lower Kopili Hydro Electric Project, 120MW.

Madam,

It is for your kind information that, Assam Power Generation Corporation Limited is proposed to install 120 MW hydro electric Project at Kopili river Basin at Longku of Dima Hasao District and Karbi Anglong District.

in this context APGCL has received Stage-I forest clearance from MoEF & CC for diversion of 523.046 Ha of forest land. As advised by Forest Advisory Committee (FAC), MoEF, APGCL has kept 198.746 Ha forest as green belt. For necessary fees for NPV, CA, S&M conservation plan, CAT Plans, ETC has been approved by the respective divisions of forest department for payment in CAMPA account. Accordingly APGCL has initiated necessary actions for release of the aforesaid payment at an early date ahead.

The conservation plan for biodiversity (Flora and Fauna) is enclosed herewith for your kind approval and necessary action.

Thanking You,

Yours faithfully,

Chief General Manager (H&C) APGCL

Copy to-

- The Managing Director, APGCL, Bijulee Bhawan, Paltanbazar, Guwahati-1, for kind 1) information.
- The Project Director, Lower Kopill H.E. Project, APGCL, Bijulee Bhawan, Paltanbazar, 2) Guwahati -1 for information.
- Relevant File. 3)

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Annexure 3 CTO for Batching Plant



"CONSENT TO OPERATE"

"CONSENT TO OPERATE" (CTO) under Section 25 of Water (Prevention and Control of Pollution) Act 1974 and Section 21 of Air (Prevention and Control of Pollution) Act, 1981 as amended is granted to-

- i) Name of Industry
 - ii) Name of the Occupier / : Sri Santanu Majumdar, Project Manager Applicant and Designation
- iii) Address of Industry
- : Vill-Totelangso,P.O-Umrangso,Dist-Dima Hasao,Assam

: M/s Larsen & Toubro Limited.

- iv) Project cost
- v) Details of Products

2001	SI No.	Product			Quanti	ty/ Cap	pacity		
	1	Ready Mix Con	crete		5200	M ³ /Mc	onth		
DGS	Sets	:	1x250	KVA,	1x180	KVA,	1x140	KVA	&

: Rs. 95.00 Lakhs

1x125 KVA

TERMS AND CONDITIONS:

vi)

- This CTO has been accorded based on the particulars furnished by the applicant vide Application ID 838921 and subject to addition of further more conditions if so warranted by subsequent developments. The CTO will automatically become invalid if there is any changes, modification, alteration, expansion or deviation is made in actual practice.
- 2. The CTO is valid for a period up to 31.03.2025 unless otherwise suspended or revoked.
- 3. The CTO may be modified, suspended or revoked by the Board in whole or in part during its term for cause including, but not limited to the following:-

a) Violation of any Terms and Conditions of this CTO;

b) Obtaining the CTO by misrepresentation or failure to disclose fully all relevant facts;

c) A change in any condition that require temporary or permanent reduction or elimination of the authorized discharge/emission;

- The project proponent shall develop a greenbelt / Plantation area with native trees covering at-least 33% of total plot area for the development of greenbelt and carbon sink.
- 5. As per provisions of water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 any officer, employed by this Board in its behalf shall have without any interruption, the right at any time to enter the industry for inspection, to take samples for analysis and may call for any information etc.
- 6. The project authority should install a Display Board as per the Boards notification no.CBA/LGL-95/2021/Notification/01 dtd.11.11.2021. (Copy enclosed as Appendix-A).
- 7. Permission shall be obtained from the Central Ground Water Authority (CGWA) for the extraction of ground water, if applicable.

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8. Measures including water sprinkling shall be provided at all the material in the haul roads to control fugitive emission.

-2-

Air Aspects:

- 1. The unit shall comply with the Particulate Matter (PM) emission level at 150 mg/Nm³
- 2. Dust suppression measures are to be taken by the industry to control the dust in the haul roads during movement of vehicles.
- The unit shall comply with the standards and guidelines for control of noise pollution from stationary Diesel Generator (DG) set as notified vide GSR 7, dtd.22.12.1998 as attached in Appendix-B.
- Necessary steps are to be made to bring the noise within the prescribe limit as stipulated below:

Limit in o	dB(A) Leq.
Day time	Night time
75	70

The industry must comply the National Ambient Air Quality Standards as per Schedule – VII under Rule, 3 (3B) of the Environment (Protection) Rules, 1986 as prescribed vide CPCB Notification No. B-29016/20/90/PCI-I dtd. 18.11.2009 (copy enclosed as Appendix -C) especially for PM_{2.5} & PM₁₀.

	AND MELL NORTH	Time	Concentrati	on in Ambient Air
Sr. No.	Pollutant	Weighted Average	e Industrial, ge Industrial, Rural & Other Area al* 60 rs** 100 al* 40	Ecologically Sensitive Area (notified by Central Government)
1.	Particulate Matter (size less than 10µg) or PM10 µg/m3	Annual* 24 hours**		60 100
2.	Particulate Matter (size less than 2.5µg) or PM2.5 µg/m3	Annual* 24 hours**		40 60

Water Aspects:

- The unit must construct effluent treatment system for the treatment of waste water and the parameters should meet with general discharge parameters standard as per G.S.R. 422(E) dated 19.05.1993 (Copy enclosed as Appendix -D).
- 2. The unit shall reuse the treated water at their own processes.

Solid Waste Aspect-

- Adequate facility should be created for collection, storage, transportation, treatment & disposal of solid waste generated from the Industry
- 2. Adequate system should be adopted on reduction of waste generation and enhancement of re-utilization & recycling of waste materials.
- Solid waste generated in the unit shall be disposed of as per the provisions of the Solid Waste Management Rules 2016.

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- D. Hazardous Waste Aspects-
 - The unit shall apply for authorization under the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016 and submit the annual return under Hazardous & Other Waste (Management & Trans Boundary Movement) Rules 2016 in the Form-IV within 30th June every year.
 - 2. Adequate facility shall be provided for collection and storage of spent oil and such hazardous waste generated in the unit shall be sent to registered recyclers for recycling.
 - The unit shall disposed hazardous waste generated in the unit in accordance to the provisions of the Hazardous & Other Waste (Management & Trans Boundary Movement) Rules 2016 including Notification, Guidelines issued there under.

The unit shall submit compliance report of the mandated conditions by April 15 of every year to Member Secretary, PCBA as well as to Regional Office, Silchar, PCBA. The Board will have the liberty to withdraw the CTO if adequate pollution control and safety measures are not taken.

Memo No. WB/ SLC/T-1191/21-22/17-A,

(Shantanu Kr. Dutta) <u>Member Secretary</u>

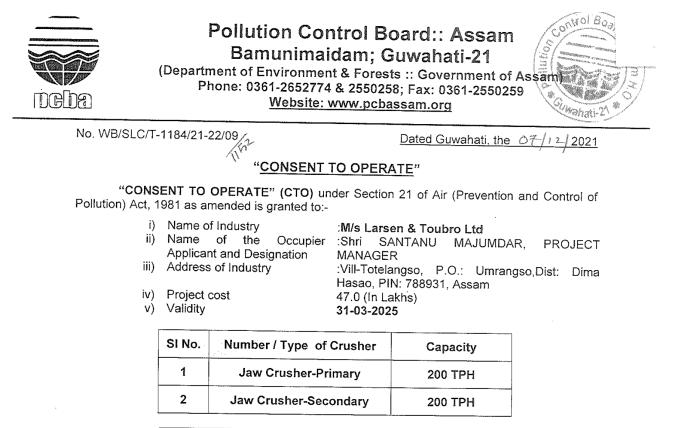
Dated Guwahati, the 27th December, 2021

Copy to:

1 M/s Larsen & Toubro Limited, Vill- Totelangso, P.O-Umrangso, Dist- Dima Hasao, Assam A for information & necessary action.

2. The Executive Engineer; RLO, Silchar, Pollution Control Board, Assam for information & necessary action.

213743 (Shantanu Kr. Dutta) Member Secretary



SI No.	Product	Quantity/ Capacity
1	Stone Aggregate	33378 MT/Month
2	By product:	
	1.Quarry Wastage	5006 MT/Month
	2. Micro Fines	3337 MT/Month.

vi) DG Set

4 nos. of capacity – 40 KVA, 125 KVA, 180 KVA & 250 KVA

TERMS AND CONDITIONS:

- 1. This CTO has been accorded based on the particulars furnished by the applicant vide Application ID **810264** and subject to addition of further more conditions if so warranted by subsequent developments. The CTO will automatically become invalid if there is any changes, modification, alteration, expansion or deviation is made in actual practice.
- 2. The CTO is valid for a period up to 31.03.2025 unless otherwise suspended or revoked.
- 3. The CTO may be modified, suspended or revoked by the Board in whole or in part during its term for cause including, but not limited to the following:
 - a) Violation of any Terms and Conditions of this CTO;
 - b) Obtaining the CTO by misrepresentation or failure to disclose fully all relevant facts;
 - c) A change in any condition that require temporary or permanent reduction or elimination of the authorized discharge/emission;
- 4. The CTO does not authorize any addition, alteration, modification, modernization of processor products without prior permission of the Board.
- 5. Proper housekeeping shall be maintained within unit premises.
- 6. The project proponent must develop a greenbelt/plantation area with native trees covering atleast 33% of the total plot area to develop Green Belt and Carbon Sink.

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-2-The project authority should install a Display Board as per the Boards notification no. PCBA/LGL-95/2021/Notification/01 dtd.11.11.2021. (Copy enclosed as Appendix-A).

As per the provisions of the Water (Prevention and Control of Pollution) Act, 1974 as amended and Air Prevention and Control of Pollution) Act, 1981 as amended that any Officer empowered by the Board on its behalf shall have without interruption, the right at any time to enter the unit premises for inspection, collection of sample for analysis and may call for any information as deemed necessary. Denial of this right will cause withdrawal of the Consent Order.

9. The unit shall apply for renewal atleast ninety (90) before expiry of this CTO.

Specific Conditions:

10. DG Set

The unit shall comply with the standards and guidelines for control of noise pollution from stationary Diesel Generator (DG) set as attached in Appendix-B.

11. The industry shall take adequate measures for control of noise from its own source so as to comply with the Standards below:

Category of	Limit in	dB(A) Leq.
Area	Day Time (6:00am-9:00pm)	Night Time (9:00pm- 6:00am)
Industrial area	75	70

12. The industry must comply with the National Ambient Air Quality Standards as prescribed vide Notification No. B-29016/20/90/PCI-I dtd. 18.11.2009 especially with reference to PM2.5 & PM10 as follows:

			Concentra	tion in Ambient Air
SI. No.	Pollutant	Time Weighted Average	Industrial, Residential, Rural & Other Area	Ecologically Sensitive Area (notified by Central Government)
1.	Particulate Matter (size		60	60
	less than 10μg) or PM ₁₀ μg/m³	24 hours**	100	100
2.	Particulate Matter	Annual*	40	40
	(size less than 2.5µg) or PM _{2.5} µg/m ³	24 hours**	60	60

13. The unit shall comply with the air quality standard of Stone crusher as follows:

SI. No.	Pollutant	Standards
1.	Suspended particulate matter	The suspended particulate matter measured between 3 meters and 10 meters from any process equipment of a stone crushing unit shall not exceed 600 micrograms per cubic meter.

Hazardous Waste Aspect:

- 1. The unit shall apply for authorization under the Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016.
- 2. Appropriate facility should be created for handling, storage, treatment & disposal of Hazardous waste generated from the industry such as spent oil, waste oil etc. in accordance to the provisions of the Hazardous & Other Wastes (Management & Trans Boundary Movement) Rules, 2016 including Notification, Guidelines issued there under;
- 3. The unit should submit the annual return under the Hazardous & Other Wastes (Management & Trans Boundary Movement) Rules, 2016 in the Form-IV within 30th June every year, E-Waste Management Rules, 2016 in the Form-III within 30th June every year and Plastic Waste Management Rules, 2016 within 30th June every year.

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The unit shall submit compliance report of the mandated conditions by April 15 of every year to Member Secretary, PCBA as well as to concerned Regional Office of the Board. The Board will have the liberty to withdraw the CTO if adequate pollution control and safety measures are not taken.

Memo No. WB/SLC/T-1184/21-22/09-A,

(Shantanu Kr. Dutta) <u>Member Secretary</u>

Dated Guwahati, the 07/12/ 2021

- 1 M/s Larsen & Toubro Ltd, Vill-Totelangso, P.O.: Umrangso,Dist: Dima Hasao, PIN: 788931, Assam for information & necessary action.
- The General Manager, DI & CC, Dima Hasao District, Assam, for information.
 The Executive Engineer; Regional Lab cum Office, Silchar; Pollution Control
- Board, Assam for information & necessary action.

م (Shantanu Kr. Dutta) Member Secretary m

Annexure 5 CTE for Batching Plant (Dam)



"CONSENT TO ESTABLISH"

"CONSENT TO ESTABLISH" (CTE) under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 as amended and Rules Framed thereunder is granted to:

i)	Name of Industry	:	M/s Larsen & Toubro Ltd. (Batching Plant)
ii)	Name of the Occupier / Applicant and Designation	:	Santanu Majumder, Project Manager
iii)	Address of the unit	:	Lower Kopili Hydro Electric Power Project, Vill: Longku, P.O. Umrangso, Dist. Dima Hasao, Assam-788931.
iv)	Cost of the project	:	Rs. 744.69 Lakhs.
v)	Details of the project & category	:	Batching Plant (Green Category)

Sl. No.	Product	Capacity
1.	Cement Concrete	200000 m ³ / annum

General Conditions:

- 1. The Consent to Establish (CTE) has been accorded based on the particulars furnished by the applicant vide **Application ID: 1278389** and subject to addition of further or more conditions if so warranted by subsequent developments. The CTE will automatically become invalid, if there is any changes, modification, alteration, expansion or deviation made in actual practice.
- "CONSENT TO ESTABLISH" will be valid till the date of commissioning of the unit or seven (7) years whichever is earlier.
- 3. The CTE may be modified, suspended in whole or in part or withdrawn by the Board during its term for cause including, but not limited to the following:
 - a) Violation of any Terms and Conditions of this CTE;
 - b) Obtaining the CTE by misrepresentation or failure to disclose fully all relevant facts;
 - c) If any genuine complaint received;
- 4. The unit shall obtain prior 'Consent to Establish' from the Board for any expansion, alteration, modification of the project,
- 5. The project proponent must develop a greenbelt/plantation area with native trees covering atleast 33% of the total plot area.
- 6. The project authority should install a Display Board as per the Boards notification No. PCBA/LGL-95/2021/Notification/01 dtd.11.11.2021 (Annexure-A).
- 7. As per the provisions of the Water (Prevention and Control of Pollution) Act, 1974 as amended and the Air (Prevention and Control of Pollution) Act, 1981, as amended, any Officer, empowered by the Board on its behalf shall have without interruption, the right at any reasonable time to enter the unit for inspection, collection of sample for analysis and may call for any information as deemed necessary. Denial of this right will cause withdrawal of the Consent Order.

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8. Proper housekeeping shall be maintained. Burning of any waste inside the unit premises is strictly prohibited.

The project authority shall not operate the unit before obtaining "Consent to Operate" from that 2 the Board.

Specific Conditions:

100 80

A) Air Aspects:

- 1. The industry shall install the screening machine, with proper enclosure and dust extraction and treatment mechanism.
- 2. The following air pollution control measures shall be implemented by the project authority to control source emission and fugitive emission:
 - a. Dust containment cum suppression system at Raw Material Feed Hopper, all material transfer & dropping points.
 - b. Construction of the metallic roads within the premises.
 - c. Regular cleaning and wetting of ground within the premises.
- 3. The industry shall comply with the Noise Level Standard notified by MoEF&CC, Govt. of India, vide GSR.7; dtd: 22/12/1998 as mentioned below:

Limit in dB (A) Leq					
Day Time (6:00AM-10:00PM)	Night Time (10:00PM-6:00AM)				
75	70				

4. The Ambient Air Quality within the Plant premises shall be maintained within the National Ambient Air Quality Standards as notified by MoEF&CC, Govt. of India, vide G.S.R.826(E) dtd.18.11.2009, especially w.r.t. PM_{2.5} & PM₁₀ as mentioned herein under:

		Time	Concentration in A	mbient Air
SI. No.	Pollutant	Time Weighted Average	Industrial, Residential, Rural & Other Area	Ecologically Sensitive Area (notified by Central Government)
1.	Particulate Matter (size less	Annual*	60	60
	than 10 μ g) or PM ₁₀ (μ g/m ³)	24 hours**	100	100
2.	Particulate Matter (size less	Annual*	40	40
		24 hours**	60	60

B) Water Aspects:

1.	Source of Water	:	Surface water
2.	i) Water consumption	:	200.0 KLD
	ii) Effluent generation	:	Nil KLD
	iii) Effluent recycled	:	Nil
	iv) NOC from CGWA	:	Not obtained
	v) Capacity of ETP	:	No ETP

- 3. Exemption NOC/Permission of the Central Ground Water Authority shall be obtained for extraction of Ground Water, if applicable.
- 4. Storm Water Aspect:
 - a) Storm water shall not be allowed to mix with effluent and/or floor washings.
 - b) Storm water within the battery limits of the unit shall be channelized through separate drain/pipe passing through an Oil & Grease Trap cum Sedimentation Tank.

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Contd...p/3

- c) Storm water discharge shall meet with general effluent discharge parameters standard. notified by MoEF & CC, GOI vide G.S.R.422 (E); dated 31.12.1993 (Appendix - B)
- 5. Rain water harvesting facility shall be installed and maintained.

C) Solid Waste Aspects:

- 1. Adequate facility should be created for collection, storage, transportation, treatment & disposal of non-hazardous industrial solid waste generated from the Industry.
- 2. Adequate system should be adopted on reduction of waste generation and enhancement of re-utilization & recycling of waste materials.
- 3. The unit shall strictly comply with all the provisions of the Solid Waste Management Rules, 2016.

D) Plastic Waste Aspects:

- 1. Plastic waste generated in the unit shall be disposed of scientifically as per the provisions of the Plastic Waste Management Rules, 2016.
- 2. The unit shall submit a report on generation and disposal of Plastic Wastes within June every year.

E) E-Waste Aspects:

- 1. Electronic wastes generated in the unit shall be disposed of as per the provisions of E-Waste Management Rules, 2016.
- 2. The unit shall submit the Annual Report in the Form-III within 30th June every year.

F) Hazardous Waste Aspects:

- 1. Authorization under Hazardous & Other Wastes (Management & Trans-boundary Movement) Rules, 2016 shall be obtained from the Pollution Control Board, Assam.
- 2. The project authorities shall comply with the provisions of the said Rules.
- 3. Adequate facility shall be provided for collection and storage of used/spent oil, which shall be sent to registered recyclers for recycling.
- 4. The unit shall dispose of any other Hazardous Waste generated by the unit as per the provisions of the Rules.
- The unit shall identify and quantify all streams of Hazardous Waste generation as per 5. Schedule-I and maintain proper record in Form-III of the said Rules.
- 6. The unit should submit annual return in Form-IV under the said rules on or before 30th June every year.

The unit shall submit compliance report of the mandated conditions of this CTE by April 15, every year to the Member Secretary, PCBA as well as to Regional Office, Silchar. The Board will have the liberty to withdraw the CTE if adequate pollution control and safety measures are not taken.

Memo No. WB/SLC/T-1191/21-22/24 -A, Copy to:

Sdl = (Shantanu Kr. Dutta) Member Secretary

0.103/01

Dated Guwahati, the 2310 June, 2022

1. M/s Larsen & Toubro Ltd. (Batching Plant), Lower Kopili Hydro Electric Power Project, Vill: Longku, P.O. Umrangso, Dist. Dima Hasao, Assam-788931 - for information & compliance of conditions.

(Shantanu Kr. Dutta) Member Secretary NS

Annexure 6 : Monitoring reports

	Rep. Sam	No. AAAR_	ANALYSIS REPOR 1503163_01_54 EETNE/MAR/170 : M/s.	3		UL ect, Lanki	R NO.	NABL AC te: 31/03/2022 TC76692100 Dima Hasa	2 00000646P	
	Sam Anal Sam	ple Drawn B pling Plan & ysis Duration pling Instrum tion Control	Procedure n	24/03/22 TO	01 0 24/03/22, 0 27/03/22, 0 29/03/22,	25/03/22 T 27/03/22 T	0 28/03	/22, 23/03/22 TC /22 /22, 28/03/22 TC		
SL.	D	ATE OF	LOCATION/			1		IETERS		
NO		AMPLING	SOURCE	WEATHER	PM ₁₀ (μg/m ³)	PM _{2.5} (μg/m ³)	NO (µg/n		CO (mg/m ³	
i)	2	1/03/22	Power Inlet Dam Site	/	33.1	19.3	12.1	L BDL	BDL	
ii)	2	2/03/22	Crusher Site		38.1	24.2	14.1	L 0.03	0.04	
iii)	2	3/03/22	Adit to HRT	- Carlos	39.1	20.1	11.3	BDL	BDL	
iv)	2.	4/03/22	Primary Hospital Nea APGCL Camp	Clear	34.2	20.2	12.4	4 BDL	BDL	
v)	2	5/03/22	Batching plant		35.6	22.7	15.2	2 BDL	BDL	
vi)	20	6/03/22	Surge Shaft Site	e	37.3	20.3	13.6	5 BDL	BDL	
vii)	2	7/03/22	Labour & Stat	ff	30.2	17.2	10.3	B BDL	BDL	
viii	2	8/03/22	Power house		37.1	20.3	9.1	BDL	BDL	
		IONAL AME	npling were done BIENT AIR QUALI tant Matter (PM10),	TY STANDARDS: Test Method	Time	Weighted A	verage	Air Industrial, Rural and Other	in Ambient Residential, Area	
-	2	µg/m ³		IS:5182 Part-XXI CPCB		24	hours		00	
-	3	µg/m ³ Nitrogen	Matter (PM _{2.5}), Dioxide (NO ₂),	EETNE/SOP/01/2 IS:5182 Part-VI/		24	hours	the second data with the secon	60	
-	-	µg/m ³	Monoxide (CO),	CPCB	Annu	Annual 24 hours		40 80		
L	4	mg/m ³	(00),			8 Hours	Suiro Te	chnoi 2.0		
	U (Env	tpal Bezbar ironmental	Chemist)	For Envis		Dr. Pra	Gon	East, Guwahat difficulty kraborty Quality Manage		





TEST REPORT
AMBIENT NOISE LEVEL MEASUREMENT REPORT
Rep.No. ANLMR_1503163_06A_544
Sample ID: EETNE/MAR/17(1)/22

Date: 31/03/2022 ULR NO.: TC766921000000646P

Issued to : M/s. Lower Kopili HEP Project, Lanku, Dist.- Dima Hasao, Assam.

SL.	DATE OF		NOISE LEVEL in dB(A)Leq
NO.	SAMPLING	LOCATION /SOURCE	Day Time (6:00 am to 10:00 pm)
i)	22/03/22	Power Inlet / Dam Site	48.3
ii)	23/03/22	Crusher Site	55.3
iii)	24/03/22	Adit to HRT	51.2
iv)	25/03/22	Primary Hospital Near APGCL Camp	56.1
v)	26/03/22	Batching plant	50.3
vi)	27/03/22	Surge Shaft Site	47.2
vii)	28/03/22	Labour & Staff Camp	51.2
viii)	29/03/22	Power house	55.2

Remarks: Noise level is carried out during 75% of the Day Time. Method of analysis : CPCB July 2015 guideline.

Sampling Instrument Used : Lutron SL-4033SD, HTC SL 1350

Area Code	Category of area	Limits in dB(A) Leq			
		Day (6:00 am to 10:00 pm)	Night (10:00 pm to 6:00 am)		
A	Industrial Area	75	70		
В	Commercial Area	65	55		
С	Residential Area	55	45		
D	Silence Zone	50	40		

Ambient Noise Standards:

For Envision Enviro Technologies North East, Guwahati

Utpal Bezbaruah (Environmental Chemist)

He

Dr. Pranita Ghakraborty Authorized by (Quality Manager)

To Tech

Note: i) The results relate only to the parameters tested. ii) The test report shall not be reproduced except in full, without written approval of laboratory. iii) Monitoring is performed twice a week in each location.

Page 1 of 1

House No. 6, 1st Floor, Sankardev Path, Pub-Sarania, Chandmari, Guwahati-781003, Assam.

Phone : +91 8811096201 e-mail : envisionghy@gmail.com





<u>TEST REPORT</u>: Report No: 220407_1503163_0 ULR No:TC766922000000072P Sample ID No: EETNE/March/21/22/D Test Starting Date: 30/03/22

2

Date of Report: 07/04/22 Date of sample receipt: 30/03/22 Test completion Date: 07/04/22

Name & Address of Client	M/s. Lower Kopi	ili Project. Nea	r Lanka, Dist: Dim	a Hasa	0.	
Sample Description	Type: Surface W	ater(1 km U/S	of dam site)		Source: K	opili River
Sample collected by	M/s. En-vision E	nviro Technolo	gies North East			8
Sample Collection Particulars	Date 29/03/2022	Time 3:20 P.M	Temperature 28°C	р ^н 7.1	Quantity Drawn:4L	Sampling Method: EETNE/SOP/02

SI No.	Parameters	Unit	Result	Reference Method
1	р ^н		7.39	APHA 23 rd Edition,4500 H ⁺ ,Page:4-95
2	Turbidity	NTU	2.28	APHA 23rd Edition,2130,Page:2-13
3	TDS	mg/L	31.4	APHA 23 rd Edition,2540 C, Page :2-69
4	TSS	mg/L	85.3	APHA 23rd Edition,2540,Page:2-70
5	Oil and GREASE	mg/L	<5	APHA 23rd Edition, 5520 B,Page: 5-42
6	Dissolved Oxygen	mg/L	7.3	APHA 23rd Edition, 4500-O C, Page: 4-146
7	Total hardness	mg/L	75.9	APHA 23 rd Edition,2340 B,Page:2-48
8	Calcium	mg/L	33.6	APHA 23 rd Edition, 3500-Ca B, Page: 3-69
9	Magnesium	mg/L	16.5	APHA 23rd Edition, 3500-Mg B, Page: 3-86
10	Total Alkalinity	mg/L	32.7	APHA 23rd Edition,2320,Page:2-37
11	Chloride	mg/L	14.3	APHA 23rd Edition,4500-Cl ⁻ B,Page:4-75
12	Sulphate	mg/L	10.6	APHA 23 rd Edition,4500-SO4 ²⁻ E,Page:4-199
13	Nitrates	mg/L	2.9	APHA 23 rd Edition,4500-NO ₃ B,Page:4-127
14	Phosphate	mg/L	< 0.02	APHA 23 rd Edition,4500-P,Page:4-163
15	Salinity	%	0.3	APHA 23 rd Edition,2520B,Page:2-60
16	conductivity	µS/cm	82.5	APHA 23rd Edition,2520B,Page:2-60

NO Tech *

Page 1 of 2

House No. 6, 1st Floor, Sankardev Path, Pub-Sarania, Chandmari, Guwahati-781003, Assam Phone : +91 8811096201 ♦ e-mail : envisionghy@gmail.com





Sample ID No: EETNE/March/21/22/D Test Starting Date: 30/03/22

Date of sample receipt: 30/03/22 Test completion Date: 07/04/22

51 No.	Parameters	Unit	Result	Reference Method
17	Arsenic	mg/L	BDL	APHA 23rd Edition,3114A,Page:3-36
18	Iron(as Fe)	mg/L	0.65	APHA 23 rd Edition,3500-Fe B,Page:3-80
19	Total Coliform	MPN/100ml	5	APHA 23 rd Edition,9222B,Page:9-81
20	Fecal Coliform	MPN/100ml	Nil	APHA 23rd Edition,9222 D,Page:9-89
21	BOD	mg/L	3	APHA 23 rd Edition,5210B,Page:5-6
22	COD	mg/L	19	APHA23 Edition,5220 b,Page:5-18

For Envision Enviro Technologies North East, Guwahati

Rimpi sarma **Environmental Chemist Test Done By**

Dr. Pranita Chakraborty **Quality Manager** Authorized Signatory

Note: i) The results relate only to the parameters tested. ii) The test report shall not be reproduced except in full, without written approval of laboratory.

End of report

Page 2 of 2

Phone : +91 8811096201 e-mail : envisionghy@gmail.com





TEST REPORT: Report No: 220407_1503163_0 ULR No:TC766922000000080P Sample ID No: EETNE/March/22/22/D Test Starting Date: 30/03/22

Date of Report: 07/04/22 Date of sample receipt:30/03/22 Test completion Date: 07/04/22

Name & Address of Client	M/s. Lower Kopili	Project. Near	Lanka, Dist: Dim	a Hasad	».	
Sample Description	Type: Surface Wa	ter (1 km D/S	of dam site)	1	Source: I	Kopili River
Sample collected by	M/s. En-vision En	viro Technolog	ies North East		Statest and	3
Sample Collection Particulars	Date 29/03/2022	Time 3:50 P.M	Temperature 27 ^o C	р ^н 7.00	Quantity Drawn: 4 Lt	Sampling Method: EETNE/SOP/02

SI No.	Parameters	Unit	Result	Reference Method
1	р ^н		7.28	APHA 23 rd Edition,4500 H ⁺ ,Page:4-95
2	Turbidity	NTU	1.95	APHA 23 rd Edition,2130,Page:2-13
3	TDS	mg/L	27.7	APHA 23rd Edition,2540 C, Page :2-69
4	TSS	mg/L	86.2	APHA 23 rd Edition,2540,Page:2-70
5	Oil and Grease	mg/L	<5	APHA 23rd Edition,5520 B,Page:5-42
6	Dissolved Oxygen	mg/L	6.9	APHA 23rd Edition,4500-O C,Page:4-146
7	Total hardness	mg/L	72.4	APHA 23rd Edition,2340 B,Page:2-48
8	Calcium	mg/L	35.6	APHA 23 rd Edition,3500-Ca B,Page:3-69
9	Magnesium	mg/L	18.5	APHA 23 rd Edition,3500-Mg B,Page:3-86
10	Total Alkalinity	mg/L	44.6	APHA 23 rd Edition,2320,Page:2-37
11	Chloride	mg/L	13.8	APHA 23 rd Edition,4500-Cl ⁻ B,Page:4-75
12	Sulphate	mg/L	11.2	APHA 23 rd Edition, 4500-SO ₄ ²⁻ E, Page: 4-199
13	Nitrates	mg/L	2.6	APHA 23 rd Edition,4500-NO ₃ [•] B,Page:4-127
14	Phosphate	mg/L	<0.02	APHA 23 rd Edition,4500-P,Page:4-163
15	Salinity	%	0.5	APHA 23 rd Edition,2520B,Page:2-60
16	conductivity	µS/cm	83.1	APHA 23 rd Edition,2520B,Page:2-60



Page 1 of 2

House No. 6, 1st Floor, Sankardev Path, Pub-Sarania, Chandmari, Guwahati-781003, Assam. Phone : +91 8811096201 e-mail : envisionghy@gmail.com





Date of sample receipt: 30/03/22

Recognized by Pollution Control Board, Assam

Test Startin	ng Date: 30/03/22	Test completion Date: 07/04/22		
SI No.	Parameters	Unit	Result	Reference Method
17	Arsenic	mg/L	BDL	APHA 23rd Edition,3114A,Page:3-36
18	Iron(as Fe)	mg/L	0.91	APHA 23rd Edition, 3500-Fe B, Page: 3-80
19	Total Coliform	MPN/100	2	APHA 23rd Edition,9222B,Page:9-81
20	Fecal Coliform	MPN/100	Nil	APHA 23rd Edition,9222 D,Page:9-89
21	BOD	mg/L	4	APHA 23rd Edition, 5210B, Page: 5-6
22	COD	mg/L	22	APHA 23rd Edition, 5220 b, Page: 5-18

Sample ID No: EETNE/March/22/22/D

Niro Techno For Envision Envir Re logies North East, Guwahati 12 Dr. Pranita Chakraborty Quality Manager Authorized Signatory

Rimpi Sarma **Environmental Chemist Test Done By**

Note: i) The results relate only to the parameters tested. ii) The test report shall not be reproduced except in full, without written approval of laboratory

End of report

Page 2 of 2

Phone : +91 8811096201 e-mail : envisionghy@gmail.com





<u>TEST REPORT</u>: Report No: 220407_1503163_0 ULR No: TC766922000000081P Sample ID No: EETNE/March/23/22/D Test Starting Date: 30/03/22

Date of Report: 07/04/22 Date of sample receipt: 30/03/22 Test completion Date: 07/04/22

Name & Address of Client	M/s. Lower Kopi	ili Project. Nea	r Lanka, Dist: Dim	a Hasa	10.	
Sample Description	Type: Surface W	ater (3 km D/s	S of dam site)		Source: Ko	pili River
Sample collected by	M/s. En-vision E	nviro Technolo	gies North East		- Statistics	3
Sample Collection Particulars	Date 29/03/2022	Time 4:20 P.M	Temperature 27°C	р ^н 7.2	Quantity Drawn:4L	Sampling Method: EETNE/SOP/02

SI No.	Parameters	Unit	Result	Reference Method
1	р ^н		7.17	APHA 23 rd Edition,4500 H ⁺ ,Page:4-95
2	Turbidity	NTU	1.86	APHA 23 rd Edition,2130,Page:2-13
3	TDS	mg/L	32.9	APHA 23 rd Edition,2540 C, Page :2-69
4 5	TSS	mg/L	82.4	APHA 23 rd Edition,2540,Page:2-70
5	Oil and Grease	mg/L	<5	APHA 23rd Edition,5520 B,Page:5-42
6	Dissolved Oxygen	mg/L	7.5	APHA 23 rd Edition,4500-O C,Page:4-146
7	Total hardness	mg/L	68.7	APHA 23 rd Edition,2340 B,Page:2-48
8	Calcium	mg/L	34.3	APHA 23rd Edition, 3500-Ca B, Page: 3-69
9	Magnesium	mg/L	16.9	APHA 23rd Edition,3500-Mg B,Page:3-86
10	Total Alkalinity	mg/L	38.5	APHA 23 rd Edition,2320,Page:2-37
11	Sulphate	mg/L	17.2	APHA 23 rd Edition,4500-SO4 ²⁻ E,Page:4-199
12	Nitrates	mg/L	12.3	APHA 23rd Edition,4500-NO3 B,Page:4-127
13	Phosphate	mg/L	<0.02	APHA 23 rd Edition,4500-NO ₃ B,Page:4-127
14	Salinity	%	0.5	APHA 23 rd Edition,2520B,Page:2-60
15	Conductivity	µS/cm	84.7	APHA 23 rd Edition,2520B,Page:2-60



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House No. 6, 1st Floor, Sankardev Path, Pub-Sarania, Chandmari, Guwahati-781003, Assam.





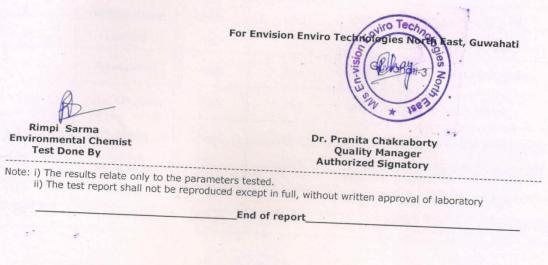
Sample ID No: EETNE/March/23/22/D Test Starting Date: 20/12/21

Rimpi Sarma **Environmental Chemist**

Test Done By

2

SI No.				Date of sample receipt: 20/12, Test completion Date: 29/12/21		
51 NO.	Parameters	Unit	Result	Reference Method		
16	Chloride	mg/L	18.5	APHA 23 rd Edition,4500-Cl ⁻ B,Page:4-75		
17	Arsenic	mg/L	BDL	APHA 23 rd Edition, 3114A, Page: 3-36		
18	Iron(as Fe)	mg/L	1.2	APHA 23 rd Edition, 3500-Fe B, Page: 3-80		
19	Total Coliform	MPN/100	5	APHA 23 rd Edition,9222B,Page:9-81		
20	Fecal Coliform	MPN/100	Nil	APHA 23 rd Edition,9222 D,Page:9-89		
21	BOD	mg/L	5			
22	COD	mg/L		APHA 23rd Edition, 5210B, Page: 5-6		



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House No. 6, 1st Floor, Sankardev Path, Pub-Sarania, Chandmari, Guwahati-781003, Assam.

Phone : +91 8811096201 e-mail : envisionghy@gmail.com





TEST REPORT: Report No: 220407_1503163_0 ULR No:TC76692200000082P Sample ID No: EETNE/March/24/22/D Test Starting Date: 30/03/22

Date of Report: 07/04/22 Date of sample receipt: 30/03/22 Test completion Date: 07/04/22

Name & Address of Client	M/s. Lower Kop	ili Project. Nea	r Lanka, Dist: Din	na Hasa	0.	
Sample Description	Type: Surface W	ater (8 km D/	S of dam site)		Source: Ko	nili River *
Sample collected by	M/s. En-vision E			the state		
Sample Collection Particulars	Date 17/12/2021	Time 5:10 P.M	Temperature 26°C	р ^н 7.00	Quantity Drawn:4L	Sampling Method: EETNE/SOP/02

SI No.	Parameters	Unit	Result	Reference Method
1	р ^н		7.11	APHA 23 rd Edition,4500 H ⁺ ,Page:4-95
2	Turbidity	NTU	3.83	APHA 23 rd Edition,2130,Page:2-13
3	TDS	mg/L	35.6	APHA 23 rd Edition,2540 C, Page :2-69
4	TSS	mg/L	28.8	APHA 23 rd Edition,2540,Page:2-70
5	Oil and Grease	mg/L	<5	APHA 23 rd Edition,5520 B,Page:5-42
6	Dissolved Oxygen	mg/L	6.4	APHA 23 rd Edition,4500-O C,Page:4-146
7	Total hardness	mg/L	79.5	APHA 23rd Edition,2340 B,Page:2-48
8	Calcium	mg/L	40.7	APHA 23 rd Edition, 3500-Ca B,Page: 3-69
9	Magnesium	mg/L	18.2	APHA 23 rd Edition,3500-Mg B,Page:3-86
10	Total Alkalinity	mg/L	112.8	APHA 23 rd Edition,2320,Page:2-37
11	Sulphate	mg/L	16.4	APHA 23 rd Edition,4500-SO4 ²⁻ E,Page:4-199
12	Nitrates	mg/L	5.1	APHA 23 rd Edition,4500-NO ₃ ⁻ E,Page:4-199
13	Phosphate	mg/L	BDL	
14	Salinity	%	0.3	APHA 23 rd Edition,4500-P,Page:4-163 APHA 23 rd Edition,2520B,Page:2-60
15	Conductivity	µS/cm	85.7	APHA 23 rd Edition,2520B,Page:2-60



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	g Date: 30/03/22	/22/0	Date of sample receipt: 30/03/22 Test completion Date: 07/04/22	
SI No.	Parameters	Unit	Result	Reference Method
16	Chloride	mg/L	15.2	APHA 23rd Edition,4500-CI'B,Page:4-75
17	Arsenic	mg/L	<0.001	APHA 23rd Edition,3114A,Page:3-36
18	Iron(as Fe)	mg/L	1.8	APHA 23rd Edition,3500-Fe B,Page:3-80
19	Total Coliform	MPN/100	3	APHA 23rd Edition,9222B,Page:9-81
20	Fecal Coliform	MPN/100	Nil	APHA 23rd Edition,9222 D,Page:9-89
21	BOD	mg/L	5	APHA 23rd Edition,5210B,Page:5-6
22	COD	mg/L	54	APHA 23rd Edition,5220 b,Page:5-18

Sample ID No: EETNE/March/24/22/D



Rimpi Sarma

Environmental Chemist Test Done By

Note: i) The results relate only to the parameters tested. ii) The test report shall not be reproduced except in full, without written approval of laboratory

End of report

Page 2 of 2

Phone : +91 8811096201 e-mail : envisionghy@gmail.com





TEST REPORT: Report No: 220407_1503163_0 ULR No:TC766922000000078P Sample ID No: EETNE/March/20/22/D Test Starting Date: 30/03/22

Date of Report: 07/04/22 Date of sample receipt: 30/03/22 Test completion Date: 07/04/22

Name & Address of Client	M/s. Lower Kopili Project. Near Lanka, Dist: Dima Hasao. Type: Surface Water Source: Submergence Dam Site					
Sample Description						ubmergence area
Sample collected by	M/s. En-vision E	nviro Technolo	ogies North East			
Sample Collection Particulars	Date 29/03/2022	Time 2:50 P.M	Temperature 28°C	р ^н 7.00	Quantity Drawn:4L	Sampling Method: EETNE/SOP/02

SI No.	Parameters	Unit	Result	Reference Method
1	р ^н		7.41	APHA 23 rd Edition,4500 H ⁺ ,Page:4-95
2	Turbidity	NTU	1.72	APHA 23 rd Edition,2130,Page:2-13
3	TDS	mg/L	38.4	APHA 23 rd Edition,2540 C, Page :2-69
4	TSS	mg/L	26.7	APHA 23rd Edition,2540,Page:2-70
5	Oil and GREASE	mg/L	<5	APHA 23rd Edition,5520 B,Page:5-42
6	Dissolved Oxygen	mg/L	7.3	APHA 23 rd Edition,4500-O C,Page:4-146
7	Total hardness	mg/L	69.2	APHA 23rd Edition,2340 B,Page:2-48
8	Calcium	mg/L	35.8	APHA 23 rd Edition, 3500-Ca B, Page: 3-69
9	Magnesium	mg/L	17.5	APHA 23 rd Edition, 3500-Mg B, Page: 3-86
10	Total Alkalinity	mg/L	85.3	APHA 23 rd Edition, 2320, Page: 2-37
11	Sulphate	mg/L	9.6	APHA 23 rd Edition,4500-SO4 ²⁻ E,Page:4-199
12 .	Nitrates	mg/L	5.1	APHA 23 rd Edition,4500-NO ₃ ⁻ B,Page:4-127
13	Phosphate	mg/L	< 0.02	APHA 23 rd Edition,4500-P,Page:4-163
14	Salinity	%	0.6	APHA 23 rd Edition,2520B,Page:2-60
15	conductivity	µS/cm	93.4	APHA 23 rd Edition,2520B,Page:2-60



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Sample ID No: EETNE/March/20/22/D Test Starting Date: 30/03/22

Date of sample receipt: 30/03/22 Test completion Date: 07/04/22

5I No.	Parameters	Unit	Result	Reference Method
16	Chloride	mg/L	17.6	APHA 23rd Edition,4500-Cl ⁻ B,Page:4-75
17	Arsenic	mg/L	<0.001	APHA 23rd Edition,3114A,Page:3-36
18	Iron(as Fe)	mg/L	0.86	APHA 23rd Edition, 3500-Fe B, Page: 3-80
19	Total Coliform	MPN/100ml	5	APHA 23rd Edition,9222B,Page:9-81
20	Fecal Coliform	MPN/100ml	Nil	APHA 23rd Edition,9222 D,Page:9-89
21	BOD	mg/L	<2	APHA 23rd Edition,5210B,Page:5-6
22	COD	mg/L	<5	APHA 23rd Edition,5220 b,Page:5-18

For Envision Enviro Technologies North East, Guwahati



Rimpi sarma

Environmental Chemist Test Done By Dr. Pranita Chakraborty Quality Manager Authorized Signatory

Note: i) The results relate only to the parameters tested. ii) The test report shall not be reproduced except in full, without written approval of laboratory

____End of report_____

Page 2 of 2

House No. 6, 1st Floor, Sankardev Path, Pub-Sarania, Chandmari, Guwahati-781003, Assam

Minutes of the Meeting of 1st Multi Disciplinary Committee (MDC) in respect of 120 MW Lower Kopili Hydro Electric Project (LKHEP) in the districts of Dima Hasao and Karbi Anglong, Assam held on 6th May, 2022 at Conference Hall (3rd Floor), Bijulee Bhawan, Assam Power Generation Corporation Limited, Guwahati.

- 1. The Meeting of MDC of LKHEP was chaired by Shri. Mridul Saikia, Chief General Manager (PP&I), APGCL cum Project Director LKHEP. At the onset Chairman welcomed all the members present and briefed about the project and described the roles and responsibilities of the sectoral experts.
- 2. MoEF&CC has accorded Environmental Clearance vide No.J-12011/26/2012-IA-I. Dated 4th September, 2019 for the 120 MW Lower Kopili Hydro Electric Project (LKHEP).
- 3. After a brief power point presentation, it was highlighted that Environment Clearance stipulations and the compliance adhered so far. Details of the project components and the salient features of the project along with the possible impact and the mitigation plan suggested in the EMP of EIA were explained.
- 4. Dr. Pranab Bujarbaruah, raised query on direct forest dependency of the communities and the loss of forest cover. In reply to that APGCL explained the following.

The land acquisition for revenue land has been done through the RFCTLARR Act 2013 and ADB's safeguard policy SPS 2009. It covers all the possible social impacts and has been compensated accordingly. Over and above, APGCL has agreed to provide various components in local area development like (i) Educational facilities (ii) Healthcare facilities (iii) Construction of community toilets and (iv) Development of training/educational institute.

Against the loss of forest cover Compensatory Afforestation, Green Belt Development, Soil and Moisture conservation, Catchment Area Treatment and during the implementation Biodiversity Conservation Plan along with other conservation activities will be taken up to compensate the forest loss. As per Government norms the ratio is 1:1 but considering all the components of plantation it will come around 1:3 which is above the ADB's requirement 1:2 to achieve No net Loss on Biodiversity.

- 5. Dr. (Sri) C. Muthukumarvel, IFS, Chief Conservator of Forests & Nodal Officer (FC Act) enquired about the Status of the tree felling in the project impacted area and the status of Compensatory Afforestation. APGCL responded that all the trees felling are done through the respective Forest Divisions. Tree felling is not completed in the Karbi Anglong West division and felling of the trees in the reservoir area is remaining. Regarding Compensatory Afforestation, Addl. Principal Chief Conservator of Forest & Chief Executive Officer, CAMPA, Assam informed that initiation of plantation will be taken up in this financial year in both the divisions.
- 6. Mr. C. J. Saikia asked about the green belt development and requested to share the EIA report. APGCL explained about the plan for plantation and agreed to share the EIA report with all the experts through email.
- 7. The meeting ended with a vote of thanks from the chair.
- 8. The list of the participants is attached as ANNEXURE- 1.

LOWER KOPILI HYDRO ELECTRIC PROJECT 120 MW

1st Multi Disciplinary Committee Meeting

Date : 06.05.2022 Venue : APGCL, Guwahati-781001

	Name	Organization	Contact Number	Email	Signature
1	MSAIKID	CAM APGel	98640-17180	milapur@jahoo.com	K
2	Jh. Sachi Mohan Singhs	GM (P). APGCL	9869102918	singhy_ sach @ rediffered. com	The
3	AKSHAY TALUKOAR	DGM(PPLI) APGCL	94351 39416	austalk 13 @ gmail.com	Hen
4	Ph. Anarenda Singha	DGM(PPRI)() APGCL	9365533072	amarindrashyaman @	-215/22
5	DR PRANAB BUJARBARU	Dept- 12 BArry Colleg	9435400597	pbujarbarna @ gmail. w	" Restin
6	C. J. SAIKIA	Soil Conservation Dept. Joint Director, Lober Asian Circle.	9435381743	cjsaikka t@ smail. am	Main
7	Deepak 16 Barnah	Environment- Eapert. APGCL	9435113521	deepakbaruahoo7@ gmail.com	\$0 comon

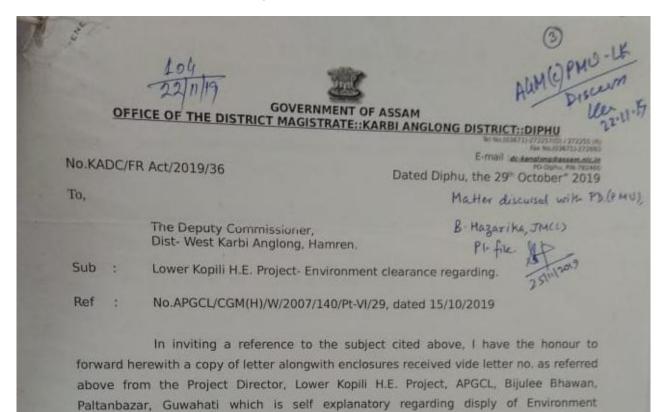
	Name	Organization	Contact Number	Email	Signature
8	Sarquan Sirgh	AFRY Indias Brit Udi	9990432700	Sangram. singh Bafry Cou	Å.
9	Gunjan K Norh	APRIL	7399924917	gunjannath Cline . com	Se
10	Hainmoy Jyoti Pandit	APGCL	98641-50847	mainmoy pandit@ apgel.org	(upandit
11	tankaj br. Hog arika	APGel	86386-51918	hazariha 072@ gmail.	ARmund -
12	Mitu Du	ZPGCL	3859259477	Dasmitul 18@ gmil. com	Mitte
3	Dr. Jayanta Dan	PMC., AFRY,	9435406966	jayanta.das@afey.com	Jayater
14	Dr. (Sri) C. Muthukumarvel, IFS	S Chief Conservator of Forests & Nodal Officer (FC Act)	9435500123	addlpccf.nodal@gmail.com	Attended virtually







Annexure 8 EC Disclosure (supporting Documents)



Clearance on the Lower Kopili H.E. Project in the Office premises. This is for favour of kind information and necessary action.

Yours faithfully,

Enclo: As above- 10 (ten) sheets.

Addl. Deputy Commissioner, Karbi Anglong, Diphu

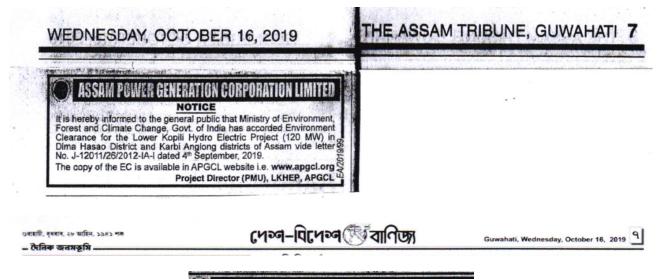
Memo No.KADC/FR Act/2019/36-A Copy to: Dated Diphu, the 29" October" 2019

to: 1 The Project Director, Lower Kopili H.E. Project, APGCL, Bijulee Bhawan, 3^e Floor, 1 The Project Director, Lower Kopili H.E. Project, APGCL, Bijulee Bhawan, 3^e Floor, 1 Paltanbazar, Guwahati-01 for information. As per your letter referred above, the Paltanbazar, Guwahati-01 for information. As per your letter referred above, the same is displayed in the Notice Board of the Offfice premises of office of Deputy

Commissioner, K/ Anglong, Diphu. 2. C.A. to D.C. for kind appraisal of the Deputy Commissioner, K/ Anglong, Diphu.

Addl. Deputy Commissioner. Karbi Anglong, Diphul

Advertisement on Local daily in English and Assamese language



ASSAM POWER GENERATION CORPORATION LIMITED

NOTICE

It is hereby informed to the general public that Ministry of Environment, Forest and Climate Change, Govt. of India has accorded Environment Clearance for the Lower Kopili Hydro Electric Project (120 MW) in Dima Hasao District and Karbi Anglong districts of Assam vide letter No. J-12011/26/2012-IA-I dated 4th September, 2019.

The copy of the EC is available in APGCL website i.e. www.apgcl.org Project Director (PMU), LKHEP, APGCL