

QUORUM

**HON'BLE MR. JUSTICE B. D. AGARWAL,
FORMER JUDGE, GAUHATI HIGH COURT, GUWAHATI**

**MR. S. C. BHOWMIK, PROFESSOR
REPRESENTATIVE FROM INDIAN SCHOOL OF MINES,
(IIT – ISM), DHANBAD
(Email id: bhowmik44@gmail.com)**

**DR. SHANTANU KUMAR DUTTA, ADDITIONAL DIRECTOR
REPRESENTATIVE OF CENTRAL POLLUTION CONTROL BOARD
(Email id: shantanucpcb@gmail.com)**

IN THE MATTER OF

Threat to Life Arising Out of Coal Mining in South Garo Hills District

-Vs-

**The State of Meghalaya & Ors.
And other connected matters**

PRESENT

- :** **Prof. Shri S.C. Bhowmik,**
Member, NGT Committee, Meghalaya,
Indian School of Mines,
IIT-ISM, Dhanbad. Sardar Patel Nagar,
Jharkhand-826004
Email id: bhowmik44 @gmail.com.
- :** **Dr. Shantanu Kumar Dutta,**
Member, NGT Committee, Meghalaya,
Addl. Director, Central Pollution Control Board,
Regional Directorate Shillong, Nongthymmai,
Meghalaya, Shillong.
Email id: shantanucpcb@gmail.com
- :** **Shri S.M. Sahai, IFS**
Addl Principal Chief Conservator of Forests,
(Climate Change, Research & Training)
Forests & Environment Department
Govt of Meghalaya
Email id: sushileshmsahai@gmail.com



- : **Mr. G.K. langrai, MFS**
Assistant Inspector General of Police (A),
Meghalaya, Shillong
Email: gkiangrai@gmail.com
- : **Mr. W. S. Manner, IFS**
Chief Conservator of Forests
(Social Forestry & Env),
& Member Secretary, SEIAA,
Forests & Environment Department,
Government of Meghalaya
- : **Mr. Manjunatha C, IFS**
Secretary to the Government of Meghalaya,
Mining & Geology Department
Email id: manju2020@gmail.com
- : **Smti. P. L. Lawai, MCS**
Joint Secretary to the Government of Meghalaya,
Mining & Geology Department
Email id:paleilawai@gmail.com
- : **Mr. A. Kembhavi, IAS**
Director, Directorate of Mineral Resources, Government
of Meghalaya,
Email id: arunkumar.kembhavi@gmail.com
- : **Dr. Z. Changsan**
Regional Director, Central Pollution Control Board,
Regional Directorate North East, Shillong
Email id: zchangsan.cpcb@nic.in
- : **Dr. H. Tynsong, Scientist 'D',**
Ministry of Environment, Forests & Climate Change,
North Eastern Regional Office, Shillong
Email id: h.tynsong@gov.in
- : **Smti. R. Kynjing**
Executive Engineer, Rural Water Supply Division, Public
Health Engineering Department, Jowai,
Email id: ronkyn88@gmail.com
- : **Mr. M. Passah**
Sub – Divisional Officer, Public Health Engineering,
Khliehriat, Government of Meghalaya
Email id:montripassah@icloud.com



: **Mr. I. R. Lyngdoh**
Meghalaya Institute of Natural Resources – Meghalaya
Basin Development Authority,
Government of Meghalaya
Email id: iaisan.ryngkat@gmail.com

PROCEEDINGS NO. 25

RECORD OF MINUTES OF TWENTY FIFTH SITTING OF THE COMMITTEE CONSTITUTED BY THE HON'BLE NGT UNDER CHAIRMANSHIP OF HON'BLE MR. JUSTICE B.D. AGARWAL, FORMER JUDGE, GUWAHATI HIGH COURT HELD THROUGH VIDEO CONFERENCE ON 01ST SEPTEMBER, 2020 AT 10.30 A.M. AT COMMITTEE ROOM-II, MAIN SECRETARIAT BUILDING, MEGHALAYA, SHILLONG-793001.

Agenda

1. Consider the application filed by Shri. Pawan Sharma, G.S. Road, Shillong in I.A. No. 244/2020 in O.A. No. 110(THC)/2012.
2. Review the progress in implementation of item D & E of the Action Plan prepared by the NGT Committee for restoration of environment in areas affected by coal mining in Meghalaya.
3. Presentation by Trinity Impex International with respect to progress in the implementation of the project for Phytoremediation of AMD affected streams in East Jaintia Hills district.
4. Any other item with permission of the Chairperson.

PROCEEDINGS

AGENDA NO. 1

Consideration of the application filed by Shri. Pawan Sharma, G.S. Road, Shillong in I.A. No. 244/2020 in O.A. No. 110(THC)/2012 before the Hon'ble NGT, Principal Bench

Shri Pawan Sharma, a resident of G.S. Road, Shillong, Meghalaya had submitted a complaint to the Hon'ble National Green Tribunal, Principal Bench, New Delhi alleging that the State of Meghalaya has not complied with several directions given by the Hon'ble Tribunal in their order dated 17.01.2020 in OA No. 110(THC)/2012.



Dr Manjunatha C IFS, Secretary to the Government of Meghalaya, Mining & Geology Department submitted that a number of directions of the Hon'ble NGT have already been complied with and the Government is in the process of implementing the remaining directions.

Upon hearing both the parties, the Government of Meghalaya is directed to submit a detailed reply/ counter, along with annexures, against the complaint of Shri. Pawan Sharma within the next four weeks.

AGENDA NO.2

Component D of the Action Plan for restoration of environment in areas affected by coal mining in Meghalaya.

D. PROVISION OF SAFE DRINKING WATER IN AREAS AFFECTED BY ACID MINE DRAIN

D.1 Development of potable water purifier to treat acidic water to ensure availability of good quality potable water in affected areas

During the deliberation, Dr. Shantanu K. Dutta, Additional Director, Central Pollution Control Board and Member of the Committee suggested that the Public Health Engineering Department, Government of Meghalaya should be requested to submit a scheme regarding development of potable water purifier to treat acidic water. However, the Executive Engineer, Rural Water Supply Division, Public Health Engineering Department, Jowai, Government of Meghalaya informed the Committee that they do not possess any technology to treat the acidic water. On the other hand, Dr. Manjunatha C, IFS, Secretary to the Government of Meghalaya, Mining & Geology Department suggested that this task should be given to some expert agency like Indian Institute of Technology, Guwahati/CIMFR (CSIR), Dhanbad.

Accordingly, it is decided that Civil Engineering Department of Indian Institute of Technology, Guwahati and CIMFR – CSIR may be requested to submit a concept note and detailed project proposal as to how to develop this project technology and make it operational across the State in areas affected by coal mining.

D.2. Distribution of potable water purifier in areas affected by acid mine drain

This agenda is deferred till a suitable agency develops the system of converting acidic water into potable water in areas affected by coal mining.



D.3. Financial assistance for construction of roof top rain water harvesting structure to store rain water to meet requirement of potable water in areas affected by acid mine drain

During the deliberation of the Agenda, the officers representing Public Health Engineering Department and Meghalaya Basin Development Authority submitted that it would be appropriate in the first instance to obtain schemes indicating design and estimates for roof top rain water harvesting and also undertake survey of requirement for providing potable water in AMD affected areas.

The Executive Engineer, Rural Water Supply Division, Public Health Engineering Department, Jowai, Government of Meghalaya is directed to submit a detailed estimate for executing this project in Acid Mine Drain affected districts of Meghalaya after conducting the required survey within four weeks.

D.4. Assessment of feasibility to provide safe drinking water in AMD affected areas through deep bore wells

The requisite survey for the purpose of assessment would be undertaken by the PHE Department in AMD affected areas and submit a report thereof to the Committee within four weeks.

D.5. Provision of safe drinking water in AMD affected areas through deep bore wells wherever found feasible

The Executive Engineer PHE who represents the Chief Engineer, PHE Department has expressed willingness to implement this item of the Action Plan. The PHE Department shall submit the estimate for actual implementation of the project within four weeks to the Committee.

E. BIOLOGICAL RECLAMATION OF AREAS AFFECTED BY COAL MINING

E.1. Identification/ delineation of areas affected by Coal Mining

The Secretary to the Committee informed that North Eastern Space Applications Centre, Department of Space, Umiam has already submitted a report of estimates in relation to identification/ delineation of areas affected by coal mining through application of remote sensing and GIS technology. The Secretary is requested to



circulate the report and estimates to the members of the Committee to enable the Committee take a decision in the next Sitting of the Committee.

E.2. Development of cost effective models for biological reclamation of coal mining affected areas

E.2.1 Identification and prioritisation of AMD resistant species

E.2.2 Development, standardisation, field demonstration and documentation of cost effective nursery and plantation techniques for prioritized species

In respect of item E. 2.1 and E. 2.2 relating to identification and prioritisation of AMD resistant species, and development, standardisation, field demonstration and documentation of cost effective nursery and plantation techniques for prioritized species the pilot project report submitted by Research & Training wing of the Forest Department detailing an estimate for a total sum of Rs 40,36,500/- , which includes a sum of Rs. 4.63 lakhs pertaining to the component to be undertaken by the Central Pollution Control Board, a total sum of Rs. 40,36,500/- has already been approved by the Hon'ble National Green Tribunal for release to the Forest Department.

The Additional Principal Chief Conservator of Forests (Climate Change, Research & Training) requested that implementation of the pilot project pertaining to the components to be implemented by the State Forest Department be done by the Social Forestry Wing of the State Forest Department. The proposal of the Addl PCCF was discussed threadbare and in view of the fact that the Hon'ble National Green Tribunal has already approved the earlier recommendation of the Committee for implementation of the pilot project by the Research & Training Wing of the Forest Department therefore, the Additional Principal Chief Conservator of Forests (Climate Change, Research & Training) was requested to ensure that the pilot project in relation to the components pertaining to the Forest Department be executed by the Climate Change, Research & Training Wing. Once the pilot project is executed successfully, thereafter raising the plantation over the areas affected by coal mining employing the protocol developed by the Climate Change, Research & Training Wing may be carried out by the Social Forestry Wing. However, insofar as the component of the pilot project pertaining to the Central Pollution Control Board (reclamation of 1 Ha of land using Miyawaki method at a total cost of Rs 4,63,000), the same shall be executed by the Central Pollution Control Board.



The aforesaid sums shall be released in favour of the Climate Change, Research & Training Wing of the State Forest Department and the Central Pollution Control Board (N E Region) respectively from the MEPR Fund by the Mining & Geology Department since the said release has already been approved by the Hon'ble NGT.

Insofar as request of the Additional Principal Chief Conservator of Forests (Climate Change, Research & Training) for sanctioning the balance sum of Rs. 43,59,600/- for undertaking the raising of one nursery at Tuber and its maintenance for three years is concerned, which is part of the pilot project, the said proposal shall be processed in the manner laid down under the guidelines for utilizing MEPR fund notified by Mining & Geology Department under MO No.MG.61/2018/149 dated 20.08.2020.

E.3 Biological reclamation of identified/delineated areas

This component will be undertaken after execution of the pilot project as detailed in E.2.

AGENDA NO.3

Presentation by Trinity Impex International with respect to progress in the implementation of the project for Phytoremediation of AMD affected streams in East Jaintia Hills district.

The Chief Executive Officer, Trinity Impex International has been assigned the work of implementation of the project for Phytoremediation of AMD affected streams in East Jaintia Hills District. In today's sitting, the said agency was supposed to give the presentation on the pilot project. The Chief Executive Officer of the Company, submitted that due to law and order problems at the initial stage during January – March 2020 followed by lockdown in Meghalaya and other parts of the country on account of COVID-19, they could not make much progress at the site in respect of in-situ remediation of AMD affected streams. However, the site has been developed and algae have been cultured and the same is ready for dosing.

The Secretary to the Government of Meghalaya, Mining & Geology Department informed the Committee that presently the Government of Meghalaya has eased the restrictions of Lockdown and technical persons are allowed to enter Meghalaya and



the Department will facilitate obtaining passes for the executive and technical staff of the Company to visit Meghalaya. The CEO is requested to furnish the details and itinerary of his staff to the Secretary, Mining & Geology Department, Govt of Meghalaya to enable him to facilitate issuance of e-passes.

Accordingly the agenda of presentation is deferred since the slides pertaining to progress in site development, culturing micro algae etc have already been seen by the Committee on earlier occasion.

The Chairman thanked all present and concluded the meeting.



(Justice B .D. Agarwal)
Former Judge, Gauhati High Court
Chairman
NGT Committee, Meghalaya