

Q U O R U M

CHAIRMAN

**HON'BLE MR. JUSTICE BROJENDRA PRASAD KATAKEY,
FORMER JUDGE, GAUHATI HIGH COURT, GUWAHATI**

MEMBER

**PROF. ASHOK K. SINGH
INDIAN SCHOOL OF MINES, DHANBAD
IIT (ISM), DHANBAD (826004)
(e-mail id - singhashok0707@gmail.com)**

MEMBER

**DR. SHANTANU KUMAR DUTTA, SCIENTIST 'D'
REPRESENTATIVE OF CENTRAL POLLUTION CONTROL BOARD
(e-mail id - shantanucpcb@gmail.com)**

IN PRESENCE OF:

- : Professor O.P. Singh,
Head of Department of Environmental Studies,
North Eastern Hill University, Shillong – 793002
email id- **opsinghnehu@gmail.com** – *Special Invitee*
- : Mr. T. Dkhar, IAS, Commissioner & Secretary,
Government of Meghalaya, Mining & Geology Department,
email id – **ttdkhar.2007@rediffmail.com**
tadkhar.2013@gmail.com
- : Mr. C.P. Marak, IFS, Principal Chief Conservator of Forests
& HoFF (PCCF & HOFF), Government of Meghalaya, and
Chairman, Meghalaya State Pollution Control Board
email id – **pccfmegh@gmail.com**
- : Mr. H.C. Chaudhary, IFS,
Additional Principal Chief Conservator of Forests (Planning,
Development and Legal Matters)
email id- **harishcc@yahoo.com**
- : Mr. Manjunatha C. IFS, Planning Officer (Forests),
Government of Meghalaya.
- : Mr. A. Ch Marak, MCS,
Director of School Education & Literacy & Director Higher
& Technical Education.
email id – **achmarak@gmail.com**
- : Smti P.L. Lawai, MCS, Joint Secretary, Government of
Meghalaya Mining & Geology Department,
email id – **paleilawai@gmail.com**



- : Shri. M.S. Lyngdoh, Director of Mineral Resources,
Government of Meghalaya.
email id- **msanlyngdoh@gmail.com**
- : Shri S. Syiem, Assistant Environmental Engineer,
Meghalaya State Pollution Control Board, Shillong.

RECORD OF THE MINUTES OF THE PROCEEDING NO.3 HELD ON 1ST
OCTOBER, 2018 AT 10:30 AM IN STATE GUEST HOUSE AT SHILLONG, MEGHALAYA

The Chairman of the Committee welcomed the Members of the Committee, the Special Invitee and the Officials of the Government of Meghalaya, who are present in today's proceeding. Professor Ashok K. Singh, who has been nominated by the Director, IIT (ISM), Dhanbad as a Member of this Committee, has attended today's proceeding for the first time. The Constitution of the Committee, therefore, is complete today in terms of the order dated 31.08.2018 passed by the Hon'ble National Green Tribunal. The Committee has also ratify the proceeding Nos.1 & 2 dated 11th September, 2018 & 19th September, 2018, respectively.

2. Smti. P.L. Lawai, MCS, Joint Secretary to the Government of Meghalaya, Mining & Geology Department, has produced a copy of the NGT's Order dated 19th September, 2018 passed by the Hon'ble National Green Tribunal appointing Secretary, Forest & Environment Department, Government of Meghalaya as Member Secretary/Coordinator of this Committee.

3. Consequently the Order dated 19th September, 2018 of the Committee relating to appointment of Smti. P.L. Lawai, MCS, Joint Secretary to the Government of Meghalaya, Mining & Geology Department, as Secretary of the Committee, stands modified. The Secretary, Forest & Environment Department, Government of Meghalaya shall act as Member Secretary/Coordinator of the Committee, who, however, is not present in today's proceeding. The Secretary, Forest & Environment Department, Government of Meghalaya shall remain present in the subsequent meetings of the Committee.

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4. Dr. Shantanu Kumar Dutta, one of Members of the Committee made a brief presentation about the environmental problems created in the State of Meghalaya by the Rat Hole Mining of coal in an unscientific manner by landowners. The presentation made reveals that since the tertiary origin of N.E. coal contains Sulfur (both in organic and inorganic form) in the range of 4% to 5% (maximum), it has given rise to the problem of Acid Mine Drainage (AMD). In the said presentation, it has also been projected that the water coming out from these numerous small mines (active or abandoned) has made the main surface water bodies highly acidic (pH of the order of 2.2 to 4), which at places have become unsuitable for consumption by human and animals as well as do not support any aquatic life. There is no respite in the acidic nature of water during different seasons, i.e. during monsoon and post-monsoon.

The Committee has also been informed by Dr. Shantanu Kumar Dutta that the acidic nature of water throughout the year and also dumping of extracted coal in open highlands have created a major environmental problem by degradation of soil making it unfit for any type of cultivation.

5. Presentations were also made by the Meghalaya State Pollution Control Board as well as by the Forest & Environment Department of Government of Meghalaya highlighting the problem of AMD due to Rat Hole mining. However, the extent of spatial distribution of problem areas on land, number and location of these Rat Hole mines, extent of effect of AMD on stream/river/surface water body and its seasonal variation in quality could not be made available either by the Government of Meghalaya or by the State Pollution Control Board, which requires detail mapping of the areas and testing of water and soil, apart from survey. The Committee has been informed that such exercise covering almost the entire State is huge one and could not be made due to lack of adequate skilled man power. The Committee has also been apprised that regular monitoring of water in a few selected locations is being carried out on monthly basis under the National Water Quality Monitoring Programme funded by the Central Pollution Control Board.

6. The State Government Officials present in today's proceeding have informed the Committee that though some leases and Environment Clearance (EC) were granted to the limestone mines in the State, no mining lease or EC has been granted/issued for any coal mines. It has also been informed that the Rat Hole Coal Mines were operated by individual landowners, who have rights over the mineral in their respective areas as per the Sixth Schedule of the Constitution of India. Apart from violation of the provisions of the Mines & Minerals (Development & Regulation) Act for Grant of Prospecting & Mining Lease, no law was ever applied for these Rate Hole Mining practices in the State, viz. Coal Mines (Nationalization) Act, 1973, Mines Act, 1952 and the Rules framed thereunder for the safety of these mines; Rule 22 of the Mineral Conservation & Development Rules, 2017 for closure of mines; Consent to Establish and Operate by State Pollution Control Board under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 or Environment Impact Assessment Notification dated 14.09.2006 and such other Notifications issued thereafter from time to time for EC under the provisions of Environmental (Protection) Act, 1986 and the Rules framed thereunder.

7. The Officers of different Departments of the State Government present have also apprised the Committee that except issuance of transportation challans and collection of royalty by the State Government, there are no other authentic records of production, number of Rat Hole mines abandoned; number of active Rat Hole Mines; number of persons employed; number and names and addresses of the victim of the accident occurred in such mining activities and also the particulars of individuals affected by such Rat Hole mining, as the Rat Hole mines were totally in the hands of individuals/village headman, who were doing unscientific mining in unorganized manner with little or no control of the State as well as the Central Governments.

 8. Shri T. Dakhar, IAS, Commissioner & Secretary to the Government of Meghalaya, Mining & Geology Department has apprised the Committee that it

has been linked on the website of the Mining & Geology Department – “megdmg.gov.in”. The Committee has also been informed about generating email id – “mines.geology-meg@gov.in”.

9. The Commissioner & Secretary to the Government of Meghalaya, Mining & Geology Department has also apprised the committee that an amount of Rs.433,07,26,731/- is in deposit in SBI DMR Account No.34843521013, which constitute MEPR Fund and no amount has been spent or diverted from the said account.

10. The Commissioner & Secretary to the Government of Meghalaya, Mining & Geology Department has also submitted certain documents in compliance with the direction issued vide the Committee’s proceedings No.2 dated 19th September, 2018, which are placed on record. The Committee, however, is of the view that the said records do not suggest complete compliance of the directions issued.

11. The Meghalaya State Pollution Control Board has submitted an Action Plan for treatment of Acid Mine Drainage (AMD), wherefrom it appears that even the basic data for Rimet Stream in Dkhiah in Jaintia Hills District with reference to quality and discharge volume of water and plan/programme for treating the acidic stream water, is not available with the State Pollution Control Board. Hence, the Action Plan suggest generation of baseline data; analytical data; customization of technology, development, installation and commissioning of prototype and development of full scale water treatment plant, for which, according to the State Pollution Control Board, 18(eighteen) months time would be required. The said Action Plan also projected the proposed project cost of Rs.60,00,000/- (Rupees Sixty Lakhs), which amount, the Officers of the Government present in today’s proceeding, suggested to be spent out of the aforesaid MEPR fund. The said Action Plan also reveals that pH level of water samples collected from the affected sites in the month of November, 2017 was found to be between 2.65 to 2.7.

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12. The Departments of Mining & Geology and Forest & Environment, Government of Meghalaya, also suggested that the restoration of coal mining affected areas in the State may be divided in 2(two) phases, namely, preparatory phase and implementation phase. While the preparatory phase includes a study through the North Eastern Space Application Centre to survey, map and delineate the coal mines, dumping sites and the areas affected by coal mines by using high resolution satellite imageries, implementation phase consist of taking remedial measures to improve the environmental conditions that has affected the water as well as the land in the mining areas. It has also been suggested that the abandoned Rat Hole mines either in the hills or on the river bed should be closed by using controlled blasting to be executed under the guidance of the Council of Scientific & Industrial Research and Central Institute of Mine Fuel Research (CIMFR-CSIR), Dhanbad. Engagement of a reputed institute to conduct a socio-economic survey to assess the impact of coal mining in the livelihood, health and overall wellbeing of mining affected areas and also to identify the mining affected households, has also been suggested. The cost to be incurred in this respect was suggested to be borne out of MEPR fund constituted under the order of the Hon'ble National Green Tribunal.

13. The Commissioner & Secretary to the Government of Meghalaya, Mining & Geology Department, has prayed for allowing the Director of Mineral Resources, Meghalaya, Shillong to invest some amount in short/long term interest bearing deposits out of the aforesaid MEPR fund in any nationalized/ schedule bank at Shillong so that there is growth on the fund deposited in the bank.

14. The Officials of the Government of Meghalaya have requested the Committee to allow spending of amount from the said MEPR fund to bear the expenses incurred/to be incurred in connection with working of the Committee and also to implement the directions Issued/to be issued from time to time.



15. The Committee, in view of various news reports published in the newspapers from the State of Meghalaya and also in the newspapers published from the neighbouring State of Assam relating to detention of trucks carrying coal from the State of Meghalaya, apprehended that the surface coal stocks are replenish by fresh mining at places even after the order passed by the Hon'ble National Green Tribunal stopping such mining activity, which needs to be stopped with immediate effect inconsonance with the aforesaid order passed by the Hon'ble National Green Tribunal, till the Hon'ble Supreme Court issues any order in the cases pending before it.

16. Professor Ashok K. Singh, one of the Members of the Committee, has pointed out that the production figures of coal in the State of Meghalaya, as reflected in the report published by the Coal Controller, Government of India, reveals that despite the ban imposed by the Hon'ble National Green Tribunal on the Rat Hole Coal Mining in the State of Meghalaya, productions are shown in the aforesaid report for the financial years 2016-17 and 2017-18. The Commissioner & Secretary to the Government of Meghalaya, Mining & Geology Department as well as the Principal Chief Conservator of Forests and Head of Forest Force have informed the Committee that the figures shown in the said reports actually reflect the quantity of coal transported during those years pursuant to the orders passed by the Hon'ble Supreme Court and Hon'ble National Green Tribunal.

17. After detailed discussions with various authorities and having regard to the orders passed by the Hon'ble National Green Tribunal on the issues arising out of Rat Hole Coal Mining, the Committee decides to adopt the following

Action Plan:-

- (i) To invite Professor O.P. Singh, Head of the Department of Environmental Studies, North Eastern Hill University and the Director of North Eastern Space Applications Centre, Department of Space, Government of India, Umiam, Meghalaya and also the Director of Remote Sensing Agency, Meghalaya to assist the Committee for study



and taking remedial measures to improve the environmental conditions in the State of Meghalaya, as their knowledge and work in this field will be beneficial for the Committee. The Secretary of the Committee will issue letters to them requesting their presence in the meetings of the Committee and provide their valuable inputs.

- (ii) The Director of Mineral Resources, Government of Meghalaya shall provide a reconciled extracted coal stock as on 17th April, 2014, when the operation of Rat Hole Mines was stopped by the Hon'ble National Green Tribunal and also the transportation of coal thereafter as per challans issued as permitted by any Court of law and also by the Hon'ble National Green Tribunal from time to time. The balance of coal left as of now in the surface stocks, after such permitted transportation, shall also be provided to the Committee in its next sitting.
- (iii) Mapping of affected areas in the State of Meghalaya with the help from Remote Sensing Agency to prepare up to date maps of the land used, water reign (drainage patter) on urgent basis so that the extent of Rate Hole Mining could be identified. The said process is to be started immediately. A monthly report in that regard shall be submitted to the Committee.
- (iv) The trial treatment of acidic effluent with the help of limestone conducted by Professor O.P. Singh, Head of the Department of Environmental Studies, North Eastern Hill University, shall be continued with the full support from the State of Meghalaya as such trial treatment borne positive result. Progress report of which shall be submitted every month.
- (v) The Ministry of Forest & Environment, Government of Meghalaya, in association with the State Pollution Control Board and Central Pollution Control Board, shall draw comprehensive monitoring programme of all



major water streams and implement the same. All necessary infrastructure and manpower shall be provided in that respect. A monthly report in that regard shall be submitted to the Committee by the Secretary to the Government of Meghalaya, Forest & Environment Department.

- (vi)** The Government of Meghalaya shall finalize the proposal submitted by the Council of Scientific & Industrial Research and Central Institute of Mine Fuel Research (CIMFR-CSIR), Dhanbad for pilot project of Acid Water Treatment Plan at a cost of Rs.50,00,000/- plus applicable GST, on priority basis, for one of the location in West Jaintia Hills area. Based on the result of the said Pilot Project, reapplication of the same to other areas would be considered. A report in that regard shall be submitted before the Committee in its next meeting.
- (vii)** The Government of Meghalaya, Ministry of Forest & Environment shall also take a decision, within a month, on the proposal of Council of Scientific & Industrial Research and Central Institute of Mine Fuel Research (CIMFR-CSIR), Dhanbad of controlled blasting to fill up the abandon mines voids and apprise the Committee about the same.
- (viii)** The Commissioner & Secretary to the Government of Assam, Mining & Geology Department shall, in the next meeting of the Committee, to be held on 12th and 13th November, 2018, submit the reply to the questionnaires made in the previous meeting held on 19th September, 2018, as the reply submitted by him during this proceeding is found to be not satisfactory.
- (ix)** The Secretary to the Government of Meghalaya, Ministry of Forest & Environment, who was incidentally appointed as Member Secretary of this Committee by the Hon'ble National Green Tribunal, shall coordinate with all the State and Central Agencies, as different Central and State Agencies are seized with the problems arising out of Rat



Hole Mining and trying to devise means to solve the said problem without coordination amongst them, so that a concerted effort by all such Agencies to identify the problems and devise the means to solve such problem can collectively be made. A report in that regard shall be submitted to the Committee within 2(two) months.

- (x) The Meghalaya State Pollution Control Board, in active co-operation of the Ministries of Mining & Geology as well as the Forest & Environment, shall conduct a Social Impact Assessment (SIA) to find out the socio-economic impact of Rat Hole Coal Mining on the affected population and submit a report to this Committee within 2(two) months.
- (xi) The Ministries of Forest & Environment as well as Mining & Geology shall also conduct a survey relating to the mining of other minerals like limestone etc., whether the same has been done in an organized and scientific manner with due attention to the safety, health and environmental concerns. A report in that regard shall be submitted to the Committee within 2(two) months.
- (xii) The Chairman, Members as well as the Member Secretary of the Committee along with the officials of the Central Pollution Control Board, State Pollution Control Board, Ministry of Mining & Geology and Ministry of Forest & Environment, Government of Meghalaya shall **visit certain Rat Hole Coal Mine areas of East Jaintia Hills District on 12th November, 2018**. The Member Secretary of the Committee shall prepare a report after the site visit and place it before the Committee in the meeting schedule to be held on 13th November, 2018.
- (xiii) Regular site visit of all sites affected by the Rat Hole Coal Mining shall be conducted by the Meghalaya State Pollution Control Board and also the Central Pollution Control Board with the active assistance of the Ministries of Forest & Environment and Mining & Geology, Government



of Meghalaya to find out the pH level of surface water bodies of the affected areas and also the extent of damage caused to the land mass. Remedial measures shall also be suggested by both the Pollution Control Boards. A monthly report in that respect shall be submitted to the Committee along with the remedial measures to be taken.

- (xiv)** The Commissioner & Secretary to the Government of Meghalaya, Education Department, in association with the Ministry of Forest & Environment, Mining & Geology as well as the Deputy Commissioners, Gaonbuhars and the District Councils shall conduct regular awareness campaign in all the localities affected by Rat Hole Mining and also in the Schools, identified by them, to make aware the public about the environmental damage caused by the Rat Hole Coal Mining. A monthly report in that regard shall be submitted to the Committee.
- (xv)** The Commissioner & Secretary to the Government of Meghalaya, Mining & Geology Department shall submit to the Committee the statements submitted to the Coal Controller, Government of India, based on which the reports for the years 2016-17 and 2017-18 have been published by the Coal Controller, Government of India. The same shall be submitted to the Committee during its sitting scheduled to be held on 12th & 13th November, 2018.
- (xvi)** The Central Pollution Control Board and the Meghalaya State Pollution Control Board shall compile all available data of water pollution and also of water quality of the stream and other water bodies of the areas affected by Rat Hole Coal mining and submit the same to the Committee during its sitting on 12th & 13th November, 2018.
- (xvii)** The Commissioner & Secretary to the Government of Meghalaya shall ascertain the extracted coal, if any, not already inventorised. In the event, any such extracted coal is found, he shall cause preparation of a separate inventory of such extracted coal and ascertain whether such



coal was illegally extracted, i.e. extracted after the ban imposed by the Hon'ble National Green Tribunal. The royalty payable, as fixed by the Hon'ble National Green Tribunal, shall also be realized. A monthly report in that regard shall be submitted to the Committee.

- (xviii) The Ministries of Mining & Geology as well as the Forest & Environment, Government of Meghalaya in association with the District Administrations, District Council, Village Headmen, shall conduct a survey to find out the names and addresses of the victims, if any, of the Rat Hole Mining and also the individuals, if any, affected by such Rat Hole Mining. A report in that regard shall be submitted to the Committee within 2(two) months.
- (xix) The Meghalaya State Pollution Control Board, in association with the Central Pollution Control Board and with active co-operation of the Ministries of Mining & Geology as well as the Forest & Environment, Government of Meghalaya shall conduct a survey about the environmental affect, more particularly, the affect on the nearby stream, river water bodies and land because of the dumping of extracted coal and submit a report to the Committee within 2(two) months.
- (xx) The Deputy Commissioners of all the districts of State of Meghalaya, shall within 2(two) months from today, submit their respective reports on the issue as to whether any Rat Hole Coal Mining is presently on. If so, the details of such Rat Hole Mining shall also be Submitted.

THE COMMITTEE, IN VIEW OF WHAT HAS BEEN RECORDED IN THIS PROCEEDING, ALSO DECIDES TO SEEK DIRECTIONS FROM THE HON'BLE NATIONAL GREEN TRIBUNAL ON THE FOLLOWING ISSUE:


- A. *Whether the Government of Meghalaya, Ministries of Mining & Geology as well as Forest & Environment, as minuted above, should be***

allowed to utilize the amount deposited in MEPR Fund towards the expenditure to be incurred in connection with holding of various meetings etc. of this Committee and also all the expenditures to be incurred towards the various site visits, surveys, mapping and other expenditures to be incurred to find out the extent of environmental damage caused and to remedy the same, from out of the aforesaid fund, which has been created by the order passed by the Hon'ble National Green Tribunal and kept in deposit in the State Bank of India.

The said fund (MEPRF) having been created under the order of the Hon'ble National Green Tribunal, the Committee decides to place the matter before the Hon'ble National Green Tribunal for issuance of necessary directions in that regard.

18. The Member Secretary of the Committee shall send a copy of this proceeding to the Hon'ble National Green Tribunal by e-mail at "**filing.ngt@gmail.com**".

19. The meeting ended with vote of thanks to the Chair. The next meeting of the Committee would be held on **12th & 13th November, 2018** at **Shillong**. All necessary arrangements for smooth conduct of the visit, as aforesaid, and holding of the meeting shall be made by the Member Secretary of this Committee.


(JUSTICE BROJENDRA PRASAD KATAKEY)
CHAIRMAN
Former Judge, Gauhati High Court
Guwahati