

Item No. 06

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 304/2019
(M.A. No. 81/2021, M.A. No. 83/2021, M.A. No. 96/2021 & M.A. No.
85/2021 to M.A. No. 88/2021 & I. A. No. 184/2022)

M. Haridasan

Applicant

Versus

State of Kerala & Ors.

Respondent(s)

Date of hearing: 18.01.2023

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE PROF. A. SENTHIL VEL, EXPERT MEMBER**

Applicant: Ms. Nishtha Kumar, Adv. for Applicant

Respondent: Mr. Jogy Scaria, Advocate for Kerala SPCB
Mr. Nishe Rajen Shonker, Advocate for the State of Kerala

ORDER

1. The Issue for consideration is the safeguards in operation of stone quarries close to residences and public roads in Kerala. Distance prescribed by the Kerala State PCB being inadequate against safety of buildings and environment, the Tribunal vide order dated 21.7.2020 directed longer distance, based on expert committee report, after study on direction of this Tribunal.

2. In the light of order of the Hon'ble Supreme Court dated 25.10.2021 in a batch of matters against order of the Tribunal, giving liberty to the aggrieved parties to move this Tribunal for reconsideration, the matter was further considered vide order dated 09.12.2021. On such further

consideration, the Tribunal did not find any substance in the stand of the project proponents (PPs) for reduction in distance as earlier directed. It was observed:

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6. *On merits also, stand in all the applications is almost same. **The PPs claim to be carrying on quarry mining, using blasting at various locations under leases granted by the Mines Department of Kerala under the Kerala Minor Mineral Concession Rules, 1967. Minimum safety distance of 50m is maintained from nearest dwelling units.** Grievance of the original applicant that 50m distance is not enough and reliance on observations of the Hon’ble Supreme Court in *M.C. Mehta v. Union of India*, (1996) 8 SCC 462 and *Mohammaed Haroon Ansari v. District Collector, Ranga Reddy District*, (2004) 1 SCC 491 is uncalled for.*

7. *To complete the narration, we may record that **the Tribunal sought a report from CPCB and as per report dated 09.07.2020, it was suggested that minimum distance should be 100m where blasting is not involved and 200m where blasting is involved.** The Tribunal accepted the said view and, vide order dated 21.07.2020, issued directions in terms thereof which are reproduced for ready reference, as follows:*

“3. Accordingly, the CPCB has filed its report on 09.07.2020 concluding as follows:

“6.0 Conclusion:

In view of available information, following minimum distance criteria may be considered for permitting stone quarrying by SPCBs:

Mining Type		Minimum Distance	Locations
A.	When Blasting is not involved	100 m	<i>Residential/Public buildings, Inhabited sites, Protected monuments, Heritage sites, National / State Highway, District roads, Public roads, Railway line/area, Ropeway or Ropeway trestle or station, Bridges, Dams, Reservoirs, River, Canals, Lakes or Tanks, or any other locations to be considered by States.</i>
B.	When Blasting is involved	200 m **	

****Note: The regulations for danger zone (500 m) prescribed by Directorate General of Mines Safety also have to be complied compulsorily and necessary measures should be taken to minimise the impact on environment. However, if any states is already having stringent criteria than the above for minor mineral mining (i.e. more prescribed distances than the above), the same shall be applicable.”**

4. *In view of the above, the said criteria be followed throughout India. The CPCB may monitor compliance.”*

8. *In view of rival submissions, question is whether there is any scope for interference by this Tribunal.*

9. ***Original applicant has opposed the applications of the PPs and submitted that minimum distance of 200m must be maintained in the interest of safety of the inhabitants as well as flora and fauna in the area. The Tribunal must follow the ‘Precautionary’ principle and, if any, further study is undertaken, mining may not be allowed within 200m pending such study. It was also submitted that mining is continuing illegally in violation of orders of Hon’ble Supreme Court and on that aspect the matter is being further raised before the Hon’ble Supreme Court by the applicant.***

10. *Stand of learned Counsel for the PPs is that distance of 50m is laid down under the Mines and Mineral Rules as well as under the orders of the State PCB. Any longer distance is beyond the jurisdiction of this Tribunal. CPCB also has no jurisdiction as powers under the EP Act are only with MoEF&CC.*

11. *Further submission is that due to topography of the State of Kerala, longer distance will obstruct the legitimate mining activities in violation of sustainable development principle. With the use of Nonel Detonation technology, 50m distance is adequate and does not cause any adverse impact.*

12. *Reliance has also been placed on a CSIR-Central Institute of Mining & Fuel Research study conducted in June 2021 on “SCIENTIFIC STUDIES FOR DESIGN OF SAFE BLAST PARAMETERS AT PEROORKADA STONE MINE, KUTHIRAKALAM P.O. VELLANADU, THIRUVANANTHAPURAM, KERALA” concluding and recommending as follows:*

“8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions:

The following conclusions can be drawn from the results of the study on blast vibration analysis:

- i) From the blasting trials, with the designed blast patterns, it was observed that blast induced ground vibrations; air overpressure and fly rock were within safe limits*
- ii) The use of bottom hole-initiation systems like shock tubes in conjunction with noiseless trunk line delays (NTLD) during trial blasts kept the vibration and air over-pressure to the allowable limits.*
- iii) Proper stemming with coarse grained sand reduced the chances of flyrock and limited to bare minimum within the quarry area.*
- iv) The throw of the muck was found to be favourable for easy removal and handling by machines*
- v) The maximum value of blast induced ground vibration (PPV) level recorded at the south eastern boundary from where the closest civil structure (water tank), is 1.024 mm/s with*

- dominant excitation frequency as 82.25 Hz at a distance of 125 m.
- vi) The maximum projectiles range of flyrock was observed as 10-15 m from the blast site and the air overpressure levels recorded were within the safe limits (<128 dB).
 - vii) This clearly indicates that the blast design parameters followed during the studies at the mine are quite safe to the nearby habitats and structures.

8.2 Recommendations:

On the basis of data analysis and results of the study the following points are recommended for consideration and strict adherence for controlled blasting and safety of structures:

1. It is recommended to practice the blast design parameters as burden = 1 m spacing = 1.2m, hole depth = 1.8 m to 3m and specific charge = 0.35 kg/m³.
2. Maximum hole depth can be upto 3m. Holes of lesser depth may have a tendency of generating more flyrock.
3. In case of varying hole depth, charge per holes should be calculated on the basis of specific charge (0.35 kg/m³)
4. The hole diameter should be kept at 32mm and there should be no variation in diameter of the drilled holes.
5. Typical blast designs shown in the figure 6 and 7 should be followed for safe blasting practice
6. The safe maximum charge per delay for the distances of 45m and above, from the dwellings/structures is mentioned in Table-5, and Figure 16, which should be followed to contain the ground vibrations and flyrock within the limits.
7. Although, the nearest house not belonging to quarry owner, is towards South-east direction of the mine at a distance of 250 m and the safe maximum charge per blast for that distance, as per the Table-4, is 8.29 kg
8. Prilled Ammonium Nitrate Fuel Oil (ANFO) and Cartridge emulsion explosive of 25mm diameter to be used for all production blast rounds. Care should be taken to ensure utilization of explosive within the prescribed shelf-life period.
9. Blast rounds should be planned in such a manner that at least one free face is available
10. Maximum four rows are to be fired in each blast round to avoid cumulative confinement and flyrock problem.
11. Top of the face should be cleaned for any debris. The face should be cleared of muck of the previous blast as it creates flyrock.
12. The free face direction should be, as far as possible, opposite from the hutments/ structures (temporary or permanent). The propagation of the initiation should be opposite to the structures/ habitats.”
13. We have duly considered the above submissions. **We do not find any merit in the objection of the PPs that this Tribunal has no jurisdiction in view of distance laid down under the Mines and Mineral Rules. in view of law laid down inter-alia in Mantri**

Techzone Pvt. Ltd. v. Forward Foundation and Ors.,¹ and the Director General (Road Development) NHAI v. Aam Aadmi Lok Manch.² There is also no merit in the contention that CPCB has no jurisdiction under the EP Act. CPCB has jurisdiction under EP Act, as per delegation under section 23 of the said Act as well statutory powers under the Air and Water Acts and also under directions of this Tribunal. Plea of the PPs that the study relied upon clinches the matter in their favour is also not born out from the said study. There is also no merit in the contention that even at the cost of environment mining must be allowed having regard to peculiar topography of Kerala.”

3. In spite of above, the Tribunal thought it proper to direct further study on the subject and constituted a seven member joint Committee for the purpose to furnish report to this Tribunal within four months. It is sad to note that inspite of expiry of one year, the Committee has failed to give its report and has been seeking further time vide letters dated 20.07.2022, 28.10.2022 and 13.01.2023.

4. Even though we are disappointed at long delay caused in the process when there should not have not been any difficulty in completing the work in one year period, as last opportunity, we grant further extension up to 28.02.2023 for submission of the report which may now be positively filed by that date.

List for further consideration on 06.03.2023.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Prof. A. Senthil Vel, EM

January 18, 2023
Original Application No. 304/2019
(M.A. No. 81/2021, M.A. No. 83/2021, M.A. No. 96/2021 & M.A. No. 85/2021 to M.A. No. 88/2021 & I. A. No. 184/2022)
AB

¹ 2019 SCC online SC 322, Para 43-47

² AIR 2020 (SC) 3471, Para 75