

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

Original Application No. 104/2018  
(M.A. No. 279/2018 & M.A. No. 858/2018)

With  
Execution Application No. 05/2019  
IN  
O.A. No.104/2018

(With report dated 14.10.2020)

Shivpal Bhagat & Ors.

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 27.02.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER  
HON'BLE MR. SIDDHANTA DAS, EXPERT MEMBER**

For Applicant(s): Mr. Saurabh Sharma, Advocate and  
Ms. Rinchin, Petitioner in person

For Respondent(s): Mr. Rajkumar, Advocate for CPCB

**ORDER**

1. This order is being passed in continuation of order dated 22.07.2019. The issue for consideration is the remedial action against pollution caused by the thermal power plants, the coal washeries in Tamnar and Gharghoda blocks of Raigarh District in Chhattisgarh, including M/s Jindal Power Limited, M/s Jindal Power and Steel Limited, M/s TRN Energy Private Limited, M/s Mahavir Energy & Coal Benefaction Limited, M/s. Hindalco Industries Limited and M/s. Monet Energy Limited, SECL. The operation of the said units was allegedly resulting in contamination of air, water and land and having adverse impact on the

environment and the habitants. Water and soil have toxic metals having potential for health hazard requiring monitoring of emissions, making the polluter accountable and regulating the polluting activities.

2. Vide order dated 22.07.2019 after referring to the earlier proceedings and in the light of report dated 28.06.2019 furnished by the Committee comprising Scientist D, CPCB, Bhopal, Professor IIT (ISM), Dhanbad, Assistant Professor, IIFM, Bhopal and SE-CECB, Raipur, the Tribunal observed:

“4. Report dated 28.06.2019 has been furnished by the Committee comprising Scientist D, CPCB, Bhopal, Professor IIT (ISM), Dhanbad, Assistant Professor, IIFM, Bhopal and SE-CECB, Raipur. The observations of the Committee include certain deficiencies such as mines fire being observed, green belt being insufficient, no work having been started for diversion of Bendra nallah and construction of embankment of 5 km length between River Kelo and mining lease as per condition of EC to protect surface water body from pollution caused by mining operation.

5. The Committee suggested that the report with regard to damage assessment submitted in *Dukalu Ram v. Union of India & Ors. (Supra)*, may be considered.

6. We find that the report furnished does not exhaustively address the issues required to be gone into by order dated 23.08.2018 quoted above, particularly conducting carrying capacity of the area, remediation measures, improved quality of soil, adequacy of the pollution control devices, fly ash management and ambient air quality with regard to  $PM_{2.5}$ .

7. We are, thus, of the opinion that a further updated and exhaustive report is required to be furnished after considering these aspects, which have also been concluded in para 10 quoted above, by the following Committee:-

1. Representative of MoEF&CC, Regional Office Nagpur to the level of Scientist – E
2. Representative of NEERI, Nagpur
3. Scientist – E, Regional Office CPCB, Bhopal, who will be the nodal officer
4. Representative of State of PCB
5. Dr. Sarat Chander Lele, EAC Member Coal and Thermal, MoEF&CC, New Delhi.

8. *The Committee may visit the area within one month. The Committee may take into account the earlier reports on the subject and also consider the views of the inhabitants and furnish a report to this Tribunal preferably within two months by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).*

3. Accordingly, a report dated 14.10.2019 has been filed by the CPCB on behalf of the Committee on 15.10.2019. The Committee visited various sites and considered the earlier reports, including maps and the data of air quality as well as water pollution. The Committee then considered the mitigation measures prescribed and their current status including installation of Electro-Static Precipitators (ESPs) and Fluidized Gas Desulfurizers (FGDs) in the Thermal Power Plants. The committee also considered ground water depletion, soil pollution, forest loss and livelihood loss and after detailed study of various aspects made following recommendations:

#### **“4. RECOMMENDATIONS:**

*Based on the above observations, the committee recommends a set of short-term and long-term measures.*

##### **4.1 Short-term measures**

- a. *Requiring all coal mines in Raigarh district to accept fly ash for disposal through OB dump and back-filling. (Action by respective Coal mine companies).*
- b. *Given the seriousness of improper fly ash dumping in low lying areas, and the practical difficulty in rigorously monitoring the implementation of the recent SOP in the field, no further disposal of fly ash in low-lying areas by TPP/CPP companies to be permitted and all Gram Panchayats in Raigarh district to be directed to stop issuing NOCs for the same.*
- c. *Requiring that whatever coal is being supplied to JPL and JSPL from Gare Palma IV/2&3 should be transported through the already existing **closed***

**conveyor belts** and no such coal transport should be allowed via trucks. (Action by SECL).

- d. Establishment of monitoring cell by PHED to monitor water quality being used by the residents of villages and provide pretreatment facility and removal of geogenic contaminants and anthropogenic contaminants before its use as drinking water. Specifically, the quality of water treatment in the mine-supported water supply system in village Kondkhel needs to be ensured by PHED as per drinking water norms.
- e. Installation of adequate number of CCTV and CAAQM stations in coal mining area. Proper records under CCTV coverage shall be maintained by coal mines to ensure movement of covered trucks loaded with coals and regular and comprehensive operation of sprinklers in coal zone, stockyard and all mine roads. CAAQMS shall be connected to CECB/CPCB server, and also displayed on the mine gates for public information. (Action by respective coal mine companies).
- f. Proper repairing and maintenance of roads both inside and outside the mine area to ensure smooth movement of trucks and other load carrying vehicles. (Action by Public Works Department and respective mining companies). Indian Railways to be directed to submit a time-bound action plan for commissioning of the railway line in Tamnar and Gharghoda blocks to ensure all coal transportation by rail.
- g. Proper and free health care facilities with multispecialty treatment system may be provided in all coal mine-adjacent villages as per the recommendations of the committee report of 14.6.2019 in the Dukalu Ram (OA 314/2014 CZ) case. (Action by respective coal mine companies).
- h. Strict vigilance by MOEFCC for green belt development compliance as per EC conditions.
- i. We also recommend that **no further conversion of UG mines to Open Cast mines** be permitted in Tamnar and Gharghoda, keeping in mind the environmental costs in terms forest loss, major noncompliance in pollution control and social cost (rehabilitation).

#### 4.2 Long-term measures

- a) **Based on evidence summarised above, the committee is of the opinion that the Tamnar-Gharghoda block region is close to exceeding**

**its environmental carrying capacity.** However, the precise extent of current environmental load and the likely impacts of future mining and industrial activities has to be worked out through a detailed and comprehensive **environmental load carrying capacity study, to be carried out by a reputed environmental research institute or a consortium of such institutes over a 24-month period.**

i) The study must cover dimensions of air pollution (especially PM2.5), water pollution and ground and surface water depletion, soil contamination, forest and biodiversity loss, and social and health impacts.

ii) Moreover, given the geography of the region, the study must assess the carrying capacity separately for two different subregions: the northern Tamnar (coal mining related) block and Gharghoda block. Moreover, since Chhal open cast mine located in southern Dharamjaigarh block is located on the bank of Mand River and therefore in an eco-sensitive zone, a baseline study of this region may also be carried out. The southern Tamnar subregion has already been studied for environmental load carrying capacity by IIT Kharagpur (report submitted to CECEB in 2018) and it has already recommended strict regulation of any further industrial development in particular parts of the sub-region through a high-level committee.

iii) Mode of commissioning of this study may please be decided by the Hon'ble NGT, and necessary directions may please be issued accordingly.

**b) To reduce the pollution and other impacts caused by road transport** of coal and other minerals, directions may be issued that coal transport by road from coal mines or to thermal power plants in these two blocks will be permitted only for 1 year, after which transport must be done by rail or closed conveyor belt only.

**c) Condition of greenbelt development** may be incorporated at TOR stage of EC application to ensure that greenbelt work shall be in place at the time of final presentation for obtaining EC, which shall be verified by MOEFCC. Further, while granting TOR, EAC should specify the location of the greenbelt to provide buffer between coal mine and human settlements, and specify a sufficient width of the greenbelt for the same.

**d) Ministry of Coal be directed to include the necessary provisions *to ensure the acceptance of fly ash* in coal mines for disposal through OB dump and back-filling as per fly ash notification of 2009.”**

4. We find that the recommendations are based on relevant studies and need to be implemented by the concerned power plants and mines in the area for protection of environment and the public health and the environmental rule of law.

5. The applicants have, while broadly expressing satisfaction with the report, made certain suggestions. First suggestion of the applicants is that carrying capacity assessment must be expeditiously carried out and till such assessment is done, expansion and new projects should be only after thorough evaluation. Further suggestion is that there should be a mechanism to oversee the remedial measures, including oversight of health mitigation measures suggested by the Committee.

6. We are of the view that since serious deficiencies have been found and there is potential for damage to the environment as observed in the report, the 'Precautionary' and 'Sustainable Development' principles require that any further expansion or new projects in the area should be allowed after thorough evaluation only and mechanism for remedial measures should be in place, including oversight of measures for health mitigation. The Committee already constituted in terms of order of this Tribunal dated 22.07.2019 will act as an Oversight Committee. The nodal agency for the purpose will be the CPCB. Meeting of the Committee may be held atleast once in two months or at such interval as may be decided by the Committee. Mitigation measures for health issues may be overseen

by the Principal Secretary, Health, Govt. of Chhattisgarh. For this purpose, the existing arrangements in the local areas may be reviewed and further strengthened to meet the requirements. The Principal Secretary, Health, Govt. of Chhattisgarh will be at liberty to issue appropriate directions to the concerned project proponents also for their initiatives out of CSR funds. The Committee may give a status report on the issue as on 30.06.2020 by 15.07.2020 by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in). The Oversight Committee may issue appropriate directions to the project proponents for other remedial measures.

7. The above report may be looked into and acted upon by the Ministry of Coal as well as MoEF&CC for such further action as may be necessary.

A copy of this order be sent to the CPCB, Principal Secretary, Health, Govt. of Chhattisgarh, Ministry of Coal as well as the MoEF&CC by e-mail.

List for further consideration on 28.07.2020.

Adarsh Kumar Goel, CP

Dr. Nagin Nanda, EM

Siddhanta Das, EM

February 27, 2020  
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