

Item No. 04

**BEFORE THE NATIONAL GREEN TRIBUNAL
CENTRAL ZONE BENCH, BHOPAL
(Through Video Conferencing)**

**Original Application No.128/2023(CZ)
(I.A.No.04/2024) (O.A.No.564/2023 - PB)**

News item titled “Unbridled illegal mining next to officers:
Video: Overloaded dumpers in front of Police”
appearing in Dainik Bhaskar dt. 08.09.2023

..Suo Motu

Date of Hearing: **22.02.2024**

**CORAM: HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER**

For Applicant (s): None

For Respondent(s): Mr. Yadvendra Yadav, Adv.
 Ms. Prachi Mishra, Adv.

ORDER

1. Heard the argument and perused the record.
2. The issue of large scale of illegal mining using heavy materials and machines in Jathiyana Hill just next to the Alwar District Headquarter was reported in violation of MoEF notification and environmental rules.
3. The matter was taken up by this Tribunal and a committee was constituted to submit the factual and action taken report in addition to that respondents were also directed to submit their reply. The respondent nos. 1 and 5 have filed the reply with the facts that :-
 - i. The illegal mining on the Hill is being conducted by local residents of Jathiana Village, permanently settled around the foot of the Hill.
 - ii. Hon'ble High Court of Rajasthan at Jaipur in Sanjay Kumar Garg vs. State of Rajasthan & Ors. DB Civil Writ Petition No. 9458/2018 directed the District Collector to form a Special Investigating Team (SIT) to conduct raids and to control the illegal mining.
 - iii. Hon'ble the High Court of Rajasthan, Jaipur again in W.P.

(Civil) No. 467/2014 directed the Chief Secretary, Government of Rajasthan to take effective steps to curb illegal mining.

- iv. The Mining Department has reported the registration of more than 20 FIRs pertaining to illegal mining.
- v. It is pertinent to note that in the FIR No. 39/2023 dated 31.10.2023, Point 12 details the First Information Contents which categorically states that upon information received from the police Department, Mining Department sent Border Home Guards to the location along with the Police Officers, and when the JCB and Tractor loading illegally mined rock were approached, women from the surrounding houses came out and blocked the government vehicle not allowing them to move forward. This incident is suggestive of the submission made hereinabove regarding the illegal mining being done by the local residents of the Jathiana Village who have paved illegal pathways leading up to the Hill out of their own houses and interfere with the adjudication of the public servants.
- vi. The Department of Mines and Geology has also issued 14 Challans since 2020 to 2023, against the Vehicles which were involved in illegal mining of masonry stone, chinnai stone, and khanij stone and the penalty amount has been recovered.
- vii. Mining Engineer of the Department also wrote to the Police personnel vide letter dated 26.09.2023 and letter dated 10.10.2023, regarding an FIR registered on 13.09.2023 against 13 persons collectively requesting to arrest the concerned people and also to give the status of all such FIRs registered with respect to the Jathiana Hill.
- viii. That all the vehicles which have been found to be transporting bajri and other stone which have been illegally mined from the Hill, have also been compounded.

4. The matter was taken up by this Tribunal on 21.11.2023 and this Tribunal observed as follows :

“The perusal of the report and reply reveals that there are serious violation of environmental rules, complete lawlessness in the area by use of threat and force even to the Police Department the illegal mining is continued. The reply reveals that the Govt. vehicle was blocked and not allowed to move forward by the violators of law.

It shows either the administration department is careless, negligent and not performing the duty seriously, fairly and honestly or they are also involved in promoting the illegal mining and thus directly and indirectly causing loss to the State Exchequer. The release of vehicles are completely violation of law laid down by this Tribunal and the directions issued in original application no. 360/2015 titled NGT Bar Association vs Balvinder Singh etc. which provides the seizure and release of the vehicle involved in the illegal mining as follows :-

“Seizure and Release of vehicles involved in illegal mining

1. Another issue bearing on the enforcement mechanism is the action against the vehicles used in illegal sand mining. Seizure of such vehicles is required and release of seized vehicles lightly defeats the purpose of the coercive measures. Since the vehicles are in a way weapon of offence, the same cannot be dealt with in the manner disputed property is dealt with under section 451 Cr.PC. by releasing the same in favour of the ostensible owner by taking an entrustment/indemnity bond/sapurdginama. In Sujit Kumar Rana, (2004) 4 SCC 129 and order dated 26.03.2019 in Cr. A. 524/2019, State of Madhya Pradesh v. Uday Singh, it was held that special procedure for seizure and release of such vehicles prevails over the procedure under Section 451

Cr.P.C. This Tribunal earlier directed, in the case of illegal mining in Meghalaya that such vehicles should be released only on the payment of 50% of the showroom value. The same was affirmed by the Hon’ble Supreme Court in 2019 (8) SCC 177. Similar order was passed by the Tribunal on 10.01.2019 in O.A. No. 670/2018, Atul Chouhan v. State of U.P., which stands affirmed by the Hon’ble Supreme Court vide order dated 07.05.2019 in C.A. No. 1590/2019. Thus, the procedure under Cr.P.C. for release of vehicles on superdari without stringent conditions would not apply in respect of action taken for enforcement of Sustainable Guidelines issued under the Environment (Protection) Act, 1986 (EP Act) and for enforcement of orders of this Tribunal under Section 15 of the National Green Tribunal Act, 2010 (NGT Act). However, having regard to the difficulty expressed by the State that requirement to pay 50% of the showroom value of the vehicle was resulting in vehicles not being released at all, the earlier order was modified on 19.02.2020 to the effect that following scale of amount be recovered for release of the seized vehicles:-

Sr. No.	Category of Vehicle	Penalty Amount
1	Vehicles/Equipments/Excavators with showroom value more than Rs. 25 lacs and less than 5 years old.	Rs. 4 lacs
2	Vehicles/Equipments/Excavators with showroom value more than Rs. 25 lacs and more than 5 years but less than 10 years old.	Rs. 3 lacs
3	For the remaining Vehicles older than 10 years/Equipments/ Excavators which are otherwise legally permissible to be operated and not covered by Serial No. 1 and 2.	Rs. 2 lacs

Note – I:	<i>On repetition of the offence by the same vehicle/ equipment, Order dated 05.04.2019 will be applicable.</i>
Note – II:	<i>The option of release may be available for a period of one month from the date of seizure and thereafter, the vehicles may be confiscated and auctioned.</i>

2. *Following further directions were issued :-*

“6. The State may issue an appropriate Office Order/Rule to the above effect and publish the same. Needless to say that any private contract between a financier and a debtor cannot affect the States’ sovereign power to protect the environment and take incidental coercive measure for enforcement of rule of law. Lien of the State will override any private interest. The above compensation regime will be over and above any existing Rules or provisions. The amount collected may be remitted to the State PCBs/PCCs for being utilized for restoration of the environment.

7. The above course of action will be permissible to all the States at their option.”

Scale of compensation for violations on polluter pays principle

3. *Vide order dated 17.08.2020, the Tribunal considered the CPCB report dated 30.01.2020, in pursuance of earlier orders on scale of compensation to be recovered for violation of norms for mining on polluter pays principle and the matter was deferred for further consideration of such scale and further orders in the light of the EMGSM 2020. On the issue of scale of compensation for violations, the Tribunal held that the same has to be calculated having regard to the polluter pays principle and not mere loss of royalty. This requires taking into account value of the illegally mined material and cost of restoration of the environment. CPCB did the exercise by constituting an expert Committee. The Tribunal considered the report as follows:-*

- “8. The Committee considered two approaches:
- (I) Approach 1: Direct Compensation based on the market value of extraction, adjusted for ecological damages.
 - (II) Approach 2: Computing a Simplified NPV for ecological damages.
9. In the first approach, the criteria adopted is:
- Exceedance Factor (EF).
 - Risk Factor (RF).
 - Deterrence Factor (DF).
10. Approach 1 is demonstrated by Table 1 as follows:

Table No. 01: Approach 1				
Permitted Quantity (in MT or m3)	Total Extraction (in MT or m3)	Excess Extraction (in MT or m3)	Exceedance in Extraction:	Compensation Charge (in Rs.)
X	Y	Z = Y-X	Z/ X	D * (1+RF + DF) Where D = Z x Market Value-of- the-material- per-MT-or-m3
				DF = 0.3 if Z/X = 0.11 to 0.40 DF = 0.6 if Z/X = 0.41 to 0.70 DF = 1 if Z/X >= 0.71
				RF = 0.25, 0.50. 0.75, 1.00 (as per table 2)

11. Approach 2 is demonstrated by following formula:
- “Till such time as data and information for a comprehensive NPV is worked out in a site specific manner to account for all (or atleast the major) ecological damages, a simplified NPV, proxied on the market value of the illegally extracted amount may be computed. In this case the NPV approach would imply that the total benefits from the activity of sand mining (as represented by the market value of the extracted amount) be deducted from the total ecological costs imposed by the activity. In the absence of data on benefits and costs separately, we recommend a modification of the formula as shown below:

*Total Benefits(B) = Market Value of illegal extraction
: D (refer Table 1)*

*Total Ecological Costs = Market Value Adjusted for
risk factor: D* RF (refer Table1).*

For present purposes, it is assumed that the Benefits would accrue only in the first year (in which the extraction of the illegally mined material takes place), while the ecological costs would continue to be felt over a period of time. NPV is to be calculated for a period of 5 years on the net value, $\Sigma (C-B)$, at a discount rate ranging from 8%-5%, varying in inverse with the risk factor. Thus, where the highest risk factor (say 1) is applicable, the discount rate applicable would be the lowest (say 5% in this case)."

12. Final recommendation is as follows:

"Thus, it is recommended that the annual net present value (NPV) of the amount arrived at after taking the difference between the costs and the benefits through the use of the above approach, maybe calculated for a period of 5 years at a discount rate of 5% for mining which is in a severe ecological damage risk zone. The rationale for levying this NPV is based on expert opinion that reversal and/or restoration of the ecological damages is usually not possible within a short period of time and rarely is it feasible to achieve 100% restoration, even if the sand deposition in the river basin is restored through flooding in subsequent years. The negative externalities of the mining activity are therefore to be accounted for in this manner. Ideally, the worth of all such damages, including costs of those which can be restored should be charged. However, till data on site-specific assessments becomes available, this approach may be adopted in the interim. In situations where the risk categorization charged. However, till data on site-specific assessments

becomes available, this approach may be adopted in the interim. In situations where the risk categorisation is unavailable or pending calculation, the following Discount Rates may be considered:

<i>Severity</i>	<i>Mild</i>	<i>Moderate</i>	<i>Significant</i>	<i>Severe</i>
<i>Risk Level</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>Risk Factor</i>	<i>0.25</i>	<i>0.50</i>	<i>0.75</i>	<i>1.0</i>
<i>Discount</i>	<i>8%</i>	<i>7%</i>	<i>6%</i>	<i>5%</i>

5. The adverse impact of unscientific /unregulated sand mining has been discussed as follows :-

“Adverse impact of unscientific/unregulated Sand Mining

- 1. It is undisputed that there is huge degradation of environment on account of unregulated sand mining remains which is otherwise lucrative activity. It poses threat to bio-diversity, could destroy riverine vegetation, cause erosion, pollute water sources, badly affecting riparian ecology, damaging ecosystem of rivers, safety of bridges, weakening of riverbeds, destruction of natural habitats of organisms living on the riverbeds, affects fish breeding and migration, spell disaster for the conservation bird species, increase saline water in the rivers. It has direct impact on the physical habitat characteristics of the rivers such as bed elevation, substrate composition and stability, in-stream roughness elements, depth, velocity, turbidity, sediment transport, stream discharge and temperature. Increase in demand of sand has placed immense pressure in the supply of sand resource and mining activities were going on illegally as well as legally without requisite restrictions. Lack of proper planning and sand management disturbs marine ecosystem and upset the ability of natural marine processes to replenish the sand. The Hon’ble Supreme Court (in Deepak Kumar, supra) noted that core group was constituted by the MoEF&CC to examine the impact of minor minerals on riverbeds and ground waters. A draft report was prepared recommending mandatory preparation of mining plan on the*

pattern of mining plans for major minerals. Further recommendations are reclamation and rehabilitation of abandoned mines, proportion of hydro geo-logical balance for minerals below ground water table limiting depth of mining to 3 meter and identification on locations where mining should be permitted was required. There is need for identifying safety zones in the proximity of intendments. Thus, strict regulatory parameters were required for regulating mining of minor minerals. It was noted that in-stream mining lowers the stream bottom of rivers which may lead to bank erosion. Depletion of sand in the stream bed causes deepening of rivers which may result in destruction of aquatic and riparian habitats. It has impact on stream's physical habitat characteristics.

2. *In State (NCT of Delhi) v. Sanjay, (2014) 9 SCC 772, at page 790, it was observed :*

“32. The policy and object of the Mines and Minerals Act and Rules have a long history and are the result of an increasing awareness of the compelling need to restore the serious ecological imbalance and to stop the damages being caused to the nature. The Court cannot lose sight of the fact that adverse and destructive environmental impact of sand mining has been discussed in the UNEP Global Environmental Alert Service Report. As per the contents of the Report, lack of proper scientific methodology for river sand mining has led to indiscriminate sand mining, while weak governance and corruption have led to widespread illegal mining. While referring to the proposition in India, it was stated that sand trading is a lucrative business, and there is evidence of illegal trading such as the case of the influential mafias in our country.

33. The mining of aggregates in rivers has led to severe damage to rivers, including pollution and changes in levels of pH. Removing sediment from rivers causes the river to cut its channel through the bed of the valley floor, or channel incision, both upstream and downstream of the extraction site. This leads to coarsening of bed material and lateral channel instability. It can change the riverbed

itself. The removal of more than 12 million tonnes of sand a year from Vembanad Lake catchment in India has led to the lowering of the riverbed by 7 to 15 cm a year. Incision can also cause the alluvial aquifer to drain to a lower level, resulting in a loss of aquifer storage. It can also increase flood frequency and intensity by reducing flood regulation capacity. However, lowering the water table is most threatening to water supply exacerbating drought occurrence and severity as tributaries of major rivers dry up when sand mining reaches certain thresholds. Illegal sand mining also causes erosion. Damming and mining have reduced sediment delivery from rivers to many coastal areas, leading to accelerated beach erosion.

34. The Report also dealt with the astonishing impact of sand mining on the economy. It states that tourism may be affected through beach erosion. Fishing, both traditional and commercial, can be affected through destruction of benthic fauna. Agriculture could be affected through loss of agricultural land from river erosion and the lowering of the water table. The insurance sector is affected through exacerbation of the impact of extreme events such as floods, droughts and storm surges through decreased protection of beach fronts. The erosion of coastal areas and beaches affects houses and infrastructure. A decrease in bed load or channel shortening can cause downstream erosion including bank erosion and the undercutting or undermining of engineering structures such as bridges, side protection walls and structures for water supply.

35. Sand is often removed from beaches to build hotels, roads and other tourism-related infrastructure. In some locations, continued construction is likely to lead to an unsustainable situation and destruction of the main natural attraction for visitors—beaches themselves. Mining from, within or near a riverbed has a direct impact on the stream's physical characteristics, such as channel geometry, bed elevation, substratum composition and stability, instream roughness of the bed, flow velocity,

discharge capacity, sediment transportation capacity, turbidity, temperature, etc. Alteration or modification of the above attributes may cause hazardous impact on ecological equilibrium of riverine regime. This may also cause adverse impact on instream biota and riparian habitats. This disturbance may also cause changes in channel configuration and flow paths

.....Today, demand for sand and gravel continues to increase. Mining operators, instead of working in conjunction with cognizant resource agencies to ensure that sand mining is conducted in a responsible manner, are engaged in full-time profiteering. Excessive in-stream sand and gravel mining from riverbeds and like resources causes the degradation of rivers. In-stream mining lowers the stream bottom, which leads to bank erosion. Depletion of sand in the stream-bed and along coastal areas causes the deepening of rivers and estuaries and enlargement of river mouths and coastal inlets. It also leads to saline water intrusion from the nearby sea. The effect of mining is compounded by the effect of sea level rise. Any volume of sand exported from stream-beds and coastal areas is a loss to the system. Excessive in-stream sand mining is a threat to bridges, river banks and nearby structures. Sand mining also affects the adjoining groundwater system and the uses that local people make of the river. Further, according to researches, in-stream sand mining results in the destruction of aquatic and riparian habitat through wholesale changes in the channel morphology. The ill effects include bed degradation, bed coarsening, lowered water tables near the stream-bed and channel instability. These physical impacts cause degradation of riparian and aquatic biota and may lead to the undermining of bridges and other structures. Continued extraction of sand from riverbeds may also cause the entire stream-bed to degrade to the depth of excavation.

Need for regulation under the Water, Air and EP Acts by PCBs, apart from the Mining authorities under the Mining law

3. Again, in Goa Foundation, supra (prs 74-76) it was observed that mining was required to be regulated not only by the Mining department but also by the PCBs under the Water and Air Act and by the MoEF under the EP Act. It is made clear that the environment laws override other laws and any provision to the contrary in the Mines Act will not stay in the way of enforcing the environment norms. In this regard reference may also be made to report of the Ministry of Mines entitled “Sand Mining Framework” which will not stand in the way of modified mechanism in accordance with this order.”

6. Directions has been issued as follows :-

“Interaction for Effective enforcement

1. The above discussion shows that the problem has defied solution and unless tackled seriously, damage to the environment will continue. Clear road map is thus required with effective monitoring mechanism. Report of the Oversight Committee for UP and affidavit of the State of MP, the report from Rajasthan and some other States also show that effective mechanism is lacking. For clarity on all issues, periodic interaction of stake holders, particularly the enforcement authorities is required. This will also facilitate engagement of accredited agencies/experts for preparing DSRs/replenishment studies. In the Central Government, the concerned authorities include Mining Ministry, Environment Ministry, Jalshakti Ministry and CPCB. In States, Departments of Mining, Environment, SEIAA, PCB and District Magistrates.

Enforcement of Monitoring Mechanism and review by the Chief Secretary at State level and Secretary MoEF&CC at National level

2. *We direct all the States/UTs to strictly follow the SSMG-2016 read with EMGSM-2020 reinforced by mechanism for preparation of DSRs (in terms of directions of this Tribunal dated 14.10.2020 in Pawan Kumar, supra and 04.11.2020 in Rupesh Pethe, supra), Environment Management Plans, replenishment studies, mine closure plans, grant of EC (in terms of direction dated 13.09.2018 in Satendra Pandey, supra), assessment and recovery of compensation (as per discussion in Para 25), seizure and release of vehicles involved in illegal mining (in terms of order dated 19.02.2020 in Mushtakeem, supra), other safeguards against violations, grievance redressal, accountability of the designated officers and periodical review at higher levels. As already noted, EMGSM-2020 contemplates extensive use of digital technology, including remote sensing.*
3. *We further direct that periodic inspection be conducted by a five-members Committee, headed and coordinated by the SEIAA and comprising CPCB (wherever it has regional office), State PCB and two expert members of SEAC dealing with the subject. Where CPCB regional office is not available, if MoEF&CC regional office is available, its Regional Officer will be included in the Committee. Where neither CPCB nor MoEF&CC regional office exists, Chairman, SEIAA will tie up with the nearest institution of repute such as IIT to nominate an expert for being included in the Committee. Such inspection must be conducted at least thrice for each lease i.e. after expiry of 25% the lease period, then after 50% of the period and finally six months before expiry of the lease period for midway correction and assessment of damage, if any. The reports of such inspections be acted upon and placed on website of the SEIAA. Every lessee, undertaking mining, must have an environment professional to facilitate sustainable mining in terms of the mining plan and environmental norms. This be overseen by the SEIAA. Environment Departments may also develop an appropriate mobile App for receiving and redressing the grievances against the sand mining, including connivance of the authorities and also a mechanism to fix accountability of the concerned officers.*

Recommendations of the Oversight Committee for the State of UP quoted earlier may be duly taken into account.

The mechanism must provide for review at the level of the Chief Secretary at least once in every quarter, in a meeting with all concerned Departments in the State. The Chief Secretary UP may ensure further action in the light of the report of the Oversight Committee.

Similarly, at National level, such review needs to be conducted atleast once in a year by the Secretary, Environment in coordination with the Secretaries Mining and Jalshakti Ministries the CPCB.”

5. The matter was taken up by this Tribunal on 21.11.2023 and this Tribunal directed the State Pollution Control Board as follows :

Accordingly, in all those cases in which the vehicle were seized by the police department or the mining department, the penalty must be assessed in accordance with the above criteria thus State PCB, Rajasthan is directed to immediately take steps to calculate the above penalty and rest of the amount must be recovered and action taken report be submitted to this Tribunal within 15 days.

6. In compliance of the previous order respondent no. 1 & 5 has submitted the further action taken report as follows:

- i. That Respondent No. 1 & 5 have successfully ensured the cessation of illegal mining around the Hill. In view of ensuring such illegal mining several steps were taken to curb and prevent the menace of illegal mining on the Hill.
- ii. That the Answering Respondents have been continuously conducting regular inspection visits at the site, i.e., around the Hill on 30.11.2023, 04.12.2023, 08.12.2023, 11.12.2023 and 21.12.2023. Upon making such surprise inspection visits by the Surveyor (Mining Engineer) accompanied by the Home Guards of the Mining Department, off-late it has reported that neither any vehicle/labourer/machinery was found on the sites conducting illegal mining nor any vehicle transporting

stone was found. True Copies of Mauka Reports of all such inspection visits are being annexed herewith and marked as Annexure R-A (Colly).

- iii. Moreover, on the site inspection visit dated 21.12.2023, the Answering Respondents authorized deepening of the already dug up trench around the Hill, impairing any vehicles from approaching the Hill. True Copies of Photographs representing the trench being deepened around the Jathiana Hill are being annexed herewith and marked as Annexure
- iv. The Respondent No. 1 and 5 are also in the process of establishing fence around the Hill funded by the District Mineral Foundation Trust to prevent the approach of any potential illegal miners and/or mining vehicles towards the Hill. Furthermore, authorization of Field Staff of the Mining Department, who are accompanied by Border Home guards is also being proposed so as to facilitate regular patrolling of the Hill.

7. The Learned Counsel for the Respondent nos. 1 & 5 have moved an application to implead the persons in a given list which is of more than 41 in numbers against whom some investigations are either pending or charge sheet have been filed or FIR has been disposed of according to the existing rules. Since all those matters are at the stage of investigation or trial, thus it would not be appropriate to further proceed unless the decision is taken by the competent court. Learned Counsel for the respondent have further argued that the department may calculate the environmental compensation against all those persons and after giving an opportunity of hearing will proceed according to rules.

8. Accordingly, we direct as follows :

- i. The Member Secretary, Rajasthan State Pollution Control Board and the Director, Mining Department of Mines and

Geology, Alwar, Rajasthan will personally monitor the action taken in this case and to enforce the rule and law. In light of the order of Hon'ble Supreme Court of India in *Deepak Kumar vs State of Haryana* (2012) 4 SCC 629 and *Goa Foundation vs, Union of India and Ors.* (2014) 6 SCC pg. no. 590, Sustainable Sand Mining Management Guidelines, 2016 & The Enforcement and Monitoring Guidelines for Sand Mining, 2020.

- ii. State PCB is further directed to calculate the environmental compensation for degradation of the environment against the illegal mining according to the parameter laid down by the CPCB or the National Green Tribunal in accordance with the above criteria or the criteria which fixed by the state of Rajasthan which may not be lesser than the criteria prescribed by the CPCB.
 - iii. State Pollution Control Board is further directed that the environmental compensation for the seizer of the vehicles and against the violators should be calculated and notice should be issued against them and after giving an opportunity of hearing to dispose and finalise the environment compensation and to proceed to realise it in accordance with the rules.
9. With these observations the Original Application No. 128/2023(CZ) stands **disposed** of accordingly.

10.

Sheo Kumar Singh, JM

Dr. Afroz Ahmad, EM

22nd February, 2024
O.A. No. 128/2023 (CZ)
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