

**REPORT OF THE JOINT COMMITTEE IN O.A No 194 OF 2020 AS PER ORDER  
DATED 07.10.2020 OF HON'BLE NATIONAL GREEN TRIBUNAL  
(SOUTHERN ZONE), CHENNAI**

**1.0 PREAMBLE**

In the Original Application No. 194 of 2020 (SZ), filed by Shri. Sarvabhoom Bagali Vs State of Karnataka, the Hon'ble National Green Tribunal (NGT), Chennai issued an Order on 07.10.2020 with the following directions:

*“ 11. In order to ascertain the impact of such conditions on Environment, we feel it appropriate to appoint a Joint Committee comprising of 1) a Senior Scientist from Regional Office, Ministry of Environment, Forests and Climate Change (MoEF&CC), Regional office, Bangalore, 2) a Senior officer from State Environment Impact Assessment Authority (SEIAA), State of Karnataka 3) Senior officer from Central Pollution Control Board and 4) Senior Officer from Director of Mining and Geology of the respective Districts namely, Gadag, Raichur and Kalburgi of State of to inspect the areas in question and submit a factual and consider the nature of conditions imposed, its impact on sand mining whether they are in violation of the Sustainable Sand Mining Policy issued by the Ministry of Environment, Forests and Climate Change (MoEF & CC), Whether there are any violations committed by the persons to whom the Environmental Clearances were granted regarding excess mining than the quantity permitted and the depth of mining that is being done and what is the impact of environment on account of use of semi mechanised machineries for the purpose of sand mining which is not permissible as per the Sustainable Sand Mining Policy of 2020 as well and if any violation is found to assess the environmental compensation and also further action taken to rectify the deficiency if any, in the conditions imposed and submit a factual as well as action taken report.*

*12. State Environment Impact Assessment Authority Bangalore shall be the nodal agency for coordination and also for co-ordination and for providing all necessary logistics for purpose”.*

**2.0 COMPOSITION OF THE JOINT COMMITTEE**

Based on the directions of the Hon'ble NGT, State Environment Impact Assessment Authority, Karnataka being the Nodal Institution sought nominations from all the concerned agencies and pursuant to receipt of nominations, a Joint Committee with the following Members was constituted:

1	A Senior officer from Regional Office, Ministry of Environment, Forest and Climate Change (MoEF&CC), Bangalore	<b>A. Sri.E.Thirunanavukkarasu, (For Raichur)</b> Scientist-“E”/ Additional Director <b>B. Dr. Murali Krishna, (For Gadag)</b> Scientist-“D”/ Joint Director, <b>C. Dr. S. Prabhu For Kalburgi)</b> Scientist-“C”/ Deputy Director
2	A Senior officer from Central Pollution Control Board (CPCB)	<b>Smt. Anjana Kumari V</b> Scientist “D”, CPCB, Regional Directorate, Bangalore
3	Senior Officer from Department of Mining and Geology, Gadag District	<b>Sri.Rajesh D.S</b> Senior Geologist, Gadag
4	Senior Officer from Department of Mining and Geology, Raichur District	<b>Sri. Vishwanath. M</b> Senior Geologist, Raichur
5	Senior Officer from Department of Mining and Geology, Kalburgi District	<b>Sri.Mohan S</b> <b>Deputy Director (In charge),</b> DMG, Kalburgi
6	A Senior officer from State Environment Impact Assessment Authority (SEIAA), Karnataka	<b>Sri. Kiran Kumar. B.S</b> Scientific Officer Grade-1, Department of Forest, Environment and Ecology,

The Joint Committee comprising of following officials inspected a total of 38 project sites in the districts of Raichur, Gadag and Kalburgi during the months of November and December 2020 to ascertain the factual status of compliance to Environmental Clearance (EC) conditions. During the inspections, the following officials from the office of DMG also accompanied the Joint Committee:

1. Sri. Pushpalatha, Deputy Director, DMG
2. Sri. Gopi Krishna, Geologist, Raichur
3. Sri. Syed Fazil, Geologist, Raichur
4. Sri. Manjunath. Geologist, Raichur
5. Sri.Umesh, Geologist, Gadag

6. Sri. Santhosh. Geologist, Gadag
7. Sri. Chauhan. AEE, Kalaburgi, DMG.
8. Sri.Riyaz,Geologist, Kalaburgi, DMG.

### **3.0 PROCEDURE FOR GRANT OF SAND MINING LEASES IN THE STATE OF KARNATAKA**

During the inspection the Joint Committee had discussions with concerned officials of Department of Mines & Geology and obtained the information on procedure followed in issuing of Grant of Lease for sand blocks in river bed, nala & patta lands. The brief note on procedure followed is given below:

#### **3.1 PROCEDURE FOLLOWED IN GRANTING LEASE**

As per the Sustainable Sand Mining Policy-2016 and 31(R) of Karnataka Minor Mineral Concession Rules -1994 (KMMCR) of amendment of 2016, Sand blocks will be inspected and identified with co-ordinates in river bed & Nalas for the purpose of Tender-Cum-Action or reservation for Government works. With the assistance of Departments of Revenue, PWD, Forests, and DMG the approximate quarriable sand available in each identified block is estimated by restricting quarrying depth to 1 to 3 meter or water level whichever is less.

After recommendations of the Taluk Committee, District Committee notifies in the official Gazette for grant of quarrying lease through auction for sand quarrying or extraction by Government Departments.

Tender-cum-auction is done through online. Highest price offer is declared as the successful bidder; the successful bidder obtains Quarry Plan, Environmental Clearance, as per Chapter-II-A of KMMCR-1994 of amendment of 2016. Sand quarrying permission is issued up to a period for five years. The sand leases are sanctioned in patta land as per the State Government notification after obtaining quarry plan & Environmental Clearance for the period of five years.

The District Level Sand Monitoring Committee ensures stipulation of following conditions as per the New Sand Policy, 2016, KMMCR, 1994 and Amendment,2016 and as per the Sustainable Mining Management Guidelines,2016:

- a) No sand quarrying shall be undertaken without a quarrying plan and Environmental Clearance.
- b) Lessee shall make Stockyard, Office, CC Camera, Weigh Bridge near to the sand block.
- c) Quarrying shall be done in accordance with MOEF Guidelines.

- d) Instream, mining sand extraction and loading to vehicles directly from river is prohibited. So, lessee should store mining sand in stockyard.
- e) Lessee should mine as per the mine plan without damaging safety zone and riverbed.
- f) Sand quarrying activity shall be in accordance with terms and conditions of the EC
- g) The sand has to be mined in the sand lease blocks and to be stored in stockyard.
- h) No Sand quarrying shall be allowed within a radius of 500 meters from water supply.
- i) Permits shall be issued to vehicles having GPS.
- j) The vehicles having non-communication mode, shall not be issued with permit and shall not be allowed to load sand.
- k) Permits issued for transportation of Sand shall be obtain sign in the Check Post.
- l) Mechanized boats and dredgers in river sand quarrying are prohibited.
- m) Usage of backhoe equipment like JCB is allowed as per Chapter IV – B, 31-R of Karnataka Minor Mineral Concession Rules -1994 & its amendments.
- n) Sand stored in stockyard, shall be disposed by issuing Computerised Mineral Dispatch Permits (CMDR) to the transporters.

#### **4.o. DELIBERATIONS OF THE JOINT COMMITTEE**

**Hon'ble National Green Tribunal in its order dated 07.10.2020 directed the Joint Committee to look into the following:**

- i. to inspect the areas in question and consider the nature of conditions imposed, its impact on sand mining whether they are in violation of the Sustainable Sand Mining Policy issued by the Ministry of Environment, Forests and Climate Change (MoEF & CC)*
- ii. whether there are any violations committed by the persons to whom the Environmental Clearances were granted regarding excess mining than the quantity permitted and the depth of mining that is being done*
- iii. what is the impact of environment on account of use of semi mechanised machineries for the purpose of sand mining which is not permissible as per the Sustainable Sand Mining Policy issued by the Ministry of Environment, Forests and Climate Change (MoEF & CC) in the year 2016 and Sustainable Sand Mining Policy of 2020 as well and*

- iv. *if any violation is found to assess the environmental compensation and also further action taken to rectify the deficiency if any, in the conditions imposed*

In order to deliberate on the above given Terms of References (ToR), the Joint Committee inspected 36 mines in Gadag & one each in Raichur & Gulbarga Districts. The detailed report of individual blocks of Gadag, Raichur & Kulburgi is given as **Annexure I, II and III** respectively. The Joint Committee had examined various documents like mine lease, Environmental Clearance and the Compliance status with the prevailing regulations and guidelines etc., Based on the above, each ToR has been deliberated in detail and following are the observations/comments:

**4.1. *inspect the areas in question and consider the nature of conditions imposed, its impact on sand mining whether they are in violation of the Sustainable Sand Mining Policy issued by the Ministry of Environment, Forests and Climate Change (MoEF & CC)***

The Joint Committee noted that conditions stipulated in the Environmental clearance are relating to installation of dust control measures, implementation of water conservations measures, advertisement on grant of EC, improvement of transport route, constitution of Environmental Management Cell, Submission of half yearly compliance report to Regional Office of the MoEFCC etc.,

The Joint Committee after perusal of EC's issued to 38 sand mines noted that with regard to area that is allocated for sand mining leases are ranging from 2.20 acres (lowest) to 12.0 acres (highest).

During the visit, mine owners expressed technical difficulties / non-viabilities in installing the dust control measures and implementation of water conservations measures. It is noted that EC stipulated a condition as "*Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including the transfer points should also have efficient dust control arrangement. These should be properly maintained and operated.*"

The Committee opined that the dust extraction could be installed and effectively operated in a closed area, whereas here both the mining as well as the sand storage area are done in an open area and hence it would be technically not feasible. Further, the dust pollution is naturally prevented due to the moisture content and the density of the sand. Moreover, the dust settles down within few meters of the activity (within the site itself) due to density of

sand particle. **In view of the above, the Joint Committee opines that this condition is not so relevant for sand mining operations. Instead of dust extraction, water sprinkling at stock yard may be insisted in the Environmental clearance.**

As regards, water conservation, it is noted that EC stipulates a condition as “ *The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board within 3 months and report be submitted to the Authority.*” In general water conservation involves minimisation of water usage, recycling and rainwater harvesting etc.,. Whereas, in this instant case there is neither water usage nor waste water generation in the sand mining. Since all the mining sites are located either in riverbed or nallas, no separate rainwater harvesting measures are required. **In view of the above, the committee opined that this condition is not so relevant for sand mining.**

As regards, CSR, the mine owners have informed that they pay District Mineral Fund (DMF) which is used in the CSR activities in the vicinity of the project and also carry out certain activities viz distribution of tree saplings, issue of books for the school students etc, hence, stipulation of separate conditions on CSR amounts to duplication. **The Joint Committee noted that for each metric ton of sand an amount of Rs. 5/- is collected as CSR Fee and Rs. 11/- is collected as EMF during the generation of online permits.**

As regards non- constitution of Environmental Management Cell (EMC), the Joint Committee felt that it may not be viable for such mines to have a separate Environment Management cell in view of the number of workers engaged and their educational quality, nature of activity etc, and hence the mine owners may utilise the service of accredited environmental consultant/laboratory for the environmental management instead of having their own EMC.

**In view of the above, the Committee opined that conditions on dust extraction system, water conservation, Environmental Management Cell, CSR need to be revisited. The MoEFCC / SEIAA need to consider suitable modification of above conditions in the Environmental Clearance for such sand mining projects in future.**

With regard to compliance with Sustainable Sand Mining Management Guidelines, 2016, it is noted that the Sand mining is not allowed in streams and no sand areas are identified for sand mining activity in a pond/tank. Mechanized boats and dredgers in river sand mining are prohibited, however usage of backhoe equipment like JCB is allowed as per Chapter IV– B, 31-R of KMMCR, 1994 & its amendment-2016. Further, the Sustainable mining practices under Sustainable Sand Mining Management Guidelines, 2016, provides the following:

*“Depending upon the location, thickness of sand, deposition, agricultural land/riverbed, the method of mining may be manual, semi mechanized or mechanized”.* In many sand leases in Yamuna River semi mechanized method is allowed by MoEFCC. Copy of an EC is enclosed at **Annexure-IV**.

**The above reveal that the conditions of Environmental Clearance are in line with the Sustainable Sand Mining Policy.**

**4.2. *whether there are any violations committed by the persons to whom the Environmental Clearances were granted regarding excess mining than the quantity permitted and the depth of mining that is being done***

**Depth of Mining:** According to the DMG, the mining sites are periodically inspected, and the encroachment and depth of mining are monitored. Since all the storage and movement of mined materials are monitored through geo-fencing, computerised e-permit, transport through GPS fitted vehicle, any excess mining either through encroachment of outside mine lease area or beyond the depth permitted, will be traced and fine are imposed which is about double the cost of the mined material. Moreover, the sand availability also restricts the depth of mines. In view of the above, in general, the mines are not mining beyond the permitted depth.

The Joint Committee after perusal of EC's issued to 38 sand mines noted that with regard to depth of mining activity that is being allowed from case to case varies from depth ranging from 0.145 metres to 3 metres.

Further, the Joint Committee also noted during the inspections that no mine is undertaking blasting/ drilling activities, no mining is done in any streams, no mining is undertaken in safety zone, adequate buffer of 7.5 metres is being left and no mining is being done outside the lease area.

**Excess Mining:** As per the information provided by DMG, Gadag, the EC was granted to the lessee-Srinahalli Block-1 on 13<sup>th</sup> June 2017, more sand deposited in lease area during 2019-20. Therefore lessee has requested for enhancing the annual permitted quantity for 69000 MT/Annum fro 21825 MT approved and also submitted the modified Quarry Plan to Department of Mines & Geology. After field observation, Senior Geologist Department of Mines & Geology Gadag has verified and approved the modified Quarry Plan for 69000 MT/Annum Further lessee has submitted the approved modified Quarry Plan to SEIAA Karnataka. The lessee extracted 13,374.56 MT excess sand in 2019-20 anticipating environmental clearance from SEIAA but couldn't get the clearance. Therefore,

compensation of Rs 81,59,089/- (at the rate of Rs. 609/MT) has been collected from the lease holder.

**4.3. *what is the impact of environment on account of use of semi mechanised machineries for the purpose of sand mining which is not permissible as per the Sustainable Sand Mining Policy issued by the Ministry of Environment, Forests and Climate Change (MoEF & CC) in the year 2016 and Sustainable Sand Mining Policy of 2020 as well.***

**Environmental Impacts due to mining:** The Joint Committee noted that the likely impacts from such mining activity may include noise from the operation of machineries like JCB, dust from mining, loading/ unloading, disturbance to the flora/ fauna if present at/close to the mine site, change of hydrology and related issues if the depth of mining is more etc. and among all the inspected mines, it is noted that the maximum depth being allowed is 3 metres.

**Dust pollution:** The Committee noted that the moisture content in the sand naturally prevents generation of dust pollution. Moreover, the dust settles down within the site itself due to density of sand particle. The ambient air quality monitoring carried out by these mine sites revealed that the dust particles (particulate matter) are within the permissible limit. Water sprinkling is carried out on haul roads to control the dust generated from the plying of vehicles. Joint Committee opines that the transport route from mining site to the stock yard and to main road shall be improved and water sprinkling shall be carried out to control the dust generated from the plying of vehicles. **The Committee noted that no wind barriers provided at many stockyards and hence the proper wind barriers shall be provided on all sides at stock yards to prevent dust pollution.**

**Noise Pollution:** It is learnt from the local that only manual mining is being carried out in the above mines and as per the noise levels monitoring reports the noise level varies are within the permissible limit.

**Eco- Sensitive Area:** The Joint Committee noted that no Eco- Sensitive Area's exist within the vicinity of leased sand mining areas.

**Water Pollution:** The Joint Committee noted that since there is no wastewater generation from the sand mining activities, no water pollution is occurring.

**The Joint Committee opines that impact due to the usage of semi mechanised machineries in mining can be minimised if the above measures are followed and the depth of mining is limited to less than three meters.**

**The usage of semi mechanized, or mechanized mining may be permitted as per the Sustainable Sand Mining Management Guidelines, 2016, only in case of the blocks where the depth of sand deposition is more than three meters and depth of mining can be permitted more than one meter. Mining up to one-meter depth should be by manual only.**

**4.4. *if any violation is found to assess the environmental compensation and also further action taken to rectify the deficiency if any, in the conditions imposed***

According to DMG, Gadag District, out of 36 mines in the District, three mines (**Annexure-V**) have not commenced mining activity and 12 mines (**Annexure-VI**) have carried out mining activity in an average of 15 days only from the lease granted date due to local issues, sand quality and the lease area was continuously submerged. Lease holders produced less than 1000 MT sand from the granted area.

The joint Committee noted that there are certain non-compliances of EC conditions in all other mines ( 21 in Gadag and one each in Kalburgi and Raichur) especially relating to installation of dust control measures, implementation of water conservations measures, advertisement on grant of EC in newspapers, rain water harvesting measures, improvement of transport route, constitution of Environmental Management Cell, submission of half yearly compliance report to Regional Office of the MoEFCC etc,. by almost all the leased sand miners. **The Joint Committee is of the view that imposing such non-relevant conditions in the Environmental Clearance has led to such non-compliances and hence MoEFCC / SEIAA may relook into such conditions while according Environmental Clearance as some of the conditions are practically not-feasible for implementation by small sand mining leases.**

However, as regards the non-compliances of EC, mine owners have been directed to take action to comply with the conditions and submit a Action taken report / Action plan with time schedule. Few Sand mine lease holders have submitted compliance report along with latest ambient air quality monitoring report, noise level report etc,. and the monitoring

reports reveal that all the parameters are within the limit. However, there are few shortcomings such as improvement & maintenance of approach road, wearing of personnel protective equipment by workers, advertisement about grant of EC etc.

**In view of the least importance given by the lease owners on Environmental Clearance compliances and to bring attention and importance on Environmental Clearance, the committee felt that a lump sum amount, say Rs Two to Three lakhs may be imposed on all 23 mines as Environmental compensation.**

**4.5.1. Details of Penalties imposed /collected by DMG for illegal Sand Mining Activities / violations.**

As per the information provided by the DMG, the Joint Committee noted that amongst the inspected 38 sand mines, fines/ penalties have been imposed for certain mines as detailed below:

**Table 1: Details of Penalties imposed /collected by DMG for illegal Sand Mining Activities / violations.**

<b>Sl.No.</b>	<b>Name of the mine lease</b>	<b>Violation</b>	<b>Penalty collected, Rs</b>
<b>Gadag District</b>			
<b>1</b>	Gangapur Sand Mining-Block 1-	The lessee has constructed temporary road in the river and excavation by using Hitachi which is against the EC conditions.  In stream sand mining which is against the EC conditions	5,00,000  1,00,000
<b>2</b>	Gangapura Sand Mining-Block 2	The lessee has constructed temporary road in the river and excavation by using Hitachi which is against the EC conditions.	5,02,880
<b>3</b>	Hesaruru Sand Mining-Block 4		5,02,200
<b>4</b>	Shingatalur Sand	-do-	5,00,000 from

	Mining- Block 1-		each lessee
<b>5</b>	Shingataloor Sand Mining Block 2		
<b>6</b>	Shingataloor Sand Mining- Block 3		
<b>7</b>	Shiranahalli Sand Mining- Block 1 -		
<b>9</b>	Hesarur Sand Mining- Block 2		
<b>10</b>	Srinahalli Block-1	Lessee carried out mining anticipating grant of Environmental clearance.	81,59,089
<b>Kaburgi District</b>			
<b>11</b>	Ghattaraga- Block 15	Lessee transported sand without permit	85,04,039 (Lessee sought a waiver from Court for remaining balance of Rs. 83,51,700/-)
<b>Raichur District</b>			
<b>12</b>	Joladahadegi- Block 2	The lessee undertaken 127 trips of sand mine without permit  For using heavy machinery (Hitachi)	19,01,952  2,00,000

**4.4.2 Environmental Compensation:** It can be seen from the above tables that there is excess sand mining by one of mine lease- Srinahalli Block-1. The EC was granted to the lessee-Srinahalli Block-1 on 13<sup>th</sup> June 2017, more sand deposited in lease area during 2019-

20. Therefore lessee has requested for enhancing the annual permitted quantity for 69000 MT/Annum fro 21825 MT approved and also submitted the modified Quarry Plan to Department of Mines & Geology. After field observation, Senior Geologist Department of Mines & Geology Gadag has verified and approved the modified Quarry Plan for 69000 MT/Annum Further lessee has submitted the approved modified Quarry Plan to SEIAA Karnataka. The lessee extracted 13,374.56 MT excess sand in 2019-20 anticipating environmental clearance from SEIAA but couldn't get the clearance. Therefore, compensation of Rs 81,59,089/- (at the rate of Rs. 609/MT) has been collected from the lease holder.

The Joint Committee has calculated environmental compensation based on the Judgement of Hon'ble NGT(PB) dated 26.02.2021 in OA 360 of 2015.

**Table 3: Details of the Environmental compensation**

<b>Sl.No</b>	<b>No Name of the lessee</b>	<b>Excess mined Quantity, MT</b>	<b>Environmental compensation calculated based on the above, Rs</b>	<b>Penalty collected, Rs.</b>
1	Srinahalli Block-1	13397.52	86,50,757	81,59,089

Calculation on Environmental Compensation is enclosed at **Annexure- VII**.

It can be seen from the above two table that the Environmental Compensation worked out based on the Judgement of Hon'ble NGT(PB) dated 26.02.2021 in OA 360 of 2015 is more than the penalty levied by DMG. The excess amount may be recovered from the lessee.

## **5.0 CONCLUSION AND FINAL RECOMMENDATIONS**

- i. The Joint Committee observed that the conditions of Environmental clearances are in line with the Sustainable Sand Mining Policy.**
- ii. The Committee felt that the conditions stipulated in the Environmental Clearance such as dust extraction in mineral handling area (storage area), water conservation, etc are not so relevant for these mines hence conditions on dust extraction system, water conservation, Environmental Management Cell, CSR need to be revisited. The mine owners may utilise the service of accredited environmental consultant / laboratory for the environmental**

**management instead of having their own Environment Management Cell. The MoEFCC / SEIAA need to consider suitable modification of above conditions in the Environmental Clearance for such sand mining in future.**

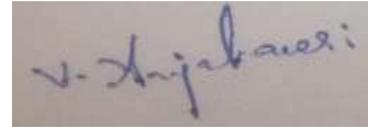
- iii. The usage of semi mechanized, or mechanized mining may be permitted as per the Sustainable Sand Mining Management Guidelines, 2016, only in case of the blocks where the depth of sand deposition is more than three meters and depth of mining can be permitted more than one meter. Mining up to one-meter depth should be by manual only.**
- iv. The District/Taluka Sand Committee & DMG office shall be strengthened with additional manpower & advanced infrastructure facilities for strict vigilance on illegal mining activities.**
- v. Audit on the quantity permitted, quantity mined out, rate of replenishment etc shall be conducted every year.**
- vi. In addition to the imposition of penalty, cancellation of mine lease in case of any violation- encroachment, excess mining etc, and barring the lease owner in participating in Auction for a particular period say one to two years, may be considered.**
- vii. All the relevant Regulations and Guidelines shall be followed strictly in granting mining lease, carrying out the mining activity and monitoring.**
- viii. The CC Cameras at stock yard shall be connected to the servers of District / Taluk Sand Monitoring Committees/ DMG for monitoring.**
- ix. The CC Cameras shall be installed at check post on the sand transport route and connected to the servers of District / Taluk Sand Monitoring Committees/ DMG for monitoring.**
- x. The transport route from mining site to the stock yard and to main road shall be improved and water sprinkling shall be carried out to control the dust generated from the plying of vehicles.**

- xi. In view of the least importance given by the lease owners on EC compliances and to bring attention and importance on EC, the committee felt that a lump sum amount, say Rs. 2-3 lakhs may be imposed on all 23 operating mines as Environmental compensation.
- xii. In case of continuance of non- compliances, the SEIAA, Karnataka to take action as per the powers delegated under S.O 637 (E) dated 28.02.2014

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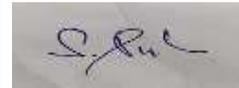
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