

**BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI**

in

O.A.No.106 of 2021 (SZ)

IN THE MATTER OF:

M. Kathirvel

....Applicant(s)

Vs

Union of India Rep by Secretary,  
MoEF & CC, New Delhi and others.

...Respondent(s)

**Joint Committee Report**

**Joint Committee Report**

in

Application No.106 of 2021

**Index**

<b>Sl.No</b>	<b>Particular</b>	<b>Page No.</b>
1	Joint Committee Report	1-11
2	Annexure-A: Photos taken during inspection	12-14
3	Annexure-B: Copy of the Quarry lease	15-33
4	Annexure-C: Environmental Clearance	34-49
5	Annexure-D: Consent for operation under Water and Air Act of Quarry	50-73
6	Annexure-E: Consent for operation under Water and Air Act of crusher	74-89
7	Annexure-F: Analysis reports	90-109
8	Annexure-G: Copy of Chapter-1V in the report	110

- 1 -

**BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI**

in

Application No.106 of 2021

**Joint Committee Report on OA No.106 of 2021(SZ) filed before the Hon'ble National  
Green Tribunal, Southern Zone, Chennai.**

**Introduction**

Vide Order dated 20.5.2021 in O.A No. 106 of 2021, the Hon'ble NGT (SZ) has constituted a Joint Committee comprising of 1) a Senior Officer from Regional Office, Ministry of Environment, Forest & Climate Change (MoEF & CC), Chennai, 2) a Senior Officer from State Environment Impact Assessment Authority (SEIAA), Tamil Nadu, (3) The Revenue Divisional Officer, Karur, (4) The Assistant Director of Geology & Mining, Karur District and (5) a Senior Officer from Tamil Nadu Pollution control Board (TNPCB) as deputed by its Chairman to inspect the unit in question and submit a factual as well as action report, if there is any violation found.

Accordingly, the Joint committee comprising of the following officials visited the site on 28.07.2021 and again on 13.08.2021 in compliance with the direction of Hon'ble NGT vide its order dated 03/08/2021.

<b>S. No.</b>	<b>Name</b>	<b>Department</b>	<b>Designation</b>
1.	Dr. C. Palpandi,	MoEF&CC, IRO, Chennai	Scientist 'C'
2.	Thiru P. Murali	SEIAA, Chennai	Assistant Engineer
3.	Thiru. N.S. Balasubramanian	Revenue, Karur	Revenue Divisional Officer
4.	Dr. P. Jayapal,	Geology and Mining, Karur	Deputy Director
5.	Dr. K. Ravichandran	TNPCB, Karur	District Environmental Engineer

The complainant Thiru Kathirvel house in the farm land, agriculture land and well in the land was also inspected. The farm house of the petitioner was located at distance of 513 meters from the quarry lease boundary and 397 meters from the Crusher unit (Crusher machineries).

The nearby habitation namely Rayagoundanputhur was also inspected. Five houses are located in the habitation and some new construction of houses was noticed in the area at distance of 225 meters from the quarry lease boundary and 505 meters from the Crusher unit.

Photos taken during the visit is at Annexure-A.

**Field Observation of the Committee:**

1. During inspection, quarrying of Rough Stone in the non-leased out area was detected.
2. Sign Board is maintained regarding the details of lease, and also the time of blasting.
3. Barbed Wire Fencing was maintained all along the boundary of the lease hold area.
4. 7.5-meter safety zone was not maintained all along the boundary of the lease hold area.
5. Blasting is carried out by outsource only, no blaster of magazine is maintained in the quarry.
6. Water Sprinkler and Dust Suppression method are maintained in order to control the Air Pollution (Dust Pollution).
7. First Aid Medical Kit is available at the quarry site to give emergency treatment.
8. There is no record available on the Periodical Medical Examination done for the quarry Workers.
9. Mines Office is maintained in site and Mine Surface Plan is kept in the Mines Office.
10. Top soil was stocked in the mine area without maintaining requisite slope and garland drains were also not provided. This may leads to erosion of soil to the nearby areas during rain.
11. One crack was noticed in a house, which was about 80 years old as informed by the house owner and no cracks were noticed in remaining houses and temples in the nearby areas.
12. Green belt was not developed around the mine area and crusher unit.

**Observation of the Committee against each direction given by the Hon'ble NGT (SZ) Vide Order dated 20.5.2021 in O.A No. 106 of 2021 is as follows:**

- 1. The committee is directed to ascertain as to whether the present 11th respondent (Originally 16th respondent) unit is having all necessary clearance and permission.***

The present 11<sup>th</sup> respondent (Originally 16<sup>th</sup> respondent) have quarry lease for quarrying Rough Stone in an extent of 4.86.0 Hects. of patta land in Survey Nos. 571(P), 669 & 670 (P) of Munnur Village, Pugalur(erstwhile Aravakurichi)Taluk of Karur District for a period of 5 Years vide Proceedings of the District Collector, Karur vide Proceeding No.565/Mine/2013, dated:20.02.2015. The period of lease was from 20.02.2015 to 19.02.2020. and expired on 19.02.2020 and Environmental Clearance was obtained from the State Environment Impact Assessment Authority Chennai vide letter No. SEIAA-TN/F.No.2264/EC/1(a)/1281/2014, dated:20.05.2014. The Unit has obtained Consent from the Tamil Nadu Pollution Control Board under Water and Air Act on 21.07.2016 for carrying out quarry operations for the period ending up to 31.03.2019. Further renewal of consent was not issued as the Environmental Clearance issued to the quarry expired on 19/05/2019.

Further, the present 11<sup>th</sup> respondent (Originally 16<sup>th</sup> respondent) have one more quarry lease for quarrying Rough Stone over an extent 2.65.0 hectares of patta lands in S.F.Nos.568/1(Part) and 672(Part) of Munnur village, Pugalur (erstwhile Aravakurichi)Taluk, Karur District for a period of 5 years vide District Collector's Proceedings No.484/Mines/2017, dated:23.10.2017. The lease period is valid from 23.10.2017 to 22.10.2022 and Environmental Clearance was obtained from the District Environment Impact Assessment Authority, Collectorate Karur vide letter No. DEIAA-DIA/TN/MIN/8233/2017-KRR Ec.No.76/2017/Mines, dated:14.10.2017. The unit has obtained Consent from the Tamil Nadu Pollution Control Board under Water and Air Act on 01.11.2017 for carrying out quarry operations for the period ending up to 31.03.2022.

The crushing Unit of 11th respondent (Originally 16th respondent) is located in S.F. No. 667 of Munnur Village, Pugalur Taluk, Karur District and the unit is in operation from the year 2003. The unit manufactures 40,000 T/M, Blue metal jelly of various sizes and M-Sand 10,900T/M. The unit is having valid license of Consent to Operate from the District Environmental Engineer, Karur (TNPCB) for the period ending up to 31.03.2028.

The Stone Crusher Unit has obtained the Consent from the District Environmental Engineer, Karur and installed the following Machineries.

- a) Primary Jaw Crushers - 2 Nos
- b) Secondary Jaw crushers - 4 Nos
- c) Cone Crusher - 1 No
- d) VSI Pulveriser - 2No.
- e) Vibrating Screens - 5 Nos
- f) Sand Washers - 3 Nos

Thus the committee noticed that the unit has obtained all necessary clearance and permission for their operations.

Copy of the Mining lease is at **Annexure-B**, Environmental Clearance is at **Annexure-C** and Consent for operation under Water and Air Act of mine and crusher are at **Annexure-D** and **Annexure-E**.

**2. Whether sufficient pollution control mechanism has been provided, whether any pollution both air, noise and soil pollution has been caused on account of the operation of the unit as alleged by the applicant.**

The unit has installed Air Pollution Control measures for Crushing machineries of Jelly and M-Sand. The unit has also installed DG Set 500 KVA and DG Set 62.5 KVA with Acoustical enclosures with Stack as Air Pollution Control Measures.

The Unit generates 0.7 KLD of Sewage and it is disposed with Septic tank and Soak pit arrangement.

The unit also generates 15 KLD of Trade Effluent from the M Sand Washing and the Unit has provided Settling Tanks for the treatment of Trade Effluent and the treated Trade Effluent is recycled for M Sand washing. The Unit has reported that the makeup water for M Sand washing is obtained from the rain water stored in the Quarry pit.

During the visit it is noticed that the Air pollution Control measures were in operation. The water sprinklers provided in the stone crusher are in operation and water was sprinkled in the vehicle movement area for dust suppression.

As per the analysis report there is no pollution to ground water, soil, air and noise level is also within the permissible limit. The analysis reports are at **Annexure-F**.

**3. Whether any excess mining has been done or mining is being carried out in an area other than the area permitted and if so, what is the nature of action taken.**

During inspection, quarrying of Rough Stone in the non-leased out area was identified and the details of S.F. Nos., Classification, areas under quarrying average depth of the pits and quantity so for quarried and transported without valid permission/Lease are as follows:

Sl. No	Description	S.F. No.	Classification	Area in Sq. mts.	Average Depth in Mts.		Excavated volume in Cu. Mts.	
					Gravel	Rough Stone	Gravel	Rough Stone
1	Non Lease hold area -1	571	Patta	985	2	7.4	1970	7289
2	Non Lease hold area -2	613	Patta	5640	2	15.3	11280	86292
3	Non Lease hold area -3	614	Patta	6382	2	15.3	12764	97644.6
4	Non Lease hold area -4	568	Patta	262	2	16.3	524	4270.6
5	Non Lease hold area -5	672	Patta	2639	2	9.7	5278	25598.3
6	Non Lease hold area -6	673	Patta	1622	2	9.1	3244	14760.2
7	Non Lease hold area -7	674	Patta	233	2	2.7	466	629.1
8	Non Lease hold area -8	667	Patta	63	2.2	--	138.6	--
9	Non Lease hold area -9	668	Patta	297	1.7	--	504.9	--
<b>Total</b>				<b>18123</b>			<b>36169.5</b>	<b>236483.8</b>

It is also noticed that on 20.01.2020 as per the direction of District collector a Joint Committee comprising of (1) Revenue Divisional Officer, Karur, (2) Assistant Director, Geology and Mining, Karur and (3) Tahsildar, Pugalur have been inspected the subject area and noticed that they have quarried Rough stone from non lease hold areas adjacent to the lease area. Accordingly action was initiated against the violators under the provisions of Rule 36(A) of TNMMCR 1959.

In this regard a WP (MD) Nos.3398 & 3399 of 2020 has filed by the violator before the Hon'ble Madurai Bench of Madras High Court and obtained an Order on 20.02.2020 in WMP Nos. 2858 & 2859 of 2020 and the Case is pending before the Hon'ble Court.

4. **If there is any violation found, the committee is directed to assess the environment compensation apart from imposing penalty and royalty for excess mining done has provided under the respective rules.**

The violation noticed was excess quarrying in the non-leased out area and as per the analysis report of water quality, air quality and soil quality no abnormality was noticed except that of Total Dissolved solids, which is a characteristic of ground water in that area. However excess mining may results excess usage of water for dust suppression. As per the Environmental Clearance the daily water requirement of the unit is less than 0.06 m<sup>3</sup> per day for dust suppression.

Therefore, the Environmental Compensation is calculated in accordance with Chapter-IV: Environmental Compensation Rate (ECRGW) for illegal use of Ground Water in the Report of the CPCB In-house Committee on Methodology for Assessing Environmental Compensation and Action Plan to Utilize the Fund which was formulated based on direction given by the Hon'ble National Green Tribunal (NGT), Principal Bench in the matter of Shailesh Singh v/s Central Ground Water Board & Ors. (Original Application No. 327/2018) vide order dated 03/01/2019. Copy of Chapter-1V in the report is at **Annexure-G**.

The committee members who have formulated the CPCB report recommended that the minimum Environmental Compensation for illegal extraction of ground water for domestic purpose will be Rs. 10,000, for institutional/commercial use will be Rs. 50,000 and for other uses will be Rs. 1,00,000/-.

In view of this an environmental compensation of Rs.1,00,000/- is recommended for mining project and Rs.1,00,000/- is recommended for crusher unit in addition to the penalty and royalty for excess mining.

5. The committee is also directed to conduct the soil analysis and also water analysis of water bodies nearby and ascertain as to whether there was any degradation caused on account of the operation of these units and if there is any contamination found, what is the remedial measures to be taken for rectifying the same this may also be incorporated in the report.

During inspection on 28/07/2021 water sample was collected at the following locations and sent to analysis to TNPCB Advanced Environmental Laboratory, Salem and the results are as follows:

Sl. No.	Parameters	Standards (Irrigation Standards) B.P. Ms. No. 30 dated: 21.02.1984	Water Samples			
			Point of Collection & Lab code No			
			Quarry pit in the unit premises	Bore well at the unit premises -I	Bore well at the unit premises-II	Open well at Kathirvel Farm land
			918	919	920	923
1.	pH at 25°C	5.5 to 9.0	7.09	7.22	6.45	6.81
2.	TSS at 103°C – at 105°C (mg/l)	200	4	4	4	4
3.	TDS at 180°C (mg/l)	2100	1216	976	1692	3760
4.	Oil & Grease(mg/l)	10	<4	<4	<4	<4
5.	BOD (at 27°C for 3 days) (mg/l)	100	<2	<2	<2	8
6.	COD(mg/l)	-	16	16	16	96
7.	Ammonical Nitrogen as NH <sub>3</sub> -N(mg/l)	-	2.8	2.24	2.8	3.36
8.	Copper(mg/l)	3	<0.0015	<0.0015	<0.0015	<0.0015
9.	Zinc (mg/l)	1.5	0.1650	0.1451	0.1551	<0.0015
10.	Lead (mg/l)	1	0.5880	0.3806	0.7224	0.651
11.	Cadmium(mg/l)	1	<0.0008	<0.0008	<0.0008	<0.0008
12.	Total Chromium(mg/l)	2	<0.05	<0.05	<0.05	<0.05
13.	Nickel (mg/l)	3	<0.006	<0.006	<0.006	<0.006
14.	Hexavalent Chromium (mg/l)	1	<0.05	<0.05	<0.05	<0.05

Water sample was also collected from the Panchayat bore well located adjacent to the unit .The public of Rayagoundanputhur has also given water sample for testing the water supplied by the Panchayat. The results of analysis are as follows:

Sl. No.	Parameters	Standards Drinking water standards (IS 10500:2012)	Water Samples	
			Point of Collection & Lab code No	
			Panchayat Bore well outside the unit	Bore well sample given by public of Rayagoundanputhur
			921	922
1.	pH at 25°C	6.5 -8.5	6.76	7.29
2.	TSS at 103°C – at 105°C(mg/l)	-	4	4
3.	TDS at 180°C(mg/l)	500 2000**	1056	1380
4.	Oil & Grease(mg/l)	-	<4	<4
5.	BOD (at 27°C for 3 days) (mg/l)	-	<2	<2
6.	COD(mg/l)	-	16	16
7.	Ammonical Nitrogen as NH3-N (mg/l)	-	2.24	2.24
8.	Copper(mg/l)	0.05	<0.0015	<0.0015
9.	Zinc(mg/l)	5	0.0571	0.0554
10.	Lead(mg/l)	-	0.6864	0.8247
11.	Cadmium(mg/l)	0.003	<0.0008	<0.0008
12.	Total Chromium(mg/l)	0.05	<0.05	<0.05
13.	Nickel(mg/l)	0.02	<0.006	<0.006
14.	Hexavalent Chromium	-	<0.05	<0.05
15.	Manganese(mg/l)	0.1	<0.01	<0.01

\*\* Permissible limit of TDS in the absence of Alternate source.

The Bore well located in the unit premises is mainly used for Green belt development and for water sprinkling for dust suppression system. The water in the quarry pit is mainly used for makeup water in M Sand preparation. The report of analysis is compared with the irrigation discharge standards of TNPCB. The samples Code No 918,919 & 920 are meeting the irrigation standards. The water quality of Kathirvel open well is not meeting the irrigation standard. The open well is located about 330m away from the boundary of the unit whereas the panchayat bore well is located adjacent to the compound wall of the unit.

The water quality is not meeting the desirable drinking water standards specified in (IS 10500:2012). Mainly due to the high value of TDS prevails in the area.

The agricultural land in Munnur village and other 19 villages of Karur District are Ayacut area of Athupalayam Reservoir which located on the upstream side. The water source for Athupalayam reservoir is mainly from Noyyal River and water from Noyyal River is diverted through a feeder canal from Muthur barrage in Noyyal River. As the pollution issue of Noyyal River the Athupalayam Reservoir is generally not getting any water from Noyyal. In the year 2004, the Loss of Ecology Authority through Anna University has carried out a study and identified this village as one among the affected village in Karur district due to Noyyal River polluted water.

During the visit it is noticed that the Unit utilize the Water available within the premises for M sand process and also to suppress dust emission by sprinkling. The water used for M sand process is recycled to process after settling in tanks. Therefore the possibility of ground water contamination due to operation of the unit is very meager.

As directed by Hon'ble NGT (SZ) soil samples were also taken from four locations viz unit premises, Kathirvel farm land and sediment from Kathirvel farmland open well for analysis and the results are as follows:

Sl. No.	Parameters	Soil Samples		
		Point of Collection & Lab code No		
		From the Unit premises	From the Kathirvel Agriland	Desilted foil from Kathirvel farmland open well
		924	925	926
1.	pH at 25°C in 5% Solution	6.24	7.01	6.74
2.	TDS at 180°C(mg/l)	21360	2640	3760
3.	Chloride as CL(mg/l)	4100	440	400
4.	Sulphates as SO <sub>4</sub> (mg/l)	7900	280	1480
5.	SAR in 5% Solution	3.0	0.6	0.5
6.	Copper(mg/l)	0.0679	<0.0015	<0.0015
7.	Zinc(mg/l)	1.0521	0.1549	0.7331
8.	Lead(mg/l)	0.2791	<0.015	0.142
9.	Cadmium(mg/l)	<0.0008	<0.0008	<0.0008
10.	Nickel(mg/l)	0.1401	0.0221	0.1214
11.	Manganese(mg/l)	<0.01	<0.01	<0.01

The soil quality results reveals that the dust sample collected from the unit premises and the sediments from the well is saline in Nature whereas high salinity was not noticed in the soil sample collected from the complainant land. The complainant reported that the recent rains has washed away the dust deposit in his land and requested to make inspection during North East wind season. The complainant house and his land is located on the western of the unit. He further added that their land is not affected much during the present wind season of South West wind and they are highly affected during North East wind season of October to November. During inspection no visible dust deposit was noticed in the land.

The unit has provided compound wall and earthen bund on the four side to arrest carryover dust if any due to wind and also noticed that the dust suppression system are in place. Therefore, there is only a less possibility to carry over the dust.

However, the unit has not provided paved metal road within the premises to arrest dust emission during vehicles movement and only water sprinkling is carried out.

### **Recommendations**

- 1) The unit should provide paved metal Road within the premises in the vehicle movement area within a period of two months' time.
- 2) The unit has to improve the green belt development primarily in the earthen bund.
- 3) 7.5-meter safety zone should maintain all along the boundary of the lease hold area.
- 4) The Competent Mining Person has to be appointed shortly in order to supervise the quarrying activities and also to control the Dust Emission by way of water sprinkling and to look after the welfare of the Workers engaged in both in the quarry site and in Unit.
- 5) Top soil stock in the mine area should maintain with requisite slope and garland drains to arrest the erosion.

- 6) During inspection, quarrying of Rough Stone in the non leased out area was detected and the quantity of gravel and rough stone quarried from non leased out area is worked out as 36,169.5 cbm and 2,36,483.8 cbm respectively for which action need to be initiated as per rule 36- A of TNMMCR 1959 and as per the outcome of W.P.3398 & 3399 of 2020 filed before the Hon'ble High Court of Madras, Madurai Bench.
- 7) An amount of Rs. 200000/-(two lakhs) can be levy as Environmental Compensation in addition to the Royalty and Penalty.

*C. Ramnath*  
31/8/2021  
SCIENTIST - C  
MoEF& CC, IRO  
CHENNAI

*P. M. S.* 27/8/21  
ASSISTANT ENGINEER  
SEIAA, CHENNAI

*[Signature]*  
REVENUE DIVISIONAL OFFICER  
KARUR 27/8/21

*[Signature]* 27/8/21  
DEPUTY DIRECTOR  
GEOLOGY AND MINING  
KARUR

*A. S. S.* 27/8/21  
DISTRICT ENVIRONMENTAL  
ENGINEER, TNPCB  
KARUR