

**Joint committee report submitted to the Hon'ble National
Green Tribunal (SZ), Chennai**

1. CASE DETAILS

The Hon'ble National Green Tribunal, Southern Zone, Chennai on its Suo Motu motion have registered an Original Application No. 69 of 2021 (SZ), under the caption "Landslide in Uthiramerur Stone Quarry: one Killed" on the basis of the newspaper report published in Dinamalar Newspaper, Chennai, Edition dated 05.02.2021.

1.1. ORDERS OF THE HON'BLE TRIBUNAL

The Hon'ble National Green Tribunal (SZ) in its order dated 17.02.2021 (**Annexure-1**) has appointed Department of Geology and Mining as a Nodal Agency and also directed to appoint a Joint Committee comprising of (i) The District Collector, Thiruvallur District, (ii) a Senior Scientist from Tamil Nadu State Pollution Control Board (TNPCB) as designated by its Chairman (iii) The Geologist from the Department of Geology and Mining, Chennai to inspect the subject area in question and submit a factual as well as action taken report on the following aspects,

a) If there is any violation found along with the steps already taken by them when they came to know about the incident.

b) If there is any violation of the conditions imposed, either in the mining lease or in the other permission granted and not providing any safety measures or excess mining or unscientific manner in which mining has been conducted, if that be the cause for the incident, suggest further precautionary methods to be taken for the purpose of

considering the question of future course of action as to whether any further permission for quarrying in such areas can be granted taking into account the geological formation of the stones, its feasibility and strength and risk that is likely to be caused in future, if it is continued to be quarry.

c) The committee may also assess the environmental compensation, if there is any violation found and excess mining done and submit a report to this Tribunal.

d) The Hon'ble Green Tribunal further directed the committee to consider the question of cost required for restoring the damage caused to the Environment and the remedial measures to be taken, while submitting the report.

1.2. COMPOSITION OF THE COMMITTEE

In compliance to the Hon'ble NGT [SZ] order,

a) The Commissioner of Geology and Mining vide Rc.No.931/MM1/2021 dated 19.04.2021 has nominated Dr.A.Kalaiselvan, Additional Director of Geology and Mining as a member of the Joint committee vide **(Annexure 2)** Further, in order to assist the Joint committee during the inspection of the quarry site Thiru. D. Gnanavel, Assistant Director, O/o. Commissioner of Geology and Mining, Chennai and Thiru. S. Velu, Sub-Inspector of Survey, O/o. the Assistant Director of Geology and Mining, Tiruvallur had also been deputed by the Commissioner of Geology and Mining **(Annexure-3)**.

b) The Member Secretary, Tamil Nadu Pollution Control Board vide letter No.TNPSC/LAW/NGT/007460/2021 dated 29.03.2021 has nominated Thiru.P Ravichandran, District Environmental Engineer, Kanchipuram District as a member of the Joint committee **(Annexure-4)**.

Accordingly, the nominated members of the joint Committed is given as under.

1. Thiru.P.Ponniah, I.A.S.,
District Collector
Tiruvallur - Member
2. Dr.A.Kalaiselvan,
Additional Director,
Directorate of Geology and Mining,
Chennai-32 - Member
3. Er. P. Ravichandran,
District Environmental Engineer,
Tamil Nadu Pollution Control Board,
Sriperumbudur - Member

In this connection, the status report filed by then District Collector, Kancheepuram before the Hon'ble NGT (SZ) with praying to permit the District Collector Kancheepuram to file joint Committee report instead of District Collector, Tiruvallur and also prayed to 4 week time for filling report. The Hon'ble NGT [SZ] in its order dated 18.06.2021(Annexure-5) The District Collector, Kancheepuram is substituted in the committee **(Annexure-5)**

Accordingly, the revised Member of the Committee are as follows.

1. Dr. M. Aarthi, I.A.S.,
District Collector
Kancheepuram -Member
2. Dr.A.Kalaiselvan,
Additional Director,
Directorate of Geology and Mining,
Chennai-32 - Member
3. Er. P. Ravichandran,
District Environmental Engineer,
Tamil Nadu Pollution Control Board,
Sriperumbudur - Member

1.3. SCOPE OF THE COMMITTEE AS PER ORDER

- (i) To inspect the site and ascertain whether any violation of the conditions imposed in the mining lease, Environmental Clearance and other permissions issued to the proponent.
- (ii) To prepare a report which contains suggestions and precautionary methods to be taken for the purpose of considering the question of future course of action as to whether any further permission for quarrying
- (iii) To assess the environmental compensation, if there is any violation found and excess mining done.

2. JOINT INSPECTION OF THE COMMITTEE

2.1) The Joint Committee have inspected the quarry lease granted area in favour of Thiru D.Sarathkumar in patta lands for quarrying rough stone and gravel in S.F.No.325/4, 109/1A1 and 109/1A2 over an extent of 3.01.50 hectares of Sirudhamur village, Uthiramerur Taluk, Kanchipuram District on 23.04.2021. During the time of inspection, the Deputy Director and Assistant Geologist of Geology and Mining, Kanchipuoram, Assistant Engineer, Pollution Control Board, Sriperumputhur, Tahsildar, Uthiramerur, the Head Surveyor, Uthiramerur, Firka Surveyor and the Revenue Inspector, Arumpuliyur and the Village Administrative Officer, Sirudhamur were also present and assisted at the time of inspection. The lessee Thiru.D.Sarathkumar was also present at the time of inspection of the quarry sites.

2.2) At this stage, as per order of Hon'ble NGT, the revised member of the Joint Committee along with the other officials such as Revenue Divisional Officer of Kancheepuram, Assistant Director and Assistant Geologist of Geology and Mining, Kancheepuoram, Assistant Engineer, Tamilnadu Pollution Control Board, Sriperumputhur, Tahsildar, Uthiramerur, Head Surveyor, Uthiramerur, Firka Surveyor and Revenue Inspector, Arumpuliyur and Village Administrative Officer, Sirudhamur were inspected on 15-07-2021.

3. Observation of the Joint Committee

3.1) The details of quarry lease granted to Thiru.D.Sarathkumar for quarrying rough stone and gravel is tabulated as follows:-

Pro. of the District Collector & date	Taluk & village	S.F.No. & Extent (inhects.)	Lease period	Remarks
<u>Rc.No.79/U3/2018</u> dated 20.12.2018 (Annexure-5)	Uthiramerur, Sirudhamur	325/4, 109/1A1 and 109/1A2. 3.01.50	5 Years (20.12.2018 to 19.12.2023)	Fresh lease (1 st lease)

3.2) The lessee has obtained Environmental clearance from District level Environmental Impact Assessment Authority for a period of 5 years from the date of execution of lease deed vide Lr. No. DEIAA-DIA/TN/MIN/79/Q3/2018 -KPM EC.No.29-2018 dated: 03.10.2018 **(Annexure-6)** subject to the conditions stipulated therein for quarrying of Rough Stone and gravel to the tune of 7,21,040 cu.m and 50,172 cu.m respectively.

3.3) The lessee has also obtained TNPCB consent vide CTO Proc.NO.F.2029SPR/RS/DEE/TNPCB/SPR/W&A/2019 dated 06/02/2019 valid up to 31-03-2023 (**Annexure 7a & 7b**) subject to comply with the conditions in the EC and quarry lease agreement.

3.4) The lessee has enter blasting work contract agreement with Sri Sivakumar S/o Sri Jawahar Udayam Explosives, perugalathur for extraction of quarrying mineral (**Annexure-8**)

3.5) The Officials of Revenue and Survey Departments i.e., the Firka Surveyor and the Village Administrative Officer, Sirudhamur Village had identified the boundaries of the area granted for quarry lease in S.F.Nos.325/4, 109/1A1 and 109/1A2 of Sirudhamur village (**Annexure-9**) and the dimensions of the quarried pit in the area granted had been measured with Total Station instruments.

3.6) The followings violations are observed during inspection in the Lease Hold Areas in S.F.Nos. 325/4, 109/1A1 and 109/1A2.

- i) As per lease deed conditions the required safety distance of 7.5 and 10mts has not been provided to the adjacent Patta and Poramboke lands and quarrying had been carried out in the safety zone area also.
- ii) Boundary pillars have not been erected and maintained all along the boundary of the lease granted area as per rule 36(4) of Tamil Nadu Minor Mineral Concession Rules 1959.
- iii) The lessee has not maintained the 5m height and width of benches with 45 degree slope from horizontal in order to avoiding untoward incident as per regulation 106(2)(a) of the Metalliferrous Mines Regulation 1961 and also the

lessee has not carried out the quarrying operations in a skilful, scientific and systematic manner keeping in view of proper safety of the labourers.

- iv) The lessee has not monitored the quality of the ground water once in 3 month and not conducted any air sampling survey in and around the quarry site as per EC conditions The lessee has not planted any green belt development around the bounty of the quarry site in manner to preservation of environment and ecology of the area as per rule 36 (5) (C) of Tamil Nadu Minor Mineral Concession Rules 1959.
- v) Mining operation is approved up to depth of 62 m (below ground level) in the mining plan / environmental clearance whereas the lessee has carried out the mining operation to depth of 62.6 m i.e beyond the approved depth over an extent of 0.22.0 hec out of 3.01.5 hec.
- vi) As per the pit measurements, it is estimated that a quantum of 74,205 M³ of gravel and 14, 07,888 M³ of rough stone had been quarried from the area granted under lease in S.F.Nos. 325/4, 109/1A1 and 109/1A2.
- vii) The quantity of rough stone permitted for production in the Approved Mining Plan / Environmental Clearance the quantity for which transport permits obtained from the Office of the Assistant Director of Geology and Mining, Kanchipuram (**Annexure-10**) and the actual quantum of minerals quarried and removed within the lease hold area in patta S.F.Nos. 325/4, 109/1A1 and 109/1A2 of Sirudhamur village and non lease hold area in S.F.No.322 (part) grazing malai and 325/5 kallankuttu Government land of Sirudhamur village are tabulated as follows:-

Sl. No	Year	Quantum of mineral permitted for production in the approved mining plan (in M ³).		Quantum of minerals for which transport permits obtained (in M ³)		Actual quantity of minerals quarried and removed (in M ³)		Quantum of Mineral quarried and transported unlawfully (in M ³)	
		Gravel	Rough stone	Gravel	Rough stone	Gravel	Rough stone	Gravel	Rough stone
	1	2	3	4	5	6	7	8=(6-4)	9=(7-5)
1	20.12.2018 - 19.12.2019	50,172	1,45,945	30,300	27,300	74205	14,07,888	24,105	13,40,688
2	20.12.2019 - 19.12.2020	-	1,43,870	19,800	32,700				
3	20.12.2020 - 19.12.2021	-	1,43,405	-	7,200				
Total		50,172	4,33,220	50,100	67,200	74,205	14,07,888	24,105	13,40,688

3.7) Thus, it is estimated that an quantum of 24,105 M³ of gravel and 13,40,688 M³ of rough stone has been quarried and removed from the lease hold area without payment of seigniorage fee.

3.8 Illegal quarry in non-lease hold area:

- i. The lessee has encroached and indulged illegal quarrying operation in the adjacent non lease Government poramboke (Grazing malai) in S.F.Nos. 322 (P) over an extent of 0.63.26 hec and illegally transported to the tune of 15,815 M³ of gravel and 1,62,835 M³ of rough stone.
- ii. The lessee has also encroached and indulged illegal quarrying operation in the adjacent non lease Government poramboke (kallankuttu) in S.F.Nos. 325/5 over an extent of 0.29.0 hec and illegally transported to the tune of of 72,50 M³ of gravel and 1,53,839 M³ of rough stone and thereby the lessee contravened the sub section (1) & (1A) of Section 4 of Mines and Minerals (Development and Regulation) Act, 1957

- iii. Dumping of gravel was noticed in the South eastern side i.e, non lease hold area in S.F.No.322 Government poramboke (Grazing malai). It is estimated that a quantum of 90,954 M³ of gravel was dumped.

Abstract for Quantity of Minerals Quarried and Transported Unlawfully/Illegally

Sl. No.	S.F.Nos.	Extent (in Hec.)	Quantum of the Mineral unlawfully quarried (within the lease hold area)		Quantum of the Mineral Illegally quarried (Outside the lease hold area)	
			Gravel (in M ³)	Rough stone (in M ³)	Gravel (in M ³)	Rough stone (in M ³)
1.	325/4, 109/1A1 & 109/1A2	3.01.50	24,105	13,40,688	--	--
2.	322 (P)	0.63.26	--	--	15,815	1,62,835
3.	325/5	0.29.0	--	--	7250	1,53,839
Total			24,105	13,40,688	23065	316674
Grand Total			1364793		339739	
			1704532 cum			

3.9) The Topographical base plan and details of survey carried out by Sub Inspector of Survey O/o Assistant Director, Geology and Mining, Tiruvallur Dt [camp at Kancheepuram] on 22-04-2021 and 23-04-2021 is enclosed (**Annexure-11a & 11b**).

Photograph taken during inspection is enclosed (**Annexure-12a and 12b**).

4. Action taken after the Incident:

a) The issuance of transport permits to the lessee with effect from 04.02.2021 and also the quarrying operation was suspended by the District Collector vide Roc No.79/Q3/2018, dated 15.07.2021 under Rule 41(10)(ii) of Tamil Nadu Minor Mineral Concession Rules 1959 (**Annexure-13**).

b) The Deputy Director of Mines Safety, Directorate General of Mines Safety (DGMS), Chennai Region, Chennai had inspected the quarry site on 04.02.2021 and he had issued a notice vide letter.No.CNR/FA/Ta-01/2021/1120, dated 07.04.2021 by pointing out the following violation which are the root cause for the fatal accident occurred in the subject area (**Annexure-14**);

- i. The owner of the mine, failed to appoint a duly qualified manager for overall management, supervision, direction and control of the mine. In contravention of regulation 34 of the Metalliferous Mines Regulation, 1961.
- ii. The quarry owner failed to ensure the sides of the open cast workings been adequately benched, sloped or secured so as to prevent danger from fall of sides before Employing person at the bottom of the bench as require under regulation 106(3) of the Metalliferous Mines Regulations, 1961.
- iii. The quarry owner also failed to appoint mining mate and place workings under the charge of the mining mater in contravention of the regulation 39 read with 116 of the Metalliferous Mines Regulations, 1961.

c) Subsequently, the quarry owner requested the Director of the Mine Safety to approve the authorization of Shri Deenapal Pesaramelli as a Manager to his rough stone quarry. Accordingly, DGMS, Chennai vide letter No.518553/Sz/Chennai Region/Perm/2021/8928, dated 16.04.2021(**Annexure-15**) has authorized the request of the lessee. Further, on his request, permission given for using Heavy Earth Moving Machinery without deep whole blasting under regulation 106(2)(b) of the Metalliferous Mines Regulations, 1961 to form benches in overburden and ore bodies in the subject quarry.

d) During the accident occurred on 04.02.2021, two workers namely, Sonu Ansary and B.Manikandan were died. The lessee provided a sum of Rs.5,00,000 /- each as a compensation amount in the presence of District Collector, Kanchipuram on 08.02.2021 to the legal heirs of the deceased persons.

e) As per District Administration observation 12 labours employed in the subject rough stone quarry were made registered under the “Pradhan Mantri Jeevan Jyoti Bima Yojana” insurance scheme and also applied for Tamil Nadu unorganised Welfare Board.

f) Consent to operate issued to the quarry vide CTO Proc. NO.F.2029SPR/RS/ DEE/TNPCB/ SPR/W&A/ 2019 dated: 06/02/2019 under the Water (Prevention and Control of Pollution) Act, 1974, as amended and the Air (Prevention and Control of Pollution) Act, 1981 as amended for quarrying of rough stone Rough Stone -7,21,040 cu.m and Gravel - 50,172 cu.m over a period of 5 years withdrawn under the provisions of Section 27 of the Water (Prevention and Control of Pollution) Act, 1974, as amended and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended vide proc. No. T2/ TNPCB /F.10942/Consent withdrawal/W&A/SPR/2021 dated 11-06-2021 by Tamilnadu Pollution Control Board (**Annexure-16**).

5. Environmental compensation and cost required for environmental damages

As per the CPCB guidelines the Environmental compensation shall be calculated as, Environmental compensation to be paid
(EC) = Pl x N x R x S x LF

Where,

PI Pollution index of industrial sector - For Red category [Sl.No. 1085] it is 60 to 100.

An average value of 80 taken

N Number of days of violation took place

Actual quantity of minerals (rough stone) quarried and removed in the lease granted area	14,07,888 M3
Number of days of quarrying operation from 06.02.2019 to 04.02.2021	729 days
Quantity of minerals (rough stone) quarried per day	$1407888/729= 1931$ M3/day
Quantum of minerals (rough stone) for which transport permits obtained	67,200 M3
Number of days of quarrying operation carried legally	$67200/1931= 35$ days
Number of days of quarrying operation carried unlawfully / illegally	$729 - 35= 694$ days

Hence, it may be considered that the proponent has taken the excess mining from the date of commissioning from 06.02.2019 (694 days)

R = A factor in Rupees for EC is minimum of 100 and maximum of 500. An average value of 250 taken for violation

S = Factor for scale of operation (0.5 for small, 1.0 for medium and 1.5 for large scale). Hence 0.5 taken since it is small scale.

LF = Location factor (population from 1 to <5 million LF is 1.25).

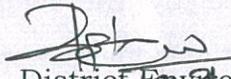
$$EC = 80 \times 694 \times Rs. 250 \times 0.5 \times 1.25 = Rs. 86,75,000/-$$

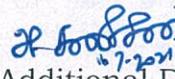
It is respectively submitted that the proponent may be issued with directions to remit the Environmental compensation of Rs. 86,75,000 under section 5 of Environmental [Protection] act, 1986 as amended after giving an opportunity to the proponent.

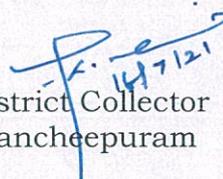
4 Recommendations :-

- i) For illegal and unlawful quarrying and transportation 17,04,532 M3 of rough stone and gravel necessary penal action has to be initiated by the concerned authority as per G.O 170 industries department dated 05.08.2020 and the Tamil Nadu Minor Mineral Concession Rules, 1959.
- ii) For the violations of lease deed conditions, penalty action may be imposed in respect of such breach may cancel the lease after granting an opportunity of hearing to the lessee as per the Rule 36 (5) (h) of Tamil Nadu Minor Mineral Concession Rules, 1959 ~~after providing opportunity for personal hearing.~~
- iii) Since at present further quarrying in the subject area is endanger to the life of the quarry workers. Further, quarrying may be allowed only after taking remedial measures and after getting concurrence from the Director General of Mines Safety and District Collector.
- vi) The committee recommends that the drone survey to be under taken to existing/proposed quarries by the expense of the lessee once in year through the empanelled agency.

vii) The committee recommends that the lessee shall deposit Environmental Compensation as appealed by Hon'ble National Green Tribunal (SZ) in the TNPCB – Environmental Compensation Fund payable at Chennai. The amount shall be used for restoration of environment and for necessary remedial and preventive measures in regard to environmental matters.


District Environmental
Engineer,
Kanchipuram


Additional Director,
Commissionerate of
Geology and
Mining.
Chennai-32


District Collector
Kancheepuram