

State Expert Appraisal Committee (SEAC)

Minutes of 413th meeting of the State Expert Appraisal Committee (SEAC) held on 05.10.2023 (Thursday) at SEIAA Conference Hall, 2nd Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Building and Construction projects and Mining projects.

Confirmation of Earlier Minutes

The minutes of the 412th SEAC meeting held on 04.10.2023 were circulated to the Members in advance and as there are no remarks, the Committee decided to confirm the minute.

Agenda No: 413 - 01.

(File No: 10267/2023)

Existing Rough stone quarry lease over an extent of 1.00.0Ha (Government Tender Quarry) in S.F. No:3 (P), Santhiyur Village, Salem Taluk, Salem District, Tamil Nadu by Thiru.P.Sivanandham- For Environmental Clearance. SIA/TN/MIN/431075/2023 Dt.27.05.2023)

The proposal was placed for appraisal in 413th meeting of SEAC held on 05.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

1. Earlier, the PP has obtained precise are communication vide Lr. No. Roc. 77/2018/ Mines/A/ Dated 31.03.2018.
2. The Mining plan approved for the period 2018 to 2023 vide Letter No. Rc No. 77/2018/Mines- A, dated 24.04.2018 (Valid up to 14.07.2023) for production should not exceed 243877 m³ of Rough stone, & 9939 m³ of Topsoil & the depth of mining up to 31m AGL.
3. Earlier, the PP has obtained EC from Lr. No DEIAA-DIA/TN/MIN/14922/2018-SLM-EC. No. 20/2018 Dated 10.06.2018 (EC Valid up to 09.06.2022) for production of 243877 m³ of Rough stone, & 9939 m³ of Topsoil & the depth of mining up to 31m AGL under B2 category (<25 Ha).
4. Lease granted for the period of 10 Years vide Lr. Dt: 15.07.2018 (Lease period – 15.07.2018 to 14.07.2028).


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5. MoEF&CC OM Dt: 28.04.2023
6. Now, the project proponent, Thiru. P. Sivanandham has applied for reappraisal of Environmental Clearance for the Existing Rough stone quarry lease over an extent of 1.00.0Ha (Government Tender Quarry) in S.F. No:3 (P), Santhiyur Village, Salem Taluk, Salem District, Tamil Nadu.
7. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
8. The current mining plan vide Rc. No. 4026/MM2/2022, Dated 14.10.2022 for the production should not exceed 187020 m³ of Rough Stone & 120 m³ of Topsoil. The annual peak production is 37240 m³ of Rough Stone and the depth of mining upto 46m (36 AGL + 10m BGL).
9. The PP has obtained CCR from IRO (SZ), MoEF&CC vide EP/12.1/2023-2024/SEIAA/67/TN/931 Dt:31.07.2023.

Based on the presentation and documents furnished by the project proponent, SEAC decided to defer the proposal for want of additional particulars.

1. For the existing quarry, the PP shall obtain a letter from the concerned AD (Mines) for non-operation of this quarry from 28.04.2023 as per MoEF&CC O.M Dt:28.04.2023 which shall also contain the following information:
 - i. Original pit dimension of the existing quarry
 - ii. Quantity achieved Vs EC Approved Quantity
 - iii. Balance Quantity as per Mineable Reserve calculated.
 - iv. Mined out Depth as on date Vs EC Permitted depth
 - v. Details of illegal/illicit mining carried out, if any
 - vi. Non-compliance/Violation in the quarry during the past working.
 - vii. Quantity of material mined out outside the mine lease area (or) in the adjacent quarry/land.
 - viii. Existing condition of Safety zone/benches
 - ix. Details of any penalties levied on the PP for any violation in the quarry operation by the Department of Geology and Mining.


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2. The PP shall furnish mitigation measures/remedial action plan for the non-compliance stated in the Certified Compliance Report (CCR) obtained from IRO(SZ), MoEF&CC.
3. The study on impact of the proposed quarrying operations on the surrounding environment which includes water bodies, etc.
4. The PP shall obtain and furnish DFO letter regarding proximity of the proposed mining area along with recommendation on conservation measures if required.

Agenda No: 413 - 02


(File No: 10274/2023)

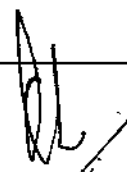
Proposed Ordinary Earth quarry lease over an extent of 0.70.0Ha in S.F.No:149/1A (Part), Sembedu Village, Tiruvallur Taluk, Tiruvallur District, Tamil Nadu by Mr.R.Likkitesh, - For Environmental Clearance. (SIA/TN/MIN/436731/2023 Dt.22.07.2023)

The proposal was placed for appraisal in 413th meeting of SEAC held on 05.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, Mr.R.Likkitesh has applied for Environmental Clearance for the proposed Ordinary Earth quarry lease over an extent of 0.70.0Ha in S.F.No:149/1A (Part), Sembedu Village, Tiruvallur Taluk, Tiruvallur District, Tamil Nadu.
2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. The precise area communication was issued for the period of 1 Years. The approved mining plan is for the period of 1 Years & production should not exceed 6936m³ of Ordinary Earth. The depth of mining is 2.0m BGL.
4. AD letter vide Rc.No.47/2022/G&M-2, dt: 25.07.2023 regarding distance of rivers, streams, canal etc.
5. Soil Test Report Dt: 24.07.2023 from University of Madras, Dept. Of Geology, Guindy campus, Chennai.

SI. No	Salient Features of the Proposal
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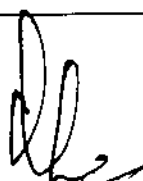

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1.	Name of the Owner/Firm	: Mr.R.Likkitesh, Proprietor of M/s. Sree Devi Brick Industries, No.24, Devaki Ammal Street, Shenoy Nagar, Chennai District - 600030
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	: Ordinary Earth
3.	S.F Nos. of the quarry site with area break-up	: 149/1A (Part)
4.	Village in which situated	: Sembedu
5.	Taluk in which situated	: Tiruvallur
6.	District in which situated	: Tiruvallur
7.	Extent of quarry (in ha.)	: 0.70.0Ha
8.	Latitude & Longitude of all corners of the quarry site	: 13°13'53.06"N to 13°13'55.67"N 79°59'17.43"E to 79°59'21.94"E
9.	Topo Sheet No.	: 57/O-16
10.	Type of mining	: Opencast Semi-Mechanized mining
11.	Life of Project	: 1 Year
	Lease Period	: 1 Year
	Mining Plan Period	: 1 Year
12.	Mining Plan Details	: As per approved Mining Plan
	Geological Resources m ³ (RoM)	: Ordinary Earth in m ³ 13970m ³
	Mineable Resources m ³ (RoM)	: Ordinary Earth in m ³ 6936m ³
	Annual Peak Production in m ³	: Ordinary Earth in m ³ 6936m ³
	Maximum Depth in meters	: 2.0m BGL
13.	Depth of water table	: 25m to 20m
14.	Man Power requirement per day:	: 6 Nos


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15.	Water requirement: 1. Drinking water 2. Utilized water 3. Dust suppression 4. Green belt	:	2.0 KLD 1.0 KLD 0.5 KLD 0.5 KLD
16.	Power requirement	:	TNEB
17.	Precise area communication approved by the Deputy Director, Department of G&M.	:	Na.Ka.No.47/2022/Kanimam.2, dt: 29.05.2023
18.	Mining Plan approved by Deputy Director, Department of G&M.	:	Rc.No.47/2022/G&M-2, dt: 21.06.2023
19.	500m Cluster Letter by Deputy Director, Department of G&M.	:	Rc.No.47/2022/G&M-2, dt: 21.06.2023
20.	VAO Certificate Regarding Structures within 300m Radius	:	Dt:18.07.2023
21.	Project Cost (excluding EMP cost)	:	Rs.13.425 Lakhs
22.	EC Recommendation	:	As per approved mining plan Ordinary Earth in m ³ Max Total RoM in m ³ 6936m ³ Annual Max RoM in m ³ 6936m ³ Max Depth in mtrs 2 m BGL
23.	EMP cost (in Rs. Lakh).	:	Rs.1.96 Lakhs
24.	CER cost (in Rs. Lakh).	:	Rs. 2.0 Lakhs

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production shall not exceed 6936m³ of Ordinary Earth and the ultimate depth of mining up to 2m BGL and for the period of one Year only, subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions, in addition to the standard conditions & normal conditions stipulated by MOEF &CC:

1. The PP shall not carry out the drilling and blasting activities in the quarry.
2. The proponent shall carryout plantation of 500 Nos. of tall saplings of native species within the proposed mining area as committed before obtaining CTO from TNPCB.
3. The PP shall install a Bio-toilet for the persons employed in the quarry before obtaining the CTO from the TNPCB.
4. As accepted by the Project proponent the CER cost is Rs.2 Lakhs and the amount shall be spent for the Panchayat Union Middle School, Sembudu as committed, before obtaining CTO from TNPCB.

Agenda No: 413 – 03.

(File No: 10281/2023)

Proposed Rough stone quarry lease over an extent of 2.00.0Ha (Govt. Poramboke Land - Tender Quarry) in S.F. No:481/2 (Part-1), Musuvanoothu Village, Nilakottai Taluk, Dindigul District, Tamil Nadu by Mr.M.Bose - For Environmental Clearance.

(SIA/TN/MIN/434052/2023 Dt.15.07.2023)

The proposal was placed for appraisal in 413th meeting of SEAC held on 05.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, Mr.M.Bose has applied for Environmental Clearance for the Rough stone quarry lease over an extent of 2.00.0Ha in S.F.No:481/2 (Part-1), Musuvanoothu Village, Nilakottai Taluk, Dindigul District, Tamil Nadu.
2. The project/activity is covered under category "B2" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. The precise area communication was issued for the period of 5 Years. The approved mining plan is for the period of five years & production should not exceed 233885 m³ of Rough Stone & 21830 m³ of Topsoil. The annual peak production is 53000 m³ of Rough Stone (5th Year). The depth of mining is 65m (60m AGL & 5m BGL).

Based on the presentation and documents furnished by the project proponent, SEAC noticed that the proposed lease area consists of dense flora and fauna and is close to reserve forest. Hence, the Committee decided to constitute a sub-committee to make on-site inspection to assess the environmental aspects the proposed project.


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Agenda No: 413 - 04

(File No: 10288/2023)

Proposed Expansion for Construction of Residential Building Old S.No.132 (Part), 139-1, T.S.No.15/2-2, 15/4-2/2 & 15/4-1 of Block 22, Ward No. G in Athipattu Village, Ambattur Talu, Thiruvallur District, Tamil Nadu by M/s.Nature Residences Development Private Limited - For Environmental Clearance for Expansion along with Name change from M/s. Vasathi Homes Private Limited to M/s. M/s.Nature Residences Development Private Limited. (SIA/TN/INFRA2/438516/2023 Dt:01.08.2023)


1. The environmental clearance is sought for expansion of Construction Project at Plot No: Old S.No. 132 (Part), 139-1, T.S.No 15/2-2, 15/4-2/2 & 15/4-1 of Block 22, Ward No.G in Athipattu Village, Ambattur Taluk, Thiruvallur District, Tamil Nadu by M/s. Natureresidences Development Private Limited along with Name change from M/s. Vasathi Homes Private Limited to M/s. M/s.Nature Residences Development Private Limited.
2. M/s. Globus Environment Engineering Services is the EIA Consultant for the project.
3. Total plot area of the project is 9383.73 m² and built-up area is 23841.89 m² respectively.
4. Maximum number of floors will be B+S+5 and maximum height of the building will be 18 m.
5. Total Saleable DU's (dwelling units) is 185 Nos.
6. Salient features of the project as submitted by the project proponent:

Sl. No.	Description	Existing	Proposed	Expansion	Unit
GENERAL					
1	Plot Area	9359.84	23.89	9383.73	SQMT
2	Proposed Built Up Area	20557.54	3284.35	23841.89	SQMT


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3	Total no of Saleable DU's/Villas	147	38	185	Nos.
4	Max Height – (Height of tallest block)	15.0	3.0	18.0	M
5	No of Building Blocks (Residential + Community facilities)	Basement + Stilt + 4 Floors – 5 Blocks	5 th Floor with Amenities	Basement + Stilt + 5 Floors – 5 Blocks with Amenities	-
6	Max No of Floors	4 Floors	5 th Floor with Amenities	B+S+5 Upper floors	No.
7	Expected Population (Residential + Floating)	808 (Residential – 735 + Floating - 73)	200 (Residential – 172 + Floating - 28)	Total 1008 (Residential – 907 & Floating Population – 101)	No.
8	Total Cost of Project	59.6203 Cr.	3.3253 Cr.	62.9456 Cr.	CR
9	Project Activity:	Basement + Stilt + 4 Floors – 5 Blocks	5 th Floor with Amenities	Proposed Expansion for Construction of Residential Building having Combined Basement + Combined Stilt Floor + 5 Upper Floors with Amenities with 185 dwelling units	
AREAS					
10	Permissible Ground Coverage Area (%)	1.41	0.5	1.91	SQMT
11	Proposed Ground	3983.48 Sq.m	345.89 Sq.m	4329.37 Sq.m (46.14%)	SQMT


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	Coverage Area (%)				
12	Permissible FAR Area	Allowable 2.0		1.91	
13	Proposed FAR Area	- (1.41)	- (0.5)	17935.66 Sq.m (1.91)	SQMT
14	Other Non-FAR Areas including basement area etc.	-	-	(5906.23) 0.62	
15	Proposed Total Built Up Area	20557.54	3284.35	23841.89	SQMT

Existing				After Expansion			
Description	FSI (Sq.m)	Non-FSI (Sq.m)	Total built up Area (Sq.m)	Description	FSI (Sq.m)	Non-FSI (Sq.m)	Total built up Area (Sq.m)
Basement floor	-	195.70	3983.48	Residential Block (B+S+5 Floors) with Amenities	17935.66	5906.23	23841.89
Stilt floor		489.63	2421.19				
Block 1	929.16	72.62	1001.78				
Block 2	4288.052	398.28	4686.332				
Block 3	2690.712	179.48	2870.192				
Block 4	3019.15	180.08	3199.23				
Block 5	2253.66	141.67	2395.53				


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	Total	13180 .74	1657. 46	20557.5 4	Total	1793 5.66	5906.23	23841.8 9
WATER								
16	Total Water Requirement	110.3		34.7		145		KLD
17	Fresh water requirement	67		15		82		KLD
18	Treated Water Requirement	43.3		25		63		KLD
19	Wastewater Generation	93		7		100		KLD
20	Proposed Capacity of STP	100		25		125		KLD
21	Treated Water Available for Reuse	91		19.7		98		KLD
22	Treated Water Recycled	Toilet Flushing - 35 Greenbelt & OSR Gardening 8.3, Excess Treated wastewater disposal to CMWSSB (Koyambedu STP) - 47.7		Toilet Flushing - 7 Dust Suppression - 9 Bike, Car, Solar Panel Washing - 3, Greenbelt & OSR Area - 0.7		Toilet Flushing- 42 Dust Suppression - 9 Bike, Car & Solar Panel washing - 3, Greenbelt & OSR Area - 9 Excess treated wastewater disposal to Avenue Plantation - 35		KLD
23	Surplus treated water to be discharged in Municipal	47.7		-			Avenue Plantation - 35	KLD


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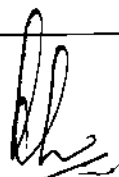
	Sewer with Prior permission				
RAINWATER HARVESTING					
24	Rainwater Harvesting Recharge Pits	-	18	18	No.
PARKING					
25	Total Parking Required as per Building Bye Laws	Car required 135Nos Car Proposed 139Nos Two-Wheeler required - 70 Nos Two-Wheeler Proposed - 73 Nos	Car Proposed 46 Nos Two-Wheeler Proposed - 2 Nos	Car required - 170 Nos Car Proposed - 185 Nos Two-Wheeler required - 53 Nos Two-Wheeler Proposed - 75 Nos	ECS
26	Proposed Total Parking	1906.40 Sq.m	5028.59 Sq.m	6934.99 Sq.m	ECS
27	Parking in Basements and Stilt floor	-	-	6309.99 Sq.m	ECS
GREEN BELT AREA					
28	Proposed Green Area (Minimum 15.0% of plot area)	1681.20 Sq.m (17.92%)	0	1681.20 (17.92%)	SQM T
	Total area	1681.20 Sq.m (17.92%)	0	1681.20 (17.92%)	SQM T
	Existing trees on plot	-	-	7 Nos in OSR Area	


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	Number of trees to be planted	-	-	140	Nos
	Number of trees to be transplanted /cut	-	-	-	
SOLID WASTE MANAGEMENT					
29	Total Solid Waste Generation	0.377	-	0.565	Kgs/Day
30	Organic waste	0.226	-	0.226	TPD
31	Quantity of E-Waste Generation	-	-	1	TPA
32	Quantity of Hazardous waste Generation (Used Oil)	-	-	0.025	TPA
33	Quantity of Sludge Generated from STP	10	-	42	KG/DAY
POWER / GREEN POWER					
34	Total Power Requirement	965	535	1500	KVA
35	DG set backup	250 KVA -2 Nos.	-	160 KVA - 2Nos.	KVA
36	No of DG Sets	2 Nos. of 250 KVA	-	2 Nos of 160 KVA	Nos.
37	Solar Panels - Roof Coverage	-	-	50	%



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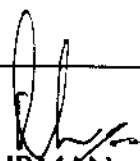

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38	Hot Water Requirement	-	-	100	%
	Of which met by Solar Panels	-	-	100	%

7. Population details:

POPULATION			
Residential	DU'S	POP/DU	TOTAL POPULATION
Total Saleable Du's	1BHK – 47 2 BHK –109 3 BHK - 29	4 5 6	188 545 174
Total	185	-	907
Non-Residential	-	-	-
CLUB (Employees etc.)	-	-	-
Club	-	-	-
Commercial	-	-	-
Facility Management Staff	-	-	10
Total	-	-	10
Visitors	-	-	91
Residential	-	10% of Residential Population	-
Club/Community Hall	-	-	-
Commercial	-	-	-
Total Visitors	-	-	101


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Total Population	-	-	1008
EMP Cost	Construction Phase: Capital Expenses – Rs. 20.3 Lakhs Operational Expenses – Rs. 32.55 Lakhs Operation Phase: Capital Cost: Rs. 95.95 Lakhs Recurring Cost: Rs. 152.61 Lakhs		
CER Cost	Rs. 60 Lakhs		
	S. No	Beneficiary	Description of Activity
	1	Government Boys Higher Secondary School - Ayapakkam	Furniture's for Library Book and Journals Computers Public Address systems in class room Sanitation Materials & Toilet Maintenance
	2	Kamarajar Girls Higher Secondary School - Ambattur	Sanitation Materials & Toilet Maintenance.
	3	Dr. Ambedkar Government Arts College - Vyasarpadi	Plantation of Greeneries Provision of sanitation facilities Providing smart classroom facilities
			Total
			60

RECOMMENDATION OF THE COMMITTEE

The Committee discussed the matter and recommended a grant of environmental clearance for the project proposal as above and subject to the standard conditions as per the Annexure II of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:


Additional Conditions:

1. The construction shall comply with Green Building norms and shall get minimum IGBC Platinum rating.
2. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.


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3. The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.
4. Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading.
5. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).
6. The proponent should provide the sufficient electric vehicle charging points as per the requirements at ground level and allocate the safe and suitable place in the premises for the same.
7. The project proponent should develop green belt in the township as per the plan submitted and also follow the guidelines of CPCB/Development authority for green belt as per the norms.
8. Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.
9. Proponent should submit the certified compliance report of previous/present EC along with action taken report to the Regional office MoEF Lko/Director of Environment and other concerning authority regularly.
10. Proponent shall provide the dual pipeline network in the project for utilization of treated water of STP for different purposes and also provide the monitoring mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority.


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11. The project proponent shall provide a measuring device for monitoring the various sources of water supply namely fresh water, treated waste water and harvested rain water.
12. The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.

Agenda No: 413-05

(File No: 10268/2023)

Proposed Rough Stone Quarry over an extent of 1.00.0Ha at S.F.Nos.39 (P) of Santhiyur Village, Salem Taluk, Salem District, Tamil Nadu by Tmt.K.Jayalakshmi -For Environmental Clearance. (SIA/TN/MIN/431083/2023, Dated:27.05.2023).

The proposal was placed in the 413rd Meeting of SEAC held on 05.10.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Tmt. K. Jayalakshmi has applied for Environmental Clearance for the Proposed Rough Stone Quarry over an extent of 1.00.0Ha at S.F.Nos.39 (P) of Santhiyur Village, Salem Taluk, Salem District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The quarry lease was granted for a period of ten years. The quarry lease deed was executed on 15.07.2018 and the lease period is valid up to 14.07.2028.
4. Earlier, the project proponent has obtained EC from DEIAA vide Lr.No.DEIAA-DIA/TN/MIN/14924/2018-SLM/EC.No.21/2018 dated: 10.06.2018 in the name of Tmt. K. Jayalakshmi for the quantity of 2,90,430 cu.m of Rough Stone up to a depth of 46m AGL for the period of 5 years from the date of execution of the quarrying lease period.
5. Certified Compliance Report (CCR) obtained from IRO(SZ); MoEF&CC vide Lr. EP/12.1/2023-24/SEIAA/66/TN/927 Dt:31.07.2023 states that
"...as informed by the Project Proponent, the mining work was stopped on 14th July 2023".
6. As per the mining plan the lease period is 10 years. The scheme of mining plan is for the period of Five years (2023 to 2028) & production should not exceed 2,22,620 m³ of Rough Stone with a depth of mining 46m AGL.


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Based on the presentation and documents furnished by the project proponent, SEAC decided to obtain the following details from the PP.

1. During the presentation, SEAC noted that from the KML file uploaded by the proponent in PARIVESH portal, it is ascertained that the proposed site has been quarried for rough stone beyond the mine lease area boundary line up to a depth of 46m on northern side. For the existing quarry, the PP shall obtain a letter from the concerned AD (Mines) for Non operation of this quarry from 28.04.2023 as per MoEF&CC O.M Dt:28.04.2023 which shall also stipulate the following information:
 - i. Original pit dimension of the existing quarry
 - ii. Quantity achieved Vs EC Approved Quantity
 - iii. Balance Quantity as per Mineable Reserve calculated.
 - iv. Mined out Depth as on date Vs EC Permitted depth
 - v. Details of illegal/illicit mining carried out, if any
 - vi. Non-compliance/Violation in the quarry during the past working.
 - vii. Quantity of material mined out outside the mine lease area (or) in the adjacent quarry/land.
 - viii. Existing condition of Safety zone/benches
 - ix. Details of any penalties levied on the PP for any violation in the quarry operation by the Department of Geology and Mining.
2. The PP shall furnish mitigation measures/remedial action plan for the non-compliance stated in the Certified Compliance Report (CCR) obtained from IRO(SZ), MoEF&CC.
3. The PP shall furnish a letter received from DFO concerned stating the proximity details of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.
4. The proponent shall enumerate on the details of the structures located within 50m, 100m, 200m, 300m radius from the proposed mine lease area indicating the type of structure/building, usage/purposes of such building – commercial/industrial/residential/farm house/Govt. building such as Sub-station,


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occupants of such buildings/structures, ownership of the buildings/structures whether it belongs to the PP (or) not, etc.

On receipt of the above details, the SEAC would further deliberate on this project and decide the further course of action. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVESH portal.

Agenda No: 413 - 06

(File No: 10269/2023)

Existing Rough stone quarry lease over an extent of 1.35.0 Ha at S.F.No.443(Part) in Erumapalayam Village, Salem South Taluk, Salem District, Tamil Nadu by Thiru. O.K.Kumar – Environment Clearance for next scheme of mining. (SIA/TN/MIN/431207/2023 dt 28/05/2023)

The proposal was placed in this 413rd meeting of SEAC held on 05.10.2023. The Project Proponent made a detailed presentation on the proposal. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following among other things:

1. The Project Proponent, Thiru. O.K.Kumar has applied seeking Environment Clearance for the existing Rough stone quarry lease (for next scheme of mining) over an extent of 1.35.0Ha at S.F.No.443(Part) in Erumapalayam Village, Salem South Taluk, Salem District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category “B2” of Item 1(a) “Mining Projects” of the Schedule to the EIA Notification, 2006, as amended.
3. DEIAA EC Lr.No. DEIAA-DIA/TN/MIN/18824/2018-SLM-EC.No.55/2018 dated 05.12.2018 to mine 382925 cbm of Rough stone to a depth of 61m AGL subject to the conditions stated therein.
4. CCR obtained from IRO(SZ), MoEF&CC vide Lr. No.EP/12.1/2023-24/SEIAA/63/TN/928 dated 31.07.2023

Based on the presentation and documents furnished by the project proponent, SEAC directed the Project Proponent to furnish the following additional particulars:

1. The PP shall furnish the letter obtained from the concerned AD (Mines) detailing the date of last permit issued for this mine.


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2. Extracts from the mine production register duly authenticated by the concerned AD (Mines).
3. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
4. DEIAA has issued EC vide Lr.No. DEIAA-DIA/TN/MIN/18824/2018-SLM-EC.No.55/2018 dated 05.12.2018 to mine upto a depth of 61m AGL. However, in the CCR obtained from IRO(SZ), MoEF & CC vide Lr. No.EP/12.1/2023-24/SEIAA/63/TN/928 dated 31.07.2023 it is reported that the mining has been carried out upto the depth of 66m AGL.

Based on the presentation by the PP, the SEAC has decided to request the SEIAA for instructing the concerned AD (Mines) to inspect the mine site and furnish factual information on the actual depth of mining & existing conditions in the mine.

On receipt of the above details, the SEAC would further deliberate on this project and decide the further course of action. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVRESH portal.

Agenda No: 413 - 07

(File No: 10276/2023)

Proposed Rough stone lease over an extent of 1.25.5 Ha at S.F.No.39/1(Part) in Chinnakallapadi village, Tiruvannamalai Taluk, Tiruvannamalai District, Tamil Nadu by Thiru. D. Chakkaravarthi - Environment Clearance. (SIA/TN/MIN/437584/2023 dt 24/07/2023)

The proposal was placed in this 413th meeting of SEAC held on 05.10.2023. The Project Proponent made a detailed presentation on the proposal. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru. D. Chakkaravarthi has applied seeking Environment Clearance for the proposed Rough stone lease over an extent of 11.25.5 Ha at S.F.No.39/1(Part) in Chinnakallapadi village, Tiruvannamalai Taluk, Tiruvannamalai District, Tamil Nadu.


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2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006, as amended.
3. During the presentation the EIA coordinator informed the following to the Committee:

- Previously the Quarrying Operations were carried in the applied lease area by Thiru.R.Jeevanantham during the Lease Period 13.05.2010–12.05.2020 vide District Collector's Proceeding Rc.No.24/Kanimam-2/2010, Dt:13.05.2010. Before this the lease was operated by Thiru.H.Rajaram from 28.10.1998 to 27.10.2020. During this period no partition was done, total 5.0 Ha of the survey No39/1 was granted as lease.
- There are three existing pits within proposed lease area. The details are given below.

Pit No	length (Max) in(m)	Width (Max) in (m)	Depth (Max) in (m)
I	33	23	6m below ground level
II	47	33	11m below ground level
III	15	11	2m below ground level

File No	10276 (SIA/TN/MIN/437584/2 023 dt 24/07/2023)	Category	B2
Sl. No	Salient Features of the Proposal		
1.	Name of the Owner/Firm	:	Thiru.D.Chakkaravarthi, S/o.Duraisamy, No.47, SE.Gudalur, Thandrapattu Taluk, Tiruvannamalai District.
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough Stone


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3.	S.F Nos. of the quarry site with area break-up	:	S.F.No. 39/1(Part)	
4.	Village in which situated	:	Chinnakallapadi	
5.	Taluk in which situated	:	Tiruvannamalai	
6.	District in which situated	:	Tiruvannamalai	
7.	Extent of quarry (in ha.)	:	1.25.5 Ha – Government land	
8.	Latitude & Longitude of all corners of the quarry site	:	12°05'12.11"N to 12°05'15.47"N 79°06'50.77"E to 79°06'56.78"E	
9.	Topo Sheet No.	:	57P/04	
10.	Type of mining	:	Opencast semi mechanized method of mining.	
11.	Life of Project	:	5 years	
	Lease Period	:	5 years	
	Mining Plan Period	:	5 years	
12.	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC
	Geological Resources (RoM) m ³	:	Rough Stone - 249020 m ³	-
	Minable Resources in (RoM) m ³	:	Rough Stone - 59450 m ³	-
	Annual Peak Production in m ³	:	Rough Stone - 13260 m ³	-
	Maximum Depth in meters	:	21m BGL	-
13.	Depth of water table	:	46 m	
14.	Man Power requirement per day:	:	20 Nos.	
15.	Water requirement: 1. Drinking & domestic purposes (in KLD) 2. Dust suppression, Green Belt & Wet Drilling (in KLD)	:	5.0 kLD	
16.	Power requirement	:	TNEB power supply & 48KL of HSD for DG set	
17.	Precise area communication approved by Dept. of Geology & Mining	:	Rc.No.02/Kanimam/2023, Dated:10.01.2023.	


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18.	Mining Plan approved by	:	Rc.No.02/Kanimam/2023, Dated:06.04.2023.	
19.	500m Cluster Letter issued by Dept. of Geology & Mining	:	Rc.No.02/Kanimam/2023, Dated:06.04.2023.	
20.	VAO Certificate regarding Structures within 300m Radius	:	Letter Dated 21.04.2023	
21.	Project Cost (excluding EMP cost)	:	Rs.1,14,50,000/-	
22.	EC Recommendation	:	Validity	30 years subject to the following upper limits.
		:	Max Total RoM in m ³	Rough Stone 59450
		:	Annual Max RoM in m ³	13260
		:	Max Depth in m	21m BGL
23.	Total EMP cost (in Rs. Lakh).	:	Rs.128.92 Lakh	
24.	CER cost (in Rs. Lakh).	:	Rs. 8.0 Lakh	

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak RoM production capacity not exceeding 13260 of Rough stone by maintaining the ultimate depth of mining of 21m BGL, subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.


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2. The proponent shall provide the particulars for carrying out the plantation of 1600 Nos. of tall saplings of native species within the proposed mining area as committed before obtaining CTO from TNPCB.
3. The PP shall furnish the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, to the concerned AD (Mines) at the time of lease execution.
4. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
5. Since structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to optimize the blast design parameters for controlling the blast-induced ground/air- vibrations and fly rock from the blasting operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
6. Since the structures are located within 500 m, as a part of monitoring the implementation of eco-friendly blasting operation, the PP shall monitor the blast-induced ground & air vibration (noise) by installing the DGMS approved 'Vibration Monitoring System (VMS)' at a distance of 300m, 500m, and 750 m and the fly rock level produced through capturing a video image once in six months, by involving any of the reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT (ISM) - Dhanbad, and Anna University Chennai-CEG


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Campus, etc. A copy of such post-monitoring report shall be submitted to the AD/Mines-DGM, Director of Mines Safety / Chennai Region, the SEIAA-TN, and the IRO/MoEF, as a part of Environmental Compliance without any deviation.

7. For securing the safety of persons employed in the mine, the PP shall carry out the scientific studies to assess the slope stability of the benches and existing quarry wall within a period of one year from the date of lease execution for preparing the slope stability action plan, by involving anyone of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
8. Since the waterbodies are situated nearby, the PP shall carry out the scientific studies to assess the hydrogeological condition of the quarry within 2 years from the commencement of mining operations, by involving any one of the reputed Research and Academic Institution - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras – Dept of Geology, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
9. The PP shall strictly adhere to the provisions provided in the Annexure to safeguard the existence of Reserved Forest/Reserve Land within 1 km from the project site.
10. As accepted by the Project Proponent the CER cost of Rs.8.0 lakh and the amount shall be spent for the committed activities at Village Union Panchayat School, Vellayampatti, Tiruvannamalai before obtaining CTO from TNPCB.


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Agenda No: 413 - 08

(File No: 10283/2023)

Existing Multi Colour Granite Quarry lease over an extent of 2.02.0Ha at S.F.No.1052/1, in Thiyanadurgam Village, Soolagiri Taluk, Krishnagiri District, Tamil Nadu by M/s. Siva Granite Products - Environment Clearance for next scheme of mining. (SIA/TN/MIN/430446/2023dt 23/05/2023)

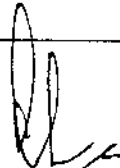
The proposal was placed in this 413rd meeting of SEAC held on 05.10.2023. The Project Proponent made a detailed presentation on the proposal. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

The SEAC noted the following among other things:

1. The Project Proponent, M/s. Siva Granite Products has applied seeking Environment Clearance for the existing Multi Colour Granite quarry lease (next scheme of mining) over an extent of 2.02.0 Ha at S.F.No.1052/1, in Thiyanadurgam Village, Soolagiri Taluk, Krishnagiri District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006, as amended.
3. DEIAA issued EC Lr.No. 31/DEIAA-KGI/EC.No.37/2018 dated 27.02.2018 for mining 15501 cbm of Multi Colour Granite upto a depth of 9m (4m AGL+5m BGL) subject to the conditions stated therein.
4. CCR obtained from IRO(SZ), MoEF&CC vide Lr. No.EP/12.1/2023-24/SEIAA/43/TN/842 dated 11.07.2023.
5. The DD(Mines), Krishnagiri vide letter dated 27.09.2023 has reported that the permit quantity so far for the period from 2018-19 to 2022-23 is 704.043 cbm.
6. During appraisal, PP informed the Committee that mining was not carried out until the year 2020 for want of NBWL Clearance as Cauvery North Wild Life Sanctuary is located at a distance of 7.9 km from the project site.

File No	10283	Category	B2
	SIA/TN/MIN/430446/2023 dt 23/05/2023		


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Sl. No	Salient Features of the Proposal		
1.	Name of the Owner/Firm	:	M/s. Siva Granite Products, No.11, Ramakrishna Road, Salem District, Tamil Nadu -636007.
2.	Type of quarrying (Ordinary Stone/Sand/Granite/ Limestone)	:	Multi Colour Granite
3.	S.F Nos. of the quarry site with area break-up	:	S.F.No.1052/1
4.	Village in which situated	:	Thiyanadurgam
5.	Taluk in which situated	:	Soolagiri
6.	District in which situated	:	Krishnagiri
7.	Extent of quarry (in ha.)	:	2.02.0 Ha
8.	Latitude & Longitude of all corners of the quarry site	:	12°36'55.5424"N to 12°37'04.4901"N 77°53'57.5999"E to 77°54'00.5181"E
9.	Topo Sheet No.	:	57-H/14
10.	Type of mining	:	Opencast mechanized method of mining.
11.	Life of Project	:	15 years
	Lease Period	:	20 years
	Mining Plan Period	:	5 years
12.	Mining Plan Details	:	As per approved Mining Plan
	Geological Resources m ³ (RoM)	:	565521 m ³
	Minable Resources in m ³ (RoM)	:	137015 m ³
	Annual Peak Production in m ³	:	5510 m ³
	Maximum Depth in meters	:	39m (4m +35m BGL)
13.	Depth of water table	:	64-59m
14.	Man Power requirement per day:	:	27 Nos.
15.	Water requirement:	:	2.0 kLD
	1. Drinking & domestic purposes (in kLD)	:	0.5 kLD
	2. Dust suppression, Green Belt & Wet Drilling (in kLD)	:	0.8 kLD & 0.7 kLD

16.	Power requirement		TNEB power supply & 41696 litres of HSD for DG set
17.	Precise area communication issued by Industries Dept, Govt of Tamil Nadu	:	Industries (MME.2) Department Lr. No.13362/MME.2/2017-1, Dt.: 23.11.2017.
18.	Mining Plan & 1 st scheme of mining approved by Dept. of Geology & Mining	:	Mining plan approval vide Rc.No.6802/MM5/2017 Dated: 18.12.2017. 1 st scheme of mining approval vide Rc.No.6649/MM4/2022 Dated: 18.11.2022.
19.	500m Cluster Letter issued by Dept. of Geology & Mining		Rc.No.1676/2022/Mines Dated: 16.12.2022.
20.	VAO Certificate regarding Structures within 300m Radius		Letter Dated 25.06.2023
21.	Project Cost (excluding EMP cost)	:	Rs.2,52,29000/-
22.	EC Recommendation	:	Validity 30 years subject to the following upper limits.
		:	Max Total RoM in m ³ 26062
		:	Annual Max RoM in m ³ 5510
		:	Max Depth in m 34m (4m +30m BGL)
23.	Total EMP cost (in Rs. Lakh).	:	Rs.323 Lakh (inclusive of Rs. 5 Lakh contribution towards Cauvery North Wildlife Sanctuary Conservation plan)
24.	CER cost (in Rs. Lakh).	:	Rs. 5.0 Lakh as accepted by the PP

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak RoM production capacity not exceeding 5510 m³ by maintaining the ultimate depth of mining of 34m (4m +30m BGL) subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 1) The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to

a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.

- 2) The proponent shall provide the particulars for carrying out the plantation of 1410 Nos. of tall saplings of native species within the proposed mining area as committed before obtaining CTO from TNPCB.
- 3) For securing the safety of persons employed in the mine, the PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 3 years of operation whichever is earlier, by involving anyone of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 4) The PP shall strictly adhere to the provisions provided in the Annexure to safeguard the existence of Reserved Forest/Reserve Land within 1 km from the project site.
- 5) As accepted by the Project Proponent the CER cost of Rs.10 Lakhs towards
 - Rs. 5 Lakhs conservation Cost for Cauvery North Wild life Sanctuary in consultation with the concerned DFO.
 - Rs. 5 Lakhs for Panchayat Union Middle School, Hanumanthapuram

The above amount shall be spent for the committed activities before obtaining CTO from TNPCB.

Agenda No: 413 - 09

(File No: 10290/2023)

Proposed Rough stone lease over an extent of 1.54.4 Ha at S.F.No.121/2 and 121/3 in Chennimalai village, Perundurai Taluk, Erode District, Tamil Nadu by Thiru. Tmt.R. Maheswari- Environment Clearance. (SIA/TN/MIN/436752/2023 dt 14.07.2023)

The proposal was placed in this 413rd meeting of SEAC held on 05.10.2023. The Project Proponent made a detailed presentation on the proposal. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).


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The SEAC noted the following among other things:

1. The Project Proponent, Thiru. Tmt.R. Maheswari has applied seeking Environment Clearance for the Proposed Rough stone lease over an extent of 1.54.4 Ha at S.F.No.121/2 and 121/3 in Chennimalai village, Perundurai Taluk, Erode District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006, as amended.
3. ToR issued vide Lr.No. SEIAA-TN/F.No.9154/SEAC/ToR-1188/2022 dated 06.07.2022 under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006, as amended.
4. During appraisal, the PP informed the Committee that the project activity falls under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006, as amended furnishing revised 500m Cluster letter dated 30.05.2023 issued by DD(Mines), Erode District and requested the Committee to grant EC considering the project activity as B2 category project. The SEAC, after detailed discussions accepted the request of the PP and decided to consider the project activity under Category "B2" and directed the PP to submit request letter to the Authority for surrendering the ToR granted vide SEIAA Lr.No. SEIAA-TN/F.No.9154/SEAC/ToR-1188/2022 dated 06.07.2022.

File No	10290	Category B2	Date of Receipt: 07.08.2023
	(SIA/TN/MIN/436752/2 023 dt 14.07.2023)		
Sl. No	Salient Features of the Proposal		
1.	Name of the Owner/Firm	:	Tmt. R.Maheswari, W/o.S.P.Ramasamy, No. 1-339 - L, Chengappalli. Uthukuli Taluk, Erode District, Tamil Nadu – 638812.
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough Stone and Gravel


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3.	S.F Nos. of the quarry site with area break-up	:	S.F.No.121/2 and 121/3	
4.	Village in which situated	:	Chennimalai	
5.	Taluk in which situated	:	Perundurai	
6.	District in which situated	:	Erode	
7.	Extent of quarry (in ha.)	:	1.54.4 Ha -Patta land	
8.	Latitude & Longitude of all corners of the quarry site	:	11°11'53.59"N to 11°11'59.21"N 77°33'35.62"E to 77°33'40.30"E	
9.	Topo Sheet No.	:	58E/12	
10.	Type of mining	:	Opencast mechanized method of mining.	
11.	Life of Project	:	10 years	
	Lease Period	:	10 years	
	Mining Plan Period	:	5 years	
12.	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC
	Geological Resources m ³ (RoM)	:	Rough Stone - 617440 m ³ Gravel - 30872 m ³	-
	Minable Resources in m ³ (RoM)	:	Rough Stone - 164525 m ³ Gravel - 21292 m ³	Rough Stone - 163675 m ³
	Annual Peak Production in m ³	:	Rough Stone - 35876 m ³ Gravel - 8800 m ³	Rough Stone - 35025 m ³
	Maximum Depth in meters	:	42m BGL	-
13.	Depth of water table	:	65m - 70m	
14.	Man Power requirement per day:	:	22 Nos.	
15.	Water requirement:	:	1.5 kLD	
	3. Drinking & domestic purposes (in KLD) 4. Dust suppression, Green Belt & Wet Drilling (in KLD)	:	0.3 0.7 kLD & 0.5 kLD	kLD
16.	Power requirement	:	TNEB power supply & 135166 litres of HSD	


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17.	Precise area communication approved Dept. of Geology & Mining	:	R.c.624/Mines/2021 Dated:07.03.2022.			
18.	Mining Plan approved by Dept. of Geology & Mining	:	R.c.624/Mines/2021 Dated:14.03.2022.			
19.	500m Cluster Letter issued by Dept. of Geology & Mining	:	R.c.624/Mines/2021 Dated:30.05.2023.			
20.	VAO Certificate regarding Structures within 300m Radius	:	Letter Dated 17.03.2022			
21.	Project Cost (excluding EMP cost)	:	Rs.51,20,000/-			
22.	EC Recommendation	:	Validity	30 years subject to the following upper limits.		
				Rough Stone	Gravel	
			:	Max Total RoM in m ³	163675	21292
			:	Annual Max RoM in m ³	35025	8800
:	Max Depth in m	40m BGL	2m BGL			
23.	EMP cost (in Rs. Lakh).	:	Capital cost – Rs.23,22,150/- Recurring cost – Rs. 15,39,345/- + 5% of inflation cost every year			
24.	CER cost (in Rs. Lakh).	:	5.0 Lakh as accepted by the PP			

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak RoM production capacity not exceeding 35025 m³ of Rough stone and 8800 m³ of Gravel by maintaining the ultimate depth of mining of 42m BGL, subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 1) The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to


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a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.

- 2) The proponent shall provide the particulars for carrying out the plantation of 750 Nos. of tall saplings of native species within the proposed mining area as committed before obtaining CTO from TNPCB.
- 3) The PP shall furnish the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, to the concerned AD (Mines) at the time of lease execution.
- 4) The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
- 5) Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to optimize the blast design parameters for controlling the blast-induced ground/air- vibrations and fly rock from the blasting operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 6) For securing the safety of persons employed in the mine, the PP shall carry out the scientific studies to assess the slope stability of the benches and quarry wall when the depth of the quarry touches 30 m (or) after the completion of 3 years of operation whichever is earlier, by involving anyone of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM, IIT-Madras, NIT-Dept of Mining Engg, Surathkal,

and Anna University Chennai-CEG Campus, etc. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

- 7) Since the waterbodies are situated nearby, the PP shall carry out the scientific studies to assess the hydrogeological condition of the quarry within 2 years from the commencement of mining operations, by involving any one of the reputed Research and Academic Institution - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras – Dept of Geology, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 8) As accepted by the Project Proponent the CER cost of Rs.5.0 lakh and the amount shall be spent for the committed activities at Panchayat Union Primary School, Paniyampalli Village before obtaining CTO from TNPCB.

Agenda No: 413-10

(File No: 10277/2023)

Proposed Rough stone & Gravel Quarry lease over an extent of 1.68.0Ha at S.F.Nos.59/5A & 59/5B of Meerankulam II Village, Sattankulam Taluk, Thoothukudi District, Tamil Nadu by Thiru. K.Stanlin - For Environmental Clearance. (SIA/TN/MIN/437589/2023, dated: 21.07.2023)

The proposal was placed in 413th SEAC meeting held on 05.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru. K.Stanlin has applied for Environmental Clearance for the Proposed Rough stone & Gravel Quarry lease over an extent of 1.68.0 Ha at S.F.Nos. 59/5A & 59/5B of Meerankulam II Village, Sattankulam Taluk, Thoothukudi District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.


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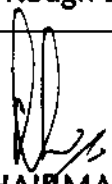

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3. As per mining plan, the lease period is for 5 years. The mining plan is for 5 years & production should not exceed 1,73,170m³ of Rough stone & 24,474m³ of Gravel. The annual peak production should not exceed 38,490m³ of Rough stone & 10,010m³ of Gravel. The ultimate depth of mining is 37m BGL.

File No		10277/2023 437589/2023	Category	B2 1(a)
Sl. No	Salient Features of the Proposal			
1.	Name of the Owner/Firm	:	Thiru.K. Stanlin, S/o.Kanagamani No.21/38-1, Kollan Vilagam, Koovattam Kuzhivilai, Vilavancode, Kanyakumari District – 629155.	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough stone & Gravel Quarry	
3.	S.F Nos. of the quarry site with area break-up	:	59/5A & 59/5B	
4.	Village in which situated	:	Meerankulam II	
5.	Taluk in which situated	:	Sattankulam	
6.	District in which situated	:	Thoothukudi	
7.	Extent of quarry (in ha.)	:	1.68.0 Ha	
8.	Latitude & Longitude of all corners of the quarry site	:	08°33'52.67"N to 08°32'58.98"N 77°50'30.19"E to 77°50'36.36"E	
9.	Topo Sheet No.	:	58 - H/14	
10.	Type of mining	:	Opencast Mechanized Mining	
11.	Life of Project	:	5 years	
	Lease Period	:	5 years	
	Mining Plan Period	:	5 years	
12.	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC
	Geological Resources m ³ (RoM)	:	Rough Stone	Rough Stone
			5,88,000m ³	
			Gravel	Gravel
	Minable Resources m ³ (RoM)	:	Rough Stone	Rough Stone
1,73,170m ³				

			Gravel	Gravel	
			24,474m ³		
	Annual Peak Production in m ³	:	Rough Stone	Rough Stone	
				38,490m ³	
				Gravel	Gravel
			10,010 m ³		
	Maximum Depth in meters	:	37m BGL		
13.	Depth of water table	:	56m BGL		
14.	Man Power requirement per day:	:	24 Nos		
15.	Water requirement: 1. Drinking & utilized water 2. Dust suppression 3. Green belt	:	1.5 KLD 0.4 KLD 0.6 KLD 0.5 KLD		
16.	Power requirement	:	TNEB 1,42,624 Ltrs of HSD		
17.	Precise area communication approved by the Assistant Geologist/Assistant Director (I/c), Dept of G&M	:	Na.Ka.No.G.M.1/206/2023, dated: 04.07.2023		
18.	Mining Plan approved by Assistant Geologist/Assistant Director (I/c), Dept of Geology & Mining.	:	Roc.No.G.M.1/206/2023, dated: 11.07.2023		
19.	Department of G&M, Assistant Geologist/Assistant Director (I/c), 500m Cluster Letter	:	Roc.No.G.M.1/206/2023, dated: 11.07.2023		
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 10.07.2023		
21.	Project Cost (excluding EMP cost)	:	Rs. 60,89,000		
22.	EC Recommendation	:	Validity	30 years subject to the following upper limits.	
				Rough Stone	


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		:	Max Total RoM in m ³	1,73,170m ³
		:	Annual Max RoM in m ³	38,490m ³
		:	Max Depth in mtrs	37m BGL
23.	EMP cost (in Rs. Lakhs).	:	Capital Cost – Rs. 28,88,600 Recurring Cost – Rs. 15,75,102	
24.	CER cost (in Rs. Lakhs).	:	Rs. 5,00,000	

The proposal was placed in 413th SEAC meeting held on 05.10.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 38,490 m³ of rough stone by maintaining the ultimate depth of mining up to 37 m BGL and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The PP shall furnish the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, to the concerned AD (Mines) at the time of lease execution.
3. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.
4. Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting

operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

5. Since the waterbodies are situated nearby, the PP shall carry out the scientific studies to assess the hydrogeological condition of the quarry within a period of six months from the date of lease execution, by involving any one of the reputed Research and Academic Institution - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras – Centre for Environmental Studies, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
6. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 3rd year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
7. As accepted by the Project Proponent the CER cost of Rs. 5 Lakhs and the amount shall be spent for the activities as committed towards Panchayat Union Middle School, Ambalacheri Village, Thoothukudi before obtaining CTO from TNPCB.


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8. In addition to that the PP shall remit Rs. 5.0 lakhs to DFO, Tirunelveli as Conservation/mitigation measures for the Koothankulam Bird Sanctuary since the site is within 10km radius and the same shall be included in the EMP.

Agenda No: 413-11

(File No: 10291/2023)

Proposed Multi colour Granite Quarry lease over an extent of 1.38.0 Ha at S.F.Nos.80/1 & 76/2 (Part) of Irumbali Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu by Tmt. D.Adaikalamary - For Environmental Clearance. (SIA/TN/MIN/438527/2023, dated: 29.07.2023)

The proposal was placed in 413th SEAC meeting held on 05.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Tmt. D.Adaikalamary has applied for Environmental Clearance for the Proposed Multi colour Granite Quarry lease over an extent of 1.38.0 Ha at S.F.Nos.80/1 & 76/2 (Part) of Irumbali Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per mining plan, the lease period is for 20 years. The mining plan is for 5 years & production should not exceed RoM - 10,725m³, Granite recovery @ 30% - 3,220m³ & Granite waste @ 70% - 7,505m³. The annual peak production should not exceed RoM - 2,145m³, Granite recovery @ 30% - 644m³ & Granite waste @ 70% - 1,501m³. The ultimate depth of mining is 26m BGL.
4. Earlier Environmental clearance obtained vide Lr.No. SEIAA-TN/F.No. 2171/EC/1(a)/1781/2014, Dated:27.03.2015 for a quantity of 3,220 Cbm of multi-coloured granite, 2,020 Cbm of top soil & 7,505 cbm of granite waste up to a depth of 6m.

The proposal was placed in 413th SEAC meeting held on 05.10.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to call for additional details

1. The proponent shall submit Certified Compliance Report obtained from IRO, MoEF&CC, Chennai for the earlier obtained Environmental Clearance.


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Agenda No: 413-12

(File No.10264/2023)

Proposed Rough Stone and Gravel Quarry Lease over an extent of 4.45.5 Ha (Patta land) at S.F.Nos. 74/1B and 74/1C1 of Seepalakottai Village, Uthamapalayam Taluk, Theni District, Tamil Nadu by Thiru. B. Sankar Ganesh - For Environmental Clearance. (SIA/TN/MIN/437974/2023 dated:26.07.2023)

The proposal was placed in the 413th Meeting of SEAC held on 05.10.2023. The project details furnished by the proponent are available on the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Thiru. B. Sankar Ganesh has applied for Environmental Clearance for the Proposed Rough Stone and Gravel Quarry Lease over an extent of 4.45.5 Ha (Patta land) at S.F.Nos. 74/1B and 74/1C1 of Seepalakottai Village, Uthamapalayam Taluk, Theni District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.

Based on the presentation made and documents submitted and from the KML file uploaded in the PARIVESH Portal, SEAC noted the following.

- i) The applied site is a fresh & virgin area, hitherto unmined.
- ii) The proposed site is lying at the foothills of Valkardu Reserve Forest and is also close to the Western Ghats.
- iii) The proposed site appears to be rich in top soil.
- iv) Further, there is a water body existing on the downstream side and the proposed site is lying at the slope exist between the Hill and the water body, i.e., on flowing path of water course.
- v) Hence, opening up of the proposed area for quarrying operations might obstruct the water flow on the downstream side.
- vi) The four numbers of seasonal odais are located at a distance of 17m, 60m, 125m, and 180 m from the lease boundary which are acting source of collecting the water for the waterbody/tank located nearby.
- vii) A shed and Temple are located within a distance of 200 m from the quarry.


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Considering the environmental concerns as noted by the SEAC, after detailed deliberations, the SEAC have decided not to recommend the proposal for grant of Environmental Clearance.

Agenda No: 413-13

(File No.I0271/2023)

Proposed Coloured Granite Quarry Lease over an extent of 2.42.9 Ha (Patta Land) at S.F.Nos. 488/1B(P) and 503/3(P) of Sithampoondi Village, Paramathivelur Taluk, Namakkal District, Tamil Nadu by Tvl. P.K.K. Exports - For Environmental Clearance. (SIA/TN/MIN/436601/2023 dated:13.07.2023)

The proposal was placed in the 413th Meeting of SEAC held on 05.10.2023. The project details furnished by the proponent are available on the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Tvl. P.K.K. Exports has applied for Environmental Clearance for the Proposed Coloured Granite Quarry Lease over an extent of 2.42.9 Ha (Patta Land) at S.F.Nos. 488/1B(P) and 503/3(P) of Sithampoondi Village, Paramathivelur Taluk, Namakkal District, Tamil Nadu.
2. The proponent has submitted an application under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. Earlier, EC was accorded to the project proponent vide Lr.No.SEIAA-TN/F.No.4850/EC/1(a)/2889/2016 dated.15.02.2016. EC was accorded for the quantity of 12.064m³ of coloured granite upto the depth of 16m.
4. Now, the proponent has submitted an application seeking Environmental Clearance for the scheme period from 2022-23 to 2026-27.
5. As per the 500m cluster letter dated.04.01.2023, issued by the Assistant Director, Dept. of Geology & Mining, there are 8 other quarries situated within 500m radius from the current proposed quarry and the total area of the cluster is found to be 25.60.9 Ha (> 5Ha).
6. As per EIA Notification 2006 and its subsequent amendments, mines of minor minerals whose cluster area exceeds 5 Ha has to be considered under 'B1' category.
7. In the present case, the cluster area of the current proposal is 25.60.9 Ha which

is more than 5 Ha. But it is observed that the proponent has submitted an application seeking Environmental Clearance under 'B2' category.

In view of the above, the Committee, after detailed deliberations, decided that the current proposal cannot be processed and hence directed the proponent to submit an application seeking Terms of Reference under 'B1' category to further process the proposal. Hence, SEIAA may close and record the current proposal submitted under 'B2' category accordingly.

Agenda No: 413-14

(File No.10278/2023)

Proposed Rough Stone and Gravel Quarry Lease over an extent of 4.90.48 Ha at S.F.Nos. 6/1, 6/2, 6/3, 6/4, 10/2A(P), 10/3A, 10/3B, 11/2A, 11/2B1, 11/2B2, 11/2C1, 11/2C2, 11/2D1, 11/2D2, 11/2E1, 11/2E2, 11/2F1, 11/2F2, 11/2G(P), 11/2H(P), 11/2I, 16/1A, 16/1B, 16/1C, 16/2A, 16/2B, 16/2C1, 16/2C2, 16/2C3, 16/3A, 16/3B, 16/3C and 16/3D of Veeranakunnam Village, Maduranthagam Taluk, Chengalpattu District, Tamil Nadu by Thiru. S. Perumal - For Environmental Clearance. (SIA/TN/MIN/438028/2023 dated: 28.07.2023)

The proposal was placed in the 413th Meeting of SEAC held on 05.10.2023. The project details furnished by the proponent are available on the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Thiru. S. Perumal has applied for Environmental Clearance for the Proposed Rough Stone and Gravel Quarry Lease over an extent of 4.90.48 Ha at S.F.Nos. 6/1, 6/2, 6/3, 6/4, 10/2A(P), 10/3A, 10/3B, 11/2A, 11/2B1, 11/2B2, 11/2C1, 11/2C2, 11/2D1, 11/2D2, 11/2E1, 11/2E2, 11/2F1, 11/2F2, 11/2G(P), 11/2H(P), 11/2I, 16/1A, 16/1B, 16/1C, 16/2A, 16/2B, 16/2C1, 16/2C2, 16/2C3, 16/3A, 16/3B, 16/3C and 16/3D of Veeranakunnam Village, Maduranthagam Taluk, Chengalpattu District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. During deliberations, the following were noted:
 - i) From the Hydrogeological Report submitted by the project proponent which was obtained from Anna University, Chennai, the Committee noted


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- that the average water table in the proposed location lies at a depth of about 10m. Further, moisture content is present in the soil up to the depth of 5m.
- ii) The applied site is a fresh area, hitherto unmined.
 - iii) From the KML file uploaded by the proponent in the PARIVESH Portal, it was ascertained that the proposed area is fully surrounded by agricultural fields on all sides.
 - iv) Kiliyar River is located at a distance of 140m from the proposed project area.
 - v) Further, there is a check dam located at a distance of 1.6km from the applied area.

Considering the significance of water body/river course located nearby and also to protect the surrounding agricultural fields, the Committee after detailed deliberations, decided not to recommend the proposal for grant of Environmental Clearance.

Agenda No: 413-15

(File No.10285/2023)

Proposed construction of a Mall Building at Survey Nos. 101/2B1A, 101/7, 101/16, 101/8, 101/9, 102/2A2, 102/2A3, 102/3, 103/2A1, 103/7, 103/2E1, 103/2E2, 103/8, 103/2F1 & 103/4 of Ullur Village, Kumbakonam Taluk, Thanjavur District, Tamil Nadu by Mr. K. Soundararajan – For Environmental Clearance. (SIA/TN/INFRA2/437585/2022 dt.02.08.2023.)

The proposal was placed in the 413th Meeting of SEAC held on 05.10.2023. The project details furnished by the proponent are available on the website (parivesh.nic.in).

The SEAC noted the following:

1. The project proponent, Mr. Soundararajan has applied for Environmental Clearance for the Proposed construct a Mall Building at S.F.Nos. 20-109/1 of Vallancheri Village, SF.No. 101/2B1A, 101/7, 101/16, 101/8, 101/9, 102/2A2, 102/2A3, 102/3, 103/2A1, 103/7, 103/2E1, 103/2E2, 103/8, 103/2F1, 103/4 Ullur Village, Kumbakonam Taluk, Thanjavur District, Tamil Nadu.
2. The project/activity is covered under category “B2” of Item 8 (a) “Building and Construction Projects” of the schedule to the EIA Notification, 2006.



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Based on the documents submitted and presentation made by the project proponent along with the consultant, the following facts have emerged: -

1. The environmental clearance is sought for Proposed construction of a Mall Building at Survey Nos. 101/2B1A, 101/7, 101/16, 101/8, 101/9, 102/2A2, 102/2A3, 102/3, 103/2A1, 103/7, 103/2E1, 103/2E2, 103/8, 103/2F1 & 103/4 of Ullur Village, Kumbakonam Taluk, Thanjavur District, Tamil Nadu by the PP Mr. K. Soundararajan.
2. M/s Eco Services India Private Limited is the EIA Consultant for the project.
3. Total land area of the project is 12.657 Sq.m and built-up area is 28,257 Sq.m respectively.
4. Maximum number of floors will be 2B + G + 4 floors and the maximum height of the building will be 24.95 m.
5. The project proposal falls under Category-8(a) of EIA Notification, 2006 (as amended).
6. Salient features of the project as submitted by the project proponent:

Salient Features of the Proposal			
Name and Address of the PP		Name of the Consultant	
Mr. K. Soundararajan No.85/102, Srinagar Colony, Gandhai Nagar East, Kumbakonam, Thanjavur District		M/s Eco Services India Private Limited	
A. Site Location			
1.	Location	Ullur Village, Kumbakonam Taluk, Thanjavur District, Tamil Nadu	
2.	Latitude & Longitude	10°58'19.35" N	79°24' 8.49" E
		10°58'18.94" N	79°24'10.53" E
		10°58'13.79" N	79°24'12.43" E
		10°58'13.39" N	79°24'10.14" E


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3.	Survey Nos	101/2B1A, 101/7, 101/16, 101/8, 101/9, 102/2A2, 102/2A3, 102/3, 103/2A1, 103/7, 103/2E1, 103/2E2, 103/8, 103/2F1 & 103/4
4.	Area in Hectares	1.2657

PROJECT SUMMARY			
Sl. No.	Description	Total Quantity	Unit
B1. GENERAL			
1	Plot Area	12,657	SQMT
2	Proposed Built Up Area	28,857	SQMT
3	Total no of Saleable DU's	0	No.
4	Max Height - (Height of tallest block)	24.95	M
5	No of Building Blocks (Commercial building + Services Building)	2	-
6	Max No of Floors	4	Nos.
7	Expected Population (5,073 Commercial + Maintenance Staff)	5,073	Nos.
8	Total Cost of Project	49.70	CR
9	EMP	Capital Expenses – Rs.180 Lakhs Annual Operational expenses – 93.5 Lakhs	Rs.
10	CER	0.50	CR
B2.AREAS			
1	Permissible Ground Coverage Area (50%)	6,328	SQMT
2	Proposed Ground Coverage Area (33%)	4,318	SQMT
3	Permissible FSI Area (3.25)	41,135.25	SQMT


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4	Proposed FSI Area (1.40)	17,769.80	SQMT
5	Other Non FSI Areas - including basement area etc.	11,087.20	SQMT
6	Proposed Total Built Up Area	28,857	SQMT
B3. WATER			
1	Total Water Requirement	176	KLD
2	Fresh water requirement	67	KLD
3	Treated Water Requirement	109	KLD
4	Wastewater Generation	111	KLD
5	Proposed Capacity of STP	130	KLD
6	Treated Water Available for Reuse	109	KLD
7	Treated Water Recycled	109	KLD
8	Surplus treated water to be discharged in Municipal Sewer with Prior permission, if any	-	KLD
B3. RAINWATER HARVESTING			
1	Rainwater Harvesting - Recharge Pits	15	No.
2	Rainwater Harvesting Sump Capacity	50	M ³
B4. PARKING			
1	Total Parking Required as / Building Bye Laws	241 Nos. of Car Parking & 237 Nos. of Two-Wheeler Parking.	Nos
2	Proposed Total Parking	362 Nos. of Car Parking and 273 Nos. of Two-Wheeler parking	Nos
3	Parking in Basements	265 Nos. of Car Parking and 273 Nos. of Two-Wheeler Parking	Nos
B5. GREEN AREA			
1	Proposed Green Area (Minimum 15.0% of Plot area)	1,899	SQMT


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2	Total area	12,657	SQMT
3	Existing trees on Plot	Nil	Nos
4	Number of Trees to be Planted	158	Nos
5	Number of trees to be Transplanted /cut	Nil	Nos
B6. SOLID WASTE MANAGEMENT			
1	Total Solid Waste Generation	1.533	TPD
2	Organic waste & in – organic waste	Organic Waste – 0.913 Inorganic Waste – 0.609	TPD
3	Mode of Treatment & Disposal	<ul style="list-style-type: none"> • Organic Waste – OWC • In-Organic Waste – Handed Over to Recyclers 	-
4	Quantity of Sludge Generated from STP & Disposal	11 Kg/day Will be Dewatered, Processed in OWC and used as Manure for gardening	-
5	Quantity of E-Waste Generation & Disposal	0.711	T/ann um
6	Quantity of Hazardous waste Generation & Disposal (used / Spent Oil)	0.825	T/ann um
B7. POWER / GREEN POWER			
1	Total Power Requirement	2220	KVA
2	Solar Panels – Roof Coverage	50	%
	Hot Water Requirement of which met by Solar Panels	50% of Hot Water Requirement will be Met through Solar Panels	-
3	DG Set backup	3,320 KVA (2 nos. of 1,500 KVA, 1 no. of 320 KVA)	KVA
4	No of DG Sets	3	Nos


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C. Population Details			
Residential	DU'S	POP/DU	TOTAL POPULATION
Total Saleable Du's	-	-	-
Total	-	-	-
Non-Residential	-	-	-
CLUB house (Employees etc.)	-	-	-
Club	-	-	-
Commercial	-	-	4,612
Facility Management Staff	-	-	461
Total (Residential & Non-Residential)	-	-	5,073 Nos.
Visitors	-	-	-
Residential	-	-	-
Club/Community Hall	-	-	-
Commercial	-	-	-
Total Visitors	-	-	-
Total Population (Residential, Non-Residential & Visitors)	-	-	5,073 Nos


RECOMMENDATION OF THE COMMITTEE

The Committee discussed the matter and recommended the proposal for grant of environmental clearance subject to the standard conditions as per the Annexure II of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

Additional Conditions:

1. The construction shall comply with Green Building norms and shall get minimum IGBC Gold rating.
2. The proponent shall furnish an affidavit regarding the temporary structure lying within the proposed project site before obtaining EC from SEIAA.


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3. The proponent shall explore the possibilities of using Packaged STP systems available in the market in order to prevent the odour nuisance arising from conventional STP systems.
4. STP shall be installed on 10-year BOOT basis, so that the construction and maintenance are combined in one single responsibility.
5. The project proponent shall provide entry and exit points for the OSR area, play area as per the norms for the public usage and as committed. The PP shall construct a pond of appropriate size in the earmarked OSR land in consultation with the local body. The pond should be modelled like a temple tank with parapet walls, steps, etc. The pond is meant to play three hydraulic roles, namely (1) as a storage, which acted as insurance against low rainfall periods and also recharges groundwater in the surrounding area, (2) as a flood control measure, preventing soil erosion and wastage of runoff waters during the period of heavy rainfall, and (3) as a device which was crucial to the overall eco-system.
6. Project proponent is advised to explore the possibility and getting the cement in a closed container rather through the plastic bag to prevent dust emissions at the time of loading/unloading.
7. Project proponent should ensure that there will be no use of "Single use of Plastic" (SUP).
8. The proponent should provide the sufficient electric vehicle charging points as per the requirements at ground level and allocate the safe and suitable place in the premises for the same.
9. The project proponent should develop green belt in the township as per the plan submitted and also follow the guidelines of CPCB/Development authority for green belt as per the norms.
10. Project proponent should invest the CSR amount as per the proposal and submit the compliance report regularly to the concerned authority/Directorate of environment.
11. Proponent should submit the certified compliance report of previous/present EC along with action taken report to the Regional office MoEFLko/Director of Environment and other concerning authority regularly.


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12. Proponent shall provide the dual pipeline network in the project for utilization of treated water of STP for different purposes and also provide the monitoring mechanism for the same. STP treated water not to be discharged outside the premises without the permission of the concerned authority.
13. The project proponent shall provide a measuring device for monitoring the various sources of water supply namely fresh water, treated waste water and harvested rain water.
14. The proponent should provide the MoU with STPs' owner/concerned department for getting the STPs treated water for construction use.
15. As agreed by the project proponent, the CER cost is Rs.50 Lakhs and the amount shall be utilized for the following activities before obtaining CTE from TNPCB.



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Beneficiary	Description of CER Activity	Budgetary Allocation (In Lakhs)
Chettimandapam Pond – Kumbakonam Panchayat Union	<ul style="list-style-type: none"> Eco Restoration of Pond 	10 Lakhs
Government Girls Higher Secondary School, Ullur Village, Kumbakonam Taluk, Thanjavur District.	<ul style="list-style-type: none"> Providing Smart Board for Classrooms. 	5 Lakhs
	<ul style="list-style-type: none"> Providing Fire Extinguishers 	
Panchayat Union Primary School, Chettimandapam Village, Ullur Panchayat, Kumbakonam Taluk, Thanjavur District.	<ul style="list-style-type: none"> Construction of Toilet Block 	5 Lakhs
	<ul style="list-style-type: none"> Providing Smart Board for Classrooms. 	
	<ul style="list-style-type: none"> Providing Height Measurement Scale 	
	<ul style="list-style-type: none"> Providing Body Weighing Machine 	
Government Arts College, Kumbakonam - 612 002	<ul style="list-style-type: none"> Infrastructure Development 	10 Lakhs
Government Higher Secondary School, Neduvasal East, Thiruvarankumlam Taluk, Pudukottai District.	<ul style="list-style-type: none"> Construction of New Auditorium 	10 Lakhs
Government Higher Secondary School, L.N. Puram, Thiruvarankumlam Taluk, Pudukottai District.	<ul style="list-style-type: none"> Construction of New Auditorium 	10 Lakhs
Total		50 Lakhs


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Agenda No: 413-16

(File No: 10265/2023)


Proposed Rough stone & Gravel quarry lease over an extent of 1.50.0Ha at SF.No. 46/1(P) of Puliankulam Village, kovilpatti Taluk, Thoothukudi District, Tamil Nadu by Thiru.R.Raveendran - for Environmental Clearance. (SIA/TN/MIN/437839/2023, Dated: 25.07.2023)

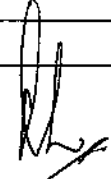
The proposal was placed in 413th meeting of SEAC held on 05.10.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru.R.Raveendran has applied for Environmental Clearance for the proposed Rough stone & Gravel quarry lease over an extent of 1.50.0Ha at SF.No. 46/1(P) of Puliankulam Village, kovilpatti Taluk, Thoothukudi District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.

File No	10265/2023	Category	B2
	SIA/TN/MIN/437839/2023, Dated:25.07.2023		
Sl. No	Salient Features of the Proposal		
1.	Name of the Owner/Firm	:	Thiru.R. Raveendran S/o. Ramasamy No.1/15, West Street Puliankulam Village Kovilpatti Taluk Thoothukudi District-628502.
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough stone & Gravel quarry
3.	S.F Nos. of the quarry site with area break-up	:	46/1(P)
4.	Village in which situated	:	Puliankulam
5.	Taluk in which situated	:	kovilpatti
6.	District in which situated	:	Thoothukudi


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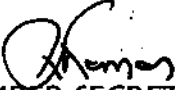

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7.	Extent of quarry (in ha.)	:	1.50.00Ha		
8.	Latitude & Longitude of all corners of the quarry site	:	09°14'15.95"N to 09°14'20.70"N 77°49'08.90"E to 77°49'13.35"E		
9.	Topo Sheet No.	:	58 G/16		
10.	Type of mining	:	Opencast Semi-mechanized Mining		
11.	Life of Project	:	5 Years		
	Lease Period	:	5 Years		
	Mining Plan Period	:	5 Years		
12.	Mining Plan Details	:	As per approved Mining Plan		
			Rough stone	Gravel	Top soil
	Geological Resources m ³	:	4,55,580m ³	60,744m ³	15,186m ³
	Minable Resources m ³	:	1,57,565m ³	43,932m ³	11,721m ³
	Annual Peak Production in m ³	:	33,310m ³	17,724m ³	-
	Maximum Depth in meters	:	35m		
13.	Depth of water table	:	60m BGL		
14.	Man Power requirement per day:	:	12 Employees		
15.	Water requirement:		6.0 KLD		
	1. Drinking water & Utilized water	:	1.0 KLD		
	2. Dust suppression	:	4.0 KLD		
	3. Green belt	:	1.0 KLD		
16.	Power requirement	:	TNEB -		
17.	Precise area communication approved by the Assistant Geologist /Assistant Director(i/c), Department of G&M.	:	Na.Ka.No.G.M.1/202/2021, Dated:10.04.2023		
18.	Mining Plan approved by Assistant Geologist /Assistant Director(i/c), Department of G&M.	:	Roc.No. G.M.1/202/2021, Dated:04.07.2023		
19.	500m Cluster Letter approved by the Assistant Geologist/ Assistant Director(i/c), Department of G&M.	:	Roc.No. G.M.1/202/2021, Dated:04.07.2023		
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated:24.04.2023		

21.	Project Cost (excluding EMP cost)	:	Rs. 67,44,000/-		
22.	EC Recommendation	:	Validity	30 years subject to the following upper limits.	
				Rough stone	Gravel
		:	Max Total in m ³	1,57,565m ³	43,932 m ³
		:	Annual Max in m ³	33,310m ³	17,724 m ³
:	Max Depth in mtrs	35m			
23.	EMP cost (in Rs. Lakh).	:	Rs.106.28 Lakhs		
24.	CER cost (in Rs. Lakh).	:	Rs. 5,00,000		

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 33,310m³ of Rough stone and 17,724m³ of Gravel by maintaining the ultimate depth of mining up to 35m and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022.
2. The PP shall furnish the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, to the concerned AD (Mines) at the time of lease execution.
3. The PP shall not employ any external agency for carrying out the blasting operation and he shall also install the temporary magazines approved by the concerned


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licensing authority before the execution of the lease, for storing the authorized explosives & detonators separately in accordance with the Explosive Rules, 2008.

4. Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of six months from the commencement of quarrying operations, to design the controlled blast parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the proposed quarry, by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
5. The PP shall furnish a Standard Operating Procedures (SoP) for carrying out the blasting operations in securing the safety of the persons living within a radial distance of 500 m (danger zone) including the protection of the cart track, to the concerned AD (Mines) at the time of lease execution.
6. As a part of Ground Water Management, the PP shall carry out the scientific studies to assess the existing hydrogeological condition and impacts of the quarrying operation on the ground water level present in the core zone, within 2 years from the commencement of mining operations, by involving any one of the reputed Research and Academic Institution - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, University of Madras – Centre for Environmental Studies, and Anna University Chennai-Dept of Geology, CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
7. For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall during the 3rd year or when the depth exceeds 30m whichever is


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earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.

8. As accepted by the Project Proponent the CER cost is Rs. 5 Lakhs and the amount shall be spent for the activities as committed towards Government Higher Secondary School, Ilayarasanendal Village before obtaining CTO from TNPCB.

Agenda No: 413-17

(File No: 10266/2023)

Proposed Gravel and Laterite quarry lease over an extent of 1.36.8 Ha at S.F.Nos. 19/5A1B & 19/5A1C of Silambinathanpettai Village, Panruti Taluk, Cuddalore District, Tamil Nadu by Thiru. D. Kadhirvel – For Environmental Clearance. (SIA/TN/MIN/438025/2023, Dated: 25.07.2023)

The proposal was placed for appraisal in this 413th meeting of SEAC held on 05.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, Thiru. D. Kadhirvel has applied for Environmental Clearance for the Proposed Gravel and Laterite quarry lease over an extent of 1.36.8 Ha at S.F.Nos. 19/5A1B & 19/5A1C of Silambinathanpettai Village, Panruti Taluk, Cuddalore District, Tamil Nadu.
2. The project/activity is covered under Category “B2” of Item 1(a) “Mining of Minerals Projects” of the Schedule to the EIA Notification, 2006.
3. The salient features of the proposal are as follows:

File No	10266 / 2023	Category	B2 / 1(a)
Sl. No	Salient Features of the Proposal		
1	Name of the Owner/Firm	:	Thiru. D. Kadhirvel, S/o. Devarasu, No.90, Kannarapet, K.Pudhur, Karaikkadu,


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		Cuddalore Taluk and District - 607 005.			
2	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	Gravel and Laterite			
3	S.F Nos. of the quarry site with area break-up	19/5A1B & 19/5A1C			
4	Village in which situated	Silambinathanpettai			
5	Taluk in which situated	Panruti			
6	District in which situated	Cuddalore			
7	Extent of quarry (in ha.)	1.36.8 Ha			
8	Latitude & Longitude of all corners of the quarry site	11°42'28.57"N to 11°42'32.93"N 79°36'41.93"E to 79°36'46.73"E			
9	Topo Sheet No.	58 - M/10			
10	Type of mining	Opencast Mechanized Mining			
11	Life of Project	: 2 years			
	Lease Period	: 2 years			
	Mining Plan Period	: 2 years			
12	Mining Plan Details	As per approved Mining Plan		As modified by SEAC	
	Geological Resources m ³ (RoM)	Gravel	Laterite	Gravel	Laterite
		21,736 m ³	5434 m ³	-	-
	Movable Resources m ³ (RoM)	Gravel	Laterite	Gravel	Laterite
		15,189 m ³	3798 m ³	-	-
	Annual Peak Production in m ³	Gravel	Laterite	Gravel	Laterite
8026 m ³		2007 m ³	-	-	
	Ultimate Depth in meters	: 2m		-	
13	Depth of water table	: 49m below ground level			
14	Man Power requirement per day:	: 10 Nos.			
15	Water requirement:	: 1.0 KLD			


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	1. Drinking water 2. Utilized water 3. Dust suppression 4. Green belt		0.2 KLD - 0.5 KLD 0.3 KLD		
16	Power requirement	:	3160 Liters of HSD		
17	Precise area communication approved by Assistant Director, Department of G&M	:	R.C.No.129/Mines/2022. Dated:18.05.2023		
18	Mining Plan approved by Assistant Director, Department of G&M	:	Rc.No.129/Mines/2022. Dated:22.06.2023		
19	Department of G&M, Assistant Director 500m Cluster Letter	:	Rc.No.129/Mines/2022. Dated:22.06.2023		
20	VAO Certificate Regarding Structures within 300m Radius	:	Letter dated 23.06.2023		
21	Project Cost (excluding EMP cost)	:	Rs. 24,79,000/-		
22	EC Recommendation	:	Validity	30 years subject to the following upper limits.	
				Gravel	Laterite
		:	Max Total RoM in m ³	15,189 m ³	3798 m ³
		:	Annual Max RoM in m ³	8026 m ³	2007 m ³
		:	Max Depth in mtrs	2m	
23	EMP cost (in Rs. Lakh).	:	Capital Cost – Rs. 9,14,460/- Recurring Cost – Rs. 5,33,226/-		
24	CER cost (in Rs. Lakh).	:	Rs. 2,00,000/-		

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 8026m³ of gravel & 2007m³ of laterite by maintaining the ultimate depth of mining upto 2m for a period of two years only and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 1) The PP shall not carry out the blasting operations in the proposed quarry.
- 2) The PP shall install a Bio-toilet for the persons to be employed in the mine before the lease execution.
- 3) The PP should not remove any trees present within the quarry site.
- 4) The PP shall ensure that a stabilised haul road consisting of a 50-75mm bonded wearing course with a bitumen seal layer shall be laid before the lease execution as it will ensure less wheel generated dust as well as reduced loss of fines and less water ingress.
- 5) As accepted by the Project Proponent the CER cost of Rs. 2 Lakhs and the amount shall be spent for the activities as committed towards Panchayat Union Primary School, Silambinathanpettai, Panruti, Cuddalore District, before obtaining CTO from TNPCB.

Agenda No: 413-18


(File No: 10273/2023)

Proposed Rough Stone quarry lease over an extent of 2.32.0 Ha at S.F.Nos. 398/2(P), 398/1A2(P) & 398/1B2(P) of Musuvanoothu Village, Nilakottai Taluk, Dindigul District, Tamil Nadu by Thiru. A. Muniappan – For Environmental Clearance. (SIA/TN/MIN/438599/2023, Dated: 30.07.2023)

The proposal was placed for appraisal in this 413th meeting of SEAC held on 05.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, Thiru. A. Muniappan has applied for Environmental Clearance for the Proposed Rough Stone quarry lease over an extent of 2.32.0 Ha at S.F.Nos. 398/2(P), 398/1A2(P) & 398/1B2(P) of Musuvanoothu Village, Nilakottai Taluk, Dindigul District, Tamil Nadu.
2. The project/activity is covered under Category “B2” of Item 1(a) “Mining of Minerals Projects” of the Schedule to the EIA Notification, 2006.

During the meeting, the Committee noted that the project proponent was absent for the meeting. Hence the subject was not taken up for discussion. Further, SEAC decided that the proponent shall furnish the reason for absence.


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Agenda No: 413-19

(File No: 10280/2023)

Proposed Black Granite quarry lease over an extent of 1.09.0 Ha at S.F.Nos. 334/1A2A(Part) & 334/2A(Part) of Dhoddakajanur Village, Thalavadi Taluk, Erode District, Tamil Nadu by Thiru. A. Azamulla Khan – For Environmental Clearance. (SIA/TN/MIN/435305/2023, Dated: 01.07.2023)


The proposal was placed for appraisal in this 413th meeting of SEAC held on 05.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).The SEAC noted the following:

1. The project proponent, Thiru. A. Azamulla Khan has applied for Environmental Clearance for the Proposed Black Granite quarry lease over an extent of 1.09.0 Ha at S.F.Nos. 334/1A2A(Part) & 334/2A(Part) of Dhoddakajanur Village, Thalavadi Taluk, Erode District, Tamil Nadu.
2. The project/activity is covered under Category “B2” of Item 1(a) “Mining of Minerals Projects” of the Schedule to the EIA Notification, 2006.
3. The salient features of the proposal are as follows:

File No	10280 / 2023	Category	B2 / 1(a)
Sl. No	Salient Features of the Proposal		
1	Name of the Owner/Firm	:	Thiru. A. Azamulla Khan, S/o. Abdul Rahimkhan, Kavalande, Nanjangud Taluk, Mysore District, Karnataka State - 517 312.
2	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Black Granite
3	S.F Nos. of the quarry site with area break-up	:	334/1A2A(Part) & 334/2A(Part)
4	Village in which situated	:	Dhoddakajanur
5	Taluk in which situated	:	Thalavadi
6	District in which situated	:	Erode
7	Extent of quarry (in ha.)	:	1.09.0 Ha


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8	Latitude & Longitude of all corners of the quarry site	:	11°45'26.62"N to 11°45'30.90"N 76°58'33.96"E to 76°58'38.43"E	
9	Topo Sheet No.	:	58 – A/13	
10	Type of mining	:	Opencast Mechanized Mining	
11	Life of Project	:	5 years	
	Lease Period	:	20 years	
	Mining Plan Period	:	5 years	
12	Mining Plan Details	:	As per approved Mining Plan As modified by SEAC	
	Geological Resources m ³ (RoM)	:	Black Granite Black Granite	
		:	90,160 m ³ ROM which includes 18,031 m ³ of granite recovery (@20%) & 72,129 m ³ of granite waste (@80%)	-
		:	Black Granite Black Granite	-
	Minable Resources m ³ (RoM)	:	26,368 m ³ ROM which includes 5274 m ³ of granite recovery (@20%) & 21,094 m ³ of granite waste (@80%)	-
:		Black Granite Black Granite	-	
Annual Peak Production in m ³	:	4160 m ³ ROM which includes 832 m ³ of granite recovery (@20%) & 3328 m ³ of granite waste (@80%)	-	
	:	Ultimate Depth in meters	28m -	
13	Depth of water table	:	49m-54m below ground level	
14	Man Power requirement per day:	:	24 Nos.	
15	Water requirement: 1. Drinking water	:	2.0 KLD 0.5 KLD	


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	2. Utilized water 3. Dust suppression 4. Green belt		- 0.8 KLD 0.7 KLD	
16	Power requirement	:	32208 Liters of HSD	
17	Precise area communication approved by Industries (MMB.3) Department	:	G.O. (3D) No. 11, Industries (MMB.3) Department, dated 23.01.2006	
18	3 rd Scheme of Mining Plan approved by Commissioner, Department of G&M	:	Rc.No.1899/MM4/2023, Dated:16.03.2023	
19	Department of G&M, Deputy Director 500m Cluster Letter	:	Rc.No.018/Mines/2023, Dated:30.05.2023	
20	VAO Certificate Regarding Structures within 300m Radius	:	Letter dated 03.04.2023	
21	Project Cost (excluding EMP cost)	:	Rs. 1,99,98,000/-	
22	EC Recommendation	:	Validity	30 years subject to the following upper limits.
		:		Black Granite
		:	Max Total RoM in m ³	20,128 m ³ ROM which includes 4026 m ³ of granite recovery (@20%) & 16,102 m ³ of granite waste (@80%)
		:	Annual Max RoM in m ³	4160 m ³ ROM which includes 832 m ³ of granite recovery (@20%) & 3328 m ³ of granite waste (@80%)
		:	Max Depth in mtrs	28m
23	EMP cost (in Rs. Lakh).	:	Capital Cost – Rs. 27,55,300/- Recurring Cost – Rs. 11,12,484/-	
24	CER cost (in Rs. Lakh).	:	Rs. 5,00,000/-	


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Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the annual peak production capacity of not exceeding 4160 m³ ROM by maintaining the ultimate depth of mining upto 28m and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the following specific conditions:

- 1) The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
- 2) The PP shall furnish a SOP indicating the safe environment while operating the Diamond Wire Saw cutting in the proposed quarry at the time of lease execution.
- 3) The PP shall construct an embankment adjacent to the odai existing nearby for a height of not less than 2 m with adequate plantation before the lease execution.
- 4) For the safety of the persons employed in the quarry, the PP shall carry out the scientific studies to assess the slope stability of the working benches and existing quarry wall within a period of six months from the date of lease execution, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg. Surathkal, and Anna University Chennai-CEG Campus. A copy of such scientific study report shall be submitted to the SEIAA, MoEF, TNPCB, AD/Mines-DGM and DMS, Chennai as a part of Environmental Compliance without any deviation.
- 5) The PP shall remit Rs. 5.0 lakhs to the concerned DFO as Conservation/mitigation measures for the Sathiyamangalam Tiger Reserve since the site is within 10km radius and the same shall be included in the EMP.


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Agenda No: 413-20

(File No: 10287/2023)

Proposed Quartz and Feldspar quarry lease over an extent of 2.17.5 Ha at S.F.Nos. 826/1B & 826/2 of Kosanam (B) Village, Nambiyur Taluk, Erode District, Tamil Nadu by M/s. Sri Hill Minerals – For Environmental Clearance. (SIA/TN/MIN/430938/2023, Dated: 26.05.2023)

The proposal was placed for appraisal in this 413th meeting of SEAC held on 05.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

1. The project proponent, M/s. Sri Hill Minerals has applied for Environmental Clearance for the Proposed Quartz and Feldspar quarry lease over an extent of 2.17.5 Ha at S.F.Nos. 826/1B & 826/2 of Kosanam (B) Village, Nambiyur Taluk, Erode District, Tamil Nadu.
2. The project/activity is covered under Category “B2” of Item 1(a) “Mining of Minerals Projects” of the Schedule to the EIA Notification, 2006.

Based on the presentation and the documents furnished by the project proponent, the SEAC decided to call for the following details from the project proponent:

- i) The PP shall obtain Certified Compliance Report (CCR) from Integrated Regional Office, MoEF&CC, Chennai for the earlier Environmental Clearance obtained from DEIAA.

On receipt of the above details, the SEAC would further deliberate on this project and decide the further course of action. Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVRESH portal.

Agenda No: 413 – TA - 01

(File No: 9622/2023)

Proposed Rough Stone and Gravel Quarry lease over an extent of 1.21.50Ha S.F.No.246/3, Veppilai Village, Kadayampatti Taluk, Salem District by Thiru.S.Uthirasami - For Environmental Clearance. (SIA/TN/MIN/409129/2022, dt: 03.12.2022)

Earlier the proposal was placed for appraisal in this 364th SEAC meeting held on


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23.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

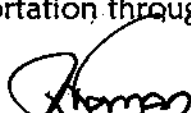
1. The Project Proponent, Thiru.S.Uthirasami has applied for Environmental Clearance for the proposed Rough Stone and Gravel Quarry lease over an extent of 1.21.50Ha S.F.No.246/3, Veppilai Village, Kadayampatti Taluk, Salem District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of item I(a) "Mining of Minerals Project' of the Schedule to the EIA Notification,2006.
3. The precise area communication/lease is issued for the period of 5Years. The approved mining plan is for the period of five years & production should not exceed 89,335m³ of Rough Stone & 18,852 m³ of Gravel and the annual peak production shall not exceed 18000 m³ of Rough Stone (4th Year) & 9312m³ of Gravel (1st Year). The ultimate depth is 42m BGL.

The salient features of the project are as follows:

Sl. No	Details of the Proposal	:	Data Furnished
1	Name of the Owner/Firm	:	Thiru.S.Uthirasami, S/o.Subramani, 5/56, O No.2/190 Kuttakkadu, Rc Chettipatti Post, Palpakki, Omalur Taluk, Salem-636455
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough Stone and Gravel
3	S.F No. Of the quarry site with area break-up	:	246/3
4	Village in which situated	:	Veppilai
5	Taluk in which situated	:	Kadayampatti
6	District in which situated	:	Salem
7	Extent of quarry (in ha.)	:	1.21.50Ha
8	Latitude & Longitude of all corners of the quarry site	:	11°56'39.19"N to 11°56'44.32"N 78°07'33.79"E to 78°07'38.62"E
9	Topo Sheet No.	:	58 – I/1
10	Type of mining	:	Opencast Semi-Mechanized of Mining
11	Period of quarrying proposed	:	5 years

12	Production (Quantity in m ³)	:	89335m ³ of Rough Stone & 18852m ³ of Gravel
13	Depth of quarrying	:	42m BGL
14	Depth of water table	:	65m – 70m BGL
15	Man Power requirement per day:		18 Nos.
16	Source of Water Requirement		water vendors and Existing Borewell
17	Water requirement: 1. Drinking & domestic purposes (in KLD) 2. Dust suppression, Green Belt & Wet Drilling (in KLD)	:	1.81 KLD 0.81 KLD 0.5 KLD 0.5 KLD
18	Power requirement		TNEB
19	Whether any habitation within 300m distance	:	No
20	Precise area communication approved by the, District Collector, Department of Geology and Mining with date	:	Rc.No.107/2021/Kanimam-A, dt: 14.10.2022
21	Mining Plan approved by Deputy Director, Department of Geology and Mining with date	:	Roc.No.107/2021/Mines-A, dt: 01.11.2022
22	Deputy Director, Department of Geology and Mining 500m cluster letter	:	Roc.No.107/2021/Mines-A, dt: 11.11.2022
23	VAO certificate regarding 300m radius cluster		Letter dt: 05.10.2022.
24	Project Cost (including EMP cost)	:	Rs.111.225 Lakhs
25	EMP cost	:	Rs.65 Lakhs/ 5 Years
26	CER cost		Rs.5 Lakhs

Based on the presentation and documents furnished by the project proponent, SEAC noted that (i) the proposed mine site is un-mined so far and (ii) Thoppaiyar Dam & Amman Eri are located nearer to the proposed mining site. Hence, SEAC, after detailed deliberations, decided to make an on-spot inspection to assess the present status of highly sensitive environmental settings of the site and availability of haul road for the transportation through a sub-committee constituted for the purpose.


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The SEAC will take further course of action based on the site inspection & report.

The sub-committee inspection report was placed in this 413th meeting of SEAC held on 05.10.2023. The sub-committee visited Rough Stone and Gravel Quarry on 01.05.2023.

The following are the observations of committee.

1. The Sub Committee observed that the quarries are located on Thoppur hills, an eastern ghat hill range that runs in Dharmapuri district.
2. The entire Thoppur hills is a major watershed, for the area, which is other wise a dry area.
3. The water that runs off the hill, drains in to a *odai* that feeds the '*Amman eri*', a nearby lake, that is key to all the agricultural activities in the area.
4. Surplus from *Amman eri* flows in to the Thoppaiyar dam, a crucial watershed that supports agricultural area and a source of drinking water for the population in and around, otherwise a dry area.
5. The proposed quarries are spread over the hills. the dust and the residue, including the explosive residues from the quarries and a crusher located in the vicinity, likely to seep into the *odai* and eventually in to the *Amman eri*. this pollution load interferes with the quality of water and may reduce the agricultural productivity in the long run.
6. The quarrying activity also alters and affects the water drainage system of the hill.
7. Thoppaiyar Dam, a source of drinking water for the population around, will be rendered with a reduced services that affects the ecology and economy of the area.

Hence the subcommittee opined that the Environmental Clearence need not be given to the proposed quarries in the Thoppur hills.

Based on the presentation and documents furnished by the project proponent and the recommendation of the Sub- committee constituted by SEAC. Considering the environmental settings of the proposed mining area, SEAC decided to accept the recommendation of the subcommittee and not to recommend grant of EC for this project.


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Agenda No: 413 – TA - 02

(File No: 9634/2022)

Proposed Rough Stone and Gravel Quarry lease over an extent of 0.93.0 Ha S.F.No.247/2, Veppilai Village, Kadayampatti Taluk, Salem District by Tmt. U. Selvi - For Environmental Clearance. (SIA/TN/MIN/409045/2022, dt: 03.12.2022)

The proposal was placed for appraisal in this 413th SEAC meeting held on 05.10.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in). The SEAC noted the following:

1. The Project Proponent, Tmt. U. Selvi has applied for Environmental Clearance for the proposed Rough Stone and Gravel Quarry lease over an extent of 0.93.0 Ha S.F.No.247/2, Veppilai Village, Kadayampatti Taluk, Salem District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of item I(a) "Mining of Minerals Project" of the Schedule to the EIA Notification,2006.
3. The precise area communication/lease is issued for the period of 5 Years. The approved mining plan is for the period of five years & production should not exceed 53,530 m³ of Rough Stone & 12,510 m³ of Gravel and the annual peak production shall not exceed 11950m³ of Rough Stone (5th Year) & 4510m³ of Gravel (1st Year). The ultimate depth is 27m AGL.
4. Earlier, the proposal was placed for appraisal in this 364th SEAC meeting held on 23.03.2023. Based on the presentation and documents furnished by the project proponent, SEAC noted that (i) the proposed mine site is un-mined so far and (ii) Thoppaiyar Dam & Amman Eri are located nearer to the proposed mining site. Hence, the SEAC, after detailed deliberations, decided to make an on-spot inspection to assess the present status of highly sensitive environmental settings of the site and availability of haul road for the transportation through a sub-committee constituted for the purpose.

The SEAC will take further course of action based on the site inspection & report. In view of the above, the proposal was again placed in this 413th SEAC meeting held on 05.10.2023 where the Sub-Committee report was deliberated and its observations & conclusions are given as below:


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1.0 Context and Chronology

- Rough Stone and Gravel Quarry is owned by Tmt. U. Selvi of Salem, Tamil Nadu. Tmt. U. Selvi has applied for obtaining of mining lease over an area of 0.93.0 Ha at S.F. No. 247/2 of Veppilai Village, Kadayampatti Taluk, Salem District, Tamil Nadu.
- While the original mining lease for rough stone was granted for 5 years and gravel was granted for 3 years has been approved through Precise Area Communication Letter vide Na. Ka. En. 108/2021/Kanimam Aa dated 14.10.2022 by The Deputy Director, Department of Geology and Mining, District Collectorate, Salem. The lease is valid up to 5 years.
- The mining plan for the lease area was approved vide Letter Roc. No. 108/2021/Mines-B dated 01.11.2022 by Deputy Director, Department of Geology and Mining, Collectorate, Salem.
- The mining activity is covered under category “B2”.
- 500 meter radius letter was approved by Deputy Director, Department of Geology and Mining, Collectorate, Salem vide Letter Roc.108/2021/Mines-B dated 11.11.2022.
- The proposal was appraised by SEAC-TN in its 364th meeting held on 23.03.2023.
- The SEAC-TN constituted a sub-committee comprising Thiru. D. Velazhagan and Thiru. D. Narasimhan, to make on-spot inspection to assess the present status of highly sensitive environmental settings of the site and availability of haul road for the transportation through a sub-committee constituted for the purpose.
- The sub-committee inspected the project site on 01.05.2023, interacted with the proponent and the EIA coordinator.

2.0 On-site Inspection – Observations

- The environmental and socio-economic settings of the mine include:
 - Nearest reserve forest – 0.70 km (SE); Lokkur R.F
 - Nearest water body – 0.94 km (NE); Amman Eri
 - Nearest Dam/Reservoir – 2.78 km (NW); Thoppaiyar Dam/Reservoir
 - Nearest archeological place – 29.42 (S); Government Museum, Salem

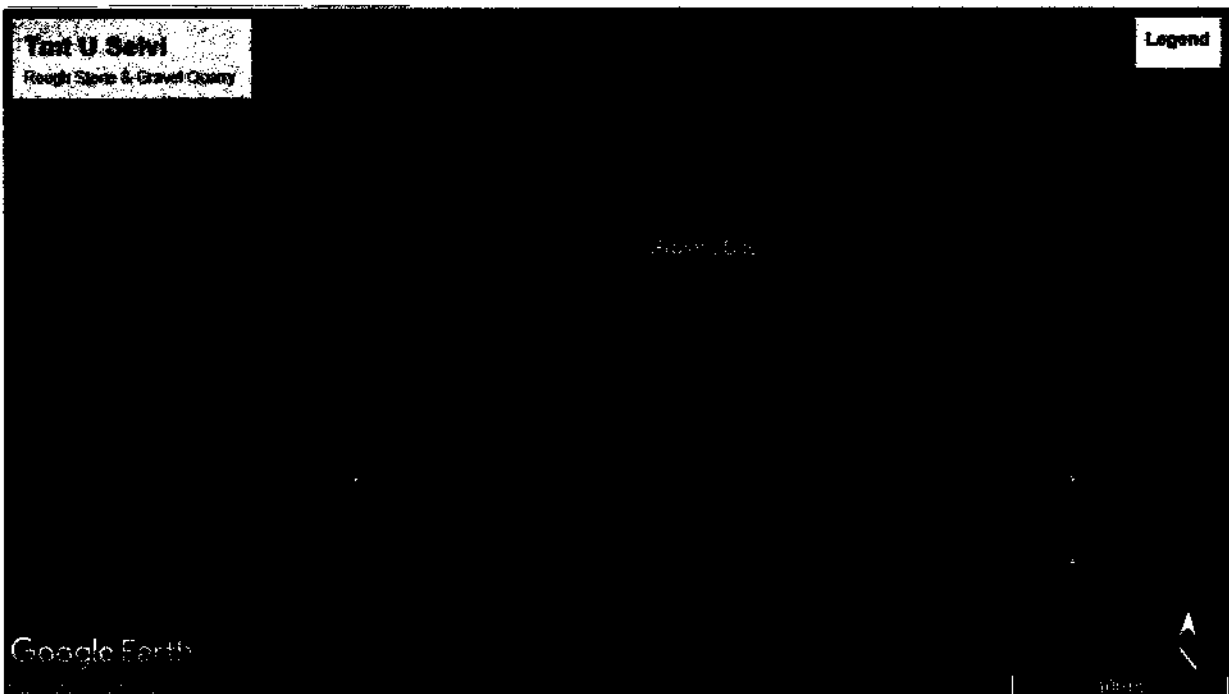

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- Nearest park – 22.06 (S); Kurumbapatty Zoological Park
- Nearest habitation – more than 300 m away
- The mine operations were of Opencast with hydraulic rock breaker, and excavator for loading.
- The mine was a fresh lease and fresh quarry
- Luxuriant trees of different varieties are seen as green belt surrounding the mine. The proponent informed that these trees were planted and maintained by the proponent. The greenbelt is well maintained.

Evidence that the mine was a fresh quarry:



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 CHAIRMAN
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INSPECTION PROCEEDINGS:


1. The Project Proponent. Tmt. U. Selvi has applied for Environmental Clearance for the proposed Rough Stone and Gravel Quarry lease over an extent of 0.93.0 Ha at S.F.No.247/2, Veppilai Village, Kadayampatti Taluk, Salem District. Tamil Nadu.
2. The project/activity is covered under Category "B2" of item 1(a) "Mining of Minerals Project' of the Schedule to the EIA Notification, 2006.
3. The precise area communication/lease is issued for the period of 5 Years. The approved mining plan is for the period of five years & production should not exceed 53,530 m³ of Rough Stone & 12,510 m³ of Gravel and the annual peak production shall not exceed 11,950 m³ of Rough Stone (5th Year) & 4510 m³ of Gravel (1st Year). The ultimate depth is 27 m BGL.

Based on the presentation and documents furnished by the project proponent, SEAC noted that (i) the proposed mine site is un-mined so far and (ii) Thoppaiyar Dam & Amman Eri are located nearer to the proposed mining site. Hence, the SEAC, after detailed deliberations, decided to make an on-spot inspection to assess the present status of highly sensitive environmental setting of the site and availability of haul road for the transportation through a sub-committee constituted for the purpose.

The sub-committee visited Rough Stone and Gravel Quarry on 01.05.2023.

The following are the observations of committee.

1. The sub committee observed that the quarries are located on Thoppur hills, an eastern ghat hill range that runs in Dharmapuri district.
2. The entire Thoppur hills is a major watershed for the area, which is other wise a dry area.
3. The water that runs off the Hill, drains in to an *Odai* that feeds the '*Amman Eri*', a nearby lake, that is key to all the agricultural activities in the area.
4. Surplus from *Amman eri* flows in to the Thoppaiyar dam, a crucial watershed that supports agricultural area and a source of drinking water for the population in and around, otherwise a dry area.


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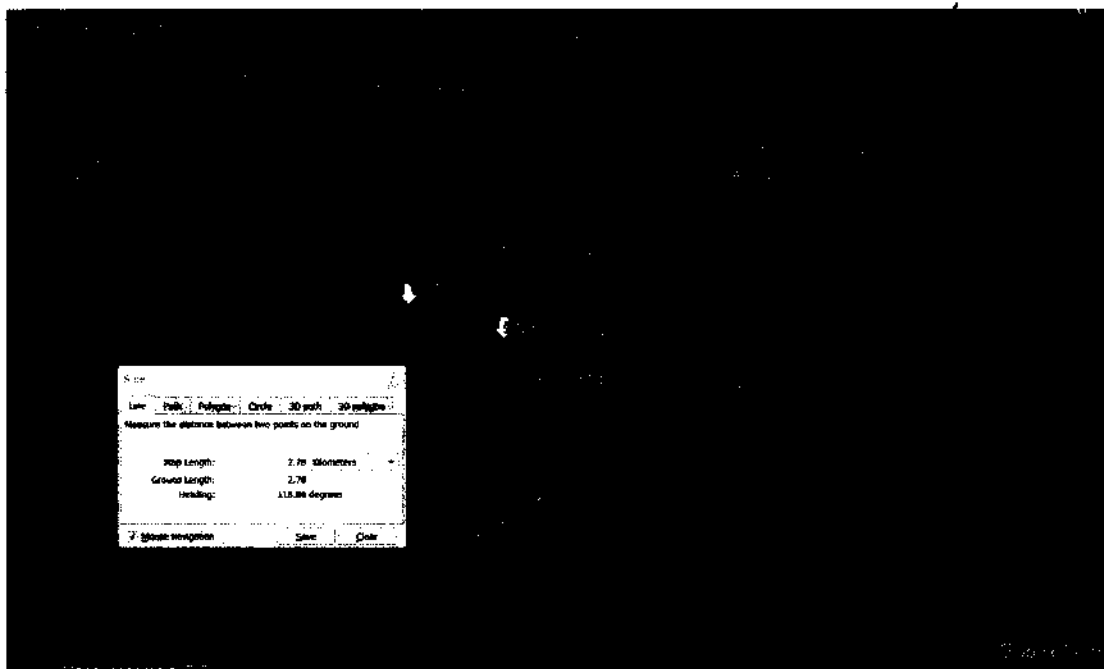
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5. The proposed quarries are spread over the hills. the dust and the residue, including the explosive residues from the quarries and a crusher located in the vicinity, likely to seep into the *odai* and eventually in to the Amman eri. this pollution load interferes with the quality of water and may reduce the agricultural productivity in the long run.
6. The quarrying activity also alters and affects the water drainage system of the hill.
7. Thoppaiyar Dam, a source of drinking water for the population around, will be rendered with a reduced services that affects the ecology and economy of the area.

HENCE THE SUBCOMMITTEE OPINES THAT THE ENVIRONMENTAL CLEARENCE NEED NOT BE GIVEN TO THE PROPOSED QUARRIES IN THE THOPPUR HILLS.

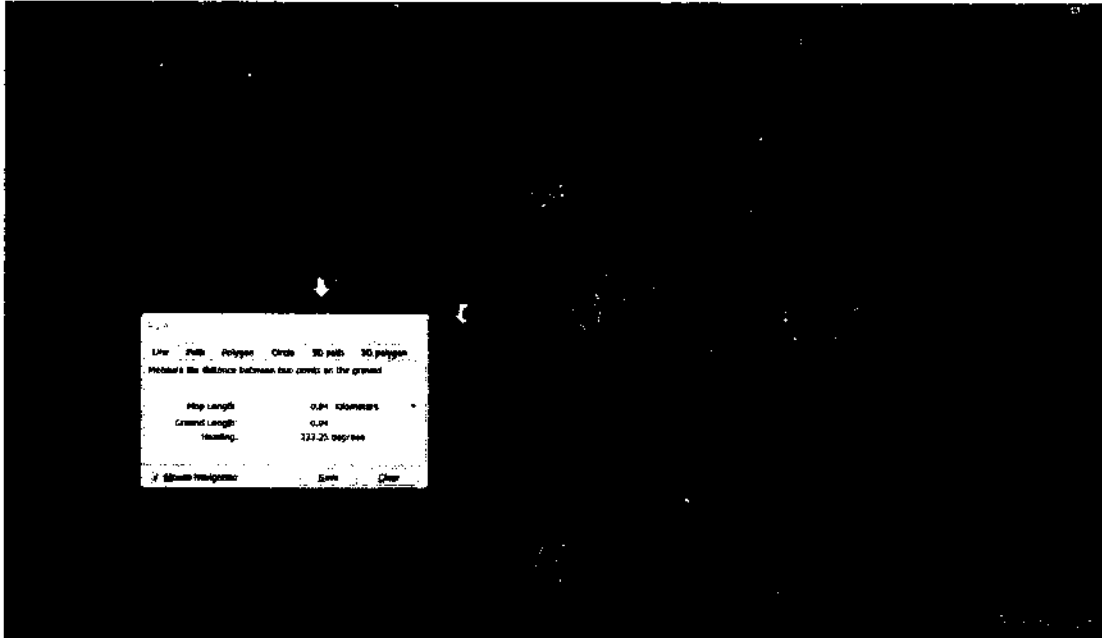
DISTANCE OF PROJECT SITE FROM THOPPAIYAR DAM



DISTANCE OF PROJECT SITE FROM AMMAN ERI


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Based on the presentation and documents furnished by the project proponent and the recommendation of the Sub- committee constituted by SEAC. Considering the environmental settings of the proposed mining area, SEAC decided to agree with the conclusion of the subcommittee and not to recommend grant of EC for this project.


Agenda No: 413 – TA - 03

(File No: 9635/2023)

Proposed Rough Stone and Gravel Quarry lease over an extent of 0.63.50Ha S.F.No.248/1, 248/2, 248/3, Veppilai Village, Kadayampatti Taluk, Salem District by Tmt.U.Selvi - For Environmental Clearance. (SIA/TN/MIN/409029/2022, dt: 07.12.2022)

Earlier, the proposal was placed for appraisal in this 364th SEAC meeting held on 23.03.2023. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

1. The Project Proponent, Tmt.U.Selvi has applied for Environmental Clearance for the proposed Rough Stone and Gravel Quarry lease over an extent of 0.63.50Ha S.F.No.248/1, 248/2, 248/3, Veppilai Village, Kadayampatti Taluk, Salem District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of item I(a) "Mining of Minerals Project' of the Schedule to the EIA Notification,2006.


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3. The precise area communication/lease is issued for the period of 3 Years. The approved mining plan is for the period of 3 Years & production should not exceed 23805 m³ of Rough Stone & 5670 m³ of Gravel and the annual peak production shall not exceed 7965 m³ of Rough Stone & 5670 m³ of Gravel. The ultimate depth is 17m BGL.

The salient features of the project are as follows:

Sl. No	Details of the Proposal	:	Data Furnished
1	Name of the Owner/Firm	:	Tmt.U.Selvi, W/o.Utthirasamy, 5/56, O No.2//190 Kuttakkadu, RC Chettipatti Post, Palpakki, Omalur Salem-636455
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Rough Stone and Gravel
3	S.F No. Of the quarry site with area break-up	:	248/1, 248/2, 248/3
4	Village in which situated	:	Veppilai
5	Taluk in which situated	:	Kadayampatti
6	District in which situated	:	Salem
7	Extent of quarry (in ha.)	:	0.63.050 Ha
8	Latitude & Longitude of all corners of the quarry site	:	11°56'32.42"N to 11°56'39.26"N 78°07'45.61"E to 78°07'49.21"E
9	Topo Sheet No.	:	58 – 1/1
10	Type of mining	:	Opencast Semi-Mechanized of Mining
11	Period of quarrying proposed	:	5 years
12	Production (Quantity in m ³)	:	23805m ³ of Rough Stone & 5670m ³ of Gravel
13	Depth of quarrying	:	17.0m BGL
14	Depth of water table	:	65m – 70m BGL
15	Man Power requirement per day:	:	18 Nos.
16	Source of Water Requirement	:	water vendors and Existing Borewell
17	Water requirement: 1. Drinking & domestic purposes (in KLD)	:	2.00 KLD 1.00 KLD


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	2. Dust suppression, Green Belt & Wet Drilling (in KLD)	0.50 KLD 0.50 KLD
18	Power requirement	TNEB
19	Whether any habitation within 300m distance	: No
20	Precise area communication approved by the, District Collector, Department of Geology and Mining with date	: Rc.No.136/2021/Kanimam-A, dt: 14.10.2022
21	Mining Plan approved by Deputy Director, Department of Geology and Mining with date	: Roc.No.136/2021/Mines-B, dt: 01.11.2022
22	Deputy Director, Department of Geology and Mining 500m cluster letter	Roc.No.136/2021/Mines-B, dt: 11.11.2022
23	VAO certificate regarding 300m radius cluster	Letter dt: 05.10.2022.
24	Project Cost	: Rs.46.23 Lakh
25	EMP cost	: Rs.24.89 Lakhs/3 Years
26	CER cost	Rs.5 Lakhs

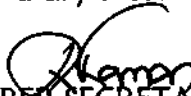
Based on the presentation and documents furnished by the project proponent, SEAC noted that (i) the proposed mine site is un-mined so far and (ii) Thoppaiyar Dam & Amman Eri are located nearer to the proposed mine. Hence, SEAC, after detailed deliberations, decided to make an on-spot inspection to assess the present status of highly sensitive environmental settings of the site and availability of haul road for the transportation through a sub-committee constituted for the purpose.

The SEAC will take further course of action based on the site inspection & report.

The sub-committee inspection report was placed in this 413th meeting of SEAC held on 05.10.2023. The sub-committee visited Rough Stone and Gravel Quarry on 01.05.2023.

The following are the observations of committee.

1. The Sub Committee observed that the quarries are located on Thoppur hills, an eastern ghat hill range that runs in Dharmapuri district.
2. The entire Thoppur hills is a major watershed, for the area, which is other wise a dry area.

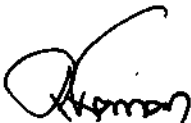

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3. The water that runs off the hill, drains in to a *odai* that feeds the '*Amman eri*', a nearby lake, that is key to all the agricultural activities in the area.
4. Surplus from *Amman eri* flows in to the Thoppaiyar dam, a crucial watershed that supports agricultural area and a source of drinking water for the population in and around, otherwise a dry area.
5. The proposed quarries are spread over the hills. the dust and the residue, including the explosive residues from the quarries and a crusher located in the vicinity, likely to seep into the *odai* and eventually in to the Amman eri. this pollution load interferes with the quality of water and may reduce the agricultural productivity in the long run.
6. The quarrying activity also alters and affects the water drainage system of the hill.
7. Thoppaiyar Dam, a source of drinking water for the population around, will be rendered with a reduced services that affects the ecology and economy of the area.

Hence the subcommittee opined that the environmental clearance need not be given to the proposed quarries in the Thoppur hills.

Based on the presentation and documents furnished by the project proponent and the recommendation of the Sub- committee constituted by SEAC. Considering the environmental settings of the proposed mining area, SEAC decided to agree with the conclusion of the subcommittee and not to recommend grant of EC for this project.

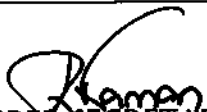

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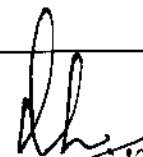

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ANNEXURE-I

SPECIAL MITIGATION MEASURES FOR THE QUARRIES LOCATED WITHIN 1 KM FROM THE RESERVE FORESTS

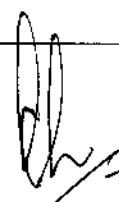
1. Since the R.F is located very close to the proposed quarry site, the PP shall develop Green Belt (Thick Tree plantation in two to three rows) along the boundary of the mine lease area before obtaining the CTO from the TNPCB.
2. The proponent shall construct and maintain proper fencing all around the boundary of the proposed working quarry adjacent to the direction of the location of the Reserved Forest before the commencement of the operation and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.
3. The PP shall take steps so that the overburden, waste rock, rejects and fines generated during the mining operations shall be stored in separate dumps positioned in opposite direction to the location of the reserved forest.
4. The PP shall ensure that such waste/reject dumps shall be properly secured to prevent escape of material there from in harmful quantities which may cause degradation of environment and to prevent causation of floods.
5. The PP shall select the site for dumps on impervious ground to ensure minimum leaching effects due to precipitations.
6. The PP shall take necessary steps that wherever possible, the waste rock, overburden etc. shall be back-filled into the mine excavations with a view to restoring the land to its original use as far as possible.
7. Wherever back-filling of waste rock in the area excavated during mining operations is not feasible, the PP shall take adequate steps in discussion with the concerned DFO to suitably terrace the waste dumps ensuring the stability through vegetation to consolidate the green belt development in the areas adjacent to the reserved forest location.
8. The PP shall carry out the scientific investigations in order to keep the ground and noise vibrations caused by blasting operations and movement of HEMM such as Excavators, Trucks within safe limit.


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9. The PP shall not perform secondary breakage involving the drilling & blasting in the quarrying operations and it can be replaced with non-conventional methods such as noise-controlled rock breakers, usage of non-explosive expansive materials/chemicals, Hydraulic Splitting based on the suitable scientific studies carried out by any reputed scientific and academic institutions.
10. The PP shall take adequate steps to control the air pollution due to fines, dust, smoke or gaseous emissions during the quarrying operations within 'Permissible Limits' specified under the environmental laws.
11. The Quarrying and Mining activities shall be restricted in the Eco-sensitive Zone of 60 m from the boundary of the Reserved area and hence the PP shall not even indulge in constructing the haul roads in these areas.
12. No development on existing steep hill slopes or slopes with a high degree of erosion shall be permitted. Hence, the PP shall not carry out the quarrying on steep hill slopes with a gradient of 20° or more or areas with a high degree of erosion on forestland.
13. The PP shall give an affidavit at the time of lease execution that there will be no felling of trees (or) any encroachment will not be made on these Reserved Forest lands and also within the Eco-sensitive Zone of 60 m without the prior permission of the State Government in case of reserve forest land as per the procedures laid down by the State Government.
14. The PP shall not use plastic carry bags within the quarry area.
15. The PP shall ensure that all the haul roads within the quarry lease shall be provided with adequate number of road side drains and these drains shall be kept free from blockage for runoff disposals. This run off from the road side drainage shall relate to the natural drainage system in the area.
16. The PP shall adhere to the provisions of the MoEF had issued Notification No. S.O. 1545 dated 25th June 2009 regulating certain activities in the eco-sensitive zone to conserve and protect the reserved forest area from ecological and environmental point of view.


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GRAVEL / RED EARTH & PEBBLES QUARRY – GENERAL CONDITIONS

1. The proponent shall mandatorily appoint the statutory competent persons and commence the quarry operations within the purview of Mines Act 1952.
2. The proponent shall erect fencing all around the boundary of the proposed area with gates for entry/exit before the commencement of the operation and shall furnish the photographs/map showing the same before obtaining the CTO from TNPCB.
3. Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required in connection with the concerned Govt. Authority.
4. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation. No change in basic mining proposal shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short-Term Permit (STP), Query license or any other name.
5. Perennial sprinkling arrangement shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals.
6. The Proponent shall ensure that the noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures undertaken accordingly.
7. Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology to be adopted by considering the wind direction.


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8. The purpose of green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics.
9. Taller/one year old saplings raised in appropriate size of bags (preferably eco-friendly bags) should be planted in proper spacing as per the advice of local forest authorities/botanist/horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
10. **Noise and Vibration Related:** (i) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (iii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
11. The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50 m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.
12. The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
13. The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried granite stones; and transport of granite stones will be as per


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IRC Guidelines with respect to complying with traffic congestion and density.


14. To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
15. The Project Proponent shall comply with the provisions of the Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
16. The project proponent shall ensure that the provisions of the MMDR Act, 1957, the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are complied by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
17. The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) by the proponent without fail.
18. The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
19. Prior clearance from Forestry & Wild Life including clearance from committee of the National Board for Wildlife as applicable shall be obtained before starting the quarrying operation, if the project site attracts the NBWL clearance, as per the existing law from time to time.
20. All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the


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Precise area communication letter issued by concerned District Collector should be strictly followed.

21. That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.
22. The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
23. As per the MoEF& CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere EMP furnished.


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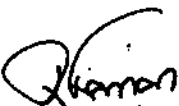
ROUGH STONE/JELLY/BLUE METAL QUARRY

- 1) The PP shall inform send the 'Notice of Opening' of the quarry to the Director of Mines Safety, Chennai Region before obtaining the CTO from the TNPCB.
- 2) The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.
- 3) The proponent shall appoint the statutory competent persons relevant to the proposed quarry size as per the provisions of Mines Act 1952 and Metalliferous Mines Regulations, 1961, as amended from time to time.
- 4) Within a period one month from the execution of lease deed, the PP shall ensure that the persons deployed in the quarry including all the contractual employees/truck drivers shall undergo initial/periodical training in the DGMS approved GVTC situated in Trichy / Salem / Hosur.
- 5) The PP shall construct a garland drain of size, gradient and length around the proposed quarry incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining. Garland drain, silt-traps, siltation ponds and outflow channel should be de-silted periodically and geo-tagged photographs of the process should be included in the HYCR.
- 6) Monitoring of drainage water should be carried out at different seasons by an NABL accredited lab and clear water should only be discharged into the natural stream. Geo-tagged photographs of the drainage and sampling site should be submitted along with HYCR.
- 7) The proponent shall install the 'S3 (or) G2' type of fencing all around the boundary of the proposed working quarry with gates for entry/exit before the commencement of the operation as recommended in the DGMS Circular, 11/1959 and shall furnish the photographs showing the same before obtaining the CTO from TNPCB.


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- 8) The Proponent shall submit a conceptual 'Slope Stability Action Plan' incorporating the benches & accessible haul road approved by the concerned AD (Mines) for the proposed quarry to the DEE/TNPCB at the time of obtaining the CTO.
- 9) The PP shall ensure that the persons employed in the quarry whether permanent, temporary or contractual are undergoing the initial/periodical medical examination in the DGMS approved OHS Clinics/Hospitals as per the DGMS Circular No. 01 of 2011 before they are engaged in mining activities.
- 10) The PP shall ensure that the persons employed in the quarry whether permanent, temporary or contractual are provided with adequate PPEs before engaged in mining operations.
- 11) The PP shall meticulously carry out the mitigation measures as spelt out in the approved EMP.
- 12) Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology should be adopted by considering the wind direction.
- 13) The Project Proponent shall ensure that the funds earmarked for environmental protection measures are kept in a separate bank account and should not be diverted for other purposes. Year-wise expenditure should be included in the HYCR.
- 14) The Project Proponent shall send a copy of the EC to the concerned Panchayat/local body.
- 15) Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required, in coordination with the concerned Govt. Authority.
- 16) Perennial sprinkling arrangements shall be in place on the haulage road for fugitive dust suppression. Fugitive emission measurements should be carried out during the mining operation at regular intervals and submit the consolidated report to TNPCB once in six months.


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- 17) The Proponent shall ensure that the noise level is monitored during mining operation at the project site for all the machineries deployed and adequate noise level reduction measures are undertaken accordingly. The report on the periodic monitoring shall be included in the HYCR.
- 18) Proper barriers to reduce noise level and dust pollution should be established by providing greenbelt along the boundary of the quarrying site and suitable working methodology to be adopted by considering the wind direction.
- 19) The purpose of green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
- 20) Taller/one year old saplings raised in appropriate size of bags (preferably eco-friendly bags) should be planted in proper spacing as per the advice of local forest authorities/botanist/horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner.
- 21) **Noise and Vibration Related:** (i) Appropriate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs/muffs, (ii) Noise levels should be monitored regularly (on weekly basis) near the major sources of noise generation within the core zone.
- 22) The PP shall carry out maximum of only one round of controlled blast per day, restricted to the maximum of 30 to 40 number of holes per round with maintaining maximum charge per delay in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the

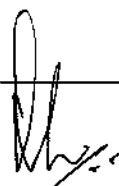

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houses/structures located at a distance of 500 m shall not exceed 2.0 mm/s and no fly rock shall travel beyond 20 m from the site of blasting.

- 23) The PP shall also ensure that the blasting operations are not carried out on a 'day after day' basis and a minimum 24 hours break should be observed between blasting days to reduce the environmental impacts effectively.
- 24) If 'Deep-hole large diameter drilling and blasting' is required, then the PP shall obtain special permission from DGMS.
- 25) The PP shall ensure that the blasting operations shall be carried out during a prescribed time interval with a prior notice to the habitations situated around the proposed quarry after having posted the sentries/guards adequately to confirm the non-exposure of public within the danger zone of 500 m from the boundary of the quarry. The PP shall use the jack hammer drill machine fitted with the dust extractor for the drilling operations such that the fugitive dust is controlled effectively at the source.
- 26) The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him in accordance with the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
- 27) The proponent shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by the quarrying operations and shall complete this work before the conclusion of such operations as per the Environmental Management Plan & the approved Mine Closure Plan.
- 28) Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
- 29) The operation of the quarry should not affect the agricultural activities & water bodies near the project site and a 50 m safety distance from water body should be maintained without carrying any activity. The proponent shall take appropriate measures for "Silt Management" and prepare a SOP for periodical de-siltation indicating the possible silt content and size in case of any agricultural land exists around the quarry.


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- 30) The proponent shall provide sedimentation tank / settling tank with adequate capacity for runoff management.
- 31) The proponent shall ensure that the transportation of the quarried granite stones shall not cause any hindrance to the Village people/Existing Village Road and shall take adequate safety precautionary measures while the vehicles are passing through the schools / hospital. The Project Proponent shall ensure that the road may not be damaged due to transportation of the quarried granite stones; and transport of granite stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.
- 32) To ensure safety measures along the boundary of the quarry site, security guards are to be posted during the entire period of the mining operation.
- 33) The Project Proponent shall comply with the provisions of the Mines Act, 1952, MMR 1961 and Mines Rules 1955 for ensuring safety, health and welfare of the people working in the mines and the surrounding habitants.
- 34) The project proponent shall ensure that the provisions of the MMDR Act, 1957 & the MCDR 2017 and Tamilnadu Minor Mineral Concession Rules 1959 are complied by carrying out the quarrying operations in a skillful, scientific and systematic manner keeping in view proper safety of the labour, structure and the public and public works located in that vicinity of the quarrying area and in a manner to preserve the environment and ecology of the area.
- 35) The quarrying activity shall be stopped if the entire quantity indicated in the Mining plan is quarried even before the expiry of the quarry lease period and the same shall be informed to the District AD/DD (Geology and Mining) District Environmental Engineer (TNPCB) and the Director of Mines Safety (DMS), Chennai Region by the proponent without fail.
- 36) The Project Proponent shall abide by the annual production scheduled specified in the approved mining plan and if any deviation is observed, it will render the Project Proponent liable for legal action in accordance with Environment and Mining Laws.


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- 37) All the conditions imposed by the Assistant/Deputy Director, Geology & Mining, concerned District in the mining plan approval letter and the Precise area communication letter issued by concerned District Collector should be strictly followed.
- 38) That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.
- 39) As per the directions contained in the OM F.No.22-34/2018-IA.III dated 16th January 2020 issued by MoEFCC, the Project Proponent shall, undertake re-grassing the mining area and any other area which may have been disturbed due to his mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The compliance of this direction shall be included in the Half Yearly Compliance Report which will be monitored by SEAC at regular intervals.
- 40) The mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- 41) As per the MoEF&CC Office Memorandum F.No. 22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall adhere to the EMP as committed.


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SPECIAL MITIGATION MEASURES FOR THE QUARRIES LOCATED IN CLOSE PROXIMITY TO THE WINDMILLS

Sl. No	Existing (or) Virgin Quarry	Wind Mills located at a distance of 150 m to 300 m	Wind Mills located beyond 300 m Up to 500 m
1.	Appointment of I/II Class Mines Manager Certificate of Competency under MMR 1961.	Appointment of I/II Class Mines Manager Certificate of Competency under MMR 1961.	Appointment of I/II Class Mines Manager Certificate of Competency under MMR 1961.
2.	Special precautions are to be taken during blasting within danger zone such as posting guards, etc.	Blast design parameters should be mentioned in mining plan/scheme. and may be reviewed by a competent mining engineer.	Blast design parameters should be mentioned in mining plan/scheme. and may be reviewed by a competent mining engineer.
3.	Blast design parameters should be mentioned in mining plan/scheme.	MCPD and total charge should be fixed such that it should not exceed 1.3 kg and 26.50 kg respectively.	MCPD and total charge should be fixed such that it should not exceed 1.3 kg and 26.50 kg respectively.
4.	The recommendations of scientific organisation need to be incorporated in the mining plan/scheme before its approval.	Fresh scientific study may be conducted if mine management wants to increase the MCPD and total explosive charge above the quantity of 1.30 kg and 26.50 kg respectively. Continuous monitoring using seismograph should also be done in such cases by the mine management.	Fresh scientific study may be conducted if mine management wants to increase the MCPD and total explosive charge above the quantity of 1.30 kg and 26.50 kg respectively. Continuous monitoring using seismograph should also be done in such cases by the mine management.
5.	Engagement of blasting in-charge having Diploma/Degree in mining engineering for day-to-day blasting.	Engagement of blasting in-charge having Diploma/Degree in mining engineering for day-to-day blasting.	Engagement of blasting in-charge having Diploma/Degree in mining engineering for day-to-day blasting.
6.	Training of the blasting crew on controlled blasting practices before engaged in operation.	Training of the blasting crew on controlled blasting practices before engaged in operation.	Training of the blasting crew on controlled blasting practices before engaged in operation.


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7.	Submission of monthly report on blast design pattern and detailed explosive consumption as well as volume of rock excavation to a statutory body viz. DGMS, DMG, PESO or SPCB.	Submission of monthly report on blast design pattern and detailed explosive consumption as well as volume of rock excavation to a statutory body viz. DGMS, DMG, SPCB. Report of recorded ground vibration need to be added in monthly report.
8.	Report of recorded ground vibration need to be added in monthly report which shall be sent to all the statutory body viz. DGMS, DMG, SPCB.	Report of recorded ground vibration need to be added in monthly report which shall be sent to all the statutory body viz. DGMS, DMG, SPCB.
9.	Small diameter emulsion cartridge of 25 mm diameter (125 gm weight per cartridge) shall be used. However, ANFO explosives may also be used as main explosive charge.	Small diameter emulsion cartridge of 25 mm diameter (125 gm weight per cartridge) shall be used. However, ANFO explosives may also be used as main explosive charge.
10.	Electronic (or) Non-electric detonators (Nonel) shall be used in all the blasts for in-hole explosive initiation and surface hole-to-hole firing.	Non-electric detonators (Nonel) shall be used in all the blasts for in-hole explosive initiation and surface hole-to-hole firing.
11.	Max. number of holes in a round: 30.	Max. number of holes in a round: 40 to 60.


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TERMS OF REFERENCE (ToR) FOR GRANITE / ROUGH STONE QUARRY


1. In the case of existing/operating mines, a letter obtained from the concerned AD (Mines) shall be submitted and it shall include the following:
 - (i) Original pit dimension
 - (ii) Quantity achieved Vs EC Approved Quantity
 - (iii) Balance Quantity as per Mineable Reserve calculated.
 - (iv) Mined out Depth as on date Vs EC Permitted depth
 - (v) Details of illegal/illicit mining
 - (vi) Violation in the quarry during the past working.
 - (vii) Quantity of material mined out outside the mine lease area
 - (viii) Condition of Safety zone/benches
 - (ix) Revised/Modified Mining Plan showing the benches of not exceeding 6 m height and ultimate depth of not exceeding 50m.
2. Details of habitations around the proposed mining area and latest VAO certificate regarding the location of habitations within 300m radius from the periphery of the site.
3. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.
4. The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the waterbodies like lake, water tanks, etc are located within 1 km of the proposed quarry.
5. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.


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6. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
7. In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall the PP shall carry out the scientific studies to assess the slope stability of the working benches to be constructed and existing quarry wall, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. The PP shall submit a copy of the aforesaid report indicating the stability status of the quarry wall and possible mitigation measures during the time of appraisal for obtaining the EC.
8. However, in case of the fresh/virgin quarries, the Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level.
9. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
10. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.
11. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.


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12. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
13. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
14. Quantity of minerals mined out.
 - Highest production achieved in any one year
 - Detail of approved depth of mining.
 - Actual depth of the mining achieved earlier.
 - Name of the person already mined in that leases area.
 - If EC and CTO already obtained, the copy of the same shall be submitted.
 - Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
15. All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology and geology of the mining lease area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
16. The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,
17. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.
18. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment, and the remedial measures for the same.

19. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of the Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.
20. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of groundwater pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds, etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided.
21. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.
22. The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
23. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
24. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to

- encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
25. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.
 26. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered.
 27. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
 28. Impact on local transport infrastructure due to the Project should be indicated.
 29. A tree survey study shall be carried out (nos., name of the species, age, diameter etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity.
 30. A detailed mine closure plan for the proposed project shall be included in EIA/EEMP report which should be site-specific.
 31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
 32. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University. The plant species with dense/moderate


canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.

33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
34. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
35. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
36. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
37. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.


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39. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
40. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
41. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB.
42. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
43. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.


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Annexure II

Standard Environmental Clearance Conditions prescribed by MoEF&CC for Construction Projects.

1. Statutory Compliance:

1. The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
2. The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightning etc.
3. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
4. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
5. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
6. The project proponent shall obtain the necessary permission for drawing of ground water / surface water required for the project from the competent authority.
7. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department and Civil Aviation


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Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

9. The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.

10. The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.

2. Air quality monitoring and preservation:

1. Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.


2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.

3. The project proponent shall install a system to carry out Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g., PM10 and PM25) covering upwind and downwind directions during the construction period.

4. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3-meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

5. Sand, murrum, loose soil, cement, stored on site should be covered adequately so as to prevent dust pollution.

6. Wet jet shall be provided for grinding and stone cutting.


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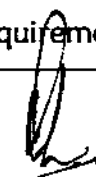
7. Unpaved surfaces and loose soil should be adequately sprinkled with water to suppress dust.
8. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
9. The diesel generator sets to be used during construction phase shall be low Sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise mission standards.
10. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
11. For indoor air quality the ventilation provisions as per National Building Code of India.

3. Water Quality Monitoring and Preservation:

1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rainwater.
2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3. Total freshwater use shall not exceed the proposed requirement as provided in the project details.
4. The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with Half Yearly Compliance Reports (HYCR).


5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
6. At least 20% of the open spaces as required by the local building byelaws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation car washing, thermal cooling, conditioning etc. shall be done.
8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
9. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
11. The local bye-law provisions on rainwater harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
12. A rainwater harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total freshwater requirement shall


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be provided. In areas where ground water recharging is not feasible, the rainwater should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.

13. All recharges should be limited to shallow aquifer.
14. No ground water shall be used during construction phase of the project.
15. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
16. The quantity of freshwater usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with Half Yearly Compliance Reports (HYCR).
17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, not related water shall be disposed into municipal drain.
18. No sewage or untreated effluent water would be discharged through storm water drains.
19. Onsite sewage treatment of capacity of treating 100% wastewater to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated wastewater shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be taken to mitigate the odor problem from STP.


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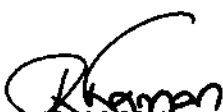
21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Centre Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.

4. Noise Monitoring and Prevention:

1. Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
2. Noise level survey shall be carried out as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of Half Yearly Compliance Report (HYCR).
3. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

5. Energy Conservation Measures:

1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
2. Outdoor and common area lighting shall be LED.
3. The proponent shall provide solar panels covering a minimum of 50% of terrace area as committed.
4. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting


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design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.

5. Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
6. Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building byelaws requirement, whichever is higher.
7. Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building byelaws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.

6. Waste Management:

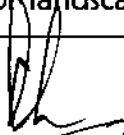
1. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
2. Disposal of muck during construction phase shall not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
3. Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
4. Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day must be installed.


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5. All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
 6. Any hazardous waste generated during construction phase shall be disposed of as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
 7. Use of environmentally friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environmentally friendly materials.
 8. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September 1999 and amended from time to time. Ready mixed concrete must be used in building construction.
 9. Any wastes from construction and demolition activities related thereto shall be managed to strictly conform to the Construction and Demolition Rules, 2016.
 10. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
7. Green Cover:
1. No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
 2. A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.



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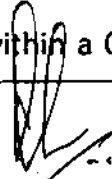

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3. Where the trees need to be cut with prior permission from the concerned local authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every 1 tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.
4. Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads, paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.
5. A wide range of indigenous plant species should be planted as given in the Appendix-I, in consultation with the Government Forest/Horticulture Departments and State Agriculture University.

8. Transport:

1. A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria.
 - a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic.
 - b. Traffic calming measures.
 - c. Proper design of entry and exit points.
 - d. Parking norms as per local regulation.
2. Vehicles hired to bring construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.
3. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms


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radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

9. Human Health Issues:

1. All workers working at the construction site and involved in loading, unloading, carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
2. For indoor air quality the ventilation provisions as per National Building Code of India.
3. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
4. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
5. Occupational health surveillance of the workers shall be done on a regular basis.
6. A First Aid Room shall be provided in the project both during construction and operations of the project.


10. Corporate Environment Responsibility:

1. The PP shall complete the CER activities, as committed, before obtaining CTE.

2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of Half Yearly Compliance Report (HYCR).
3. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Half Yearly Compliance Report (HYCR).

11. Miscellaneous:

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in Tamil language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn must display the same for 30 days from the date of receipt.
3. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.


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4. The project proponent shall submit Half Yearly Compliance Reports (HYCR) on the status of the compliance of the stipulated environmental conditions on the website of the Ministry of Environment, Forest and Climate Change at environment clearance portal.
5. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
6. The project proponent shall inform the Authority (SEIAA) of the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
7. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
8. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also during their presentation to the State Expert Appraisal Committee.
9. No further expansion or modifications to the plant shall be carried out without prior approval of the Authority (SEIAA).
10. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
11. The Authority (SEIAA) may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
12. The Authority reserves the right to stipulate additional conditions if found necessary. The Company in a time-bound manner shall implement these conditions.
13. The Regional Office of the MoEF&CC Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
14. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.


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ANNEXURE III

Standard Terms of Reference (ToR) for EIA/EMP report for projects/activities requiring environment clearance 3(a): Standard Terms of Reference for conducting Environment Impact Assessment study for Metallurgical Industries (ferrous & non-ferrous) projects and information to be included in EIA/EMP report

A. STANDARD TERMS OF REFERENCE (TOR)

- 1) Executive Summary
- 2) Introduction
 - i. Details of the EIA Consultant including NABET accreditation
 - ii. Information about the project proponent
 - iii. Importance and benefits of the project
- 3) Project Description
 - i. Cost of project and time of completion.
 - ii. Products with capacities for the proposed project.
 - iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
 - iv. List of raw materials required and their source along with mode of transportation.
 - v. Other chemicals and materials required with quantities and storage capacities
 - vi. Details of Emission, effluents, hazardous waste generation and their management.
 - vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
 - viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
 - ix. Hazard identification and details of proposed safety systems.

x. Expansion/modernization proposals:

- a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing existing operation of the project from SPCB shall be attached with the EIA-EMP report.
- b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State. Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (Including all eco-sensitive areas and environmentally sensitive places)
- iii. Details with respect to option analysis for selection of site
- iv. GPS Co-ordinates of all four corners of the site.
- v. Google map-Earth downloaded of the project site.

- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Land use break-up of total land of the project site (identified and acquired), government/ private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy

5) Forest and wildlife related issues (if applicable):

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

6) Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.

- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

7) Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyorcum- rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included.

Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District

Disaster Management Plan.

8) Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above-mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.
- iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process/ procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms /conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of

this system may be given.

- iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11. Enterprise Social Commitment (ESC)

- i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

12. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13. A tabular chart with index for points wise compliance of above TOR.

B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR METALLURGICAL INDUSTRIES (FERROUS & NON-FERROUS)

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
3. Details on installation/activation of opacity meters with recording with proper calibration system
4. Details on toxic metals including mercury, arsenic and fluoride emissions
5. Details on stack height requirement for integrated steel


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6. Details on ash disposal and management -Non-ferrous metal
7. Complete process flow diagram describing production of lead/zinc/copper/ aluminium, etc.
8. Raw materials substitution or elimination
9. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
10. Details on Holding and de-gassing of molten metal from primary and secondary aluminium, materials pre-treatment, and from melting and smelting of secondary aluminium
11. Details on solvent recycling
12. Details on precious metals recovery
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
15. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
16. Trace metals in waste material especially slag.
17. Plan for trace metal recovery
18. Trace metals in water

C. ADDITIONAL TOR FOR INTEGRATED STEEL PLANT


1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quick bird.


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ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.

5. Respirable Suspended particulate matter (RSPM) present in the ambient air must be analysed for source analysis - natural dust/RSPM generated from plant operations (trace elements). The RSPM shall also be analysed for presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction, where applicable. Chemical characterization of RSPM and incorporating of RSPM data.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.


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Appendix - I
List of Native Trees Suggested for Planting

No	Scientific Name	Tamil Name	Tamil Name
1	<i>Aegle marmelos</i>	Vilvam	விவம்
2	<i>Adenaanthera pavonina</i>	Manjadi	மஞ்சள, அழகந்தாந்திரமணி
3	<i>Albizia lebbek</i>	Vaagai	வாளை
4	<i>Albizia amara</i>	Usil	உசில்
5	<i>Bauhinia purpurea</i>	Mantharai	மந்தாரை
6	<i>Bauhinia racemosa</i>	Aathi	ஆதி
7	<i>Bauhinia tomentosa</i>	Iruvathi	இருவாதி
8	<i>Buchanania axillaris</i>	Kathma	காடகா
9	<i>Borassus flabellifer</i>	Panai	பனை
10	<i>Butea monosperma</i>	Murukkamaram	முருக்கமரம்
11	<i>Bobax caiba</i>	Ilavu, Sevvilavu	இலை
12	<i>Calophyllum inophyllum</i>	Punnai	புனை
13	<i>Cassia fistula</i>	Serakondrai	செரகண்டரை
14	<i>Cassia roxburghii</i>	Sengondrai	செங்கண்டரை
15	<i>Chloroxylon sweitenia</i>	Purasamaram	புரசம்மரம்
16	<i>Cochlospermum religiosum</i>	Kongu, Manjallavu	கோங்கு, மஞ்சள் இலை
17	<i>Coriba dichotoma</i>	Naruvuli	நடுவூலி
18	<i>Creteva adansoni</i>	Mavalingum	மாவிளங்கும
19	<i>Dillenia indica</i>	Uva, Uzha	உவா
20	<i>Dillenia pentagyna</i>	SiruUva, Sitruzha	சீரு உவா
21	<i>Diospyro sebenum</i>	Karungali	கரங்காலை
22	<i>Diospyro schloroxylon</i>	Vaganai	வாகனை
23	<i>Ficus amplissima</i>	Kallichi	கால் இச்சி
24	<i>Hibiscus tiliaceus</i>	Astrupoovarasu	அஸ்துபூவரசு
25	<i>Hardwickia binata</i>	Aacha	ஆச்சா
26	<i>Holoptalia integrifolia</i>	Aayili	ஆயில் மரம், ஆயிலி
27	<i>Lanssa coromandelica</i>	Odhiam	ஒடியம்
28	<i>Lagerstroemia speciosa</i>	Poo Marudhu	பூ மருது
29	<i>Lepisanthus tetraphylla</i>	Neikottaimaram	நெய் கெட்டிமரம் மரம்
30	<i>Limonia acidissima</i>	Vila maram	விளா மரம்
31	<i>Litsea glutinos</i>	Pisinpattai	பிசிப்பட்டை
32	<i>Madhuca longifolia</i>	Illuppai	இலுப்பை
33	<i>Manilkara hexandra</i>	UlakkaiPaalai	உலக்கை பாலை
34	<i>Mimusops elengi</i>	Magizhamaram	மகிழ்மரம்
35	<i>Mitragyna parvifolia</i>	Kadambu	கடம்பு
36	<i>Morinda pubescens</i>	Nuna	நுனா
37	<i>Morinda citrifolia</i>	Vellai Nuna	வெள்ளை நுனா
38	<i>Phoenix sylvestre</i>	Eachai	நீச்சம்மரம்
39	<i>Pongamia pinnat</i>	Pungam	புங்கம்

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40	<i>Premna mollissima</i>	Munnai	முண்டை
41	<i>Premna serratifolia</i>	Narumunnai	நறு முண்டை
42	<i>Premna tomentosa</i>	Malipoovarasu	மலை பூஞ்சை
43	<i>Prosopis cinerea</i>	Vanni maram	வாணி மரம்
44	<i>Pterocarpus marsupium</i>	Vengai	வேங்கை
45	<i>Pterospermum canescens</i>	Vennangu, Tada	வேண்டாங்க
46	<i>Pterospermum xylocarpum</i>	Polavu	பூவு
47	<i>Putterlickia roxburghii</i>	Karipala	கரிபலா
48	<i>Salvadora persica</i>	Ugaa Maram	உகா மரம்
49	<i>Sapindus emarginatus</i>	Manipungan, Soapukai	மாணிப்புகை சோப்புகை
50	<i>Saraca asoca</i>	Asoca	அசோகா
51	<i>Streblus asper</i>	Piray maram	பிராய் மரம்
52	<i>Strychnos nuxvomica</i>	Yetti	எட்டி
53	<i>Strychnos potatorum</i>	Therthang Kottai	தேர்தாங்க கோட்டை
54	<i>Syzygium cumini</i>	Naval	நாவல்
55	<i>Terminalia belleric</i>	Thandri	தாந்திரி
56	<i>Terminalia arjuna</i>	Ven marudhu	வேனி மருது
57	<i>Toona ciliata</i>	Sandhana vembu	சந்தா வெம்பு
58	<i>Thespesia populnea</i>	Puvarasu	பூஞ்சை
59	<i>Walsuratri foliata</i>	valsura	வால்சூரா
60	<i>Wrightia tinctoria</i>	Veppalai	வேப்பலை
61	<i>Pithecellobium dulce</i>	Kodukkapuli	கோடுக்காபுளி


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