

State Expert Appraisal Committee (SEAC)

Minutes of 460th meeting of the State Expert Appraisal Committee (SEAC) held on 24.04.2024 (Wednesday) at SEIAA Conference Hall, 2nd Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Building and Construction projects, Mining projects & CRZ Clearance.

Confirmation of Earlier Minutes

The minutes of the 459th SEAC meeting held on 08.03.2024 were circulated to the Members in advance and as there are no remarks, the Committee decided to confirm the minute.

Agenda No: 460-01

(File No: 10749/2024 & Old File No: 9406/2022)

Proposed Rough Stone and Gravel quarry over an extent of 3.98.1 Ha at S.F.Nos. 282/3B(P), 283/2(P), 278/2(P), 277/1B(P), 284/1A1(P) and 284/2(P) of Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu by Tvl. Hi-Tech Rock Products & Aggregates Limited - For Amendment in Environmental Clearance. (SIA/TN/MIN/463967/2024, Dated: 01.03.2024)

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. 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 project proponent Tvl. Hi-Tech Rock Products & Aggregates Limited has obtained Environmental Clearance vide Lr. No.SEIAA-TN/F.No.9406/EC.No:5716/2023 dated: 09.05.2023 for the Proposed Rough Stone and Gravel quarry over an extent of 3.98.1 Ha at S.F.Nos. 282/3B(P), 283/2(P), 278/2(P), 277/1B(P), 284/1A1(P) and 284/2(P) of Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu, for a period of 5 years, for the production quantity of 4,63,470 m³ of Rough Stone and 67,164 m³ of Gravel up to a depth of 47m below ground level.
2. Earlier, the PP has applied for Corrigendum in Environmental Clearance (Form-10) vide Online Proposal No. SIA/TN/MIN/306071/2023, Dated: 27.10.2023.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

The subject was placed in the 672nd Authority meeting held on 14.11.2023. After detailed discussions, the Authority decided that the proponent's request for inclusion of the product 'weathered rock' in the Environmental Clearance cannot be considered, due to technical and ecological reasons.

3. Now, the PP has applied for Amendment in Environmental Clearance (Form-4) vide Online Proposal No. SIA/TN/MIN/463967/2024, Dated: 01.03.2024 is as follows


Reference	As per Original EC	Amendment Sought
Pages: 3 of 37 (Sl.No - 12), 4 of 37, 8 of 37 & 18 of 37	4,63,470 m ³ of Rough Stone and 67,164 m ³ of Gravel	7,55,400 m ³ of Rough Stone and 67,164 m ³ of Gravel

4. The PP has furnished Revised Mining Plan replacing weathered rock as rough stone and the same has been approved by the Assistant Director, Dept. of Geology and Mining, Tirunelveli vide Rc.No.M2/38650-1/2019, dated: 31.01.2024. The total production quantity after adding the weathered rock into rough stone is 7,55,400 m³ of Rough Stone and 67,164 m³ of Gravel during the balance lease period. As per the revised mining plan, the annual peak production shall not exceed 3,84,230 m³ of Rough Stone and 67,164 m³ of Gravel for an ultimate depth of 47m below ground level.

Based on the presentation & documents furnished by the PP, SEAC decided to recommend for the grant of the following amendment in the Environmental Clearance, issued subject to following specific conditions.

Production quantity as per EC dated: 09.05.2023	Amendment Recommended
4,63,470 m ³ of Rough Stone and 67,164 m ³ of Gravel	7,55,400 m ³ of Rough Stone and 67,164 m ³ of Gravel

- 1) The PP shall register promptly through online in the Shram Suvidha Portal which is the official portal of Ministry of Labour & Employment, Govt of India to obtain


MEMBER SECRETARY
SEAC - TN


CHAIRMAN
SEAC- TN

Labour Identification Number (LIN) within a period one month from the date of amended EC issued by the SEIAA.

- 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 install the temporary (or) permanent magazine approved by the concerned licensing authority **before obtaining the CTO from the TNPCB**, for storage & transportation of the authorized explosives and detonators separately in accordance with the provisions as stipulated in the Indian Explosive Rules, 2008.
- 4) Since the wind mill is located within 500 m, as a part of monitoring the implementation of eco-friendly blasting operation, the PP shall continually 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 Campus, etc. A copy of such post-monitoring compliance 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.

Further, all other conditions and validity mentioned in the EC vide Lr. No.SEIAA-TN/F.No.9406/EC.No:5716/2023 dated: 09.05.2023 shall remain unchanged and unaltered.

Agenda No: 460-02

(File No: 7812/2020)

Proposed Rough Stone and Gravel Quarry over an extent of 0.91.0 Ha at S.F.No. 291/IB1A of Pachapalayam Village, Suler Taluk, Coimbatore District, Tamil Nadu by Thiru. D. Ramesh - For extension of validity of Terms of Reference.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC-TN

(SIA/TN/MIN/467009/2024, Dated: 22.03.2024)

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. 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. Ramesh has applied for extension of validity of Terms of Reference for the Proposed Rough Stone and Gravel Quarry over an extent of 0.91.0 Ha at S.F.No. 291/1B1A of Pachapalayam Village, Suler Taluk, Coimbatore District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006, as amended.
3. ToR along with Public Hearing issued vide Lr No.SEIAA-TN/F.No.7812/SEAC/ToR-882/2020 Dated:16.03.2021 with validity upto 15.03.2024 restricting the ultimate depth of mining from 56m to 51m and accordingly the quantity of mining is 60002 cu.m of Rough Stone for a period of five years leaving a bench height of 5m as per the approved mining plan considering the hydrogeological regime of the surrounding area.
4. As per MoEF&CC Office Memorandum dated: 08.06.2022, the validity of ToR shall be for a maximum period of four years in case of mining projects. Hence, the validity of the ToR issued is deemed to be valid upto **14.03.2025**.

Based on the presentation & documents furnished by the project proponent, the Committee decided to extend the validity period of ToR for a period of 1 year, i.e., up to **14.03.2025** subject to the following specific conditions.

1. The PP shall complete the fencing, tree plantation and photographs, videos of the same shall be furnished.
2. The PP shall complete the garland drainage around the boundary of the proposed quarry and the photographs indicating the same shall be shown during the EIA appraisal.
3. The PP shall carry out drone video survey covering the cluster, green belt, fencing, etc.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

4. All other conditions mentioned in the ToR vide Lr No.SEIAA-TN/F.No.7812/SEAC/ToR-882/2020 Dated:16.03.2021 shall remain unchanged and unaltered.

Agenda No: 460 – 03

(File No: 10751/2024)

Existing Rough Stone and Gravel quarry over an extent of 4.71.40Ha at S.F.Nos.290/1B(P), 290/2(P), 160/1A(P), 289/1A(P) and 289/2(P), Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu by Tvl. HI-Tech Rock Products & Aggregates Limited – Amendment for Environmental Clearance.

(SIA/TN/MIN/463897/2024, Dated: 01/03/2024)


The proposal was placed in this 460th meeting of SEAC held on 24.04.2023. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. The proponent Tvl. HI-Tech Rock Products & Aggregates Limited has obtained Environmental Clearance vide Lr. No. SEIAA-TN/F.No.9407/EC.NO.5717/2022, dated: 09.05.2023 for the existing Rough Stone and Gravel quarry over an extent of 4.71.40Ha at S.F.Nos.290/1B(P), 290/2(P), 160/1A(P), 289/1A(P) and 289/2(P), Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu, for the production of 5,39,175cu.m of Rough Stone & 74,472Cu.m of Gravel, for the period of 5 Years from the date of Execution of mining lease.
2. Now, the PP has applied for the following amendment vide proposal No. SIA/TN/MIN/463897/2024, Dated: 01/03/2024 is as follows:

Area in Ha	Old File No	New File No	EC Approved Quantity				Requested amendment in EC as per Revised mining plan			
			Rough Stone in CBM	Weathered Rock in CBM	Gravel in CBM	Total Volume in CBM	Rough Stone in CBM	Weathered Rock in CBM	Gravel in CBM	Total Volume in CBM
4.714	9607	10751	539175	0	74472	613647	863980	0	74472	938452


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Based on the presentation & documents furnished by the PP, SEAC decided to recommend for the grant of the above amendments in the Environmental Clearance, issued subject to following specific conditions

- 1) The PP shall register promptly through online in the Shram Suvidha Portal which is the official portal of Ministry of Labour & Employment, Govt of India to obtain Labour Identification Number (LIN) within a period one month from the date of amended EC Issued by the SEIAA.
- 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 DEE/TNPCB & concerned AD (Mines) at the time of lease execution.
- 3) The PP shall install the temporary (or) permanent magazine approved by the concerned licensing authority before obtaining the CTO from the TNPCB, for storage & transportation of the authorized explosives and detonators separately in accordance with the provisions as stipulated in the Indian Explosive Rules, 2008.
- 4) Since the wind mill is located within 500 m, as a part of monitoring the implementation of eco-friendly blasting operation, the PP shall continually 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 Campus, etc. A copy of such post-monitoring compliance 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.

Further, all other conditions and validity mentioned in the EC vide Lr. No. SEIAA-TN/F.No.9407/EC.NO.5717/2022, dated: 09.05.2023 will remains unchanged & unaltered.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Agenda No. 460 - 04

(File No. 10732/2024)

Proposed Rough Stone and Gravel Quarry lease over an extent of 1.68.0 Ha (Patta Land) in S.F.Nos. 59/54 and 59/5B of Meerankulam II Village, Sattankulam Taluk, Thoothukudi District, Tamil Nadu by Thiru. K. Stanlin – For amendment in Environmental Clearance. (SIA/TN/MIN/464923/2024, dated:04.03.2024)

The proposal was placed in this 460th Meeting of SEAC held on 24.04.2024. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:

1. Environmental Clearance was issued to the project proponent Thiru. K. Stanlin vide Lr.No.SEIAA-TN/F.No.10277/1(a)/EC No.6158/2023 dated.26.10.2023 for the Proposed Rough Stone and Gravel Quarry lease over an extent of 1.68.0 Ha (Patta Land) in S.F.Nos. 59/54 and 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 of Minerals Projects” of the Schedule to the EIA Notification, 2006.
3. Now the proponent has submitted an application in Parivesh portal in Form-4 vide Proposal No. SIA/TN/MIN/464923/2024, dated:04.03.2024 seeking the following amendment in the EC dated.26.10.2023.

S.No	Description	As per EC dated. 26.10.2023	As per Mining Plan	Amendment Requested
1	EC Pg.No.3, Serial No.12	1,73,170m ³ of Rough Stone	1,73,170m ³ of Rough Stone & 24,474 m ³ of Gravel	1,73,170m ³ of Rough Stone & 24,474 m ³ of Gravel
2	EC Page No.4, under validity section	1,73,170m ³ of Rough Stone	1,73,170m ³ of Rough Stone & 24,474 m ³ of	1,73,170m ³ of Rough Stone & 24,474 m ³ of


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

			Gravel	Gravel
3	EC Page No.9, under discussion by SEIAA & the remarks	1,73,170m ³ of Rough Stone	1,73,170m ³ of Rough Stone & 24,474 m ³ of Gravel	1,73,170m ³ of Rough Stone & 24,474 m ³ of Gravel

The Committee, after deliberations, **decided to recommend** the above mentioned amendments requested by the proponent in the EC dated.26.10.2023 subject to the condition that all other conditions and validity mentioned in the EC dated.26.10.2023 shall remain unaltered.

Agenda No: 460- 05

(File No: 10748/2024)

Proposed Rough Stone and Gravel quarry lease over an extent of 3.74.0 Ha at S.F.No. 289/1A(P), 289/2(P) and 161/1A(P), Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu by Tvl. Hi Tech Rock Products & Aggregates Limited - For Environmental Clearance Amendment.

(SIA/TN/MIN/464216/2024, Dated:24.04.2024)

The proposal was placed in the 460th meeting of SEAC held on 24.04.2024. 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, Tvl. Hi-Tech Rock Products & Aggregates Limited has applied for Environmental Clearance for the proposed Rough Stone and Gravel quarry lease over an extent of 3.74.0 Ha at S.F.No. 289/1A(P), 289/2(P) and 161/1A(P) of Irukkandurai Part-II Village, Radhapuram Taluk, Tirunelveli 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. EC Issued Vide Lr.No.SEIAA-TN/F.No.9405/1(a)/EC.No.5721/2022,Dated: 09.05.2023.

Now the proposal was placed in the 460th meeting of SEAC held on 24.04.2024.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Area in Ha	Old File No	New File No	EC Approved Quantity				Requested amended in EC as per revised mining plan			
			Rough Stone in CBM	Weath ered Rock CBM	Gravel in CBM	Total Volu me in CBM	Rough Stone in CBM	Weathere d Rock CBM	Gravel in CBM	Total Volum e in CBM
3.74	9405	10748	339970	0	57796	397766	587600	0	57796	645396

Based on the presentation & documents furnished by the PP, SEAC decided to recommend for the grant of the above amendments in the Environmental Clearance, issued subject to following specific conditions

- 1) The PP shall register promptly through online in the Shram Suvidha Portal which is the official portal of Ministry of Labour & Employment, Govt of India to obtain Labour Identification Number (LIN) within a period one month from the date of amended EC issued by the SEIAA.
- 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 DEE/TNPCB & concerned AD (Mines) at the time of lease execution.
- 3) The PP shall install the temporary (or) permanent magazine approved by the concerned licensing authority before obtaining the CTO from the TNPCB, for storage & transportation of the authorized explosives and detonators separately in accordance with the provisions as stipulated in the Indian Explosive Rules, 2008.
- 4) Since the wind mill is located within 500 m, as a part of monitoring the implementation of eco-friendly blasting operation, the PP shall continually 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,


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

NIRM/Bangalore, IIT (ISM) - Dhanbad, and Anna University Chennai-CEG Campus, etc. A copy of such post-monitoring compliance 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.

However, all other remaining conditions and validity mentioned in the EC vide Lr.No.SEIAA-TN/F.No.9405/1(a)/EC.No.5721/2022,Dated: 09.05.2023 will remains unchanged & unaltered.

Agenda No: 460-06

(File No: 10772/2024 & Old File No: 1260/2018)

Existing Black Granite quarry over an extent of 6.09.0 Ha at S.F.No. 11(P) of Perumbakkam Village, Vanur Taluk, Villupuram District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited - For extension of validity of Environmental Clearance (under violation category). (SIA/TN/MIN/466386/2024, Dated: 18.03.2024)

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. 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 project proponent M/s. Tamil Nadu Minerals Limited has obtained Environmental Clearance under violation category vide Lr.No.SEIAA-TN/F.No.1260/1(a)/EC.No:5620/2023, dated: 21.03.2023 for the existing Black Granite quarry over an extent of 6.09.0 Ha at S.F.No. 11(P) of Perumbakkam Village, Vanur Taluk, Villupuram District, Tamil Nadu, for the period of 2023-2024 (since four years of mine plan were lapsed), for the production quantity of 14,784 m³ ROM which includes 1478 m³ of Black Granite Recovery (@10%) & 13,306 m³ of Granite waste (@90%) up to a depth of 30m AGL.
2. Now, the PP has applied for validity extension of EC (Form-6) vide Online Proposal No. SIA/TN/MIN/466386/2024, Dated: 18.03.2024.
3. The PP has furnished 4th Scheme of Mining for the period 2024-2025 to 2028-2029 (up to lease period 18.06.2029) approved by the Commissioner of Geology and Mining, Chennai vide Rc.No.9095/MM4/2023 dated: 12.03.2024

for the production quantity of 73,819 m³ ROM which includes 7382 m³ of Black Granite Recovery (@10%) & 66,437 m³ of Granite waste (@90%) up to a depth of 30m.

Based on the presentation & documents furnished by the PP, SEAC decided to recommend for the grant of the following extension of validity of Environmental Clearance (under violation category) issued subject to following specific conditions.

As per Violation EC dated: 21.03.2023	Extension of validity of EC Recommended
RoM: 14,784 m ³ ROM which includes 1478 m ³ of Black Granite Recovery (@10%) & 13,306 m ³ of Granite waste (@90%) Ultimate Depth of Mining: 30m EC period: 2023-2024	Annual Peak RoM: 14,784 m ³ Ultimate Depth of Mining: 30m EC Period: 'Project life' as stipulated in the 4 th Scheme of Mining duly approved by the Competent Authority.

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 progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP as stipulated.
3. The PP shall complete the environmental compensation as agreed and stipulated in the EC granted vide Lr.No.SEIAA-TN/ F.No.1260/1(a)/EC.No:5620/2023, dated: 21.03.2023 within a period of six months from the date of validity extension of Environmental Clearance granted by the Authority.
4. All other conditions mentioned in the Violation EC vide Lr.No.SEIAA-TN/ F.No.1260/1(a)/EC.No:5620/2023, dated: 21.03.2023 shall remain unchanged and unaltered.

Agenda No: 460-07
(File No: 4046/2015)


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Silica Sand mine over an extent of 14.24.0 Ha (Government Poramboke land) at S.F. No. 115 of Pallambakkam Village, Cheyyur Taluk, Kancheepuram District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited - For Terms of Reference under Violation category. (SIA/TN/MIN/27249/2018, Dated: 01.09.2017)

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Proponent M/s. Tamil Nadu Minerals Limited has filed a proposal for obtaining Terms of Reference under violation category to carry out EIA study for Silica Sand mine over an extent of 14.24.0 Ha (Government Poramboke land) at S.F. No. 115 of Pallambakkam Village, Cheyyur Taluk, Kancheepuram District, Tamil Nadu.
2. The project/activity is covered under Category "B" of Item 1(a) "Mining of minerals" of the schedule to the EIA Notification, 2006.
3. Now, the project proponent M/s. Tamil Nadu Minerals Limited vide letter dated 04.03.2024 has requested for withdrawal of violation ToR proposal applied vide File No. 4046 and Online Proposal No. SIA/TN/MIN/27249/2018, Dated: 01.09.2017 stating as follows:

"9. As of now it is ascertained that patta has been given in the most of the least applied area. After deleting the patta given area, there is not possibility to carry out scientific mining operation. In this regard, TAMILIN is not pursuing the lease application and TAMILIN would like to withdraw the EC application.

10. Hence, we request the Member Secretary, SEIAA to close the file and no further action is required on the EC process of subject area."

4. Earlier, the proposal was placed in the 702nd Authority meeting held on 12.03.2024. After detailed discussion, the authority decided to forward the withdrawal request of PP for violation ToR proposal (File No. 4046 and Online Proposal No. 27249) to SEAC for remarks and recommendations.

During the meeting, the Committee decided that the PP shall furnish the letter obtained


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

from the AD (Mines) concerned on status of violation, if any occurred.

Agenda No: 460-08

(File No: 6503/2018)

Existing Limestone mine over an extent of 3.93.5 Ha at S.F.Nos. 636/2(P), 637/1(P), 711/1(P), 816/1(P), 816/2A(P) and 817/1(P) of Varavanai Village, Kadavur Taluk, Karur District, Tamil Nadu by Thiru. M. Thangaraj - For Amendment in Terms of Reference Extension under violation category. (SIA/TN/MIN/462978/2024, Dated: 15.02.2024)

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. 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. M. Thangaraj has obtained Terms of Reference with exemption of Public Hearing vide Lr No.SEIAA-TN/F.No.6503/CV/TOR-312/2017 Dated: 18.04.2018 for the Existing Limestone mine over an extent of 3.93.5 Ha at S.F.Nos. 636/2(P), 637/1(P), 711/1(P), 816/1(P), 816/2A(P) and 817/1(P) of Varavanai Village, Kadavur Taluk, Karur District, Tamil Nadu, for the period of three years.
2. Subsequently, Extension of validity of ToR was issued vide Lr. No.SEIAA-TN/F.No.6503/ToR-312/2017/A/ dated: 30.10.2021 with validity upto 17.04.2022.
3. Further, Extension of validity of ToR under violation category was issued vide Letter No.SEIAA-TN/F.No.6503/ToR-312/Ext/2018/ dated: 22.12.2022 with validity upto 17.04.2023.
4. Now, the project proponent has applied for Amendment in Terms of Reference - Form-3 vide Online Proposal No. SIA/TN/MIN/462978/2024, dated: 15.02.2024 requesting to amend in the ToR as Non Violation category.
5. Earlier, the proposal was placed in the 699th authority meeting held on 26.02.2024. After detailed discussion, the authority decided to forward the proposal to SEAC for remarks and recommendations.

The SEAC noted that the PP has obtained last permit on 26.10.2015 as per the letter issued by Deputy Director, Dept. of Geology and Mining, Karur vide Lr.Rc.No.126/Mines/2018, Dated: 15.02.2018.


MEMBER SECRETARY
SEAC -TN

13


CHAIRMAN
SEAC- TN

Hence, the Committee decided that the PP shall furnish the updated letter obtained from the AD (Mines) concerned on the last Transit Permit issued and the status of violation, if any.

Agenda No: 460-09

(File No: 5334/2016)

Proposed Rough Stone quarry over an extent of 4.40.0 Ha (Government Poramboke land) at S.F.No. 665 (Part-1) of Kamandoddi Village, Hosur Taluk, Krishnagiri District, Tamil Nadu by M/s. Thriveni Earth Movers Pvt. Ltd. - For extension of validity of Environmental Clearance. (SIA/TN/MIN/197360/2021, Dated: 09.02.2021)

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. 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 project proponent M/s. Thriveni Earth Movers Pvt. Ltd. has obtained Environmental Clearance vide Lr. No. SEIAA-TN/F.No.5334/1(a)/EC.No:3366/2016 dated:19.07.2016 for the Proposed Rough Stone quarry over an extent of 4.40.0 Ha at S.F.No. 665 (Part-1) of Kamandoddi Village, Hosur Taluk, Krishnagiri District, Tamil Nadu, with validity upto 18.07.2021.
2. The project proponent M/s. Thriveni Earth Movers Pvt. Ltd. has applied for extension of validity of Environmental Clearance through online Parivesh portal vide Online Proposal No. SIA/TN/MIN/197360/2021, dated: 09.02.2021. The PP has furnished 1st Scheme of Mining Plan for the period 2021-2022 to 2025-2026 approved by Dept. of Geology and Mining vide Roc.No.129/2021/Mines Dated:17.02.2021.
3. Meanwhile, M/s. Thriveni Earth Movers Pvt. Ltd. applied seeking Environment Clearance (File No. 8494 and Online Proposal No. SIA/TN/MIN/79170/2021, dated: 28.06.2022) for the Proposed Rough Stone quarry over an extent of 4.40.0 Ha at S.F.No. 665 (Part-1) of Kamandoddi Village, Hosur Taluk, Krishnagiri District, Tamil Nadu. The proposal was placed in the 340th meeting of SEAC held on 23.12.2022. Based on the details furnished by the sub-committee, the SEAC has decided to call the Project Proponent to inform the


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

ground on which the proposal cannot be recommended for the grant of fresh Environmental Clearance.

Subsequently, the proposal was placed in the 585th meeting of SEIAA held on 13.01.2023. The Authority noted that the proposal was placed in the 340th meeting of SEAC held on 23.12.2022. The Authority decided to request the Member Secretary, SEIAA-TN to communicate the aforesaid SEAC minutes to the Proponent.

4. The proposal for extension of validity of earlier issued EC was placed in the 381st meeting of SEAC held on 08.06.2023. During the meeting the SEAC noted that the Project Proponent was absent. Therefore, SEAC decided to defer the proposal and seek explanation for the absence.
5. Subsequently, the proposal was placed in the 629th Authority meeting held on 15.06.2023. The authority noted that this proposal was placed for appraisal in 381st meeting of SEAC held on 08.06.2023. In view of the above, the Authority decided to request Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent.
6. Now, the PP has furnished the Hon'ble High Court of Madras Order dated 26.03.2024 in W.P. No. 32017 of 2023 and requested SEIAA for the extension of Environmental Clearance vide his letter dated 03.04.2024. The Hon'ble High Court of Madras has passed Order on 26.03.2024 in W.P. No. 32017 of 2023 states as follows:

"4. In view of the stand taken by the learned Additional Advocate General, the petitioner is directed to appear before the second respondent on 03.04.2024. On that date, the petitioner shall be heard and the respondents shall consider the application, in the light of Official Memorandum dated 13.12.2022 and pass appropriate orders within a period of two weeks thereafter.

5. With the aforesaid directions, the Writ Petition is disposed of. No costs."

7. Hence, the subject was placed in the 710th Authority meeting held on 10.04.2024. During the meeting, the authority has observed that the validity of EC was expired on 18.07.2022 including COVID Extension.


MEMBER SECRETARY
SEAC -TN

15


CHAIRMAN
SEAC- TN

In view of the above, the Authority decided to refer back the proposal to SEAC for remarks / recommendations.

During the meeting, the Committee noted that the project proponent was absent for the meeting. Hence, the SEAC decided to defer the proposal. Thiru. Jagadheesan was present on behalf of PP but he did not have proper authorization letter obtained from PP.

The project proponent shall attend the SEAC Meeting during the file appraisal, otherwise the file will be dealt based on the documents available in files possessed by the SEIAA and the subject was not taken up for discussion. Hence SEAC deferred the proposal.

Agenda No: 460-10

(File No: 9739/2023)

Proposed production enhancement from 2.00 MTPA to 6.97 MTPA (ROM-Limestone & Marl) in existing limestone quarry (GO No.76) over an extent of 166.005 Ha at S.F Nos. 39/8, 40, 41/1, 47/1, 47/3, 47/4, 47/11, 49, 50, 51, 52, 53/1, 55/1 (P), 55/15, 101, 102/20, 104/1A, 104/15, 104/24, 110/2, 110/3, 110/4, 110/15, 111/1, 111/2, 112/1, 112/8, 112/11B, 112/12, 112/14A, 112/15, 113/1, 113/3, 114/1, 114/6, 114/7, 114/11, 114/12, 114/13, 114/14, 114/15, 114/17A, 114/17B, 114/18, 114/19, 115/1, 115/3, 115/4, 115/6, 115/7, 115/9, 115/10, 116/1, 116/2, 116/3, 117/1, 117/2, 117/3, 117/4, 117/5, 117/6, 117/7, 117/8, 118/1, 118/3A, 118/3C, 118/5, 118/10, 119/1, 119/19B, 120, 121/1, 121/7A, 121/18, 121/19, 122, 135/1, 135/2, 136/1, 136/3, 136/7, 136/10, 136/11, 136/12, 136/13, 136/14, 137/1, 137/2, 137/3, 137/6, 137/7, 138/1, 138/2, 139/1, 139/2, 139/3, 139/4, 139/5, 139/6, 139/7, 140/1, 140/2, 140/3, 140/4, 140/6B, 252, 254/4, 254/7, 254/8, 254/9, 254/10, 254/11, 254/12, 254/13, 258/1, 259/6, 260/3, 260/7, 260/9, 260/13, 260/16, 260/18, 268/1(P), 403 of Kallakudi Village (97.955 Ha), S.F Nos. 54/1, 54/2, 55, 56, 57, 58(P), 59/1B(P), 60, 61/8, 72/1, 72/3(P), 73/1, 73/3, 73/5, 74/1, 75, 77/4(P), 78/5(P), 78/7(P), 78/8A, 79/1A(P), 79/1B, 79/2, 79/6, 80/1, 81/1B, 81/3, 81/4, 82, 83, 85/2, 86/1, 87, 88/1, 89/1, 92(P), 93/1D, 94/7(P), 95/8(P), 140A/1, 147/1 of Kovandakurichi Village (66.820 Ha) and S.F No. 32 of Venkatachalapuram Village (1.230 Ha), Lalgudi Taluk, Trichy District, Tamil Nadu by M/s. Dalmia Cement (Bharat) Limited - For Corrigendum in Environmental Clearance. (SIA/TN/MIN/467394/2024, Dated: 27.03.2024)


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. 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 project proponent M/s. Dalmia Cement (Bharat) Limited has obtained Environmental Clearance vide Lr.No. SEIAA-TN/F.No.9739/1(a)/EC. No:6208/2023, dated: 18.12.2023 for the Proposed production enhancement from 2.00 MTPA to 6.97 MTPA (ROM-Limestone & Marl) in existing limestone quarry (CO No.76) over an extent of 166.005 Ha at S.F Nos. 39/8, 40, 41/1, 47/1, 47/3, 47/4, 47/11, 49, 50, 51, 52, 53/1, 55/1 (P), 55/15, 101, 102/20, 104/1A, 104/15, 104/24, 110/2, 110/3, 110/4, 110/15, 111/1, 111/2, 112/1, 112/8, 112/11B, 112/12, 112/14A, 112/15, 113/1, 113/3, 114/1, 114/6, 114/7, 114/11, 114/12, 114/13, 114/14, 114/15, 114/17A, 114/17B, 114/18, 114/19, 115/1, 115/3, 115/4, 115/6, 115/7, 115/9, 115/10, 116/1, 116/2, 116/3, 117/1, 117/2, 117/3, 117/4, 117/5, 117/6, 117/7, 117/8, 118/1, 118/3A, 118/3C, 118/5, 118/10, 119/1, 119/19B, 120, 121/1, 121/7A, 121/18, 121/19, 122, 135/1, 135/2, 136/1, 136/3, 136/7, 136/10, 136/11, 136/12, 136/13, 136/14, 137/1, 137/2, 137/3, 137/6, 137/7, 138/1, 138/2, 139/1, 139/2, 139/3, 139/4, 139/5, 139/6, 139/7, 140/1, 140/2, 140/3, 140/4, 140/6B, 252, 254/4, 254/7, 254/8, 254/9, 254/10, 254/11, 254/12, 254/13, 258/1, 259/6, 260/3, 260/7, 260/9, 260/13, 260/16, 260/18, 268/1(P), 403 of Kallakudi Village (97.955 Ha), S.F Nos. 54/1, 54/2, 55, 56, 57, 58(P), 59/1B(P), 60, 61/8, 72/1, 72/3(P), 73/1, 73/3, 73/5, 74/1, 75, 77/4(P), 78/5(P), 78/7(P), 78/8A, 79/1A(P), 79/1B, 79/2, 79/6, 80/1, 81/1B, 81/3, 81/4, 82, 83, 85/2, 86/1, 87, 88/1, 89/1, 92(P), 93/1D, 94/7(P), 95/8(P), 140A/1, 147/1 of Kovandakurichi Village (66.820 Ha) and S.F No. 32 of Venkatachalapuram Village (1.230 Ha), Lalgudi Taluk, Trichy District, Tamil Nadu.
2. Now, the project proponent has applied for Corrigendum in Environmental Clearance (Form-13) vide Online Proposal No. SIA/TN/MIN/467394/2024, dated: 27.03.2024 is as follows


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

As per EC dated: 18.12.2023	Corrigendum Sought
Standard Conditions Part-A: "Conditions to be complied before commencing mining operations" Sl. No. 11 states that "The quarrying operation shall be restricted between 7 AM and 5 PM."	Standard Conditions Part-A: "Conditions to be complied before commencing mining operations" Sl. No. 11 as "The mining operation shall be for 3 Shifts in a day, as approved in the Mining Plan."

3. Earlier, the proposal was placed in the 710th Authority meeting held on 10.04.2024. After detailed discussion, the authority decided to forward the proposal to SEAC for remarks and recommendations.
4. During the meeting held on 24.04.2024, the SEAC has deliberated and discussed the legal, technical, environmental and social aspects involved while operating the aforesaid limestone mine accommodating a period of 3 shift duration to facilitate the production requirements of limestone which has been categorized as 'Notified Mineral' by the Govt of India after the amendment of MMDR Act (September 2015) and it is observed the following aspects signifying the scientific & systematic mining operations:
 - (i) The PP has developed an effective Green Belt and Lawns in the Cement Plant and Mines which will have significant long term positive impact on the environment.
 - (ii) Further, the PP have already planted 20,000 no of trees under the CPCB Guidelines with developing the Green Belt inside & outside the Plant in a total extent of 45.720 Ha with about 50,404 Trees @ 1,100 Trees/Ha with a Survival Rate in the range 85-95%.
 - (iii) Since 2005, the PP have completed stopped the drilling & blasting operations and switched over to the non-conventional method of mining by adopting the 'Eco-friendly' mining using Rock Breakers and Surface Miners for the production of limestone & waste excavation.
 - (iv) It is envisaged that with the production capacity of 6.97 MTPA ROM @ 21100 Tons per day (TPD), the operation of the cement plant is not affected. For achieving the same, it has been proposed to operate 330 days with 3 shift operation in the Mining Plans/Schemes duly approved

by the Indian Bureau of Mines (IBM), Ministry of Mines, Gol.

- (v) Concurrently, the PP has obtained the Review of Mining Plan (including Progressive Mine Closure (PMC) Plan) for the Period 2024-25 & 2028-29 for 6.97 MTPA which are duly approved by the Regional Controller of Mines, IBM, Chennai vide TN/TCR/LST/MMP-1721.MDS dated 03.10.2023.
- (vi) Besides, the PP has installed the Environmental Monitoring Cell headed by the Chief Executive of the firm including the Environmental Engineer to carry out the continue monitoring of ambient air quality, dust fall rate, water quality, soil sample analysis and noise level measurements on various stations established for the purpose both in the core zone and buffer zone, as per the guidelines of MoEF & CC and keeping in view IBM's Circular No.3/92 and the same will be available to the inspecting officer on demand.
- (vii) It is noted that the Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area, which has been declared accordingly by the District Collector who is the competent authority. Hence, the trucks are not allowed to pass in the above areas including the village roads during the restricted duration of 5 hours per day as stipulated by the Competent Authority.
- (viii) The periodical reports are being submitted regularly to TNPCB monthly, IBM Quarterly and MoEF & CC Monitoring Cell-IRO & SEIAA as Half Yearly Status Reports.
- (ix) The PP have provided the details (video & photographs) showing the Vehicles are cleaned properly by the company-manufactured cleaning system before allowing the vehicles to ply in the Village/Highway roads located near to the habitations thus reducing the dust laden vehicles plying in the habitats.
- (x) The PP has already invested in purchasing the 'Noise-less' E-Vehicles for the transportation of the limestone ROM to the plant as per the ToR



MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

condition laid by the SEAC.

- (xi) All the vehicles involved in mining operations/ mineral transportation are regularly being monitored for emissions control (PUC) by an authorized agency once in six months.
- (xii) Full-fledged auto workshops have been provided for regular maintenance of all the vehicle used in mining operation/transportation to ensure noise from the vehicle remain within prescribed standards
- (xiii) The haulage roads are regularly being water sprinkled for dust suppression and proper compacting of haulage roads.
- (xiv) The mining activity has planned as per approved mining plan and complying accordingly.
- (xv) Mine internal roads maintained and regular water spraying is in practice at all internal haulage roads for controlling fugitive emission during vehicular movement and trees plantation with native species is in practice along sides of internal roads in order to contain dust.
- (xvi) No vehicles are overloaded and limestone transportation within mines lease area through tippers and haulage roads are properly graded for smooth ply of mines vehicles.
- (xvii) Fugitive emission monitoring done in work place and found within prescribed standard. Environmental monitoring done in mines area by third party NABL accredited lab.
- (xviii) All the precautions are observed as per Reg. 106 of MMR, 1961 for safety and security of the persons employed in the mine. Face masks, helmets, safety shoes etc. shall be provided to all the workers working in the mining areas and its usage shall be ensured and supervised.
- (xix) Periodic occupational health surveillance of mining workmen will be done and record will be maintained accordingly.
- (xx) All the mining machineries (HEMMS operator's cabin) are sound proof and ear plugs / muffs are provided to the workers engaged in mining activities.
- (xxi) All the HEMM has been provide acoustic cabins for drivers and also has


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

been provided ear plugs to all workers along with other PPEs like safety helmet, safety shoes, safety goggles and reflective jackets.

(xxii) All the machines are emitting noise well 85 dB(A) have deployed Surface Miner which generates less noise while Mining Limestone

(xxiii) During the EIA appraisal held, the SEAC has taken a note of the following significant points:

- No Rehabilitation & Resettlement (R&R) issues due to this existing Mine.
- No Litigation against the Proposal.
- The PP has well laid Environmental Policy & EMP Cell under Unit Head.
- The PP have obtained all the statutory approvals as required under the provisions of MMDR Act, 1957 & MMDR Amendment Act 2015, Mines Act 1952, Water Act 1974, Air Act 1981, Environmental Protection Act, 1987, EIA Notification 2006, and other state provisions.
- Usage of the Vibro silenced model of Rock Breakers for the rock breaking in the place of the conventional 'Drilling & Blasting' has effected in achieving the following environmental norms:
- The noise level due to Mining Equipment during operation, is being maintained at <90 db(A) at a distance of 1.5 m from the sources .
- In general, noise generated by these sources is within the limit of 90 dB(A) prescribed by Director General of Mines Safety (DGMS), Dhanbad.
- The work force is exposed to <85 dB(A) levels during the 8-hours Shift. Noise level at the **nearest Lease boundary** is determined as <55 dB(A) during day times and <45 dB(A) during night times and which will be within the MoEF&CC Norms for Residential and Rural Areas. This is due to the scattering operation of HEMM inside the pit having a depth of 40 m, below ground level.
- Further, the environmental study reveals the Noise Levels as indicated


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

below:

Sl. No.	Location	Area	Noise Levels, dB(A)					
			Day Time (06:00-22:00 hrs.)			Night Time (22:00-06:00 hrs.)		
			Lmin.	Lmax.	Leq	Lmin.	Lmax.	Leq
1	A1-Kallakudi Mines	Industrial	38.0	98.7	46.9	34.0	99.5	44.2
2	A2-Kovandakurichi Mines	Industrial	33.8	92.7	44.3	33.2	90.8	42.7
3	A3-DCBL DPM Plant	Industrial	35.9	97.4	47.3	34.6	98.2	44.5
4	A4-Kallakudi	Residential	34.1	96.3	44.7	32.9	90.1	42.6
5	A5-Pullambadi	Commercial	33.8	98.4	45.3	32.7	92.6	43.1
6	A6-Tappai	Residential	33.0	92.7	42.1	31.8	90.1	40.4
7	A7-Kil Arasur	Residential	33.7	94.8	43.5	32.1	92.2	41.8
8	A8-Palanganatham	Residential	33.1	92.2	41.6	31.9	89.4	40.2
9	A9-Kovil Esanai	Residential	33.2	90.4	41.5	31.5	87.8	40.0
10	A10-Kovandakurichi	Residential	33.6	93.7	43.3	32.1	90.5	41.1
11	A11- Vandalaikudalur	Residential	33.0	92.0	42.0	32.4	88.6	40.7
12	A12-Varaguppal	Residential	32.9	90.4	40.7	31.8	85.4	39.8
Study Area			32.9	98.7	43.6	31.5	99.5	41.8
MoEF&CC Norms* for Residential Areas			-	-	55	-	-	45
MoEF&CC Norms for Commercial Areas			-	-	65	-	-	55
MoEF&CC Norms for Industrial Areas			-	-	75	-	-	70

5. While the SEAC have indicated that the Habitations have a right for darkness and minimal noise levels at night, the PP have responded that the biological clock of the villages is not being disturbed even now by orienting in the floodlights/ masks away from the villagers/township and keeping the noise levels well within the prescribed limits for day lights/ night hours under the CPCB Guidelines.
6. Similarly, the PP have informed that the light posts along the ML boundary facing inwards and downwards with reflector facing downward, so that light do not spread outside ML area.

During the above presentation and deliberations, the SEAC has also observed the following provisions considered by the PP during the execution of mining operations with 3 shift duration:

1. There shall be no Blasting for mining activity.
2. Approach roads to the mining leases are metaled to avoid the fugitive particulate matter emission during vehicular movements/trucks ply.
3. The ambient noise level should confirm to the standards prescribed under E (P) A Rules, 1986 viz 75 dB (A) during day time and 70 dB (A) during night time.
4. The SoP has been installed for ensuring safe and environmentally pollution controlled transportation of mineral within and outside the premises.
5. Necessary guards are posted at critical points such as junctions, etc to regulate the traffic flow.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN


6. The vehicles carrying the mineral to the plant premises through the village roads and highway roads are not being driven at a speed of not more than 25 km/h and 40 km/h respectively.

7. The route used for the transportation of mineral is not through the villages and an affidavit confirming the above is furnished.

On a careful consideration of the matter and after hearing from the PP, the SEAC decided to **recommend to SEIAA to issue the following corrigendum in the EC issued earlier dated. 18.12.2023.** All other conditions stipulated in the EC given vide Lr.No. SEIAA-TN/F.No.9739/1(a)/EC. No:6208/2023, dated: 18.12.2023 shall remain unchanged and unaltered but subject to the following specific conditions:

As per EC dated: 18.12.2023	Corrigendum Recommended
Standard Conditions Part-A: "Conditions to be complied before commencing mining operations" Sl. No. 11 states that "The quarrying operation shall be restricted between 7 AM and 5 PM."	Standard Conditions Part-A: "Conditions to be complied before commencing mining operations" Sl. No. 11 as "The timing of the mining operation shall be as stipulated in the Mining Plan duly approved by the Competent Authority."

1. The PP shall ensure that no mine trucks shall utilize the village roads for the transportation of minerals from the mine pits to the Cement Plants as committed.
2. As per the transportation route map furnished by the PP, the PP shall ensure that the mine trucks shall only utilize the existing National Highway and its service lanes located along the mine pits for the transportation of minerals from the mine pits to the Cement Plants as committed.
3. The PP shall convert all the diesel operated mine trucks to EV trucks for the transportation of minerals in a phased manner before 2030 as committed.
4. The PP shall ensure that there will be no hindrance or disturbance to the public and people living nearby due to the mining activity and transportation of minerals as committed.
5. The PP shall ensure that all the mine trucks used for transportation of minerals shall be provided with adequate coverings using hydraulic / pneumatic or any mechanized system in a phased manner before 2026 as committed.


MEMBER SECRETARY
SEAC -TN

23


CHAIRMAN
SEAC -TN

6. The PP shall employ the road cleaning mechanism along with the water sprinkling system to suppress the road dust emitted during vehicular movements in the village road and highways.
7. The PP shall implement the DGMS Recommendations of the XIth Conference on Safety in Mines held in 2013 in New Delhi on the obligation of examining and evaluating the ergonomics factors including whole-body vibration for HEMM operators and conducting of illumination survey, airborne dust (personal and area sampling, free silica testing), noise survey for workers employed along with the whole-body vibration studies of various HEMMs employed in the mines annually by involving anyone of these reputed Research and Academic Institution such as CSIR-Central Institute of Mining & Fuel Research / Dhanbad, Regional Occupational Health Centres (ROHC) of ICMR- National Institute Of Occupational Health, NIRM/Bangalore, 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. PP shall implement all the safety measures including protection of lighting in the mine as per the guidance manual of DGMS vide circular No: DGMS (Tech) Circular No. 10 of 2020 dated. 23 June, 2020.
9. The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
10. The PP shall carry out the vegetation in the slope of dumps in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate.
11. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and

determine appropriate control measures to protect the health and wellbeing of workers and nearby community.

12. As per the Mines Rule 1955, the PP shall carry out the Occupational health surveillance programme for all employees regularly with Lung Function Test, ECG, Chest X-Ray, Blood Analysis, Urine Analysis, Audiometry, Colour Blindness, etc.
13. The PP shall make necessary alternative arrangements, where required, in consultation with the State Government, to provide alternate areas for livestock grazing.

Agenda No: 460-11

(File No: 10415/2023)

Proposed Rough stone Quarry over an extent of 1.90.0Ha at S.F.Nos. 2202/1 (part-1B) of Allinagaram Village, Theni Taluk, Theni District, Tamil Nadu by Tmt. C. Seeniyammal, Tvl. Nila Magalir Sangam - Terms of Reference – request for withdraw. (SIA/TN/MIN/443848/2023, Dated:12.09.2023).

The proposal was placed in the 460th Meeting of SEAC held on 24.04.2024.

The SEAC noted the following:

1. The Project Proponent, Tmt. C. Seeniyammal, Tvl. Nila Magalir Sangam has applied for Terms of Reference for the Proposed Rough stone Quarry over an extent of 1.90.0Ha at S.F.Nos. 2202/1 (part-1B) of Allinagaram Village, Theni Taluk, Theni District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. ToR issued vide Lr.No.SEIAA-TN/F.No.10415/SEAC/ToR-1597/2023 dated:07.11.2023.
4. Meanwhile, the Proponent has requested to withdraw the ToR issued vide Lr.No.SEIAA-TN/F.No.10415/SEAC/ToR-1597/2023 dated:07.11.2023 stating the following
"...the existing quarry namely Tvl. Nagaratchi Lathipa Mahalir Suyaudhavikuzhu, Tmt. M. Muminaparveen, Director, (2.00.0 Ha) has expired on 29.02.2024 resulting in a total cluster area of 3.92.0 Ha only which is under


MEMBER SECRETARY
SEAC - TN

25


CHAIRMAN
SEAC- TN

5.0 Ha. Existing and revised 500m cluster details are provided. Based on the above, we would like to withdraw the Terms of Reference (ToR) due to the expiration of one existing quarry and the total cluster area being only 3.92.0 hectares. We plan to submit a new Environmental Clearance application under Category B2."

Based on the proponent's request vide letter dated:01.04.2024, the subject was placed in the 710th Authority meeting held on 10.04.2024. After detailed discussion, the Authority decided to request the Member Secretary SEIAA-TN to forward the proposal to SEAC-TN for further course of action.

Now, the proposal was placed in the 460th Meeting of SEAC held on 24.04.2024. During the meeting, the Committee noted the following:

1. As per 500m radius cluster letter issued by the Dept. of G&M, Theni vide Roc.No.141/2016/Mines dated:28.08.2023, the cluster area is arrived as follows,

S.No	Name of the Owner	Extent (Ha)	Lease period
Existing quarries			
1.	Tvl. Nagaratchi Lathipa Mahalir Suyaadhavikuzhu, Tmt. M. Muminaparveen, Director	2.00.0	01.03.2019 to 29.02.2024
1.	V.Sivaraman	2.02.0	19.07.2023 to 18.07.2028
Proposed quarries			
2.	Tvl. Nila Magalir Sangam	1.90.0	
Total Extent under Cluster		5.92.0	

2. As per revised 500m radius cluster letter issued by the Dept. of G&M, Theni vide Roc.No.141/2016/Mines dated:07.03.2024, the cluster area is arrived as follows,

S.No	Name of the Owner	Extent (Ha)	Lease period
Existing quarries			
3.	V.Sivaraman	2.02.0	19.07.2023 to 18.07.2028
Proposed quarries			


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

4.	Tvl. Nila Magalir Sangam	1.90.0	
Total Extent under Cluster		3.92.0	

Based on the presentation and documents furnished by the PP, the Committee observed that the existing quarry of Tvl. Nagaratchi Lathipa Mahalir Suyaudhavikuzhu with extent of 2.00.0 Ha has been expired, in this case the total extent under cluster is 3.92.0 Ha, i.e., less than 5 Ha.

Hence, the Committee decided to accept the request for withdrawal of the Terms of Reference (ToR) issued vide Lr.No.SEIAA-TN/F.No.10415/SEAC/ToR-1597/2023 dated:07.11.2023 and SEIAA may take up the withdrawal process in accordance with the provisions stipulated in the law and on merit.

Agenda No: 460-12

(File No: 9089/2023)

Proposed Rough stone & Gravel quarry lease over an extent of 3.96.0 Ha S.F.Nos.799/1, 800 and 802/3 Karamadai Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu by Thiru K.Sundararaj –Environmental Clearance - Rejected – Representation for reconsideration (SIA/TN/MIN/414400/2023, dated 12.01.2023)


The proposal was earlier placed in 371st meeting of SEAC held on 26.04.2023. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in). The project proponent gave a detailed presentation.

The SEAC noted the following:

1. The project proponent, Thiru K.Sundararaj has applied seeking Environmental Clearance for the Proposed Rough stone & Gravel quarry lease over an extent of 3.96.0 Ha S.F.Nos.799/1, 800 and 802/3 Karamadai Village, Mettupalayam Taluk, Coimbatore District, Tamil Nadu.
2. The project/activity is covered under category “B1” of Item 1 (a) “Mining of Minerals Projects” of the schedule to the EIA Notification, 2006, as amended.

Based on the presentation and documents furnished by the project proponent, SEAC decided not to recommend the proposed project for the following reasons:

On perusal of the KML file, it was noticed that the proposed mine lease area is the middle portion of the hillock surrounded by Government Poramboke land. Allowing mining on the top of the hillock will adversely impact the ecology,


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

biodiversity, and its flora & fauna. The hillock forms an important component of the meteorology of the area and mining operation will lead to irreversible changes. The Committee, therefore, is of the opinion that any mining activity in this sensitive area will irreparably damage the environment. Furthermore, a public road is also passing very close to the site and, hence operation of the mine involving blasting will pose danger to the users of the road.

Subsequently the subject was placed in the 618th meeting of SEIAA held on 16.05.2023. The SEIAA decided to accept the decision of SEAC and rejected the proposal. Now the Commissioner of Department of Geology & Mining vide Lr. No. R.C.NO.214/MM1/2023 dt.:15.12.2023 has forwarded the representation received from the PP to reconsider the proposal for grant of EC. Hence the letter was placed in this 705th meeting of Authority held on 19.03.2024. After detailed discussions, the Authority decided to refer the matter to SEAC for furnishing remarks on the request made by the PP.

Hence the subject was taken up for discussion in this 460th meeting of SEAC held on 22.04.2024. The SEAC noted that the AD/Mines has rejected the lease application made by the PP for operating the quarry based on the decision taken by SEIAA to reject Environmental Clearance for the project.

As per the laid down departmental procedure, an appeal lies before the Commissioner of Geology & Mining against the order passed by the AD/Mines, and accordingly the PP has submitted the appeal to the Commissioner of Geology & Mining. But the Commissioner of Geology & Mining, without examining the appeal has merely forwarded the appeal to SEIAA. The SEIAA may therefore write back to the Commissioner of Geology & Mining to consider at her level as per the established procedures.

Agenda No: 460-13

(File No: 10045/2023)

Existing Rough stone and Gravel quarry lease over an extent of 3.13.0 Ha at S.F.No. S.F.Nos.50/3 & 50/4, In Sukkampalayam Village, Palladam Taluk, Tiruppur District, Tamil Nadu by M. Palanisamy- Environment Clearance -Rejected- Representation (SIA/TN/MIN/428451/2023 dt 11.05.2023)


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

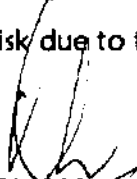
The proposal was earlier placed in the 391st meeting of SEAC held on 13.07.2023 and the SEAC, considering the following **decided not to recommend the proposal for the grant of Environmental Clearance.**

The following structures are located at a close distance from the lease boundary of the quarry;

Distance	No of Structures	Structure belongs to owner	Structure not belongs to owner	Type of Structure
0 - 50m	1	-	Yes	1 – Electronic Store
50- 100m	2	-	Yes	3 – Poultry Farms & 1 – Labour Farm
100-200m	1	-	Yes	1- Gas Godown (BP Co. Ltd) which is a storehouse for Gas Cylinders having the high pressure liquefiable gas, installed under the Indian Explosives Act, 1884
200 – 300m	4	-	Yes	3-Shed & 1 – Stock Yard office

- (i) From the above Table, it is seen that the Gas Cylinder Storage Premise (Godown), located is within 300m from the proposed site, has been set up after obtaining the statutory permission from the office of the Chief Controller of Explosives under the provisions of the Gas Cylinders Rules, 2003 and the section 18 of the Explosives Act, 1884 considered to be the high hazard installation. Hence, it requires the society/habitations/other major industries are kept at a safe distance of 250 to 300 meters from the likely point of ignition for ensuring the clear space to minimize the risk due to the


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

legal implications,

- (ii) Besides, three poultry farms are operating at a distance of 60m from lease boundary of the quarry.

The subject was placed in this 641st meeting of Authority held on 27 .07.2023. The Authority accepted the recommendations of the SEAC and decided to reject the project proposal.

Now the PP vide letter dated 20.02.2024 has requested the Authority to reconsider the project for grant of EC. The subject was placed in this 699th meeting of Authority held on 04.03.2024. The Authority, after detailed discussions decided to refer the PP's request for reconsideration of the project for grant of EC to SEAC for conducting personal hearing in this regard.

Hence the subject was taken up for discussion in this 460th meeting of SEAC held on 22.04.2024. During the presentation, the PP stated that he has already filed a new application vide **SIA/TN/MIN/463119/2024** for the same proposal. **SEAC, therefore, decided to take up the present representation along with the new proposal in the ensuing meeting.**

Agenda No: 460- 14

(File No: 10175 /2023)

Proposed Rough Stone Quarry over an extent of 11.77.0 Ha at S.F.Nos. 121/1A, 121/1B, 128/1, 128/2A, 128/2B, 128/2C & 128/2D, of Puliuram Village, Aruppukkottai Taluk, Virudhunagar District, Tamil Nadu by Thiru A.C.Thangam , Director , M/s. Vishnusurya Project and Infra Private Limited - Terms of Reference- Issued- Requisition for amendment

The proposal was earlier placed in the 395th meeting of SEAC held on 27.07.2023 and the SEAC decided to grant Terms of Reference (ToR) with Public Hearing, **restricting the ultimate depth to 50m BGL** subject to the conditions stated therein.

Subsequently the subject was placed before SEIAA and the SEIAA decided to issue ToR with Public Hearing for the **restricted depth of 45m BGL**. Accordingly ToR with Public Hearing was issued vide T.O Lr. No. SEIAA-TN/F.No. 10175/SEAC/ToR-1534/2023 dated 09.08.2023 subject to the conditions stated therein.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Now the PP vide reference cited has made the following request:

The ultimate pit depth as per the approved mining plan is 54m BGL for the Rough stone Quarry over an extent of 11.77.00 Ha. in Puliuran village, Aruppukottai Taluk, Virudhunagar District. The Public Hearing date is also fixed on 29.02.2024 in Puliuran village. But in the Terms of Reference (ToR) the ultimate pit depth is restricted to 45 m BGL.

In this connection, I request the Chairman, SEIAA-TN to permit the ultimate depth of mining upto 54 m as per the approved mining plan without restriction. I submit the following details to consider my request to allow mining upto 54 mtr BGL as per the approved mining plan.

At present we are operating two rough stone quarries nearby the lease applied area viz.

- 1. S.F.No. 114/3 (P) & 119/1 Over an extent of 4.98.00 Ha. for five years from 11.11.2019 to 10.11.2024 in Puliuran Village, Aruppukottai Taluk, Virudhunagar District. The Environmental Clearance Lr. No. SEIAA-TN/F.No: 6946/1(a)/EC.No. 4045/2019 dated 18.10.2019 in which we have been permitted mining upto a depth of 55 m BGL. The ultimate pit depth is also 55 m BGL in the approved mining plan. This quarry is located about 400 m from the applied area in the same village Puliuran.*
- 2. Another Rough stone Quarry we are operating in Melakandamangalam village, Aruppukottai Taluk, Virudhunagar District over an extent of 4.49.00 Ha, in SF No. 2/4B, 2/4C, 2/5, 3/2A, 3/2B1, 3/2B2, 3/3 A, 3/3B, 3/4B & 4/5 for a period of 5 years from 22.08.2022 to 21.08.2027. The Environmental Clearance Lr. No. SEIAA-TN/F.No:-8949/EC. No:5122/2022 dated 29.06.2022 in which we have been permitted mining upto a depth of 54 m BGL. The ultimate pit depth is also 54 m in the approved mining plan. This quarry is adjoining to the lease applied area.*

We are operating the above two quarries systematically without any environmental problems.

The lease applied area is large extent ie, 11.77.00 Ha. as compared to the present two nearby working quarries ie, 4.98.00 Ha. and 4.49.00 Ha. with well


MEMBER SECRETARY
SEAC -TN

31


CHAIRMAN
SEAC- TN

suitable dimension (length 565 m and width 195 m) for the formation of proper benches upto the ultimate depth of 54 m BGL.

In view of the above, I request the Chairman SEIAA-TN to grant permission for the ultimate mining depth of 54 m BGL as per the approved mining plan.

Subsequently the subject was placed before SEIAA in the 705th meeting of Authority held on 19.03.2024. After detailed discussions, the Authority decided to refer the matter to SEAC for furnishing remarks on the request made by the PP.

Hence the subject was taken up for discussion in this 460th meeting of SEAC held on 22.04.2024. Based on the presentation and the documents furnished by the PP, the SEAC decided to **recommend for the grant of the amendment to the ToR issued vide T.O Lr. No. SEIAA-TN/F.No. 10175/SEAC/ToR-1534/2023 dated 09.08.2023 for the ultimate depth upto 50m BGL** All the other conditions stipulated in the aforesaid ToR dated 09.08.2023 remain unaltered.

Agenda No: 460-15

(File No. 6856 /2022)


Existing Lime Stone quarry over an Extent of 8.00.5Ha in SF.No.48,63 & 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu by M/s.The India Cements Limited for Amendment to the Terms of References already Issued "Under Violation category ". (SIA/TN/MIN/221131/2021 dated 22.07.2021)

The proposal was earlier placed in the 309th Meeting of SEAC held on 02.09.2022. 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, M/s. The India Cements Limited has applied seeking Amendment to the Terms of References already Issued under Violation Category for the Existing Lime Stone quarry over an Extent of 8.00.5Ha in SF.No.48,63 & 66 of Chinnagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu State.
2. The proposed quarry/activity is covered under Category "B" – "Under Violation category" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

3. As per MoEF&CC O.M Dt:29.08.2017, the validity of ToR shall be 4 years for all the projects/activities and 5 years for River Valley and HEP Projects.

4. ToR under violation category issued vide Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021 with validity of three years.

Now, the proponent has applied seeking extension of the Terms of Reference already issued vide Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021 for one more year i.e upto 16.02.2025.

Hence the subject was taken up for discussion in this 460th meeting of SEAC held on 22.04.2024. Based on the presentation & documents furnished by the project proponent, SEAC decided to recommend for grant of extension of Terms of Reference issued dated: 17.02.2021 for one more year i.e upto 16.02.2025 as per the aforesaid MoEF&CC O.M dated 29.08.2017. All the other conditions mentioned in the ToR vide Lr No.SEIAA-TN/F.No.6856/SEAC/TOR-847/2019 Dated:17.02.2021 remain unaltered.

Further, the project proponent is requested to submit EC Application, Public Hearing minutes, EIA/EMP report along with required details on the following –

- (i) Whether there is violation of Environment Act read with various decisions of Courts and Tribunals.
- (ii) If yes, EIA coordinator shall include 'assessment of ecological damage, remediation plan and natural and community resource augmentation plan' chapter in the environment impact assessment report.


Agenda No. 460 - 16

(File No. 10082/2023)

Proposed Rough Stone Quarry lease over an extent of 1.00.0 Ha (Govt. Poramboke Land) in S.F.No. 399/1 (Part-B) of Kallukkurukki Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu by Thiru. V. Rajesh – Withdrawal request of Terms of Reference issued. (SIA/TN/MIN/431128/2023, dated:27.05.2023)

The proposal was placed in this 460th Meeting of SEAC held on 24.04.2024. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following:


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

1. The Proponent, **Thiru. V. Rajesh**, has applied for Terms of Reference for the Proposed Rough Stone Quarry lease over an extent of 1.00.0 Ha (Govt. Poramboke Land) in S.F.No. 399/1 (Part-B) of Kallukkurukki Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. Subsequently, Terms of Reference was issued to the project proponent vide Lr.No.SEIAA-TN/F.No.10082/SEAC/1(a) ToR-1510/2023 dated.01.08.2023.
4. Now, the proponent has submitted a request to withdraw the ToR dated.01.08.2023 stating the following reasons:

"... 1. Scoping done by lessee is wrong. In 500m radius cluster certificate the quarry given in the name of M.Venkataraman, extent: 5 hectares is an expired quarry granted through tender cum auction for 5 years not an existing quarry. So, the proposal comes under the B2 category. The revised 500m letter obtained.

2. The approved mining plan has several discrepancies in bench height and width, working methodology and blasting. The revised mining plan is submitted for approval. Hence the ToR granted for the file number:10082/2023 should be withdrawn..."

Based on the presentation made by the proponent and the revised 500m cluster letter dated.01.03.2024 submitted, the Committee, after deliberations decided to accept the ToR withdrawal request of the proponent.

Agenda No: 460 - 17


(File No: 5333/2016)


Proposed Rough stone quarry over an extent of 2.40.0 Ha in SF.No.665 (Part-2) at Kamandoddi Village, Hosur Taluk, Krishnagiri District, Tamil Nadu by M/s. Thriveni Earth Movers Pvt. Ltd - For Environmental Clearance Extension.

(SIA/TN/MIN/197406/2021, Dt.09.02.2021).

The proposal was placed in the 381st SEAC Meeting held on 08.06.2023. The details of the project furnished by the proponent are given on the website (parivesh.nic.in).

The SEAC noted the following:


MEMBER SECRETARY
SEAC - TN


CHAIRMAN
SEAC- TN

1. The project/activity is covered under Category "B2" of Item 1(a) " Mining of mineral of the Schedule to the EIA Notification, 2006.
2. EC Issued vide Lr. No.SEIAA-TN/F.No.5333/EC/1(a)/3367/2016,dated: 19.07.2016.

During the presentation the PP/EIA consultant requested SEAC to defer the proposal and hence SEAC deferred the proposal.

The subject was placed in the 710th Authority meeting held on 10.04.2024. After detailed discussion, the authority noted as follows:

1. Earlier, the project proponent M/s. Thriveni Earth Movers Pvt. Ltd. has obtained Environmental Clearance vide Lr. No. SEIAA-TN/F.No.5333/1(a)/EC/1(a)/3367/2016 dated:19.07.2016 for the Proposed Rough Stone quarry over an extent of 4.40.0 Ha located at S.F.No. 665 (Part-2), Kamandoddi Village, Hosur Taluk, Krishnagiri District with validity upto 18.07.2021.
2. The project proponent M/s. Thriveni Earth Movers Pvt. Ltd. has applied for extension of validity of Environmental Clearance through online Parivesh portal vide SIA/TN/MIN/197406/2021, dated: 09.02.2021. The PP has furnished 1st Scheme of Mining Plan for the period 2021-2022 to 2025-2026 approved by Dept. of Geology and Mining vide Roc.No.128/2021/Mines Dated:17.02.2021.
3. The above said proposal was placed in the 381st meeting of SEAC held on 08.06.2023. During the meeting the SEAC noted that during the presentation the Project Proponent was requested SEAC to defer the proposal .Therefore, SEAC decided to defer the proposal .
4. Subsequently, the proposal was placed in the 628th Authority meeting held on 14.06.2023. The authority noted that this proposal was placed for appraisal in 381st meeting of SEAC held on 08.06.2023. In view of the above, the Authority decided to request Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent.
5. Now, the PP has furnished the Hon'ble High Court of Madras Order dated 26.03.2024 in W.P. No. 32017 of 2023 and requested SEIAA for the extension of Environmental Clearance vide his letter dated 03.04.2024. The Hon'ble High


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Court of Madras has passed Order on 26.03.2024 in W.P. No. 32017 of 2023 states as follows:

"4. In view of the stand taken by the learned Additional Advocate General, the petitioner is directed to appear before the second respondent on 03.04.2024. On that date, the petitioner shall be heard and the respondents shall consider the application, in the light of Official Memorandum dated 13.12.2022 and pass appropriate orders within a period of two weeks thereafter.

5. With the aforesaid directions, the Writ Petition is disposed of. No costs."

6. During the meeting, the authority has observed that the validity of EC was expired on 18.07.2022 including COVID Extension.

In view of the above, the Authority decided to refer back the proposal to SEAC for remarks / recommendations.

Now the proposal was placed in the 460th meeting of SEAC held on 24.04.2024.

The SEAC noted that one Jagadeesan was present instead of the Project Proponent but he did not have proper Authorization from Project Proponent.

The project proponent shall attend the SEAC Meeting during the file appraisal, otherwise the file will be dealt based on the documents available in files possessed by the SEIAA and the subject was not taken up for discussion. Hence SEAC deferred the proposal.

Agenda No: 460-18

(File No: 10553/2023)

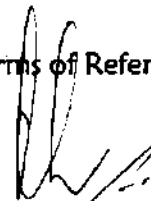
Proposed Rough Stone and Gravel quarry over an extent of 4.09.0 Ha at S.F.Nos. 405/2, 406/1A, 406/1B1A, 406/1B1B, 406/1C1 & 406/2A of Panapatti Village, Kinathukkadavu Taluk, Coimbatore District, Tamil Nadu by Thiru. M. Rajesh - For Terms of Reference. (SIA/TN/MIN/447079/2023, Dated: 05.10.2023)

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. 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. M. Rajesh has applied seeking Terms of Reference


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

- for the proposed Rough Stone and Gravel quarry over an extent of 4.09.0 Ha at S.F.Nos. 405/2, 406/1A, 406/1B1A, 406/1B1B, 406/1C1 & 406/2A of Panapatti Village, Kinathukkadavu Taluk, Coimbatore District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006, as amended.
 3. The precise area communication was issued for the period of 5 Years. The mining plan is for 5 Years. The annual peak production shall not exceed 79694 m³ of Rough Stone for the ultimate depth of 45m below ground level.
 4. Earlier, EC was accorded to the ex-proponent Thiru. H. Karthik vide Lr. No. SEIAA-TN/F.No.3268/EC/1(a)/2515/2015 dated: 01.12.2015 for the Proposed Rough Stone and Gravel quarry lease over an extent of 3.14.0 Ha at S.F.Nos. 406/1A, 406/1B1A, 406/1B1B, 406/1C1 & 406/2A of Panapatti Village, Kinathukkadavu Taluk, Coimbatore District, Tamil Nadu, for the quantity of 115198 cu.m of Rough Stone & 11775 cu.m of Gravel upto a depth of 29m Rough Stone & 5m Gravel.
 5. The ex-proponent Thiru. H. Karthik obtained consent from Tmt. Velathal on 08.03.2021 and the deed cancelled on 9th June 2022. Tmt. Velathal sold the land to Thiru. Rameshkumar and Thiru. Rameshkumar sold the land to Sankar Anand Infra and last the land purchased by the proponent Thiru. M. Rajesh on 28th January 2023.
 6. The ex-proponent Thiru. H. Karthik earlier applied seeking Environment Clearance (File No. 8458 and Online Proposal No. SIA/TN/MIN/203361/2021 dated: 13.03.2021) for the Proposed Rough Stone and Gravel quarry lease over an extent of 3.14.0 Ha at S.F.Nos. 406/1A, 406/1B1A, 406/1B1B, 406/1C1 & 406/2A of Panapatti Village, Kinathukkadavu Taluk, Coimbatore District, Tamil Nadu. The proposal was placed for appraisal in the 229th meeting of SEAC held on 27.08.2021. Based on the presentation and documents furnished by the project proponent, SEAC noted that there are no benches, no green belt development in already mined out area and also there are 2 odai nearby. Hence the SEAC decided that MS, SEIAA shall write a letter to AD mines to check whether mining plan is followed during mining when the project proponent


MEMBER SECRETARY
SEAC -TN

37


CHAIRMAN
SEAC -TN

comes for second mining activity and also recommended that AD mines may visit the site and then shall approve the mining plan. The visit proceedings by the AD (mines) may also be submitted. On receipt of the above AD mines letter, the committee would further deliberate on this project and decide the further course of action.

Subsequently, the subject was placed in the 468th Authority meeting held on 11.10.2021 & 12.10.2021. After detailed discussions, the Authority decided to request the MS-SEIAA to write a letter to AD/Mines, Coimbatore with a copy to Director of Mines requesting to furnish clarifications as requested by SEAC as per the decision taken in 229th SEAC meeting. On receipt of details, it may be sent to SEAC. Also, the minutes of SEAC shall be communicated to the Project Proponent.

Meanwhile, the Proponent had submitted a request vide letter dated: 18.10.2023 to withdraw the online proposal No. SIA/TN/MIN/203361/2021 dated: 13.03.2021. Hence, the proposal was again placed in the 674th Authority meeting held on 20.11.2023. The Authority after detailed discussions, decided to request the MS-SEIAA to write a reminder letter to AD/Mines, Coimbatore with a copy to Director of Mines requesting to furnish clarifications as requested by SEAC as per the decision taken in 229th SEAC meeting. On receipt of details, it may be sent to SEAC.

Now, the proposal was placed in the 433rd meeting of SEAC held on 21.12.2023. The Committee noted that the Project Proponent vide letter dated 18.10.2023 has requested for withdrawal of the application and as per the facts made available it is not a case of violation. The Committee, therefore, decided to accept the withdrawal request of the Project Proponent and close the file.

Subsequently, the subject was placed in the 690th Authority meeting held on 05.02.2024. The Authority noted that the subject was appraised in the 433rd SEAC meeting held on 21.12.2023. Authority noted that, based on the 229th SEAC minutes, certain details were requested from the AD/Mines, Coimbatore District vide Lr.No.SEIAA-TN/F.No.8458/2021 dated: 20.11.2023. So far, no reply has been furnished by AD/Mines. Therefore, based on the above, Authority


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

decided that MS, SEIAA may write DO letter to Commissioner of Geology and Mining regarding the above and shall request Commissioner of Geology and Mining to obtain the details sought earlier and furnish the same to SEIAA-TN to take further course of action.

7. In 674th SEIAA minutes mentioned that the ex-proponent Thiru. H. Karthik would submit the letter obtained from AD Mines but the land ownership subsequently changed to the proponent Thiru. M. Rajesh.
8. Earlier, the proposal was placed for appraisal in the 436th meeting of SEAC held on 29.12.2023. Based on the presentation made by the project proponent, **SEAC decided to recommend for grant of Terms of Reference (TOR) with Public Hearing**, subject to the TORs stated therein, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC and additional ToR conditions given in **ANNEXURE-I** are to be included in EIA/EMP Report.
9. Subsequently, the subject was placed in the 693rd authority meeting held on 08.02.2024. The authority noted that the subject was appraised in the 436th SEAC meeting held on 29.12.2023. SEAC has furnished its recommendations for granting Terms of Reference with Public Hearing subject to the conditions stated therein.

The Authority, after detailed discussions decided to consider the proposal after obtaining the following particulars from the project proponent:

- 1) In case of the existing quarry/operating mines, the PP shall obtain a letter from the concerned AD (Mines) which shall 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.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

- 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


10. Now, the project proponent has furnished the existing quarry details obtained from Deputy Director, Dept. of Geology and Mining vide letter dated 14.03.2024. But the DD Mines has not replied to the (ix) point (Details of any penalties levied on the PP for any violation in the quarry operation)

11. The subject was placed in the 704th authority meeting held on 18.03.2024. In view of the above, the authority has decided to refer back the proposal to SEAC for getting specific remarks on the PP's reply along with recommendation.

Now, this proposal was again placed in this 460th meeting of SEAC held on 24.04.2024. The Project proponent has made a presentation along with clarification for the above shortcomings observed by the SEIAA.

S. No	SEIAA Query	Reply
1.	In case of the existing quarry/operating mines, the PP shall obtain a letter from the concerned AD (Mines) which shall stipulate the following information:	AD- Letter obtained vide letter dated 14.03.2024
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	


MEMBER SECRETARY
SEAC - TN


CHAIRMAN
SEAC- TN

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	<p>The lessee Thiru. M. Rajesh had submitted the Affidavit to Dept of Geology and Mining stating</p> <ul style="list-style-type: none"> • No quarry license in my name in Tamil Nadu. • No quarry lease granted in my name independently or combined so far in TamilNadu. <p>Hence no dues or no penalties levied on the PP for any violation in the quarry operation.</p>
2.	Now, the project proponent has furnished the existing quarry details obtained from Deputy Director, Dept. of Geology and Mining vide letter dated 14.03.2024. But the DD Mines has not replied to the (ix) point (Details of any penalties levied on the PP for any violation in the quarry operation)	

Based on the presentation made and the documents furnished by the Project proponent, SEAC decided to reiterate its **recommendation already made in its 436th** meeting of SEAC held on 29.12.2023. All other conditions mentioned in the minutes will remain unchanged and unaltered.

Agenda No: 460-19

(File No: 10459/2023)

Proposed Rough Stone and Gravel quarry over an extent of 2.02.0 ha at S.F. No. 482/2C (P) of Munnur Village, Pugalur Taluk, Karur District, Tamil Nadu by Tmt. N. Latha - For Environmental Clearance. (SIA/TN/MIN/447026/2023, Dated: 05.10.2023)


 MEMBER SECRETARY
 SEAC -TN


 CHAIRMAN
 SEAC- TN

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. 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. N. Latha has applied for Environmental Clearance for the Proposed Rough Stone and Gravel quarry over an extent of 2.02.0 ha at S.F. No. 482/2C (P) of Munnur Village, Pugalur Taluk, Karur 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 10 years. The mining plan is for 5 years (two spells) & production should not exceed 2,58,440m³ of Rough Stone & 30,772 m³ of Gravel. The annual peak production 29,250 m³ of Rough Stone & 10,780 m³ of Gravel. The ultimate depth of mining is 44m BGL.
4. Earlier the proponent had applied for Terms of Reference vide **SIA/TN/MIN/78982/2022 dated 25.06.2022** and subsequently the proponent intended to withdraw the ToR application claiming that the proposal falls under 'B2' category.
5. Based on the above, the proposal was placed in 357th SEAC meeting 23.02.2023 and based on the reply furnished by the PP, committee decided to reiterate the recommendations already made in its 312th & 328th meeting held on 16.09.2022 & 11.11.2022 respectively and accepted the withdrawal request made by the PP.
6. Subsequently, the subject was placed in 649th SEIAA meeting held on 23.08.2023. The authority, after carefully taking into consideration the revised cluster letter of Deputy Director dated: 31.07.2023 & the affidavit from Thiru. R. Natarajan dated: 20.07.2023, decided to accept the proponent's request to consider the proposal under 'B2' category. Hence, the proponent shall apply accordingly.
7. The salient features of the proposal are as follows:

File No	10459/2023	Category	B2
	447026/2023		1(a)


MEMBER SECRETARY
SEAC - TN


CHAIRMAN
SEAC- TN

Sl. No	Salient Features of the Proposal			
1.	Name of the Owner/Firm	:	Tmt.N.Latha, W/o. Natarajan, Door No. 6/67E, Ganapathypalayam, Vettamangalam West Cross Street, Pugalur Taluk, Karur District - 639117.	
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough Stone and Gravel Quarry	
3.	S.F Nos. of the quarry site with area break-up	:	482/2C (Part)	
4.	Village in which situated	:	Munnur	
5.	Taluk in which situated	:	Pugalur	
6.	District in which situated	:	Karur	
7.	Extent of quarry (in ha.)	:	2.02.0Ha	
8.	Latitude & Longitude of all corners of the quarry site	:	10°59'22.62"N to 10°59'28.66"N 77°53'37.48"E to 77°53'43.22"E	
9.	Topo Sheet No.	:	58-F/13	
10.	Type of mining	:	Opencast Mechanized Mining	
11.	Life of Project	:	10 years	
	Lease Period	:	10 Years	
	Mining Plan Period	:	10 Years	
12.	Mining Plan Details	:	As per approved Mining Plan	As modified by SEAC
	Geological Resources m³ (RoM)	:	Rough Stone	Rough Stone
		:	8,05,000 m³	
		:	Gravel	Gravel
		:	40,250 m³	
	Minable Resources m³ (RoM)	:	Rough Stone	Rough Stone
:		2,58,440m³		


 MEMBER SECRETARY
 SEAC -TN


 CHAIRMAN
 SEAC- TN

	Annual Peak Production in m ³	:	Gravel	Gravel
			30,772m ³	
			Rough Stone	Rough Stone
			29,250 m ³	
			Gravel	Gravel
			10,780m ³	
	Maximum Depth in meters	:	44m BGL	
13.	Depth of water table	:	68-73 m	
14.	Man Power requirement per day:	:	20 Nos	
15.	Water requirement: 1. Drinking & utilized water 2. Dust suppression 3. Green belt	:	3.0 KLD 0.5 KLD 1.5 KLD 1.0 KLD	
16.	Power requirement	:	TNEB 1,02,528 Litres of HSD	
17.	Precise area communication approved by Deputy Director, Geology & Mining	:	Na.Ka No.433/Kanimam/2021, dated: 11.03.2022	
18.	Mining Plan approved by Deputy Director, Dept of Geology & Mining.	:	Rc.No.433/Mines/2021, dated: 06.05.2022	
19.	Department of G&M, Deputy Director, 500m Cluster Letter	:	Rc.No.433/Mines/2021-3, dated: 31.07.2023.	
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter Dated: 02.05.2022	
21.	Project Cost (excluding EMP cost)	:	Rs. 36,05,000	


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

22.	EC Recommendation	:	Validity	30 years subject to the following upper limits.	
				Rough Stone Quarry	Gravel
		:	Max Total RoM in m ³	2,58,440m ³	30,772 m ³
		:	Annual Max RoM in m ³	29,250 m ³	10,780 m ³
		:	Max Depth in mtrs	44m BGL	
23.	EMP cost (in Rs. Lakhs).	:	Capital Cost – Rs. 24,31,400 Recurring Cost – Rs. 14,62,112		
24.	CER cost (in Rs. Lakhs).	:	Rs. 5,00,000		

8. Earlier, the proposal was placed in 447th SEAC meeting held on 22.02.2024.

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 29,250 m³ of rough stone & 10,780m³ of Gravel by maintaining the ultimate depth of mining up to 44m 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 specific conditions stated therein.

9. The subject was placed in the 705th Authority meeting held on 19.03.2024. The Authority noted that the proposal was placed in 447th SEAC meeting held on 22.02.2024. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance.

The Authority, noted that the following.

In the recommendation of committee, following condition has been imposed: -

- 1) **Since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of one year from the**


MEMBER SECRETARY
SEAC -TN

45


CHAIRMAN
SEAC- TN

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 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.

- 2) 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.

In the view of the above. Authority after detailed deliberation decided to refer back to the committee for the following reasons

- i. Ten-year mining with the quantity recommended need detailed hydrogeological study from reputed institution supported with recommendations during the mine period.
- ii. Specific condition of SEAC minutes suggests that since the structures are situated within a radial distance of 500 m, the PP shall carry out the scientific studies within a period of one year from the commencement of quarrying operations, to design the controlled blast parameters for


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the quarry.

- iii. Specific condition of SEAC minutes suggests that 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.

SEIAA is of the opinion that when it comes to long term mining (more than 5 years), additional study as suggested may be done before the issue of Environmental Clearance and additional conditions shall be imposed as suggested in the report.

In view of the above, the committee shall examine the above-mentioned points and shall furnish it's remarks to SEIAA to take further course of action.

Now, this proposal was again placed in this 460th meeting of SEAC held on 24.04.2024. The SEAC has prescribed the following studies.

SEAC Conditions	SEAC Remarks
As structures are found within a radial distance of 500m. the PP has been asked to conduct a study to design the blast parameters within a period of 6 months.	The reason for prescribing 6 months period is because only after opening the mine and studying the nature of rock formation atleast to a depth of 5m a proper study to determine the blaste parameters can be undertaken. In the absence of real ground related data, any such study will be only theoretical and will not be of much use in the operation of the mine. It is for this reason, SEAC has recommended that such a study should be carried within a period of 6 months on the presumption that the mining upto one bench would have been carried out by that time.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

	<p>Further, the structures are beyond the danger zone of 300m and the above study has been prescribed as an abundant caution to prevent any potential harm to the people living in the neighborhood.</p> <p>The Committee therefore decided to reiterate it's recommendation that the study be carried out within 6 months from the opening of the mine.</p>
<p>As there were few waterbodies nearby the proposed site, the committee has suggested that a study to find out the hydrogeological study to be carried out within a period of 6 months.</p>	<p>The committee has examined the ground water levels in the vicinity, say within 500m, and the proposed depth and only after coming to the conclusion that the proposed mining operation will not interfere with the ground water levels of the vicinity. The committee has also examined the water bodies in the nearby area and considering the area of proposed mine and considering the fact that garland drain has been prescribed as part of EMP, the impact of mining operation on the nearby water bodies will be negligible. The hydrogeological study is to establish that the proposed mining activity will have no/negligible impact on the ground water table and on the water bodies nearby.</p>
<p>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</p>	<p>The reason for prescribing slope stability study to be conducted in the 4th year is because only after opening the mine and studying the structural lithology of the</p>


 MEMBER SECRETARY
 SEAC -TN


 CHAIRMAN
 SEAC- TN

<p>existing quarry wall during the 4th 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.</p>	<p>strata being encountered during the quarrying operation to determine angle of safety to ensure the factor of safety (F.O.S) of more than 1.0 ($F > 1.0$) besides the stresses induced by the surrounding rock formation during the deepening of the quarries will be utilized to arrive the required factor of safety in accordance with the DGMS circular no. 2 of 2001 issued by the statutory body.</p> <p>Besides, the determination of F.O.S after exposing the above lithological features will help in designing the benches of appropriate geometry in accordance with the provisions of the regulations, rules, circulars and orders made there under. Hence, the SEAC has felt that it provides an opportunity for the proponent to construct the benches to maintain the stability before he reaches a depth of 30m.</p> <p>The Committee therefore decided to reiterate it's recommendation that the study be carried out in the 4th year of mine operation.</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Based on the presentation made and the documents furnished by the Project proponent, SEAC decided to reiterate its recommendation already made in its 447th meeting of SEAC held on 22.02.2024. All other conditions mentioned in the minutes will remain unchanged and unaltered.

Agenda No: 460-20

(File No: 8267/2021)


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Proposed Ordinary Earth quarry lease over an extent of 2.40.5 Ha at S.F.Nos. 177/13, 177/14, 179/2 & 179/3A of Pudukudi Village, Kodavasal Taluk, Thiruvavarur District, Tamil Nadu by Thiru. M. Vignesh (Legal Heir), S/o. Late. V. Muthuramalingam (applicant) - For Environmental Clearance.

(SIA/TN/MIN/194645/2021, Dated: 23.01.2021)

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. 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. M. Vignesh (Legal Heir), S/o. Late. V. Muthuramalingam (applicant) has applied for Environmental Clearance for the proposed Ordinary Earth quarry lease over an extent of 2.40.5 Ha at S.F.No. 177/13, 177/14, 179/2 & 179/3A of Pudukudi Village, Kodavasal Taluk, Thiruvavarur District, Tamil Nadu.
2. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006.
3. The PP has submitted death certificate of applicant and legal heir certificate.
4. The PP has furnished the copy of AD Mines letter dated 21.11.2022 for transfer of application to the legal heir.
5. Earlier, the proposal was placed in the 370th SEAC meeting held on 25.04.2023. The SEAC noted that the project proponent has not attended the meeting. Hence the subject was not taken up for discussion and the project proponent shall furnish the reason for his absence.
6. The salient features of the proposal are as follows:

File No	8267 / 2021	Category	B2 / 1(a)
Sl. No	Salient Features of the Proposal		
1	Name of the Owner/Firm	:	Thiru. M. Vignesh (Legal Heir), S/o. (late) V. Muthuramalingam, No.2-71, Main Road Street, Thippanampettai, Pudukudi,

		Kodavasal Taluk, Thiruvavarur District – 612 610.	
2	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	: Ordinary Earth	
3	S.F Nos. of the quarry site with area break-up	: 177/13, 177/14, 179/2 & 179/3A	
4	Village in which situated	: Pudukudi	
5	Taluk in which situated	: Kodavasal	
6	District in which situated	: Thiruvavarur	
7	Extent of quarry (in ha.)	: 2.40.5 Ha	
8	Latitude & Longitude of all corners of the quarry site	: 10°49'54.19"N to 10°50'00.14"N 79°30'33.61"E to 79°30'39.51"E	
9	Topo Sheet No.	: C44H9	
10	Type of mining	: Opencast Semi Mechanized Mining	
11	Life of Project	: 3 years	
	Lease Period	: 3 years	
	Mining Plan Period	: 3 years	
12	Mining Plan Details	: As per approved Mining Plan	As modified by SEAC
	Geological Resources m ³ (RoM)	: Ordinary Earth 96,200 m ³	Ordinary Earth -
	Minal Resources m ³ (RoM)	: Ordinary Earth 32,646 m ³	Ordinary Earth -
	Annual Peak Production in m ³	: Ordinary Earth 11,096 m ³	Ordinary Earth -
	Ultimate Depth in meters	: 2m below ground level	-
13	Depth of water table	: 10m below ground level	


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

14	Man Power requirement per day:	:	12 Nos.								
15	Water requirement: 1. Drinking water 2. Utilized water 3. Dust suppression 4. Green belt	:	2.8 KLD 0.7 KLD - 1.5 KLD 0.6 KLD								
16	Power requirement	:	5440 Liters of HSD								
17	Precise area communication approved by Assistant Director, Department of G&M	:	Rc.No.139/Mines/2020, Dated:01.12.2020								
18	Mining Plan approved by Assistant Director, Department of G&M	:	R.C. No.139/2020/Mines, Dated:08.11.2023								
19	Department of G&M, Assistant Director 500m Cluster Letter	:	R.C. No.139/2020/Mines, Dated:08.11.2023								
20	VAO Certificate Regarding Structures within 300m Radius	:	Letter dated 05.01.2021								
21	Project Cost (excluding EMP cost)	:	Rs. 7,60,000/-								
22	EC Recommendation	:	<table><tr><td>Validity</td><td>30 years subject to the following upper limits. Ordinary Earth</td></tr><tr><td>Max Total RoM in m³</td><td>32,646 m³</td></tr><tr><td>Annual Max RoM in m³</td><td>11,096 m³</td></tr><tr><td>Max Depth in mtrs</td><td>2m below ground level</td></tr></table>	Validity	30 years subject to the following upper limits. Ordinary Earth	Max Total RoM in m³	32,646 m³	Annual Max RoM in m³	11,096 m³	Max Depth in mtrs	2m below ground level
		Validity	30 years subject to the following upper limits. Ordinary Earth								
		Max Total RoM in m³	32,646 m³								
		Annual Max RoM in m³	11,096 m³								
Max Depth in mtrs	2m below ground level										

23	EMP cost (in Rs. Lakh).	:	Capital Cost – Rs. 13,19,100/- Recurring Cost – Rs. 5,83,010/-
24	CER cost (in Rs. Lakh).	:	Rs. 2,00,000/-

7. The proposal was placed for appraisal in this 434th meeting of SEAC held on 22.12.2023. 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 11,096 m³ of Ordinary Earth by maintaining the ultimate depth of mining upto 2m below ground level for a period of three 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 specific conditions stated therein.

8. The subject was placed in the 691st authority meeting held on 06.02.2024. The authority noted that the subject was appraised in the 434th SEAC meeting held on 22.12.2023. SEAC has furnished its recommendations for granting **Environmental Clearance** subject to the conditions stated therein.

The Authority, after detailed discussions decided to consider the proposal after obtaining the following particulars from the project proponent:

- i. It was noticed from KML file that surrounding lands are seen to be agricultural lands and also the land use of proposed mining area falls under wet land (Nanjai) as per patta copy (Patta Nos. 378, 314 & 155) furnished by PP. Hence the PP shall furnish NOC obtained from the Director, Agriculture Department that the removal of earth will not affect the agriculture nearby area and also there is no impact on the water table due to the said quarrying activity.
- ii. Details of impact and mitigation measures in regard to vegetation, water table and drainage pattern.

9. The proponent vide letter dated 08.04.2024 has replied to the above details sought by SEIAA.

SEIAA query	PP's Reply
-------------	------------


MEMBER SECRETARY
SEAC -TN

53


CHAIRMAN
SEAC- TN

<p>It was noticed from KML file that surrounding lands are seen to be agricultural lands and also the land use of proposed mining area falls under wet land (Nanjai) as per patta copy (Patta Nos. 378, 314 & 155) furnished by PP. Hence the PP shall furnish NOC obtained from the Director, Agriculture Department that the removal of earth will not affect the agriculture nearby area and also there is no impact on the water table due to the said quarrying activity.</p>	<p>The Letter obtained from the deputy director agriculture department Thiruvavur District. It is mention that based on the inspection the land use for the proposed mining area land as classification mention that it is a nanjai land and also name of the pattadhar is mention in this letter vide letter No: E4/4474/2023, Dated: 12.03.2024, and also NOC letter obtained from the proposed mining area vide letter No: E4/4474/2024, Dated: 17.03.2024.</p>
<p>Details of impact and mitigation measures in regard to vegetation, water table and drainage pattern.</p>	<ul style="list-style-type: none"> • The area is surrounded by barren land on all the sides. • The mining operation will not have any significant impact to the nearby agriculture land on following the proposed mitigation measures in the EMP like water sprinkling for dust management. • The proposed activity for quarrying of gravel is without drilling and blasting and shall have no significant impact on the nearby water bodies and aquifers in order to mitigate the soil erosion its proposed to construct garland drains and connected through silt traps and this proposed EMP shall ensure that there is no significant impact on the surrounding water bodies


 MEMBER SECRETARY
 SEAC - TN


 CHAIRMAN
 SEAC- TN

	<ul style="list-style-type: none"> • The water table in this area is 47m-52m depth. The depth of the mining operation is only 2m BGL. It will not make any significant impact in the water table.
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

10. The PP has enclosed the copy of letter obtained from the Joint Director, Agriculture Department, Thiruvavur dated 17.03.2024 stated that the said land located at S.F. Nos. 177/13, 177/14, 179/2 & 179/3A over an extent of 2.40.5 Ha is presently not fit for agricultural activity.

11. Hence, the subject was again placed in the 710th Authority meeting held on 10.04.2024. The authority has observed that the S.F. Nos. 177/13, 177/14, 179/2 & 179/3A are Nanjai land as per patta copy (Patta Nos. 378, 314 & 155).

In view of the above, the Authority decided to refer back the proposal to SEAC for remarks.

Now, this proposal was placed in this 460th meeting of SEAC held on 24.04.2024. The Project proponent has made a presentation along with clarification for the above shortcomings observed by the SEIAA.

SEIAA Query	Reply
It was noticed from KML file that surrounding lands are seen to be agricultural lands and also the land use of proposed mining area falls under wet land (Nanjai) as per patta copy (Patta Nos. 378, 314 & 155) furnished by PP. Hence the PP shall furnish NOC obtained from the Director, Agriculture Department that the removal of earth will not affect the agriculture nearby area and also there is no impact on the water table due to the said quarrying activity.	The Proponent had obtained the NOC from the Director, Department of Agriculture vide Lr.No.E4/44742024, Dated: 17.03.2024 stating that for the past five years the land is barren condition and not fit for the agriculture activity.


MEMBER SECRETARY
SEAC -TN

55


CHAIRMAN
SEAC- TN

<p>Details of impact and mitigation measures in regard to vegetation, water table and drainage pattern.</p>	<ul style="list-style-type: none"> • In this type of mining operation drilling and blasting will not be involved. The mining operation will be carried out by using Excavators and tippers only. • The depth of the mine is 2m bgl and the total production would be around 2-3 tippers per day considering the quantum and method of mining this project will not have significant impact on the surrounding agriculture lands. <p style="text-align: center;">Mitigation Measures</p> <ul style="list-style-type: none"> • The Mitigation measures along with budget allocation addressed in the EMP • The mitigation measures will be carried out • Sprinkling of water in the haul roads and approach road • Water will be sprinkled on the Gravel before loading into the tippers • Garland drain will be constructed around the pit to divert the surface run off water into the natural gradient. • The water table in the surrounding area is 10m bgl and the proposed depth of the mine is 2m bgl
-------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Based on the presentation made and the documents furnished by the Project proponent, SEAC decided to reiterate its **recommendation already made in its 434th** meeting of SEAC held on 22.12.2023. All other conditions mentioned in the minutes will remain unchanged and unaltered.

Agenda No: 460-21

(File No: 9321/2022)

Existing New Building for Collectorate and other offices located at S.F.No. 191 Ward B, Block 4, T.S no.36 and others Tenkasi village, Tenkasi Taluk, Tirunelveli District, Tamil Nadu by M/s. Executive Engineer, PWD, Buildings (C&M) Division - For Environmental Clearance. (SIA/TN/MIS/252442/2022, Dated: 20.01.2022)

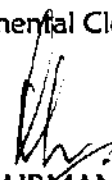
The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Proponent, M/s. Executive Engineer, PWD, Buildings (C&M) Division has applied for Environmental Clearance for the existing New Building for Collectorate and other offices located at S.F.No. 191 Ward B, Block 4, T.S no.36 and others Tenkasi village, Tenkasi Taluk, Tirunelveli District, Tamil Nadu.
2. The project/activity is covered under Category "B" of item 8(a) "Building & Construction" of the Schedule to the EIA Notification, 2006.
3. The proposal comes under violation category.
4. ToR under violation category issued vide Letter. No. SEIAA-TN/F.No. 9321/Violation/ToR- 1383/2023, dated: 27.02.2023.
5. Earlier the proposal was placed in 380th SEAC meeting held on 17.05.2023. Based on the presentation made by the proponent, SEAC decided to constitute a sub-committee to make on-site inspection to **examine the present status of the proposed project, environmental settings besides assessing the ecological damage assessment, remediation plan, natural resource augmentation and community resource augmentation furnished by the sub-committee.**

After the receipt of the site evaluation and ecological assessment report by the Sub-committee, the SEAC will deliberate on the issue of Environmental Clearance


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

under violation category.

6. A Legal opinion has been sought by the PWD which states that

“...It is seen from your communication and perusal of records that the writ petitioner namely one S. P. Muthuraman had filed a writ petition in W.P(MD)No.19 136 of 2022 in the nature of a Public Interest Litigation alleging that the construction of the new Collectorate and other office complexes in the newly carved out Tenkasi District is being proceeded, without getting environmental clearance from the Tamil Nadu State Level Environment Impact Assessment Authority and also without obtaining the clearance from the Tamil Nadu Pollution Control Board. The Hon'ble Division Bench of the Madras High Court — Madurai Bench disposed of the writ petition, vide order dated 26.08.2022 as follows:

“5. The learned Additional Advocate General stated that the environmental clearance application and the application before the Tamil Nadu Pollution Control Board are pending, but, on account of the fact that the newly carved out district has to be commissioned, the Public Works Department had begun the construction work. He also submitted that the construction would be suspended jar a further period of four weeks until the aforesaid clearances are obtained from respondents 1 and 3.

6. As regards the prayer of the petitioner for a mandamus to prosecute the fourth respondent, we are afraid that such a mandamus cannot be issued by this Court as there are alternate remedies available. Bearing in mind the larger public interest, we direct the second respondent to expeditiously dispose of the application dated 15.06.2022, which has been submitted by the fourth respondent to the second respondent jar environmental clearance.

7. Recording the aforesaid undertaking, this writ petition stands closed. No costs.”

It is seen from your records that your department had proposed to construct the new building for Collectorate and other offices for the newly

carved Tenkasi Town and a application had been submitted for Environmental Clearance by your Department vide Filed No.9321 of 2022 to the State Environmental Impact Assessment Authority (SEIAA) as per the EIA Notification,2006. Moreover, it is seen that the same was appraised on the 320th State Level Expert Appraisal Committee (SEAC) meeting held on 13.10.2022 and thereafter based on the time of reference was also issued. Furthermore, there is an observation that the application of your department is being subject to the outcome of a Writ Petition in W.P(MD)No 11757 of 2021 titled Fatima Vs Union of India challenging the Standard Operating Procedure (SOP) violation proposals dated 07.07.2021 which is pending adjudication.

Under such circumstances you have enclosed another Office Memorandum dated 28.01.2022 in F.No.22-21/2020-IA.III [E 138949] of the Government of India — Ministry of Environment, Forest and Climate Change (Impact Assessment Division). The said Office Memorandum reads as follows:

"The Ministry issued a Standard Operating Procedure dated 7th July 2021 bearing the file number 22-21/2020-IA.III, for identification and handling of violation cases under EIA Notification 2006 in compliance of order of the Hon'ble National Green Tribunal in Appeal No.34/2020 (WZ) titled Tan aji B. Gombhire Vs. Chief Secretary, Government of Maharashtra.

- 2. The SoP was challenged in the Madurai Bench of the High Court of Madras in the matter W.P.(MD), No.11757 of 2021 titled Fatima Vs Union of India and was interim stayed vide order dated 15th July 2021.*
- 3. Recently, in the Order dated 09th December 2021 in the matter of Civil Appeal Nos.7576-7577 of 2021 in Electro steel Steels Limited Vs Union of India and Ors., the Hon'ble Supreme Court of India has inter-alia observed the following.*


MEMBER SECRETARY
SEAC -TN

59


CHAIRMAN
SEAC- TN

"93. The interim order passed by the Madras High Court appears to be misconceived. However, this Court is not hearing an appeal from that interim order. The interim stay passed by the Madras High Court can have no application to operation of the Standard Operating Procedure to projects in territories beyond the territorial jurisdiction of Madras High Court. Moreover, final decision may have been taken in accordance with the Orders/Rules prevailing prior to 7th July, 2021."

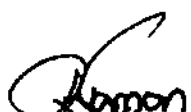
4. *The copy of the order which is self-explanatory is enclosed herewith for necessary action.*

5. *This is issued with the approval of the competent authority."*

It is seen on perusal of records that the said case in the Writ Petition in W.P(MD)No 11757 of 2021 titled Fatima Vs Union of India had been dealt with the *Hon'ble Supreme Court of India in Civil Appeal Nos.7576-7577 of 2021 in Electro steel Steels Limited Vs Union of India* and an order had been passed as early as on 09.12.2021 based on which the above-mentioned Memorandum had been circulated.

Furthermore on perusal of the records it is seen that although there is a specific finding that the interim stay passed by the Madras High Court in the Fatima case can have no application to operation of the Standard Operating Procedure to projects in territories beyond the territorial jurisdiction of Madras High Court, yet there is also other findings that the final decision may have been taken in accordance with the Orders/ Rules prevailing prior to 7th July, 2021 as well as the other observation that the interim order passed by the Madras High Court appears to be misconceived by the Hon'ble Supreme Court.

It is also pertinent to note that after the said Fatima case, the Writ Petitioner one S. P. Muthu Raman had filed a fresh Writ Petition whose merits had been heard in detail and thereafter the Hon'ble Madurai Bench of Madras High Court had given a specific direction on the grounds of the larger public interest


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

to the Tamil Nadu Pollution Control Board to expeditiously dispose of the application dated 15.06.2022 by your department for environmental clearance. Therefore, the concerned competent authorities are duty bound to follow the said direction of the Hon'ble High Court. And when the same also happens to be a subsequent direction, the said rule that has to be followed. Therefore, I am of the considered opinion that the concern competent authorities including SEIAA, shall have to consider the application of the PWD department dated 15.05.2022 not only as per the rules and regulations as on force and applicable as on date but also in light of the said Office Memorandum (issued as per the judgment of the Hon'ble Supreme of India in Civil Appeal Nos.7576-7577 of 2021) as well as the directions of the Hon'ble Division Bench of the Madras High Court — Madurai Bench in W.P(MD)No19136 of 2022.

Based on the above, The State Expert Appraisal Committee (SEAC) Tamil Nadu constituted a sub-committee vide its Lr.No. SEAC-TN/9321Site Inspection/2023, dt.01.06.2023; based on Minutes of the 380th SEAC Meeting, held on 17.05.2023, to inspect and study the field condition for the proposal seeking EC for the existing New Building for Collectorate and other offices located at S.F.No. 191 Ward B, Block 4, T.S no.36 and others Tenkasi village, Tenkasi Taluk, Tirunelveli District.

The Committee comprised of

1. Thiru. R. Thangaprakasam B.E, M.B.A., Member/SEAC
2. Thiru. K.S.S.V.P Reddy, IFS, Member/SEAC.

I. Context & Chronology:

- Construction of new Building for Collectorate and other offices located at S.F.No.191 Ward B, Block 4, T.S no.36 and other Tenkasi village, Tenkasi taluk, Tenkasi District of Tamil Nadu. It is constructed on a plot area of 36,218.79 m² without EC with a built-up area of 29621 sq.m. Project Cost: Rs.119.00 Crores.
- Construction was started in the year 2021 and was ongoing up to G+6 floors. In August 2022 the constructions work temporarily suspended for want of


MEMBER SECRETARY
SEAC -TN

61


CHAIRMAN
SEAC- TN

EC as per Hon'ble Madurai bench of Madras High court order dt.26.08.2022.

- Application for EC was made by the Executive Engineer, PWD Buildings (C&M) Division, Tenkasi on 07.06.2022 under violation category.
- ToR under violation category was issued 27.02.2023.
- EIA report was submitted to SEIAA on 16.05.2023.
- Presentation for EC under violation notification made to SEAC on 17.05.2023 in 380th meeting (File No.9321).
- A site visit has been prescribed by the SEAC and accordingly a sub-committee consisting of K.S.S.V.P Reddy, IFS and Mr. R. Thangaprakasam CE (Rtd.,) has been formed.
- The sub-committee visited the New Collectorate building and inspected the relevant issues on 01.06.2023. The officials headed by the Executive Engineer (PWD), representatives from EIA co-ordinator and Forest Department officials have participated the site visit. The District Collector, Tenkasi, Thiru. Ravichandran, IAS has met the sub-committee at site and also briefed about the project.

II. Observations:

1. Land use break up provided by the Project Proponent are as per the EIA report & PPT.
2. Build up area is detailed as under;

S.No	Description	Total Built-up (Sq. m.)
1	Ground Floor	4275
2	First Floor	3822
3	Second Floor	4197
4	Third Floor	4197
5	Fourth Floor	3822
6	Fifth Floor	4197
7	Sixth Floor	4197
8	Machine & Head Rooms	288

9	Steps, Ramp and Verandah Area	264
10	Parking & Portico	362
Total Area		29,621 m²
FSI		0.80

3. Water balance and commitment letter for water from TWAD are as per the EIA and PPT.

4. Civil works for STP have been completed.

5. Rain Water Harvesting structures are yet to be constructed.

6. Storm water drain and leading to nearby Tenkasi lake are yet to be constructed.

7. Sub-committee instructed PP to install rooftop solar panel to 50% of capacity of power requested by the collectorate and the PP has agreed.

8. Environment Management Plan and Corporate Environment Responsibility are as per norms are to be taken up.

9. Green belt development of 500 plants is yet to be taken up. However, the work now has been started and completed as per the instruction of the sub-committee.

III. Assessment of Ecological remediation cost, natural resource augmentation & community resource augmentation cost are worked out as per CPCB guidelines and also as per SEAC guideline 2018.

Tenkasi collectorate building was only procedural violations i.e., the work started without obtaining EC. Hence, it may be considered as low-level ecological damage.

A. CPCB guidelines:

The guidelines issued by CPCB viz "Report of the CPCB In-house Committee on Methodology for Assessing Environmental Compensation and Action Plan to Utilize the Fund" pertaining to industrial unit and environmental compensation as detailed below:

$$EC = PI \times N \times R \times S \times LF$$

Where,

EC is Environmental Compensation in Rupees (₹)

PI = Pollution Index of industrial sector


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

N = Number of days of violation took place

R = A factor in Rupees (₹) for EC

S = Factor for scale of operation

LF = Location factor

The formula incorporates the anticipated severity of environmental pollution in terms of Pollution Index, duration of violation in terms of number of days, scale of operation in terms of micro & small/medium/large industry and location in terms of proximity to the large habitations. The Pollution Index in the range of 60 to 100, 41 to 59 and 21 to 40, respectively. It was suggested that the average pollution index of 80, 50 and 30 may be taken for calculating the Environmental Compensation for Red, Orange and Green categories of industries, respectively. Since, the construction industry cannot be taken as industrial sector to arrive the pollution index further assessment of this formula may land in to subjective environmental compensation cost.

In the same CPCB guidelines in Chapter 2 environmental compensation to be levied in all violation cases is described in the table and the same is reproduced below.

Activity	State Of Air Quality	Environmental Compensation
Industrial Emissions	Severe +/-Emergency	Rs 1.0 Crore
	Severe	Rs 50 Lakh
	Very Poor	Rs 25 Lakh
	Moderate to Poor	Rs 10 Lakh
Vapour Recovery System (VRS) at Outlets of Oil Companies		
I. Not Installed	Target Date	Rs 1.0 Crore
ii. Non-functional	Very poor to Severe +	Rs 50.0 Lakh
	Moderate to Poor	Rs 25.0 Lakh
Construction sites (Offending plot more than 20,000 Sq.m.)	Severe +/-Emergency	Rs 1.0 Crore
	Severe	Rs 50 Lakh
	Very Poor	Rs 25 Lakh
	Moderate to Poor	Rs 10 Lakh

Solid waste/ garbage dumping in Industrial Estates	Very poor to Severe +	Rs 25.0 Lakh
	Moderate to Poor	Rs 10.0 Lakh
Failure to water sprinkling on unpaved roads		
a) Hot-spots	Very poor to Severe +	Rs 25.0 Lakh
b) Other than Hot-spots	Very poor to Severe +	Rs 10.0 Lakh

From the highlighted portion of the above table it can be seen that the proposed construction site is more than **20,000 sq.m** and the considered air quality is **moderate to poor** which can be considered for the site the environmental compensation to be levied is **Rs. 10 lakhs**. There are two reasons to consider this value of Rs. 10 Lakhs viz. Firstly, the air at construction site is considered moderate to poor. Secondly, the guidelines speak about construction sites in the table which is pertaining to the project. The other chapters deal about illegal extraction of ground water, environmental solid waste management which is not pertaining the project site as the **project site is not occupied**.


Hence it can be considered for the site the environmental compensation to be levied is **Rs. 10 lakhs**.

B. SEAC Guidelines

The second guidelines considered for this environmental damage assessment is issued by SEAC during the year 2018 based on the inspection report and violation notification the SEAC classified the level damages by the following criteria.

Level of damages	Ecological remediation of cost (% of project cost)	Natural resource augmentation	Community resource augmentation cost (% of the cost)	CER (% of project cost)	Total (% of the project cost)
Low level ecological damage	0.25	0.10	0.15	0.25	0.75


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Medium level ecological damage	0.35	0.15	0.25	0.5	1.25
High level ecological damage	0.50	0.20	0.30	1.00	2.00

They are low level ecological damage only due to

- Procedural Violation (Started the Construction in 2021 at the site without obtaining EC)

The other two ecological damage are Medium and high level but the same is not applicable.

Based on this the project violation, it can be considered as low-level damage accordingly the following factors can be arrived.

Therefore

- Ecological remediation cost = **0.25 % of project cost**
- Natural & community resource augmentation cost = **0.10+0.15 = 0.25 % of project cost.**

A. Ecological remedial cost

The Ecological remedial cost is considered 0.25% of the project cost

i.e., Rs. 119, 00, 00,000 X 0.25% = **Rs.29,75,000.**

Again, the 0.25 % is divided into five parts related to land, water, air, noise, biological covering all the factors of environment.

S.No	Particular	Cost in Lakhs Rs.	Percentage (%) of Project Cost
1	Land Environment	13,09,000	0.11
2	Water Environment	8,33,000	0.07
3	Air Environment	3,57,000	0.03
4	Noise Environment	2,38,000	0.02
5	Biological	2,38,000	0.02


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

	Environment		
	Total	29,75,000	0.25

B. Natural and community resource augmentation cost

Further, to calculate Natural and community resource augmentation damage the weightage is given about **0.10 and 0.15%** totaling to 0.25% of the project cost.

i.e., Rs. 119, 00, 00,000 X 0.25% = **Rs.29, 75,000.**

The calculated amount is **Rs.29, 75,000** will be utilized as follows

Natural and community resource damage

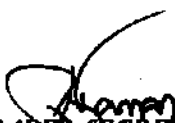
S.No.	Activity	Proposed Area	Cost in Rs
1	Improvement of nearby waterbody	Nearby site	11,90,000
2	Improvement of tree plantation	Nearby site	3,85,000
3	Improvement of nearby school water supply and Toilet facilities	Government Primary school	14,00,000
Sub total			Rs. 29,75,000

Summary of Remediation Plan & Natural and community Resource Augmentation Plan (Budgetary Allocation)

S. No.	Aspects	Amount (Rs. In Lakhs)
1	Estimated cost on Ecological remediation plan based on the damage assessment due to violation	29,75,000
2	Cost estimate for natural resources augmentation plan and community resources augmentation plan	29,75,000
Grand Total		59,50,000

Recommendation

1. Considering all the available guidelines its recommended follow to SEAC guidelines for damage assessment for the Tenkasi Collectorate. The total amount to be considered against environmental damage is **Rs. 59, 50,000.**
2. The CER activities as presented in the meeting are detailed below:


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

S. No	Activity proposed	Cost (Lakhs)
1	Manjammal Govt. Girls Hr. Sec School, Tenkasi	
a	Girl's washroom improvement	10.00
b	Sanitary and sewage arrangements	6.00
c	Upgradation of classrooms	40.00
2	Govt Boys Hr Sec School, Melagaram – Modern Library facilities	50.00
3	Upgradation of girl's restrooms at Melasengottai	15.00
4	Upgradation of girl's restrooms at seevanallur	15.00
a	Construction of smart library	42.00
	Total	178.00

IV. Site Photographs:

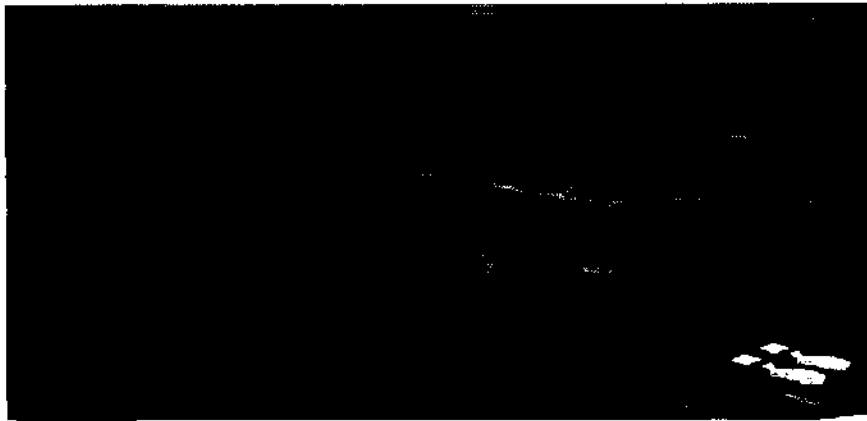


Sub-committee discussion at site


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Before Tree Plantation



After Plantation




MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

The above Sub-committee report was placed in the 391st Meeting of SEAC held on 13.07.2023. **After detailed deliberation, SEAC decided to recommend the proposal to SEIAA for grant of Environmental Clearance** subject to the conditions stated therein in addition to the normal conditions.

Subsequently, the subject was placed in 641st Authority meeting held on 27.07.2023 & 28.07.2023. The authority noted that the subject was appraised in 391st SEAC meeting held on 13.07.2023.

After detailed deliberation, SEAC decided to recommend the proposal to SEIAA for grant of Environmental Clearance subject to the following conditions in addition to the normal conditions:


- i) The recommendation is made in deference to the direction issued by the Hon'ble Madurai Bench of Madras High Court in W.P.(MD) No. 19136 of 2022 and also considering the legal opinion given by the Government Pleader to PED Department in Ref.No.GP/L.O./1126/2023. As the SoP issued by the MOEF&CC, for considering violation cases is under stay by the Hon'ble Madurai Bench of Madras High Court, SEIAA may obtain an affidavit from the PP that the decision is without prejudice to the outcome of the W.P.(MD) No. 11757 of 2021 and the PP shall abide by the judgement in the writ petition and face the consequences if any. Further, as an abundant precaution, SEIAA may get the consent of the Hon'ble High Court by filing a clarification petition.

In the view of the above, SEIAA accepts the decision of SEAC and decided to request Member Secretary to file a clarification petition as per the direction of SEAC in 391st SEAC meeting held on 13.07.2023 and communicate the minutes to the project proponent.

Subsequently, a letter was addressed to ASG, to obtain opinion regarding the procedure to file clarification petition as per the directions given by SEAC in its 391st SEAC meeting vide letter dated 10.10.2023. Based on the above, ASG has given his/her opinion vide Lr dated 30.11.2023 received by this office on 11.12.2023.

Based on the above, the subject was again placed in 681st SEIAA meeting held on 19.12.2023. The Authority, after detailed deliberations, considering the opinion given


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

by the learned ASG decided to keep the subject in abeyance until the final court order in W.P.(MD) No. 11757 of 2021.

Upon the receipt of final court order in the W.P.(MD) No. 11757 of 2021 pending before Madurai Bench of Hon'ble High Court, further deliberation shall be done.

Meanwhile, the proponent vide his letter dated 01.03.2024 has stated that the proponent has submitted Bank Guarantee (BG NO. 0051723IPG000002, Dated: 14.11.2023 for an amount of Rs. 59,50,000/-) to Tamil Nadu Pollution Control Board. But TNPCB didn't accept the bank guarantee submitted by the proponent since the Hon'ble Supreme Court of India vide order dated: 02.01.2024 in W.P.(C) No. 1394/2023 titled Vanasakti vs. Union of India has stayed the operation of both the Office Memorandum dated: 07.07.2021 and 28.01.2022 issued by the Ministry of Environment, Forest and Climate Change for handling Violation cases under EIA notification 2006 and hence, the proponent has requested SEIAA to address the Tamil Nadu Pollution Control Board with favourable recommendations for acceptance of Bank guarantee. Also, the same matter was forwarded by TNPCB vide letter dated 05.02.2024.

Hence, the subject was placed in the 710th Authority meeting held on 10.04.2024. In view of the above, the Authority decided to refer back the proposal to SEAC for remarks / recommendations.

Now, this proposal was again placed in this 460th meeting of SEAC held on 24.04.2024. During the meeting, the Committee noted that the project proponent was absent for the meeting. Hence, the SEAC decided to defer the proposal.

Agenda No: 460-22

(File No: 10385/2023)

Proposed Rough Stone quarry over an extent of 2.00.0 Ha (Government Poramboke land) at S.F.No. 109 (Part-1) of Maruthandapalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu by M/s. Sri Sai Kesava Enterprises – For Environmental Clearance. (SIA/TN/MIN/430696/2023, Dated: 25.05.2023)

The proposal was placed for appraisal in this 460th meeting of SEAC held on 24.04.2024. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

The SEAC noted the following:

1. The project proponent, M/s. Sri Sai Kesava Enterprises has applied for Environmental Clearance for the Proposed Rough Stone quarry over an extent of 2.00.0 Ha (Government Poramboke land) at S.F.No. 109 (Part-1) of Maruthandapalli Village, Shoolagiri Taluk, Krishnagiri 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 10 years. The approved mining plan is for 5 Years. As per the approved mine plan, the annual peak production shall not exceed 72,650 m³ of Rough Stone for an ultimate depth of 39m below ground level.
4. Earlier, the project proponent has obtained EC from DEIAA vide Lr.No.03/DEIAA-KGI/EC No.47/2018 dated: 27.08.2018 for the production quantity of 7,81,746m³ of Rough Stone upto the depth of 57m.
5. Earlier, the proposal was placed for appraisal in the 427th meeting of SEAC held on 07.12.2023. 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 PARIVESH portal.

6. The proponent vide letter dated 20.02.2024 submitted the Certified Compliance Report (CCR) obtained from Regional Office, MoEF&CC, Chennai vide EP/12.1/2023-24/SEIAA/127/TN/176 dated 14.02.2024 for the earlier EC issued by DEIAA.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN


7. Hence, the proposal was again placed in the 449th meeting of SEAC held on 07.03.2024.

The salient features of the proposal are as follows:

File No	10385 / 2023	Category	B2 / 1(a)
Sl. No	Salient Features of the Proposal		
1	Name of the Owner/Firm	M/s. Sri Sai Kesava Enterprises, Prop. R. Chenna Keshava, No.110/3B, Maruthandapalli Village, Shoolagiri Taluk, Krishnagiri District - 635 117.	
2	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	Rough Stone	
3	S.F Nos. of the quarry site with area break-up	109 (Part-1)	
4	Village in which situated	Maruthandapalli	
5	Taluk in which situated	Shoolagiri	
6	District in which situated	Krishnagiri	
7	Extent of quarry (in ha.)	2.00.0 Ha (Government Poramboke land)	
8	Latitude & Longitude of all corners of the quarry site	12°42'27.50"N to 12°42'23.90"N 78°00'51.95"E to 78°00'47.83"E	
9	Topo Sheet No.	57 – L/02	
10	Type of mining	Opencast Mechanized 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
		Rough Stone	Rough Stone


MEMBER SECRETARY
SEAC -TN

73


CHAIRMAN
SEAC- TN

	Geological Resources m ³ (RoM)		7,04,670 m ³	-
	Minable Resources m ³ (RoM)	:	Rough Stone	Rough Stone
			3,02,093 m ³	-
	Annual Peak Production in m ³	:	Rough Stone	Rough Stone
			72,650 m ³	-
	Ultimate Depth in meters	:	39m below ground level	-
13	Depth of water table	:	75m-85m below ground level	
14	Man Power requirement per day:	:	21 Nos.	
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 District Collector	:	Na.Ka.No.193/2018/Kanimam, dated:09.03.2018	
18	Mining Plan approved by Deputy Director, Department of G&M	:	Roc.No.193/2018/Mines, Dated:26.06.2023	
19	Department of G&M, Deputy Director 500m Cluster Letter	:	Roc.No.193/2018/Mines, Dated:25.05.2023	
20	VAO Certificate Regarding Structures within 300m Radius	:	Letter dated 09.08.2023	
21	Project Cost (excluding EMP cost)	:	Rs. 1,17,90,000/-	

22	EC Recommendation	:	Validity	30 years subject to the following upper limits.
		:		Rough Stone
		:	Max Total RoM in m ³	3,02,093 m ³
		:	Annual Max RoM in m ³	72,650 m ³
		:	Ultimate Depth in mtrs	39m below ground level
23	EMP cost (in Rs. Lakh).	:	Capital Cost – Rs. 11,57,000/- Recurring Cost – Rs. 11,75,500/-	
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 72,650 m³ of Rough Stone by maintaining the ultimate depth of mining upto 39m below ground level** and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF&CC, in addition to the specific conditions stated therein.

8. Subsequently, the subject was placed in the 707th Authority meeting held on 01.04.2024. The authority noted that the subject was appraised in the 449th SEAC meeting held on 07.03.2024. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.

After detailed discussion, the authority noted as follows:

- i. As per the Mining Plan, the depth of the bench is mentioned as 7m, whether is it safe for mining activity with 7m bench and will there be any impact on the slope stability for the proposed quarry due to 7m bench formation.

In view of the above, the Authority decided to refer back the proposal to SEAC for remarks / recommendations on the above mentioned point.


MEMBER SECRETARY
SEAC -TN

75


CHAIRMAN
SEAC- TN

Now, this proposal was placed in this 460th meeting of SEAC held on 24.04.2024. The Project proponent has made a presentation along with clarification for the above shortcomings observed by the SEIAA.

SEIAA Query	Reply
As per the Mining Plan, the depth of the bench is mentioned as 7m, whether is it safe for mining activity with 7m bench and will there be any impact on the slope stability for the proposed quarry due to 7m bench formation.	<p>The old mining plan report is approved for the bench height of 7 m.</p> <p>As per SEAC Recommendation, the mining plan has been revised for the bench height of 5 m and the same has been presented in-front of SEAC Members on 427th (07.12.2023) & 449th SEAC Meeting (ADS) (07.03.2024). So, the mining plan has been revised for the bench height of 5 m and it is duly approved by Assistant Director, Department of Geology and Mining, Krishnagiri District.</p> <p>The proposed mining is 1st scheme of mining and it is a Government Poramboke land. The existing depth is 28m BGL and the proposed depth for the current 1st scheme of mining is 11m BGL (Totally 28m existing + 11m proposed = 39m BGL).</p> <p>Hence the bench height is only 5 meter and overall depth is 39 meter only we request to consider our proposal for issuance of environmental clearance</p>

Based on the presentation made and the documents furnished by the Project proponent, SEAC decided to reiterate its **recommendation already made in its 449th**


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

meeting of SEAC held on 07.03.2024. All other conditions mentioned in the minutes will remain unchanged and unaltered.

Agenda No: 460 - 23

(File No: 9227/2023)

Proposed Rough stone & Gravel quarry lease over an extent of 4.42.0 Ha at S.F.No.58/1A, 58/1B, 58/2A, 58/2B, 58/3, 58/6, 58/7, 58/8A, 58/8B, 59/2A, 61/1B, 61/2A, 61/2B, 61/3, 61/4A, 61/5A and 61/6, Kaganam Village, Vembakkam Taluk, Tiruvannamalai District, Tamil Nadu by Thiru R. Kathirvelu - For Environmental Clearance. (SIA/TN/MIN/453028/2023, Dated: 23/11/2023).

The proposal was placed in the 460th meeting of SEAC held on 24.04.2024. 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.Kathirvelu has applied for Environmental Clearance for the Proposed Rough stone & Gravel quarry lease over an extent of 4.42.0 Ha at S.F.No.58/1A, 58/1B, 58/2A, 58/2B, 58/3, 58/6, 58/7, 58/8A, 58/8B, 59/2A, 61/1B, 61/2A, 61/2B, 61/3, 61/4A, 61/5A and 61/6, Kaganam Village, Vembakkam Taluk, Tiruvannamalai District, Tamil Nadu.
2. The project/activity is covered under category "B1" of Item 1 (a) "Mining of Minerals Projects" of the schedule to the EIA Notification, 2006.
3. ToR along with Public Hearing was issued vide Lr. No.SEIAA-TN/F.No.9227/SEAC/ToR-1195/2022 Dated: 14.07.2022.
4. Amendment ToR issued vide Lr. No. SEIAA-TN/F.No.9227/TOR-1195/2022/Amendment/dated: 28.11.2022.
5. Public hearing was conducted on 18.08.2023.
6. EIA Report was submitted on 27.11.2023.
7. Earlier, the proposal was placed in the 446th meeting of SEAC held on 16.02.2024.
8. The salient features of the proposed project as follows.


File No	9227/2023	Category	B2 1(a)
	SIA/TN/MIN/453028/2023, Dated: 23/11/2023		


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Sl. No	Salient Features of the Proposal																	
1.	Name of the Owner/Firm	:	Thiru.R.Kathirvelu No.19C,Vilakkadi Kovil Thoppu Street Kancheepuram-631501.															
2.	Type of quarrying (Ordinary Stone/Sand/Granite/Limestone)	:	Rough Stone & Gravel															
3.	S.F Nos. of the quarry site with area break-up	:	58/1A, 58/1B, 58/2A, 58/2B, 58/3, 58/6, 58/7, 58/8A, 58/8B, 59/2A, 61/1B, 61/2A, 61/2B, 61/3, 61/4A, 61/5A and 61/6															
4.	Village in which situated	:	Kaganam															
5.	Taluk in which situated	:	Vembakkam															
6.	District in which situated	:	Tiruvannamalai															
7.	Extent of quarry (in ha.)	:	4.42.0 Ha															
8.	Latitude & Longitude of all corners of the quarry site	:	12°44' 34.02"N to 12°44'41.99"N 79°34'36.73"E to 79°34'46.50"E															
9.	Topo Sheet No.	:	57/P/10															
10.	Type of mining	:	Opencast Semi-mechanized Mining															
11.	Life of Project	:	10 Years															
	Lease Period	:	10 Years															
	Mining Plan Period	:	10 Years															
12.	Mining Plan Details	:	As per approved Mining Plan															
			<table><tr><td></td><td>Rough stone</td><td>Gravel</td></tr><tr><td>Geological Resources m³</td><td>1983285m³</td><td>88146m³</td></tr><tr><td>Minable Resources m³</td><td>1018230m³</td><td>74124m³</td></tr><tr><td>Annual Peak Production in m³</td><td>127185m³</td><td>45288m³</td></tr><tr><td>Maximum Depth in meters</td><td colspan="2">48m BGL</td></tr></table>		Rough stone	Gravel	Geological Resources m ³	1983285m ³	88146m ³	Minable Resources m ³	1018230m ³	74124m ³	Annual Peak Production in m ³	127185m ³	45288m ³	Maximum Depth in meters	48m BGL	
		Rough stone	Gravel															
	Geological Resources m ³	1983285m ³	88146m ³															
	Minable Resources m ³	1018230m ³	74124m ³															
Annual Peak Production in m ³	127185m ³	45288m ³																
Maximum Depth in meters	48m BGL																	
	Geological Resources m ³	:	1983285m ³															
	Minable Resources m ³	:	1018230m ³															
	Annual Peak Production in m ³	:	127185m ³															
	Maximum Depth in meters	:	48m BGL															
13.	Depth of water table	:	62m-59m															

14.	Man Power requirement per day:	:	32 Nos												
15.	Water requirement: 1. Drinking water 2. Domestic water 3. Dust suppression	:	10 KLD 1.0 KLD 8.0 KLD 1.0 KLD												
16.	Power requirement	:	TNEB												
17.	Precise area communication approved by the Deputy Director, Department of G&M.	:	Rc.No.1127/Kanimam/201 dated:30.03.2022												
18.	Mining Plan approved by Deputy Director, Department of G&M.	:	Rc.No. 1127/Kanimam/201 dated:13.04.2022												
19.	500m Cluster Letter approved by the Deputy Director, Department of G&M.	:	1127/Kanimam/201 dated:13.04.2022												
20.	VAO Certificate Regarding Structures within 300m Radius	:	Letter dated: 02.04.2022												
21.	Project Cost (excluding EMP cost)	:	Rs.98,68,000/-												
22.	EC Recommendation	:	<table> <tr> <td>Validity</td><td colspan="3">30 years subject to the following upper limits.</td></tr> <tr> <td></td><td>Rough stone</td><td>Gravel</td><td>Weathered Rock</td></tr> <tr> <td>Max Total in m³</td><td>10,18,230 m³</td><td>74,124 m³</td><td>35,703 m³</td></tr> </table>	Validity	30 years subject to the following upper limits.				Rough stone	Gravel	Weathered Rock	Max Total in m ³	10,18,230 m ³	74,124 m ³	35,703 m ³
Validity	30 years subject to the following upper limits.														
	Rough stone	Gravel	Weathered Rock												
Max Total in m ³	10,18,230 m ³	74,124 m ³	35,703 m ³												


 MEMBER SECRETARY
 SEAC -TN


 CHAIRMAN
 SEAC- TN

		Annual : Max in m ³	127185 m ³	45288 m ³	21,98 8m ³
		Max : Depth in mtrs	48m BGL		
23.	EMP cost (in Rs. Lakh).	:	Capital –Rs. 29.81 Lakhs Recurring- Rs. 402.4 Lakhs for 10 Years		
24.	CER cost (in Rs. Lakh).	:	Rs.5 Lakhs		
25.	Tor Issued		Lr.No.SEIAA-TN/F.No.9227/SEAC/ TOR-1195/2022 Dated: 14.07.2022.		
26.	Public Hearing		18.08.2023		
27.	EIA Report Submitted		27.11.2023.		

9. 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 1,27,185m³ of rough stone, 21,988m³ & 45,288m³ of Gravel** by maintaining the ultimate depth of mining up to 48m and subject to the standard conditions as per the Annexure I of this minutes & normal conditions stipulated by MOEF &CC, in addition to the specific conditions stated therein.
10. Subsequently, the subject was placed in the 704th authority meeting held on 18.03.2024. The authority noted that the subject was appraised in the 446th SEAC meeting held on 16.02.2024. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.
11. Further, the authority during deliberations noted from the KLM file uploaded in the PARIVESH portal that the water bodies are located around the project area. Hence, the authority decided to consider the proposal after obtaining the following particulars from the project proponent:

- a) **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**


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

parameters for reducing the blast-induced ground/air- vibrations and eliminating the fly rock from the blasting operations carried out in the 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.

- b) **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.
- c) 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 4th 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.


MEMBER SECRETARY
SEAC -TN



CHAIRMAN
SEAC- TN

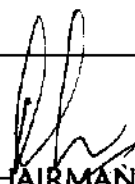
In view of the above, the Authority decided to **refer back** the proposal to SEAC for remarks /recommendations after obtaining the detailed study report on the above-mentioned points.

Now, this proposal was again placed in this 460th meeting of SEAC held on 24.04.2024. The Project proponent has made a presentation along with clarification for the above shortcomings observed by the SEIAA.

SEIAA Query	Reply
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 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	We will conduct a scientific study to design controlled blasting parameters aimed at reducing blast-induced ground vibrations and eliminating fly rock from the blasting operation. This study will be carried out in collaboration with one of the reputable research institutes recommended by the committee within six months from the Quarry Commencement
Since the waterbodies are situated nearby, the PP shall carry out the scientific studies to assess the	A detailed hydrogeological study will be carried by reputable research institutes recommended by the committee within

<p>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.</p>	<p>six months from the Quarry Commencement.</p>
<p>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 4th 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</p>	<p>The slope stability study will be conducted in the fourth year or when the depth of the working pit reaches 30m, whichever comes first, by reputable research institutes recommended by the committee within six months from the quarry commencement.</p>


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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.

Based on the presentation made and the documents furnished by the Project proponent, SEAC discussed the following:

1. **As structures are found within a radial distance of 500m. the pp has been asked to conduct a study to design the blast parameters within a period of 6 months:**

The reasons for prescribing a period of 6 months for conducting the above study are based on the following.

1. The nature & stratigraphy, lithology of rock formation can be ascertained only after the quarry is opened to a depth of atleast 6 to 7 m to determine the optimum blast parameters for the blasts to be carried out in the rock formations possessing heterogeneous rock characteristics.
2. In the absence of real ground related data, any such study will be only theoretical as simulated data for the prediction of the vibration level will not be of much use in the operation of the mine and it may also misguide the blasting operation which is highly sensitive in nature.
3. Further, as per the provisions of Reg. 164 of MMR 1961, the PP shall carry out the controlled blasting techniques only after obtaining the prior approval from the competent authority (i.e, the Director of Mines Safety, DGMS-Chennai Region) which can be accomplished only after the execution of mine lease and then only it is legally comes under the purview of the Mines Act 1952.

The Committee therefore decided to reiterate its recommendation that the study be carried out within minimum period of 6 months from the date of the commencement of the mining operations.

2. **As there were few waterbodies nearby the proposed site, the committee has suggested that a study to find out the hydrogeological study to be carried out within a period of 6 months.**

The committee has examined the ground water levels in the vicinity, say within 500m, and the proposed depth and only after coming to the conclusion that the proposed mining operation will not interfere with the ground water levels of the vicinity. The committee has also examined the water bodies in the nearby area and considering the area of proposed mine and considering the fact that garland drain has been prescribed as part of EMP, the impact of mining operation on the nearby water bodies will be negligible.

However, the hydrogeological study is to establish that the proposed mining activity will have no/negligible impact on the ground water table and on the water bodies nearby.


Therefore, the reason for prescribing a period of 1 or 2 years is based on the following facts that

1. The nature & stratigraphy, lithology of rock formation can be established only after the quarry is opened to a considerable depth of atleast 10 to 15m to determine whether the rock formations possessing heterogeneous (or) homogeneous rock characteristics.
2. In the absence of real ground related data, any such study will be only theoretical as simulated data for the prediction of the ground water level table and characteristics of ground water anomalies which will not be of much use in maintaining the smooth operation of the mine.
3. Besides, the actual hydrological & hydrogeological characteristics of the site can be evaluated during the field investigations only after ascertaining the ground realities such as
 - Phreatic surface
 - Water seepage
 - Permeability
 - Ground water condition
 - Water level and its impact
 - U/G water flow and its recharge
 - Proximity to other water reservoirs


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

4. Similarly, the quality of the ground water condition is affected due to the presence of any contaminated mineral constituents which can be ascertained only the rock / mineralized part of the quarry is exposed during the mining operations. Hence it is imperative to review the environmental and hydrological issues associated with mining processes according to the stages in the lifecycle of a mine, the mineral type, and the different mining facilities, as well as the characteristics of the contaminants, in a phased manner (periodically). By doing this, the objective of identifying the risk-associated points in the industrial mining chain related to the mining effects on water resources can be fulfilled and thus it provides suggestions for effective management, prevention, and conservation techniques for mining and water interaction.
5. Further, the mine management can adopt any techniques to identify water-related risks in mining sites and their prevention measures unless the mine is opened and operated for a considerable period. Because, based on the theoretical data used in the simulation techniques, it is difficult to accurately quantify the impact of mining on water resources due to the mining site's unique properties and diverse interactions with water bodies, the temporal nature of mining operations, the absence of inventory data on mining water use, data quality issues, poor assessment techniques to account for abnormal conditions and events (e.g., extreme weather conditions) and the accuracy of the spatial factors for impact assessment. Due to many unknown variables, mine water quality prediction is also gets complicated if the study is not carried out simultaneously during the mining operations.
6. In case of cluster of water bodies exist in and around the proposed mine (or) existence of the agricultural fields around the mine (or) presence of considerable number of habitations, such hydrogeological studies are required to be carried out by involving the reputed academic & research institutes annually for determining the impact of mining operations on the surrounding environmental settings.
7. The change in groundwater flow will modify the hydro-geochemical environment; mining activities will lead to serious deterioration of groundwater


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

quality and cause a series of eco-environmental problems. Therefore, understanding hydrological cycle processes, including water origin, evaporation, and hydraulic connection between water bodies, is significant for the rational exploitation and utilization of water resources and local eco-environment protection, especially in the mining areas.

Therefore, this study during the mining operation stage is aimed at exploring the influence of mining disturbances on the hydrological cycle processes, taking river water and groundwater, including phreatic water and confined water, as the research objects and comprehensively analyzing their stable isotope compositions to determine the recharge source of river water and groundwater and the hydraulic connection between water bodies.

3. 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 4th 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.

The stability of slopes in open-pit mining operations and quarries is extremely important from both environmental and safety points of view.

The reason for prescribing slope stability study to be conducted within one year in case of existing quarries/mines (or) during the 3rd/4th year from the commencement of mining operations in case of virgin quarries is based on the following facts that:

1. The nature & stratigraphy, lithology of rock formation can be established only after the quarry is opened to a considerable depth of atleast 30 m to determine whether the rock formations possessing heterogeneous (or) homogeneous rock characteristics.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC -TN

2. Besides, the actual hydrological & hydrogeological characteristics of the site can be evaluated during the field investigations only after ascertaining the ground realities once the mining operations are commenced which includes

- Phreatic surface
- Water seepage
- Permeability
- Ground water condition
- Water level and its impact
- Underground water flow and its recharge
- Proximity to other water reservoirs

3. The stability of rock slopes entails the design of safe, economical, and functional excavated slopes to attain equilibrium conditions of natural slopes. It is generally accepted that during the design of a stable slope, a proper understanding of the geological processes, such as stratigraphy, weathering, geomorphology, petrography, and earthquakes, is absolutely necessary. The most significant structures that influence the stability of slopes are joints, bedding planes, and the intersection of joints, faults, and shear zones which cannot be used as assumptions in the slope stability evaluation techniques using linear equilibrium and numerical modeling as it may seriously produce the biased results affecting the safety of the quarry/mine.

4. Generally, the causes of slope failure and factors that can trigger failure in slope are categorized as internal and external factors. Here, the internal factors that can affect the stability of a sloping wall include the mineral composition of the rock, rock types, and geotechnical and structural strengths. In addition, environmental factors such as earthquakes, rainfall, and weathering that can reduce the strength of the rock mass are also categorized as internal factors, while the external factors are mainly caused by human activities which can be evaluated only after the commencement of mining operations.

5. Further, the most common factors that influence the stability of rock slopes are redistribution of in situ stresses, complexity in geology, anisotropy and inhomogeneity of the rock materials, pressure pores and seismic loading.

Similarly, it has been reported during the scientific investigations that the effects of blasting and groundwater are another two major significant factors that control the stability of slopes. In addition, it was indicated that the heavy blasting operation handling huge quantity of high explosives and movement of loaded high capacity dumpers/trucks with loaded materials on the haulage roads existing adjacent to the highwall benches can cause ground vibration that in turn may have a significant influence on the stability of the highwall. Prior to the implementation of the design, the site investigation and data play important roles in evaluating the stability of a rock slope.

6. Failure of rock slope occurs when excess loading shear stress in a rock mass is redistributed and the load exceeds the strength of the rock. The shear strength of a rock mass plays an important role in the stability of the rock mass. Therefore, factors that tend to change the shear strength must be taken into consideration during the design of safe slope angle as these factors can be identified and evaluated only after the opening of the quarry & commencement of mining operations.
7. Finally, studying the structural lithology of the strata being encountered during the quarrying operation will be of immense value to determine angle of safety to ensure the factor of safety (F.O.S) in case of pit bench & dump which shall be maintained in accordance with the DGMS circular no. 3 of 2020 issued by the DGMS.
8. Besides, the SEAC has felt that it provides an opportunity for the proponent to construct the benches of appropriate geometry in accordance with the provisions of MMR 1961 to maintain the stability before he reaches a depth of 30m.
9. Further, the study will provide an opportunity for the proponents to prepare an appropriate scheme for mining and slope monitoring for the mine/quarry under their control on the basis of the scientific study inputs. This will help the proponents to see that the workings & operations are carried out strictly adhere to the mining scheme so prepared.
10. Further, as per the provisions of MMR 1961 & subsequent DGMS Circulars, the PP shall carry out the slope stability studies only after obtaining the prior


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC -TN

approval from the competent authority (i.e. the Director of Mines Safety, DGMS-Chennai Region) which can be accomplished only after the execution of mine lease and then only it is legally comes under the purview of the Mines Act 1952.

The Committee therefore decided to reiterate it's recommendation of prescribing slope stability study to be conducted within one year in case of existing quarries/mines (or) during the 3rd/4th year from the commencement of mining operations in case of virgin quarries.

Hence, SEAC decided to reiterate its **recommendation already made in its 446th** meeting of SEAC held on 16.02.2024. All other conditions mentioned in the minutes will remain unchanged and unaltered.

Agenda No: 460 - 24

File No: 9466/2023.

Proposed Red Earth quarry lease over an extent of 3.40.0HaSF.No.230/2C, 230/2D and 230/2E of Iruveli Village, Kadaladi Taluk, Ramanathapuram District by Thiru.K.Durai Singam- For Environmental Clearance. (SIA/TN/MIN/282885/2022, dt: 08.08.2022)

Earlier, the proposal was placed in the 324th SEAC meeting held on 21.10.2022. The project proponent gave a detailed presentation. The details of the project furnished by the proponent are given on the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Thiru. K. Durai Singam has applied for Environmental Clearance for the Proposed Red Earth quarry lease over an extent of 3.40.0Ha SF.No.230/2C, 230/2D and 230/2E of Iruveli Village, Kadaladi Taluk, Ramanathapuram District, Tamil Nadu
2. The project/activity is covered under Category "B2" of Item 1(a) " Mining of mineral of the Schedule to the EIA Notification, 2006.
3. The precise area communication was issued for the period of 1 Year. The approved mining plan is for the period of 1 year & production should not exceed 56036 m3 of Ordinary Earth. The ultimate depth is 2m BGL.
4. Earlier, the proposal was placed in the 324th SEAC meeting held on 21.10.2022.

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

1. Report on **mineral composition** analysis of the sample collected from the proposed quarry site indicating its coordinates & survey numbers, in the presence of concerned NABET Consultant / EIA Coordinator in accordance with the procedures as laid for sample collection by the Dept of Geology of Mining. Further the PP shall get the soil tested in any one of the following labs and ensure that the test report carries the certification issued by the concerned Asst. Director (Geology & Mining) on the results of soil composition analysis.

Sl. No	Name of the Laboratory
1.	Department of Geology, CEG Campus, Anna University, Guindy, Chennai-600025.
2.	Department of Applied Geology, University of Madras, Guindy, Chennai-600025.
3.	Department of Geology, Periyar University, Salem.

2. The proponent should produce a letter from the concerned Asst. Director (Geology and Mining) stating that the location of quarry site does not lie adjoining to the rivers, streams, canals etc., and does not fall under any notified/declared protected zones as directed in the aforesaid Judgment issued by the Hon'ble Madurai Bench of Madras High Court.
3. Revised CER proposal for Rs.75000/- as recommended by SEAC.
5. Subsequently, the proposal was placed in 569th authority meeting held on 10.11.2022 & 11.11.2022. The authority noted that this proposal was placed for appraisal in this 324th meeting of SEAC held on 21.10.2022 and the SEAC decided to obtain the certain additional details from the PP as stated therein. The authority after detailed discussions, decided to seek the following additional particulars as follows:

- i.Details of type of vegetations including no. of trees & shrubs within the proposed mining area. If so, transplantation of such vegetations all along


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

the boundary of the proposed mining area shall be mentioned in EMP.

ii. Impact on surrounding agricultural fields around the proposed mining Area.

iii. Erosion control measures.

iv. Impact on soil flora & vegetation around the project site.

In this connection, the project proponent furnished reply on 18.11.2023. Again, this proposal was placed 430 SEAC meeting held on 14.12.2023. During the SEAC meeting it was noted that the PP has informed that the EIA coordinator is absent for the meeting. Hence, the SEAC has decided not to take up this proposal for this SEAC appraisal meeting and decided to take up this proposal in the forthcoming SEAC meeting after obtaining reasons from EIA coordinator for not attending the meeting. Also, the PP shall furnish heavy mineral composition from IREL laboratory in compliance with Ministry of Mines notification Dt:20.02.2019 along with query raised by SEIAA in the 569th authority meeting held on 10.11.2022.

5. Subsequently, the proposal was placed in 687th authority meeting held on 09.01.2024 and the authority noted that the subject was appraised in the 430th meeting of SEAC held on 14.12.2023. In this connection, the project proponent furnished reply on 24.01.2024.

6. Again, the proposal was placed in 443rd SEAC meeting held on 08.02.2024.


7. The salient features of the proposed project as follows:

Sl. No	Details of the proposal	:	Data furnished
1	Name of the Owner/Firm	:	Thiru.K.DuraiSingam, S/o. Krishna Devar, S.Keerthanai Village, Kadaladi Taluk, Ramanathapuram District
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	:	Ordinary Earth
3	S.F No. Of the quarry site with area break-up	:	230/2C, 230/2D and 230/2E
4	Village in which situated	:	Iruveli
5	Taluk in which situated	:	Kadaladi


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

6	District in which situated	:	Ramanathapuram
7	Extent of quarry (in ha.)	:	3.40.0Ha
8	Latitude & Longitude of all corners of the quarry site	:	09°10'20.15"N to 09°10'31.47"N 78°25'10.26"E to 78°25'16.14"E
9	Topo Sheet No.	:	58 – K/08
10	Type of mining		Opencast Semi-Mechanized of Mining
11	Period of quarrying proposed	:	1 Year
12	Production (Quantity in m³)	:	
	Geological Reserve		68000m³ of Ordinary Earth
	Mineable Reserve		56036 m³ of Ordinary Earth
13	Depth of quarrying	:	2m BGL
14	Depth of water table	:	30m BGL
15	Man Power requirement per day:		7 Nos.
16	Source of Water Requirement		water vendors
17	Water requirement: 1. Drinking & domestic purposes (in KLD) 2. Dust suppression, Green Belt & Wet Drilling (in KLD)	:	2.9 KLD 1.5 KLD 1KLD
18	Power requirement a. Domestic Purpose b. Industrial Purpose		TNEB 9340Liters of HSD
19	Whether any habitation within 300m distance	:	No
20	Precise area communication approved by Assistant Director(i/c), Department of Geology and Mining.	:	Na.Ka.No.G&M/24/2022, dt: 10.05.2022


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

21	Mining Plan approved by Assistant Director(i/c), Department of Geology and Mining.	: Rc.No.24/G&M/2022, dt: 16.05.2022.
22	500m cluster letter by Assistant Director(i/c), Department of Geology and Mining.	Rc.No.24/G&M/2022, dt: 13.05.2022
	Red Earth to Ordinary Earth letter by Assistant Director(i/c), Department of Geology and Mining.	Rc.No.24/G&M/2022, dt: 17.11.2023
	River, Canal, Streams etc letter by Assistant Director(i/c), Department of Geology and Mining.	Rc.No.24/G&M/2022, dt: 08.07.2022
23	VAO certificate regarding 300m radius cluster	Letter dt: 14.06.2022
	Mineral Composition analysis report	Dept. of Geology, University of Madras Dt.09.11.2023. IREL (India) Limited report vide RC:UHO:STE:2018:377 Dt:28.12.2023.
24	Project Cost (excluding EMP cost)	: Rs.19.04Lakhs
25	EMP cost	: Rs.1.30 Lakhs
26	CER cost	Rs. 1Lakhs for the committed activities Government Girls Higher Secondary School, Sayalkudi.

7. PP has represented the SEAC queries as follows:

S.No.	324 th & 430 th SEAC Query	Reply
1.	Report on mineral composition analysis of the sample collected from the proposed quarry site indicating its	Dept. of Geology, University of Madras Dt.09.11.2023.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

	coordinates & survey numbers, in the presence of concerned NABET Consultant / EIA Coordinator in accordance with the procedures as laid for sample collection by the Dept of Geology of Mining. Further the PP shall get the soil tested in any one of the following labs and ensure that the test report carries the certification issued by the concerned Asst. Director (Geology & Mining) on the results of soil composition analysis.	
2.	The proponent should produce a letter from the concerned Asst. Director (Geology and Mining) stating that the location of quarry site does not lie adjoining to the rivers, streams, canals etc., and does not fall under any notified/declared protected zones as directed in the aforesaid Judgment issued by the Hon'ble Madurai Bench of Madras High Court.	Rc.No.24/G&M/2022, dt: 08.07.2022
3.	Revised CER proposal for Rs.75000/- as recommended by SEAC.	Furnished.
4.	Heavy mineral composition from IREL laboratory in compliance with Ministry of Mines notification Dt:20.02.2019.	IREL (India) Limited report vide RC:UHO:STE:2018:377 Dt:28.12.2023.

Based on the presentation & documents furnished and the Committee carefully examined the points raised by SEAC & SEIAA and the replies given by the PP, SEAC decided to recommend the proposal for the grant of Environmental Clearance for the


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

period of 1 Year and the quantity shall not exceed 56036 m³ of Ordinary Earth and the depth of mining up to 2m BGL for the period of 1 Year from the date of lease execution subject to the standard conditions & normal conditions stipulated by MOEF &CC, in addition to the specific conditions stated therein.

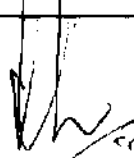
Subsequently, the subject was placed in the 700th authority meeting held on 27.02.2024. The authority noted that the subject was appraised in the 443rd meeting of SEAC held on 08.02.2024 and SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.

In view of the above, the authority noted that the soil mineral composition report obtained from IREL is based on only one soil sample taken for the proposed mining area of 3.40 Ha and SEAC felt that only one sampling is not sufficient for the entire proposed mining area of 3.40 Ha. Hence, SEAC decided to refer back this proposal to SEAC for remarks and recommendation.

Now, this proposal was again placed in this 460th meeting of SEAC held on 24.04.2024. The Project proponent has made a presentation along with clarification for the above shortcomings observed by the SEIAA as follows:

SEIAA Query	Reply
<p>The subject was placed in the 700th authority meeting held on 27.02.2024. The authority noted that the subject was appraised in the 443rd meeting of SEAC held on 08.02.2024 and SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p>In view of the above, the authority noted that the soil mineral composition report obtained from IREL is based on only one soil sample taken for the proposed mining area of 3.40 Ha and SEAC felt that</p>	<p>The composite sample of the Mineral from the Site were collected & analysed through 3 reputed institutes and Reports submitted.</p> <ol style="list-style-type: none"> 1. Periyar University, Salem Report dated 09.03.2023 2. Department of Geology, University of Madras Report dated 09.11.2023 3. IREL, Kollam Report dated 28.12.2023. In all the times, 4 Samples from all 4 Quadrants of the Site Grid were collected from average depth of 1 m. 1-fourth of sample from each


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

only one sampling is not sufficient for the entire proposed mining area of 3.40 Ha. Hence, SEAC decided to refer back this proposal to SEAC for remarks and recommendation.	Quadrant were taken and mixed to derive the composite sample for Mineralogical Composition. Monazite level is found to be nil in all reports
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------

Based on the presentation made and the documents furnished by the Project proponent, **SEAC decided to reiterate its recommendation already made in its 443rd meeting of SEAC held on 08.02.2024.** All other conditions mentioned in the minutes will remain unchanged and unaltered.

Agenda No:460-25

(File No: 10436/2023)

Proposed construction of Residential Building – Non High Rise Group development at S.F.Nos. 23/1A, 23/1B, 48/1B2, 49/1A, 49/1B, 49/1C2, 49/1D, 50/1A1B, 52/1B & 52/2A2 of Goparasanallur Village, Poonamallee taluk, Thiruvallur District, Tamil Nadu by M/s. LML Homes LLP- For Environmental Clearance -Request for withdraw.

(SIA/TN/INFRA2/445283/2023 dated: 22.09.2023).

The proposal was earlier placed in the 424th Meeting of SEAC held on 16.11.2023. 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, M/s. LML Homes LLP has applied for Environmental Clearance for the Proposed construction of Residential Building – Non High Rise Group development at S.F.Nos. 23/1A, 23/1B, 48/1B2, 49/1A, 49/1B, 49/1C2, 49/1D, 50/1A1B, 52/1B & 52/2A2 of Goparasanallur Village, Poonamallee taluk, Thiruvallur 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.

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 Residential Building – Non High rise group development in S.No. 23/1A, 23/1B, 48/1B2,


MEMBER SECRETARY
SEAC -TN

97


CHAIRMAN
SEAC- TN

49/1A, 49/1B, 49/1C2, 49/1D, 50/1A1B, 52/1B & 52/2A2 of Goparasanallur Village, Poonamallee Taluk, Tiruvallur District, Tamilnadu by the PP M/s LML Homes LLP

2. M/s Ecotech Labs Private Limited is the EIA Consultant for the project.
3. Total plot area of the project is 16,998 m² and built-up area is 49793.07 m² respectively.
4. Maximum number of floors will be 5 Floors and maximum height of the building will be 25 m.
5. Total Saleable DU's (dwelling units) is 373 No's.

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 the minutes & normal conditions stipulated by MOEF &CC, in addition to the specific conditions stated therein.

Subsequently, the subject was placed in the 680th Authority meeting held on 18.12.2023. After detailed discussions, the Authority decided to obtain the following details from the PP.

1. The PP shall submit a commitment letter for supply of fresh water and disposal of waste water from the Competent Authority.
2. The PP shall obtain Demolition certificate for the existing building in the proposed project area and submit a plan for disposal of Construction debris.
3. The proponent shall furnish NOC for flood inundation point of view obtained from the Competent Authority.
4. The project proponent shall provide a detailed plan indicating entry and exit points for the OSR area, play area as per the norms for the public usage.
5. The proponent shall provide sufficient grass lawns and play facilities for children and submit a detailed plan for the same.
6. The PP shall conduct a detailed traffic congestion study through a reputed institution and furnish the report for the same.

Meanwhile, the proponent has requested for withdrawal of the current proposal vide letter dated:22.03.2024 stating the following.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

"...we wish to inform that there is a change in built-up area while processing the application in CMDA through online with increase in built-up area from 49,793.07 sq.m to 52,000.02 sq.m and also there is an addition of Basement in Block 2 & Addition of Block 7 with Ground Floor. In this regard, we are herewith withdrawing the current proposal and we will apply for a fresh proposal."

In view of the above, the subject was again placed before the 707th Authority meeting held on 01.04.2024. After detailed discussion, the Authority decided to request the Member Secretary SEIAA-TN to refer back the proposal to SEAC-TN to obtain recommendations for further course of action.

Hence, the proposal was placed in the 460th Meeting of SEAC held on 24.04.2024. During the meeting, the Committee noted that the Project Proponent vide letter dated 22.03.2024 has requested for withdrawal of the current application and the proponent had submitted a fresh application vide Online Proposal No. SIA/TN/INFRA2/466736/2024 dated:21.03.2024. The Committee decided to accept the withdrawal request of the Project Proponent and SEIAA may take up the withdrawal process with the proponent based on merits.

AGENDA No: 460-26

(File No: 4483/2023)

Existing Grey Granite Quarry lease over an Extent of 1.85.5 Ha located at S.F.No 266/1,268/IAC and 268/IAD, Jagadevipalayam Village, Krishnagiri Taluk, Krishnagiri District by M/s. M.P. Granites – Extension of validity of Environmental Clearance. (SIA/TN/MIN/204010/2021 dated 16.03.2021)

The proposal was earlier placed in the 379th meeting of SEAC held on 12.05.2023 and the SEAC furnished its recommendation for the 'automatic extension to the respective increased validity' for the production of balance quantity of 8100 m³ of Grey Granite as per the approved mining plan subject to the conditions stated therein.

Subsequently the subject was placed in the 626th meeting of Authority held on 01.06.2023. After detailed discussions, the Authority decided to call for the following additional details/documents from the project proponent:


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

1. Letter from AD/Mines stating the quantity of mineral excavated so far and the details of last permit issued.
2. Justification for increase in recovery to 40%.
3. Copy of valid mining plan/1st scheme of mining along with approval letter.
4. Recently issued Certified compliance report.

The PP furnished the reply vide letter dated 05.10.2023 and hence the subject was placed in the 661st meeting of SEIAA held on 09.10.2023 & 10.10.2023. The Authority noted that the PP has furnished the details sought. The Authority, after detailed discussions decided to refer back the subject to SEAC for furnishing remarks.


Hence the subject was placed in the 423rd meeting of SEAC held on 15.11.2023. The SEAC noted that the following reply furnished by the PP:

S.NO	SEIAA QUERY	REPLY
1	Letter from AD/Mines stating the quantity of mineral excavated so far and the details of last permit issued	Letter obtained from the Department of Geology and Mining vide Rc. No. 914/2020/Mines Dated 26.09.2023 regarding quantity of mineral excavated and last permit issued and submitted herewith. Quantity excavated 03.02.2016 to 02.02.2021 = 540.184m ³ Last permit issued on = 14.08.2020
2	Justification for increase in recovery to 40%	The anticipated recovery percentage is 20% during the initial plan period of 2016-2021 as only development activities such as removal of overburden and formation of accessible haul roads have taken place during the year of


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

		<p>2016-17. However, the recovery of 32% was achieved in 2017-2018 due to formation characteristics, i.e., the entire formation is sheet rock and possessing less fracture & fracture.</p> <p>Hence, the recovery percentage has now been increased to 40% considering the existence of geological factors. The same has been discussed in the Scheme of Mining Plan prepared for the plan period ie., 2016 – 2017 to 2020 – 2021 (Page No:2).</p>
3	Copy of Valid Mining plan/1 st Scheme of Mining along with approval Letter	<p>Mining Plan was approved by State Geology and Mining Guindy, Chennai (2016 – 2017 to 2020 – 2021) Letter No. 7358/MM2/2015 dated 13.11.2015</p> <p>1st Scheme of Mining plan (2021 – 2022 to 2025 – 2026) approved by Commissioner of Geology and Mining Guindy, Chennai vide Letter No. 7174/MM2/2020 dated 13.12.2021.</p>
4	Recently issued Certified Compliance Report	<p>Proponent obtained Certified Compliance Report from the Regional Office, MoEF & CC Chennai vide Letter No</p>


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

		E.P.12.1/2021-22/SEIAA/40/TN/083 Dated 23.01.2022.
--	--	-------------------------------------------------------

The SEAC carefully examined the reply furnished by the PP and decided to reiterate the recommendations already made in the 379th meeting of SEAC held on 12.05.2023. Subsequently the subject was placed in the 705th meeting of SEIAA held on 19.03.2024. The SEIAA noted that the subject was placed in the 423rd meeting of SEAC held on 15.11.2023 and the SEAC has furnished its recommendations for the grant of extension of Environmental Clearance to the project subject to the conditions stated therein.

During the meeting the Authority noted that the PP has still not submitted the 1st scheme of mining plan. The PP has submitted the copy of the scheme of mining for the period 2021 to 2026. The Authority noted that the mining quantity approved by SEAC (8100 cbm balance quantity of Grey Granite) does not match with the quantity approved in the scheme of mining. Hence SEIAA decided to refer back the subject to SEAC for furnishing remarks.

Hence the subject was taken up for discussion in this 460th meeting of SEAC held on 22.04.2024. The Committee noted that the SEAC has issued 'automatic extension to the respective increased validity' for the **balance quantity of 8100 m³ of Grey Granite** as mentioned in the mining plan, existing EC and as sought by the PP in the online extension application.

Now, the SEAC further noted that the Committee has already recommended to issue the EC for the balance quantity of 1800 m³ of Grey Granite. Therefore, the SEAC reiterates its previous recommendation of granting the EC for the production quantity of not exceeding 8100 m³ of Grey Granite as approved earlier in the Mining Plan by the Competent Authority.

Agenda No: 460 - 27

(File No: 9320/2023)

Proposed Rough Stone Quarry lease over an extent of 2.38.5Ha in S.F.Nos.1267/2, 1268/2, 1268/3 of Kamandodi Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu by Thiru.P. Venkata Reddy - For Environment Clearance. (SIA/TN/MIN/439564/2023 dt:08.08.2023).


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

The proposal was earlier placed in the 411th meeting of SEAC held on 27.09.2023 and the SEAC decided to recommend for the grant of **Environmental Clearance** subject to the conditions stated therein.

Subsequently the subject was placed in the 663rd meeting of SEIAA held on 18.10.2023. After detailed discussions, the Authority decided to obtain the following additional particulars from the PP:

- Approved mining plan for the quantity recommended by SEAC shall be obtained from the Competent Authority.

On receipt of the details sought above, the Authority will further deliberate and decide on future course of action.

The PP furnished the copy of the approved mining plan and hence the subject was placed in the 702nd meeting of SEIAA held on 14.03.2024. The SEIAA after detailed discussions decided to refer back the subject along with the copy of this mining plan for the Committee to stipulate additional conditions, if any.

Hence the subject was taken up for discussion in this 460th meeting of SEAC held on 22.04.2024. Based on the presentation and the documents furnished by the PP, the SEAC decided to reiterate the recommendations already made in the 411th meeting of SEAC held on 27.09.2023 pertaining to this proposal.

Agenda No. 460-28

File No: 10605/2024

Proposed Rough Stone and Gravel quarry lease over an extent of 2.20.50 Ha at S.F.No. 104 in Gudalur (West) village, Aravakurichi taluk, Karur District, Tamil Nadu by M/s. Asiaa Exports - Environment Clearance for next scheme of mining.

(SIA/TN/MIN/455549/2023 dt 22/02/2024)

The subject was earlier placed in in the 448th meeting of SEAC held on 23.02.2024 and the SEAC has furnished its recommendations for the grant of Environmental Clearance to the project subject to the conditions stated therein.

Subsequently the subject was placed in the 706th meeting of SEIAA held on 20.03.2024. The SEIAA noted that the subject was placed After detailed discussions, the SEIAA decided to refer back the subject to SEAC to furnish remarks on the following:


MEMBER SECRETARY
SEAC -TN


CHAIRMANTM
SEAC- TN

SEIAA noted that the SEAC has recommended the proposal for grant of EC for the entire mine life of 10 years and the approved production quantity is also high. SEIAA, therefore suggests that SEAC may recommend the following studies before grant of EC for the project.

- *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.*
- *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.*

Hence the subject was taken up for discussion in this 460th meeting of SEAC held on 22.04.2024. The SEAC noted the queries raised by SEIAA and decided to furnish the following remarks:

SEAC has prescribed the following studies.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

1. As structures are found within a radial dist of 500m. the pp has been asked to conduct a study to design the blast parameters within a period of 6 months.

The study has been prescribed as the components of ground motion can affect the structures through compression and tension and through vertical and horizontal shearing effects. Here, the peak particle velocity (PPV) has so far been considered as the best criteria for evaluating blast vibrations in terms of its potential to cause damage in accordance with the DGMS Circular No.7 of 1997 stipulated by the Directorate General of Mines Safety,

The study can be carried out only after opening the mine and studying the nature of rock formation. The nature & stratigraphy, lithology of rock formation can be ascertained only after the quarry is opened to a depth of atleast 6 to 7 m to determine the optimum blast parameters for the blasts to be carried out in the rock formations possessing heterogeneous rock characteristics.

The study will help in arriving at the optimum blast parameters, which will lead to minimizing the potential damage to the environment through reduction of noise and dust pollution apart from safeguarding the structures nearby.

Further, as per the provisions of Reg. 164 of MMR 1961, the PP shall carry out the controlled blasting techniques only after obtaining the prior approval from the competent authority (i.e, the Director of Mines Safety, DGMS-Chennai Region) which can be accomplished only after the execution of mine lease and then only it is legally comes under the purview of the Mines Act 1952.

In the absence of real ground related data, a proper study will not be possible. It is for these reasons that SEAC has recommended that such a study should be carried out within a period of 6 months. The Committee therefore decided to reiterate its recommendation that the study be carried out within 6 months of the opening of the mine.

2. As there were few waterbodies nearby the proposed site, the Committee has suggested that a study to find out the hydrogeological study to be carried out within a period of 6 months.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

The study has been prescribed to ensure (i) measure the implications of mining operation on hydrological and hydrogeological feature around the mine and (ii) the safety of mining operations.

The Committee always examined the ground water levels in the vicinity and the proposed depth of the mine and possible interference with the ground water levels due to the mining operations. The Committee also ensured that the flow to the water bodies in the nearby area are not affected as the PP is required to construct garland drain as part of EMP, to not to disturb the natural flow of water in the area. The purpose of the hydrogeological study is to establish that the proposed mining activity will have no/negligible impact on the ground water table and on the water bodies nearby, and it can be carried out within a period of 6 months.

The reasons for prescribing the study after a time lag -after opening of the mine - are based on the following facts.

1. The nature & stratigraphy, lithology of rock formation can be ascertained only after the quarry is opened to a depth of at least 10 to 15m, to determine whether the rock formations possessing heterogeneous (or) homogeneous rock characteristics.
2. In the absence of real ground related data, the study will be only theoretical as real data of the ground water level and characteristics of rock anomalies will not be available.
3. The actual hydrological & hydrogeological characteristics of the site can be evaluated only during the field investigations to know the value of the following parameters.
 - Phreatic surface.
 - Water seepage.
 - Permeability.
 - Ground water condition.
 - Water level and its impact.
 - U/G water flow and its recharge.
 - Proximity to other water reservoirs.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

The study will enable mine management to adopt techniques to identify water-related risks in mining sites and their prevention measures.

It is for these reasons that SEAC has recommended that such a study should be carried out within a period of 6 months. The Committee therefore decided to reiterate its recommendation that the study be carried out within 6 months of the opening of the mine.

3. 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 4th 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.

The study has been prescribed to ensure the safety of the mine and the mineworkers. The slope stability study must be conducted in the 4th year or when the depth exceeds 30m whichever is earlier, because only after opening the mine and studying the structural lithology of the strata encountered during the quarrying operation, the angle of safety to ensure the Factor of Safety (F.O.S) of more than 1.0 ($F > 1.0$) can be determined. Besides, the stress induced by the surrounding rock formation can also be studied only when the depth reaches 30m to arrive at the required factor of safety in accordance with the DGMS circular no. 2 of 2001.

The determination of F.O.S after exposing the lithological features will help in designing the benches of appropriate geometry in accordance with the provisions of the regulations and rules and circulars and orders made there under.

The Committee therefore decided to reiterate its recommendation that the study be carried out in the 4th year of the operation of mines or when the depth exceeds 30m, whichever is earlier.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Therefore, the SEAC decided to reiterate the recommendations already made in the minutes of 448th meeting of SEAC dated 23.02.2024 pertaining to this proposal.

Agenda No.460-29

File No: 10619/2024

Proposed Rough stone and Gravel lease over an extent of 2.05.0 Ha at S.F.No.1066/1(P) in Thennilal (EAST) village, Pugalur Taluk, Karur District, Tamil Nadu by Tmt.L.Kamalam - For Environment Clearance.

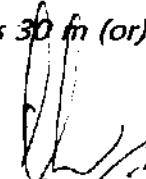
(SIA/TN/MIN/456717/2023 dt 22/02/2024)

The subject was earlier placed in the 448th meeting of SEAC held on 23.02.2024 and the SEAC has furnished its recommendations for the grant of Environmental Clearance to the project subject to the conditions stated therein. Subsequently the subject was placed in the 706th meeting of SEIAA held on 20.03.2024. After detailed discussions, the SEIAA decided to refer back the subject to SEAC to furnish remarks on the following:

SEIAA noted that the SEAC has recommended the proposal for grant of EC for the entire mine life of 10 years. SEIAA, therefore suggests that SEAC may recommend the following studies before grant of EC for the project.

- *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.*
- *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*


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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.

Hence the subject was taken up for discussion in this 460th meeting of SEAC held on 22.04.2024. The SEAC noted the queries raised by SEIAA and decided to furnish the following remarks:

SEAC has prescribed the following studies.

- 1. As structures are found within a radial dist of 500m. the pp has been asked to conduct a study to design the blast parameters within a period of 6 months.**

The study has been prescribed as the components of ground motion can affect the structures through compression and tension and through vertical and horizontal shearing effects. Here, the peak particle velocity (PPV) has so far been considered as the best criteria for evaluating blast vibrations in terms of its potential to cause damage in accordance with the DGMS Circular No.7 of 1997 stipulated by the Directorate General of Mines Safety,

The study can be carried out only after opening the mine and studying the nature of rock formation. The nature & stratigraphy, lithology of rock formation can be ascertained only after the quarry is opened to a depth of atleast 6 to 7 m to determine the optimum blast parameters for the blasts to be carried out in the rock formations possessing heterogeneous rock characteristics.

The study will help in arriving at the optimum blast parameters, which will lead to minimizing the potential damage to the environment through reduction of noise and dust pollution apart from safeguarding the structures nearby.

Further, as per the provisions of Reg. 164 of MMR 1961, the PP shall carry out the controlled blasting techniques only after obtaining the prior approval from the competent authority (i.e, the Director of Mines Safety, DGMS-Chennai Region) which


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

can be accomplished only after the execution of mine lease and then only it is legally comes under the purview of the Mines Act 1952.

In the absence of real ground related data, a proper study will not be possible. It is for these reasons that SEAC has recommended that such a study should be carried out within a period of 6 months. The Committee therefore decided to reiterate its recommendation that the study be carried out within 6 months of the opening of the mine.

2. As there were few waterbodies nearby the proposed site, the Committee has suggested that a study to find out the hydrogeological study to be carried out within a period of 6 months.

The study has been prescribed to ensure (i) measure the implications of mining operation on hydrological and hydrogeological feature around the mine and (ii) the safety of mining operations.

The Committee always examined the ground water levels in the vicinity and the proposed depth of the mine and possible interference with the ground water levels due to the mining operations. The Committee also ensured that the flow to the water bodies in the nearby area are not affected as the PP is required to construct garland drain as part of EMP, to not to disturb the natural flow of water in the area. The purpose of the hydrogeological study is to establish that the proposed mining activity will have no/negligible impact on the ground water table and on the water bodies nearby, and it can be carried out within a period of 6 months.

The reasons for prescribing the study after a time lag -after opening of the mine - are based on the following facts.

1. The nature & stratigraphy, lithology of rock formation can be ascertained only after the quarry is opened to a depth of at least 10 to 15m, to determine whether the rock formations possessing heterogeneous (or) homogeneous rock characteristics.
2. In the absence of real ground related data, the study will be only theoretical as real data of the ground water level and characteristics of rock anomalies will not be available.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

3. The actual hydrological & hydrogeological characteristics of the site can be evaluated only during the field investigations to know the value of the following parameters.

- Phreatic surface.
- Water seepage.
- Permeability.
- Ground water condition.
- Water level and its impact.
- U/G water flow and its recharge.
- Proximity to other water reservoirs.


The study will enable mine management to adopt techniques to identify water-related risks in mining sites and their prevention measures.

It is for these reasons that SEAC has recommended that such a study should be carried out within a period of 6 months. The Committee therefore decided to reiterate its recommendation that the study be carried out within 6 months of the opening of the mine.

3. 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 4th 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.

The study has been prescribed to ensure the safety of the mine and the mineworkers.

The slope stability study must be conducted in the 4th year or when the depth exceeds 30m whichever is earlier, because only after opening the mine and studying the structural lithology of the strata encountered during the quarrying operation, the angle of safety to ensure the Factor of Safety (F.O.S) of more than 1.0 ($F > 1.0$) can be determined. Besides, the stress induced by the surrounding rock formation can also be


MEMBER SECRETARY
SEAC -TN

111


CHAIRMAN
SEAC- TN

studied only when the depth reaches 30m to arrive at the required factor of safety in accordance with the DGMS circular no. 2 of 2001.

The determination of F.O.S after exposing the lithological features will help in designing the benches of appropriate geometry in accordance with the provisions of the regulations and rules and circulars and orders made there under.

The Committee therefore decided to reiterate its recommendation that the study be carried out in the 4th year of the operation of mines or when the depth exceeds 30m, whichever is earlier.

Therefore, the SEAC decided to reiterate the recommendations already made in the minutes of 448th meeting of SEAC dated 23.02.2024.

Agenda No. 460 - 30

File No: 10521/2023

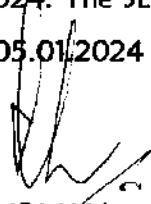
Proposed Rough stone and Gravel Quarry lease over an extent of 4.98.00 Ha at S.F.No. 609/1(P), 610(P), 611(P), 616/1(P), 617/1A(P), 617/1B2, 650/1(P), 651/1(P), 609/2(P), 609/3 and 617/2 in Ayyanaruthu Village, Kayathar Taluk, Thoothukudi District, Tamil Nadu by Thiru.A.Arunmuthukumar – For Environment Clearance. (SIA/TN/MIN/450838/2023 dt 03/11/2023)

The subject was earlier placed in the 438th meeting of SEAC held on 05.01.2024 and the SEAC has furnished its recommendations for the grant of Environmental Clearance to the project subject to the conditions stated therein. Subsequently the subject was placed in the 695th meeting of SEIAA held on 12.02.2024. After detailed discussions, the SEIAA decided to call for the following additional particulars from the PP:

On perusal of the KML file, SEIAA noted that a Tank and an Odai are located near the proposed project site. Hence the PP shall study the impact of mining on Odai and the Tank, water drainage pattern, agriculture in the area, water in and out flow from the Tank and Odai by reputed Institutions like IIT, Anna University Chennai, NIT that has NABL accredited laboratory.

On receipt the details sought, the SEIAA will further deliberate and decide on future course of action. The PP furnished the reply and hence the subject was placed in this 705th meeting of Authority held on 19.03.2024. The SEIAA noted that the subject was placed in the 438th meeting of SEAC held on 05.01.2024 and


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

the SEAC has furnished its recommendations for the grant of Environmental Clearance to the project subject to the conditions stated therein.

After detailed discussions, the SEIAA decided to refer back the subject to SEAC to furnish remarks on the following:

SEIAA noted that the SEAC has recommended the proposal for grant of EC for the entire mine life of 5 years and the approved production quantity is also high. SEIAA, therefore suggests that SEAC may recommend the following studies before grant of EC for the project.

1. Scientific study to optimize the blast design parameters for the blasting operations.
2. Scientific studies to assess the slope stability of the benches and quarry wall.
3. To conduct the Safety Audit to detect any unsafe condition/practice prevalent in the mine to ensure the health and safety of the workers employed.
4. Hydrogeological study to assess the impact of the proposed quarry on ground water and the surface water.

Hence the subject was taken up for discussion in this 460th meeting of SEAC held on 22.04.2024. The SEAC noted the queries raised by SEIAA and decided to furnish the following remarks:

Based on the presentation made and the documents furnished by the Project proponent, SEAC discussed the following:

SEAC has prescribed the following studies.

1. As structures are found within a radial dist of 500m. the pp has been asked to conduct a study to design the blast parameters within a period of 6 months.

The study has been prescribed as the components of ground motion can affect the structures through compression and tension and through vertical and horizontal shearing effects. Here, the peak particle velocity (PPV) has so far been considered as the best criteria for evaluating blast vibrations in terms of its potential to cause damage in accordance with the DGMS Circular No.7 of 1997 stipulated by the Directorate General of Mines Safety,


MEMBER SECRETARY
SEAC -TN

113


CHAIRMAN
SEAC- TN

The study can be carried out only after opening the mine and studying the nature of rock formation. The nature & stratigraphy, lithology of rock formation can be ascertained only after the quarry is opened to a depth of atleast 6 to 7 m to determine the optimum blast parameters for the blasts to be carried out in the rock formations possessing heterogeneous rock characteristics.

The study will help in arriving at the optimum blast parameters, which will lead to minimizing the potential damage to the environment through reduction of noise and dust pollution apart from safeguarding the structures nearby.


Further, as per the provisions of Reg. 164 of MMR 1961, the PP shall carry out the controlled blasting techniques only after obtaining the prior approval from the competent authority (i.e, the Director of Mines Safety, DGMS-Chennai Region) which can be accomplished only after the execution of mine lease and then only it is legally comes under the purview of the Mines Act 1952.

In the absence of real ground related data, a proper study will not be possible. It is for these reasons that SEAC has recommended that such a study should be carried out within a period of 6 months. The Committee therefore decided to reiterate its recommendation that the study be carried out within 6 months of the opening of the mine.

2. As there were few waterbodies nearby the proposed site, the Committee has suggested that a study to find out the hydrogeological study to be carried out within a period of 6 months.

The study has been prescribed to ensure (i) measure the implications of mining operation on hydrological and hydrogeological feature around the mine and (ii) the safety of mining operations.

The Committee always examined the ground water levels in the vicinity and the proposed depth of the mine and possible interference with the ground water levels due to the mining operations. The Committee also ensured that the flow to the water bodies in the nearby area are not affected as the PP is required to construct garland drain as part of EMP, to not to disturb the natural flow of water in the area. The purpose of the hydrogeological study is to establish that the proposed mining activity will have


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

no/negligible impact on the ground water table and on the water bodies nearby, and it can be carried out within a period of 6 months.

The reasons for prescribing the study after a time lag -after opening of the mine - are based on the following facts.

1. The nature & stratigraphy, lithology of rock formation can be ascertained only after the quarry is opened to a depth of at least 10 to 15m, to determine whether the rock formations possessing heterogeneous (or) homogeneous rock characteristics.
2. In the absence of real ground related data, the study will be only theoretical as real data of the ground water level and characteristics of rock anomalies will not be available.
3. The actual hydrological & hydrogeological characteristics of the site can be evaluated only during the field investigations to know the value of the following parameters.
 - Phreatic surface.
 - Water seepage.
 - Permeability.
 - Ground water condition.
 - Water level and its impact.
 - U/G water flow and its recharge.
 - Proximity to other water reservoirs.

The study will enable mine management to adopt techniques to identify water-related risks in mining sites and their prevention measures.

It is for these reasons that SEAC has recommended that such a study should be carried out within a period of 6 months. The Committee therefore decided to reiterate its recommendation that the study be carried out within 6 months of the opening of the mine.

3. 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 4th year or when the depth exceeds 30m whichever is earlier, by involving any one of the reputed Research and Academic Institutions - CSIR-


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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.

The study has been prescribed to ensure the safety of the mine and the mineworkers.

The slope stability study must be conducted in the 4th year or when the depth exceeds 30m whichever is earlier, because only after opening the mine and studying the structural lithology of the strata encountered during the quarrying operation, the angle of safety to ensure the Factor of Safety (F.O.S) of more than 1.0 ($F > 1.0$) can be determined. Besides, the stress induced by the surrounding rock formation can also be studied only when the depth reaches 30m to arrive at the required factor of safety in accordance with the DGMS circular no. 2 of 2001.

The determination of F.O.S after exposing the lithological features will help in designing the benches of appropriate geometry in accordance with the provisions of the regulations and rules and circulars and orders made there under.

The Committee therefore decided to reiterate its recommendation that the study be carried out in the 4th year of the operation of mines or when the depth exceeds 30m, whichever is earlier.

Therefore, the SEAC decided to reiterate the recommendations already made in the minutes of 438th meeting of SEAC dated 05.01.2024 pertaining to this proposal.

Agenda No. 460-31

(File No.5995/2015)

Proposal seeking Environmental Clearance for the project attracting CRZ Notification, 2011 – Proposed construction of 3 Groynes (G1-500M, G2 - 200M & G3 (Training wall) 170 M at Vembar Village, Vilathikulam Taluk, Thoothukkudi District.

(SIA/TN/MIS/31157/2015 dated 19.09.2015)

The subject was earlier placed in the 84th meeting of SEAC held on 27.02.2017, 112th meeting of SEAC held on 28.05.2018 and 117th meeting of SEAC held on 28.07.2018 and the SEAC decided to recommend the proposal for the grant of CRZ Clearance to SEIAA subject to the following specific conditions in addition to the normal conditions:


MEMBER SECRETARY
SEAC -TN



CHAIRMAN
SEAC- TN

1. The construction of the Groynes should not affect the quality of sea water especially in terms of turbidity and the construction should not affect the aquatic species population prevalent in the area.
2. The project proponent shall sign a MOU with reputed institutions for monitoring during the Groynes deployment for a minimum of one year. The monitoring shall be undertaken on weekly basis covering the parameters like physical including sedimentation rate, chemical and biological including benthic assemblages (sea grasses, coral reefs), macro fauna and fish population covering within 5km radius from the project site. A copy of the MOU for monitoring shall be submitted to SEIAA before obtaining CRZ clearance.
3. The proponent shall take comprehensive remedial and management measures, if there is any disturbance to aquatic life.
4. The proponent should monitor the impact of the construction of groynes on the sea erosion and prepare proper document so as to ascertain whether the project has yielded the anticipated results.
5. The proponent, through IIT Madras, should use such projects for validating the computer models which they use for designing the groynes.

The Hon'ble National Green Tribunal (Principal Bench, New Delhi) in O.A.No.430 of 2018 dated 23.07.2018 stated that, the process of approving the parameters of hazard line was to be finalized within 3months based on which Coastal Zone Management Plans (CZMPs) were to be finalized. All the development activities will be governed by such plans and no Environmental Clearance for any development activity in the regulated area should be granted to defeat such exercise. Timeline was laid down for submission of CZMPs i.e. April 30, 2018. The MoEF&CC finalised the approval for the hazard line by 31.07.2018. The State Government through the Department of Environment has already submitted the report to MoEF CC, GOI.

Subsequently, the office memorandum issued by MoEF&CC vide F.No.19-178/2018-IA-III(pt) dated 25.10.2018 has informed that

" Pursuant to the order dated 22.11.2017 of the National Green Tribunal, New Delhi in the matter of O.A.No.424 of 2016 and O.A.No.11 of 2014, the competent Authority has approved the Coastal Zone management plans(


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC-TN

CZMPs) in respect of the coastal states of Tamil Nadu, West Bengal, Puducherry and union Territory of Daman and Diu.

2. In view of the above , it is to inform that the Environment Clearances/ CRZ clearances for development projects in the above mentioned states/ UT, approved by the competent Authority may be issued."

Subsequently, the Senior Deputy Accountant General (ES-I), Office of the Accountant General (Economic and Revenue Sector Audit), Tamil Nadu vide Lr.No.AG(E&RSA)/ES-I/WM DP Cell/IRP:20/2017-18/136 dated 15.10.2018 has written that,

Office of the Account General, (Economic and Revenue Sector Audit), Tamil Nadu has taken up a study on "Coastal Protection Works executed by the State Public Works Department (WRD). During the course of study, it was observed that these works executed/commenced by the PWD without obtaining clearance from the SEIAA, in violation of CRZ Notification,2011 issued by the Government of India and subsequent amendment issued in November 2014 and requested SEIAA-TN to furnish the following information

1. Any Violation thereon attracts penal provisions under Environment (Protection) Act, 1986. In this regards, it may be stated as to whether any notice was issued to PWD in view of construction activities without mandatory clearance from the SEIAA.
2. Whether any action initiated/penalty levied as per provisions under Environment (Protection) Act, 1986 for construction activities without mandatory clearance from the SEIAA.
3. Reason for allowing the PWD works to continue to be executed despite violation of instructions specified in CRZ, Notification 2011.

Reply was furnished to the Senior Deputy Accountant General (ES-I), Office of the Accountant General (Economic and Revenue Sector Audit), Tamil Nadu vide this office letter dated 30.11.2018 and the subject was placed in the 335th meeting of SEIAA held on 31.12.2018 and the SEIAA decided to obtain necessary clarification from District Level Coastal Zone Management Authority, Thoothukudi District regarding the current ground status of the project, whether any works executed/commenced by the PWD for the aforesaid project and also the Authority decided that further course of action on


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

this application will be considered only after the receipt of reply received from District Level Coastal Zone Management Authority, Thoothukudi District.

Now the District Collector/Chairman, District Coastal Zone Authority, Thoothukudi vide Lr.No. DEE/TTN/F- CZMA-40/2024 dated 09.03.2024 has furnished the details sought by SEIAA and hence the subject was taken up for discussion in this 706th meeting of SEIAA held on 20.03.2024. The Authority noted that,

I invite kind attention to the reference 4th cited, wherein it has been requested to furnish the current ground status of the construction of groynes at Vembar Village, Vilathikulam Taluk, Thoothukudi District. In this regard, it is informed that the Executive Engineer, Water Resources Department (Special Project Division), Virudhunagar had filed an application with District Coastal Zone Management Authority seeking CRZ clearance for construction of 3 Groynes (G1-500M, G2 - 200M & G3 (Training wall) 170 M at Vembar Village, Vilathikulam Taluk, Thoothukudi District during the year 2014.

The subject was placed in the 59th DCZMA meeting held on 20.10.2014 and DCZMA recommended the proposal to TNSCZMA vide Lr. No. DEE/TTN/F.CZMA / 59th meeting / 2014 -2 dated: 20.10.2014. Subsequently, the TNSCZMA placed the subject in its 83rd meeting held on 19.05.2015 and accorded CRZ clearance for the proposed construction of 3 Groynes (G1-500 m, G2-200 m & G3 (Training wall- 170 m) at Vembar village in Vilathikulam Taluk, Thoothukudi district vide Proc.No.PI/2032/2014 dated: 01.06.2015. Further the SEIAA requested to issue necessary clarifications regarding the current ground status of the project vide reference 2nd cited.

In this regard, it is informed that the project proponent had commenced the works based on the clearance issued by TNSCZMA on 01.06.2015 and completed the entire construction works as per the proposal ie. Construction of Groynes G1 - 500m, G2 - 200m & G3 (Training wall) 170 m. This status was confirmed by the District Environmental Engineer, Thoothukudi and the Assistant Executive Engineer, Water Resources Department (Special Project Division), Virudhunagar during their joint inspection on 09.03.2024.


MEMBER SECRETARY
SEAC -TN

119


CHAIRMAN
SEAC- TN

The above details are submitted for kind information.

The Authority after detailed discussions decided to refer back the subject to SEAC for further necessary action. The SEAC noted that neither the PP nor the EIA coordinator turned up for the meeting. Hence the SEAC decided to defer the subject to a later date directing the PP to furnish reason for the absence without any prior intimation.

Agenda No: 460 – 32

(File No: 10269/2023)

Existing Rough stone quarry lease over an extent of 1.35.0 Ha of Government Land 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 earlier placed in the 413rd meeting of SEAC held on 05.10.2023. 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.
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.

Subsequently the subject was placed in the 451st meeting of SEAC held on 13.03.2024 and the PP made a presentation on the ADS sought by SEAC. The SEAC noted that the


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

DD/Mines in her letter no. Roc.800/2023/Mines-A Dated: 01.12.2023 has reported the following:

Quantity excavated up to May 2023: 166159 Cbm

Actual depth of mining: 46m

Based on the presentation and documents furnished by the project proponent, **SEAC decided to recommend the proposal for the grant of Environmental Clearance** subject to the conditions stated therein.

Subsequently the subject was placed in the 709th meeting of SEIAA held on 08.04.2024. After detailed discussions, the Authority decided to refer back the subject to SEAC for furnish remarks citing the following reason:

The SEAC has recommended for the grant of EC for the project for a quantity of 287300 cum of Rough stone and annual peak production not exceeding 59925 cum of Rough stone for the ultimate depth of 106m AGL in Sl.No.,22 of the agenda table. However, in the appended paragraph it is recommended as follows:

"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 12675 m³ of Rough stone by maintaining the ultimate depth of mining of 37m BGL, for the project life of 5 years (or) expiry date of mine lease but subject to a maximum of thirty years, whichever is earlier, from the date of lease execution, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022....."

Hence the subject was placed in this 460th meeting of SEAC held on 24.04.2024. The SEAC decided to replace the above paragraph with the following:

"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 59925m³ of Rough stone by maintaining the ultimate depth of mining of 106m AGL, for the project life of 5 years (or) expiry date of mine lease but subject to a maximum of thirty years, whichever is earlier, from the date of lease execution, vide MoEF&CC Notification S.O, 1807(E) dated 12.04.2022....."

All the other conditions stipulated in the minutes of 451st meeting of SEAC dated


MEMBER SECRETARY
SEAC -TN

121


CHAIRMAN
SEAC- TN

13.03.2024 pertaining to this subject remain unaltered.

Agenda No: 460 - 33

(File No.9632/2023)

Proposed Rough Stone Quarry lease over an extent 1.46.0 Ha (Govt. Poromboke Land) at S.F.No.265/1 (Part-4) of Madhakondapalli Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu by Thiru. N. Obula Reddy - For Environmental Clearance.


(SIA/TN/MIN/456247/2023 dated: 21.12.2023)

The proposal was placed for appraisal in the 460th Meeting of SEAC held on 24.02.2024. 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. N. Obula Reddy has applied for Environmental Clearance for the Proposed Rough Stone Quarry lease over an extent 1.46.0 Ha (Govt. Poromboke Land) at S.F.No.265/1 (Part-4) of Madhakondapalli Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. ToR was issued to the project proponent vide Lr.No.SEIAA-TN/F.No.9632/SEAC/ToR-1355/Dated: 10.02.2023 as the proposal falls under 'B1' category.
4. Public hearing was conducted on 27.09.2023.
5. Baseline monitoring period March – May 2023.
6. EIA Report submitted in the PARIVESH Portal on 21.12.2023.
7. Earlier, the proposal was placed in the 446th SEAC meeting held on 16.02.2024. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance subject to the conditions stated therein.
8. Subsequently, the proposal was placed in the 704th authority meeting. The authority, during deliberations, noted that the project site is located close to water bodies. Ten year mining with the quantity recommended need detailed hydrogeological study from reputed institution supported with


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

recommendations during the mine period. Specific condition no. 13 of SEAC minutes suggested that 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**. SEIAA suggests that when it comes to long term mining (more than 5 years), additional study as suggested may be got done before the issue of Environmental Clearance and additional conditions shall be imposed as suggested in the report.

In view of the above, the Authority decided to refer back the proposal to SEAC with the above remarks.

9. In this regard, the proposal is again placed in this 460th SEAC meeting. The proponent furnished a reply to the queries raised in the 704th authority meeting as follows:

SEIAA QUERY	REPLY BY PROPONENT
Ten year mining with the quantity recommended need detailed hydrogeological study from reputed institution supported with recommendations during the mine period. Specific condition no. 13 of SEAC minutes suggested that 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 . SEIAA suggests that when it comes to long term mining (more than 5 years), additional study as suggested may be	The quarry operation is proposed up to depth for 26.0m (AGL - 10m and BGL - 16m) for the proposed mining plan. The quarry operation is proposed to carry out with conventional open cast mechanized mining with 5.0 meter vertical bench with a bench width of 5.0 meter. We have prepared and submitted the EIA/EMP which covers all the existing environmental conditions in and around 10 km radius from the proposed project site. The existing Hydrogeological conditions were studied covering general hydrogeology of the project site, groundwater exploration using


MEMBER SECRETARY
SEAC -TN

123


CHAIRMAN
SEAC- TN

got done before the issue of Environmental Clearance and additional conditions shall be imposed as suggested in the report.	integrated geophysical technique, resistivity survey - DDR3 model, Data analysis from DDR3. The same has enclosed in the Final EIA report. We will assure that hydrogeological study from the reputed institution for analysing the impacts of the quarrying operation on the ground water level will be carried out within two years from the commencement of the mining operation.
-----------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

As there were few waterbodies nearby the proposed site, the Committee has suggested that a study to find out the hydrogeological study to be carried out within a period of 6 months.

The study has been prescribed to ensure (i) measure the implications of mining operation on hydrological and hydrogeological feature around the mine and (ii) the safety of mining operations.

The Committee always examined the ground water levels in the vicinity and the proposed depth of the mine and possible interference with the ground water levels due to the mining operations. The Committee also ensured that the flow to the water bodies in the nearby area are not affected as the PP is required to construct garland drain as part of EMP, to not to disturb the natural flow of water in the area. The purpose of the hydrogeological study is to establish that the proposed mining activity will have no/negligible impact on the ground water table and on the water bodies nearby, and it can be carried out within a period of 6 months.

The reasons for prescribing the study after a time lag -after opening of the mine - are based on the following facts.

1. The nature & stratigraphy, lithology of rock formation can be ascertained only after the quarry is opened to a depth of at least 10 to 15m, to determine whether the rock formations possessing heterogeneous (or) homogeneous rock characteristics.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

2. In the absence of real ground related data, the study will be only theoretical as real data of the ground water level and characteristics of rock anomalies will not be available.

3. The actual hydrological & hydrogeological characteristics of the site can be evaluated only during the field investigations to know the value of the following parameters.

- Phreatic surface.
- Water seepage.
- Permeability.
- Ground water condition.
- Water level and its impact.
- U/G water flow and its recharge.
- Proximity to other water reservoirs.

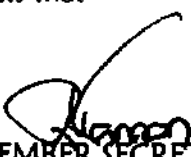
The study will enable mine management to adopt techniques to identify water-related risks in mining sites and their prevention measures.

It is for these reasons that SEAC has recommended that such a study should be carried out within a period of 6 months. The Committee therefore decided to reiterate its recommendation that the study be carried out within 6 months of the opening of the mine.

The committee has examined the ground water levels in the vicinity, say within 500m, and the proposed depth and only after coming to the conclusion that the proposed mining operation will not interfere with the ground water levels of the vicinity. The committee has also examined the water bodies in the nearby area and considering the area of proposed mine and considering the fact that garland drain has been prescribed as part of EMP, the impact of mining operation on the nearby water bodies will be negligible.

However, the hydrogeological study is to establish that the proposed mining activity will have no/negligible impact on the ground water table and on the water bodies nearby.

Therefore, the reason for prescribing a period of 1 or 2 years is based on the following facts that


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

1. The nature & stratigraphy, lithology of rock formation can be established only after the quarry is opened to a considerable depth of atleast 10 to 15m to determine whether the rock formations possessing heterogeneous (or) homogeneous rock characteristics.
2. In the absence of real ground related data, any such study will be only theoretical as simulated data for the prediction of the ground water level table and characteristics of ground water anomalies which will not be of much use in maintaining the smooth operation of the mine.
3. Besides, the actual hydrological & hydrogeological characteristics of the site can be evaluated during the field investigations only after ascertaining the ground realities such as
 - Phreatic surface
 - Water seepage
 - Permeability
 - Ground water condition
 - Water level and its impact
 - U/G water flow and its recharge
 - Proximity to other water reservoirs
4. Similarly, the quality of the ground water condition is affected due to the presence of any contaminated mineral constituents which can be ascertained only the rock / mineralized part of the quarry is exposed during the mining operations. Hence it is imperative to review the environmental and hydrological issues associated with mining processes according to the stages in the lifecycle of a mine, the mineral type, and the different mining facilities, as well as the characteristics of the contaminants, in a phased manner (periodically). By doing this, the objective of identifying the risk-associated points in the industrial mining chain related to the mining effects on water resources can be fulfilled and thus it provides suggestions for effective management, prevention, and conservation techniques for mining and water interaction.
5. Further, the mine management can adopt any techniques to identify water-related risks in mining sites and their prevention measures unless the mine is

opened and operated for a considerable period. Because, based on the theoretical data used in the simulation techniques, it is difficult to accurately quantify the impact of mining on water resources due to the mining site's unique properties and diverse interactions with water bodies, the temporal nature of mining operations, the absence of inventory data on mining water use, data quality issues, poor assessment techniques to account for abnormal conditions and events (e.g., extreme weather conditions) and the accuracy of the spatial factors for impact assessment. Due to many unknown variables, mine water quality prediction is also gets complicated if the study is not carried out simultaneously during the mining operations.

6. In case of cluster of water bodies exist in and around the proposed mine (or) existence of the agricultural fields around the mine (or) presence of considerable number of habitations, such hydrogeological studies are required to be carried out by involving the reputed academic & research institutes annually for determining the impact of mining operations on the surrounding environmental settings.
7. The change in groundwater flow will modify the hydro-geochemical environment; mining activities will lead to serious deterioration of groundwater quality and cause a series of eco-environmental problems. Therefore, understanding hydrological cycle processes, including water origin, evaporation, and hydraulic connection between water bodies, is significant for the rational exploitation and utilization of water resources and local eco-environment protection, especially in the mining areas.

Therefore, this study during the mining operation stage is aimed at exploring the influence of mining disturbances on the hydrological cycle processes, taking river water and groundwater, including phreatic water and confined water, as the research objects and comprehensively analyzing their stable isotope compositions to determine the recharge source of river water and groundwater and the hydraulic connection between water bodies.

Hence, the Committee after carefully examining the queries raised by the authority & the reply furnished by the proponent and after detailed deliberations decided to re-


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

iterate the recommendations already made in the 446th SEAC meeting.

Agenda No: 460 - 34

(File No.9561/2023)


Proposed Rough Stone and gravel quarry lease over an extent 4.36.5 Ha at S.F.No.293/1 (P), 293/3(P) 293/4(P), 294/2B & 295/1 (P) of Karudayampalayam Village, Pugalur Taluk, Karur district, Tamil Nadu by M/s. Sri Ganeshmurugan Blue Metals - For Environmental Clearance. (SIA/TN/MIN/450375/2023 dated:30.10.2023)

The proposal was placed for appraisal in the 460th Meeting of SEAC held on 24.04.2024. 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 Ganeshmurugan Blue Metals** has applied for Environmental Clearance for the Proposed Rough Stone and gravel quarry lease over an extent 4.36.5 Ha at S.F.No.293/1 (P), 293/3(P) 293/4(P), 294/2B & 295/1 (P) of Karudayampalayam Village, Pugalur Taluk, Karur district, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Minerals Projects" of the Schedule to the EIA Notification, 2006.
3. Earlier, the proponent has obtained EC from DEIAA vide Lr.No.DEIAA-DIA/TN/MIN/8442/2017-KRR Ec.No.81/2017/Mines, dated 14.10.2017. The lease was executed between 23.10.2017 to 22.10.2022.
4. Now, the proponent has submitted an application seeking approval for next scheme of mining.
5. ToR was issued to the project proponent vide Lr.No.SEIAA-TN/F.No.9561/SEAC/ToR-1358/ Dated.10.02.2023 as the proposal falls under 'B1' category.
6. Public hearing was conducted on 25.08.2023.
7. Baseline Monitoring period October – December 2022.
8. EIA Report submitted in the PARIVESH Portal on 30.10.2023.
9. The proponent furnished a Certified Compliance Report E.P/12.1/2022-23/SEIAA/213/TN/1403 dated.23.12.2022 obtained from IRO, Chennai for the


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

earlier EC dated.14.10.2017 granted by DEIAA.

10. Earlier, the proposal was placed in the 437th SEAC meeting held on 04.01.2024. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance subject to the conditions stated therein.
11. Subsequently, the proposal was placed in the 694th authority meeting held on 12.02.2024. The authority, during deliberations, noted from the documents uploaded in the PARIVESH Portal that nearly 50% of the public who attended the Public Hearing held on 25.08.2023 have expressed concern over loss of life, livelihood, insecurity and risk due to open mine blasting. The proponent has given some casual remarks which does not include serious mitigation strategies with relevance to sudden accidents and associated risks. Further, the disaster management plan submitted doesn't address the above mentioned concerns raised in the Public Hearing. Besides threat to human life, many people have expressed concern towards the impact on school going children, security to constructed houses and livestock. Hence, the authority decided to consider the proposal after obtaining the following particulars from the project proponent:

- i) A comprehensive study conducted by a reputed institution (other than the EIA Consultant) on risk and the related mitigation to people and life shall be furnished.

Subsequently, the proponent vide letter dated.15.03.2024 submitted a reply to the queries raised in the 694th Authority meeting. The proposal along with the reply furnished by the proponent is placed in the 705th Authority meeting. The authority noted that the proponent has furnished a report obtained from Dept. of Mining Engineering, College of Engineering, Guindy, titled 'Comprehensive Study on Disaster Risk Mitigation Management Plan for Quarry and Crusher Operation', with some recommendations.

The authority decided to refer back the proposal to SEAC for seeking remarks on the above mentioned report and additional conditions to be imposed, if any.

12. In this regard, the proposal is again placed in this 460th SEAC meeting. During the meeting, the proponent furnished the following reply:


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

REPLY FURNISHED BY THE PROPONENT

As per SEAC recommendation Furnished in 437th SEAC Meeting

Point No 8: SOP for best mining Practices Should adopt in the mining operation and the affidavit of the same Shall submit to Dept. of Geology and mining before Mining Operation. I will do it.

Point No 11: The stability measures of the Mine Should conduct through reputed institution and submit the report too DGMS

Point No 13: Dust Suppression method should adopt in the mine up to the life of the Mine.

Point No 16: Disaster management Cell Should from during the quarry operation not to cause any hindrance to anyone or for the adjacent lands.

The recommendations were including and the cost were given in EMP'

Apart from these the lessee had conducted the study for the Risk assessment and management plan in the lease area and stone Crusher through Anna University and provide the observation made in the Site with Photographic evidence and gave the Suggestions in conclusion which is already given in SEAC recommendation.

The Committee noted that the conditions related to disaster and risk management & relevant mitigation measures were already included the minutes of 437th SEAC meeting. Further, no new/additional significant conditions are recommended in the report furnished by the Dept. of Mining Engineering, College of Engineering, Guindy. Hence, the Committee, taking into account the commitment made by the proponent, decided to re-iterate the recommendations already made in the 437th SEAC meeting.

Agenda No: 460-35

(File No: 10601/2023)

Proposed Rough stone & Gravel quarry lease over an extent of 1.68.50Ha at SF.Nos. 238/2A1, 238/2A2, 238/2A3, 238/2B, 238/2A4, 238/2A5, 238/2A6 & 241/2A, Sathampadi Village, Natham Taluk, Dindigul District, Tamil Nadu by Thiru. K.Karanthamalai - For Environmental Clearance.

(SIA/TN/MIN/455955/2023, Dated:20.12.2023)


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

The proposal was placed in 448th meeting of SEAC held on 23.02.2024. 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.K.Karanthamalai has applied for Environmental Clearance for the Proposed Rough stone & Gravel quarry lease over an extent of 1.68.50Ha at SF.Nos.238/2A1, 238/2A2, 238/2A3, 238/2B, 238/2A4, 238/2A5, 238/2A6 & 241/2A, Sathampadi Village, Natham Taluk, Dindigul 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.

Responding to the points as indicated by the SEAC, the details furnished by the project proponent, the PP has revised mining plan by avoiding mining in the narrow NW patch of the lease (AB – XY cross section) and also narrow NE corner (survey no 241/2A portion) and submitted the revised mineable reserves, production details given below:

REVISED PRODUCTION DETAILS

YEAR	Quantity as per mining plan @12m depth for 5 years & 27m for 10 Years		Revised production as per SEAC recommendation @12m depth for 5 years & 27m for 10 Years	
	ROUGHSTONE (m ³)	GRAVEL (m ³)	ROUGHSTONE (m ³)	GRAVEL (m ³)
I	8080	12000		
II	8080	5928	8080	5928
III	8080	--	8080	--
IV	8120	--	8120	--
V	8400	--	8400	--

VI	3780	--	3780	--
VII	3680	--	3680	--
VIII	3680	--	3680	--
IX	3680	--	3680	--
X	3510	--	3510	--

The SEAC have accepted the revised production capacity of 16680m³ of Gravel, & 39,920 m³ of rough stone for a depth of 12m (BGL) for five years and 16680m³ of Gravel, & 58,230m³ of rough stone for a depth of 27m for 10 Years lease period as against mining plan approved production capacity of 17,928m³ of Gravel, & 40,700


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

m³ of rough stone for a depth of 12m (BGL) for five years and 17,928m³ of Gravel, & 59,010m³ of rough stone for a depth of 27m for 10 Years lease period.

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 8400 m³ of Rough Stone and 10752 m³ of Gravel by maintaining the ultimate depth of mining upto 27m below ground level for the project life of 10 years as laid down in the mining plan approved and renewed by competent authority and subject to a maximum of thirty years, whichever is earlier, vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022 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 mark the DGPS reference pillars painted with blue & white colour indicating the safety barrier of 7.5 m to be left under the Rule 13 (1) of MCDR, 1988 within the lease boundary and protective bunds, before obtaining the CTO from the TNPCB.
- 2) The PP shall register promptly through online in the Shram Suvidha Portal which is the official portal of Ministry of Labour & Employment, Govt of India to obtain Labour Identification Number (LIN) before obtaining the CTO from the TNPCB.
- 3) Further, the PP shall send the 'Notice of Opening' indicating the appointment of First Class/Second Class Mine Manager for managing the quarrying operations and the proposed usage of HEMM shall be sent to the Director of Mines Safety, Chennai Region of the Mine under the provisions of MMR 1961 atleast 30 days before the commencement of the mining operation immediately after the execution of lease with district authority.
- 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.


MEMBER SECRETARY
SEAC -TN



CHAIRMAN
SEAC- TN

- 5) For carrying out the eco-friendly mining, 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 quarry, by involving anyone of these reputed Research and Academic Institutions - 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) The PP shall furnish an affidavit indicating the Standard Operating Procedures (SoP) for carrying out the 'Best Mining Practices' in the areas of drilling, blasting excavation, transportation and green belt development, in securing the safety of the persons living within a radial distance of 500 m (danger zone) to the concerned AD (Mines) at the time of lease execution.
- 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 6th 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.
- 8) The PP shall ensure that the transport of materials shall not be carried out during school hours from 8AM-10AM and during 3PM -5PM (or as specified by the school administration).

- 9) The PP shall install the tall wind sheets with thick vegetation (2 to 3 tier plantations) around the boundary of the mine leasehold area, before obtaining the CTO from the TNPCB.
- 10) The PP shall only carry out the NONEL-based (or) Electronic Detonator based blasting operation for controlling the environmental impacts with keeping the security guards at a radial distance of 500 m by ensuring that all persons within such area have taken proper shelter.
- 11) The PP shall ensure that the haul road dust is constructed with bitumen to minimize dust generation but however the suppression/watering are being done to maintain the required moisture level in all active haul roads. A fleet of water trucks with adequate water spray systems are available and operational at all times.
- 12) 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.
- 13) As accepted by the Project Proponent the CER cost of **Rs. 5 Lakhs** and the amount shall be spent for the committed activities before obtaining CTO from TNPCB.

The subject was placed in the 706th authority meeting held on 20.03.2024. The Authority noted that that the subject was appraised in the 448th SEAC meeting held on 23.02.2024. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.

The authority, during deliberations noted the following.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

Further life of project, lease period and Mining plan is for 10 years. The quantity of Rough stone & Gravel to be removed is high. Hence, before issue of Environmental Clearance for 10 years it is suggested we may seek the following reports. Hence, the authority decided to consider the proposal after obtaining the following particulars from the project proponent:

1. **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 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.
2. **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.
3. 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 4th 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,


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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.

In view of the above, the Authority decided to **refer back** the proposal to SEAC for remarks /recommendations after obtaining the detailed study report on the above-mentioned points.

Now the proposal was placed in the 460th meeting of SEAC held on 24.04.2024.

Based on the presentation made and the documents furnished by the Project proponent, SEAC discussed the following:

SEAC has prescribed the following studies.

- 1. As structures are found within a radial dist of 500m. the pp has been asked to conduct a study to design the blast parameters within a period of 6 months.**


The study has been prescribed as the components of ground motion can affect the structures through compression and tension and through vertical and horizontal shearing effects. Here, the peak particle velocity (PPV) has so far been considered as the best criteria for evaluating blast vibrations in terms of its potential to cause damage in accordance with the DGMS Circular No.7 of 1997 stipulated by the Directorate General of Mines Safety,

The study can be carried out only after opening the mine and studying the nature of rock formation. The nature & stratigraphy, lithology of rock formation can be ascertained only after the quarry is opened to a depth of atleast 6 to 7 m to determine the optimum blast parameters for the blasts to be carried out in the rock formations possessing heterogeneous rock characteristics.

The study will help in arriving at the optimum blast parameters, which will lead to minimizing the potential damage to the environment through reduction of noise and dust pollution apart from safeguarding the structures nearby.

Further, as per the provisions of Reg. 164 of MMR 1961, the PP shall carry out the controlled blasting techniques only after obtaining the prior approval from the competent authority (i.e, the Director of Mines Safety, DGMS-Chennai Region) which


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

can be accomplished only after the execution of mine lease and then only it is legally comes under the purview of the Mines Act 1952.

In the absence of real ground related data, a proper study will not be possible. It is for these reasons that SEAC has recommended that such a study should be carried out within a period of 6 months. The Committee therefore decided to reiterate its recommendation that the study be carried out within 6 months of the opening of the mine.

2. As there were few waterbodies nearby the proposed site, the Committee has suggested that a study to find out the hydrogeological study to be carried out within a period of 6 months.

The study has been prescribed to ensure (i) measure the implications of mining operation on hydrological and hydrogeological feature around the mine and (ii) the safety of mining operations.

The Committee always examined the ground water levels in the vicinity and the proposed depth of the mine and possible interference with the ground water levels due to the mining operations. The Committee also ensured that the flow to the water bodies in the nearby area are not affected as the PP is required to construct garland drain as part of EMP, to not to disturb the natural flow of water in the area. The purpose of the hydrogeological study is to establish that the proposed mining activity will have no/negligible impact on the ground water table and on the water bodies nearby, and it can be carried out within a period of 6 months.

The reasons for prescribing the study after a time lag -after opening of the mine - are based on the following facts.

1. The nature & stratigraphy, lithology of rock formation can be ascertained only after the quarry is opened to a depth of at least 10 to 15m, to determine whether the rock formations possessing heterogeneous (or) homogeneous rock characteristics.
2. In the absence of real ground related data, the study will be only theoretical as real data of the ground water level and characteristics of rock anomalies will not be available.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

3. The actual hydrological & hydrogeological characteristics of the site can be evaluated only during the field investigations to know the value of the following parameters.

- Phreatic surface.
- Water seepage.
- Permeability.
- Ground water condition.
- Water level and its impact.
- U/G water flow and its recharge.
- Proximity to other water reservoirs.

The study will enable mine management to adopt techniques to identify water-related risks in mining sites and their prevention measures.

It is for these reasons that SEAC has recommended that such a study should be carried out within a period of 6 months. The Committee therefore decided to reiterate its recommendation that the study be carried out within 6 months of the opening of the mine.

3. 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 4th 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.

The study has been prescribed to ensure the safety of the mine and the mineworkers.

The slope stability study must be conducted in the 4th year or when the depth exceeds 30m whichever is earlier, because only after opening the mine and studying the structural lithology of the strata encountered during the quarrying operation, the angle of safety to ensure the Factor of Safety (F.O.S) of more than 1.0 ($F > 1.0$) can be determined. Besides, the stress induced by the surrounding rock formation can also be


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

studied only when the depth reaches 30m to arrive at the required factor of safety in accordance with the DGMS circular no. 2 of 2001.

The determination of F.O.S after exposing the lithological features will help in designing the benches of appropriate geometry in accordance with the provisions of the regulations and rules and circulars and orders made there under.

The Committee therefore decided to reiterate its recommendation that the study be carried out in the 4th year of the operation of mines or when the depth exceeds 30m, whichever is earlier.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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.

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.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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. 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.
7. The PP shall carry out only the mild blasting operation involving the small dia explosive slurry/emulsion explosive cartridges of 25 mm of not more than 375 g/hole in the hole length of 3 m or less and the NONEL detonators for loosening the strata.
8. 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.

9. **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.
10. 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.
11. The proponent shall provide garland drainage with sedimentation tank / settling tank with adequate capacity for runoff management.
12. 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.
13. 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.
14. 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.
15. 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.

16. 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.
17. 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.
18. 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.
19. 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.
20. 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.
21. 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.
22. 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.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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 within a period of one month from the date of lease execution.
- 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.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

- 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 and the AD (Mines).
- 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) 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.
- 13) The Project Proponent shall send a copy of the EC to the concerned Panchayat/local body.
- 14) Perennial maintenance of haulage road/village / Panchayat Road shall be done by the project proponent as required, in coordination with the concerned Govt. Authority.
- 15) 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.
- 16) 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.

- 17) 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.
- 18) 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.
- 19) 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.
- 20) **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.
- 21) 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 of 375g/hole in such a manner that the blast-induced ground vibration level (Peak Particle Velocity) measured in the 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.
- 22) 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.

- 23) No 'blasting' operation shall be carried out without obtaining the prior permission from the Director of Mines Safety, DGMS-Chennai Region if any structures, roads, water body located within a radial distance of 300 m from the boundary of mine lease.
- 24) 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.
- 25) The PP shall ensure that the blasting operations are carried out by the blaster/Mine Mate/Mine Foreman employed by him only in accordance with the provisions of MMR 1961 and it shall not be carried out by the persons other than the above statutory personnel.
- 26) 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.
- 27) Ground water quality monitoring should be conducted once in every six months and the report should be submitted to TNPCB.
- 28) 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.
- 29) The proponent shall ensure that the transportation of the quarried 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 stones; and transport of stones will be as per IRC Guidelines with respect to complying with traffic congestion and density.

- 30) 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.
- 31) 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.
- 32) The project proponent shall ensure that the provisions of the MMDR Act, 1957 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.
- 33) 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.
- 34) 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.
- 35) 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.
- 36) 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


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN


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.

37)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.

38)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.

39)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.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC -TN

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.
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.
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.
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.
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.
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.


 MEMBER SECRETARY
 SEAC -TN


 CHAIRMAN
 SEAC- TN

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.


 MEMBER SECRETARY
 SEAC -TN


 CHAIRMAN
 SEAC- TN

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.
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.


MEMBER SECRETARY
SEAC -TN

153


CHAIRMAN
SEAC- TN

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.
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.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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/EMP 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


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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.
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.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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 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.
 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 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.
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 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.


MEMBER SECRETARY
SEAC -TN


CHAIRMAN
SEAC- TN

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.
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.
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


MEMBER SECRETARY
SEAC -TN


CHAIRMAN,
SEAC -TN

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 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.
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.


MEMBER SECRETARY
SEAC -TN

171


CHAIRMAN
SEAC- TN

Appendix -I
List of Native Trees Suggested for Planting

No	Scientific Name	Tamil Name	Tamil Name
1	<i>Aegle marmelos</i>	Vilvam	விழ்வம்
2	<i>Adenanthura pavonina</i>	Manjadi	மஞ்சள், ஆமனக்குன்றிமணி
3	<i>Albizia lebbek</i>	Vaagai	வாகை
4	<i>Albizia amara</i>	Usil	உசில்
5	<i>Bauhinia purpurea</i>	Mantharai	மந்தாரை
6	<i>Bauhinia racemosa</i>	Aathi	ஆத்தி
7	<i>Bauhinia tomentosa</i>	Iruvathi	இருவந்தி
8	<i>Buchanania axillaris</i>	Kattuma	காட்டுமர
9	<i>Borassus flabellifer</i>	Panai	பனை
10	<i>Butea monosperma</i>	Murakkamaram	முருக்கமரம்
11	<i>Bobax ceiba</i>	Ilavu, Sevvilavu	இலவு
12	<i>Calophyllum inophyllum</i>	Punnai	புள்ளை
13	<i>Cassia fistula</i>	Sarakondrai	சரக்கொண்டை
14	<i>Cassia roxburghii</i>	Sengondrai	செங்கொண்டை
15	<i>Chloroxylon swietenia</i>	Purasamaram	புரசு மரம்
16	<i>Cochlospermum religiosum</i>	Kongu, Manjallavu	கோங்கு, மஞ்சள் இலவு
17	<i>Cordia dichotoma</i>	Naruvuli	நருவுலி
18	<i>Cretova adansoni</i>	Mavalingum	மாவிளங்கம்
19	<i>Dillenia indica</i>	Uva, Uzha	உசா
20	<i>Dillenia pentagyna</i>	SiruUva, Sitruzha	சிறு உசா
21	<i>Diospyro sebum</i>	Karungali	கருங்காலை
22	<i>Diospyro schloroxylon</i>	Vaganai	வாகனை
23	<i>Ficus amplissima</i>	Kallitchi	கல் இச்சி
24	<i>Hibiscus tiliaceou</i>	Aatrupoovarasu	ஆற்றாப்பூவரசு
25	<i>Hardwickia binata</i>	Aacha	ஆச்சா
26	<i>Holoptelia integrifolia</i>	Aayili	ஆயா மரம், ஆயிலி
27	<i>Lanea coromandelica</i>	Odhiam	ஒதியம்
28	<i>Lagerstroemia speciosa</i>	Poo Marudhu	பூ மருது
29	<i>Lepisanthus tetraphylla</i>	Neikottaimaram	நெய் கொட்டை மரம்
30	<i>Limonia acidissima</i>	Vila maram	விலா மரம்
31	<i>Litsea glutinos</i>	Pisinpattai	அரிமர, பிசின்பட்டை
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	நுணா
37	<i>Morinda citrifolia</i>	Vellai Nuna	வெள்ளை நுணா
38	<i>Phoenix sylvestre</i>	Eachai	எச்சமரம்
39	<i>Pongamia pinnat</i>	Pungam	புங்கம்

40	<i>Premna mollissima</i>	Munnai	முண்டை
41	<i>Premna serratifolia</i>	Narumunnai	நறு முண்டை
42	<i>Premna tomentosa</i>	Malaipoovarasu	மலை பூஞ்சை
43	<i>Prosopis cinerea</i>	Vanni maram	வாணி மரம்
44	<i>Pterocarpus marsapium</i>	Vengai	வேங்கை
45	<i>Pterospermum canescens</i>	Vennangu, Tada	வேளாணங்குடி
46	<i>Pterospermum xylocarpum</i>	Polavu	புலவ
47	<i>Puthranjita roxburghii</i>	Karipala	கரிபலா
48	<i>Salvadora persica</i>	Ugaa Maram	உகா மரம்
49	<i>Sapindus emarginatus</i>	Manipungan, Soapukai	மணிப்புகள் சோப்புகாய்
50	<i>Saraca asoca</i>	Asoca	அசோகா
51	<i>Strobilus asper</i>	Piray maram	பிராய் மரம்
52	<i>Strychnos nuxvomica</i>	Yetti	யெட்டி
53	<i>Strychnos potatorum</i>	Therthang Kottai	தேர்தாங்கு கோட்டை
54	<i>Syzygium cumini</i>	Naval	நாவல்
55	<i>Terminalia belleric</i>	Thandri	தாண்ட்ரி
56	<i>Terminalia arjuna</i>	Ven marudhu	வேன் மருது
57	<i>Toona ciliata</i>	Sandhana vembu	சந்தாண வேம்பு
58	<i>Thespesia populnea</i>	Puvarasu	பூவரசு
59	<i>Walsuratrifoliata</i>	valsura	வால்சுரா
60	<i>Wrightia tinctoria</i>	Veppalai	வேப்பலை
61	<i>Pithecellobium dulce</i>	Kodukkapuli	கொடுக்காப்பழி

MEMBER SECRETARY
SEAC - TN

CHAIRMAN
SEAC- TN

(Size 6' x5' with Blue Background and White Letters)

சுருக்கம்

கனம் உறுப்பினர் குவாஜி செபஸ்பாடுகோட்டை கற்றுத்தரும் அனுமதி கீழ்க்கண்ட நித்தனானகளுக்கு உட்பட்டு வழங்கப்பட்டுள்ளதாய்வு, தேதி உரிப்பட்டு, கற்றுத்தரும் அனுமதி _____ தேதி வரை செல்லுத்தக்கதாக உண்டா.

[illegible]
