

**STATE EXPERT APPRAISAL COMMITTEE – TAMIL NADU**

Minutes of 304<sup>th</sup> Meeting of the State Expert Appraisal Committee (SEAC) held on 20<sup>th</sup> August 2022 (Saturday) at SEIAA Conference Hall, 2<sup>nd</sup> Floor, Panagal Maligai, Saidapet, Chennai 600 015 for consideration of Building Construction Projects & Mining Projects.

Agenda No: 304-01

(File No: 7264/2019)

Proposed Grey Granite quarry lease over an extent of 1.46.0Ha at S.F.No. 133/2A (P), 133/2B1A (P) of Kondappanayanapalli Village, Bargur Taluk, Krishnagiri District, Tamil Nadu by Tmt. M. Sadhana - For Environmental Clearance. (SIA/TN/MIN/44635/2019 Dt. 19.10.2021)

Earlier, the proposal was placed in 256<sup>th</sup> SEAC meeting held on 24.03.2022, 500<sup>th</sup> SEIAA meeting held on 18.04.2022, 285<sup>th</sup> SEAC meeting held on 16.06.2022 and 530<sup>th</sup> SEIAA meeting held on 11.07.2022. The details of the minutes are given in the website (parivesh.nic.in).

The SEAC noted the following:

1. The Project Proponent, Tmt. M. Sadhana has applied for Environmental Clearance for the proposed Grey Granite quarry lease over an extent of 1.46.0 Ha at S.F.No.133/2A(P), 133/2B1A (P) of Kondappanayanapalli Village, Bargur Taluk, Krishnagiri District, Tamil Nadu .
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The Production for the five years states that total quantity should not exceed 31,990 m<sup>3</sup> of ROM with an ultimate depth of mining is 30m below ground level.
4. ToR issued vide Lr.No.SEIAA-TN/F.No.7264/SEAC/ToR-866/2020 Dated: 12.03.2021.
5. Public hearing was conducted on 11.08.2021.

In the 285<sup>th</sup> SEAC meeting, the committee recommended the proposal for the grant of Environmental Clearance.

Subsequently, the subject was placed in 530<sup>th</sup> SEIAA meeting held on 11.07.2022.

  
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The Authority noted that as per the approved mining plan/mine closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that:

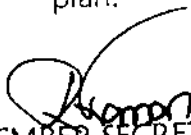
- a. The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- b. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- c. Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussion decided to **refer back the proposal to SEAC** for specific recommendation with justification for grant of environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of production quantity after the receipt of following details from the project proponent.

- i) The proponent shall submit the details of utilization of total quantity of granite waste till the life of the quarry period for beneficial purpose.
- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.

  
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- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- v) AD/Competent authority of Geology & Mining Dept. justification for according permission interims of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land back fills.
- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- ix) On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

In this regard, the proposal was reappraised in this 304<sup>th</sup> SEAC meeting held on 20.08.2022. The project proponent gave a presentation incorporating the details requested by SEIAA.

The PP has furnished a detailed clarifications covering the points raised by SEIAA as given below:

1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geo-mechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness

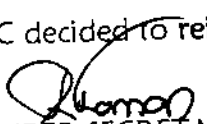
  
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of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces, while the RoM can easily be quantified at the time of preparation of mining plan.

3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. During the approval of Mining Plan, the RoM from which saleable fraction is produced are taken into consideration.
7. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
8. **SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.**
9. As per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
10. The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

Based on the presentation and the details furnished by the project proponent, the SEAC decided to **reiterate the recommendation already made in 256<sup>th</sup> and 285<sup>th</sup> SEAC**

  
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Meetings. Further, the other conditions shall remain unaltered.

Agenda No: 304-02

(File No: 6900/2022)

Existing Black Granite quarry lease over an extent of 6.00.0 Ha S.F.Nos.1193/1 (Part-15) Kodakkal Village, Sholingur Taluk, Ranipet District, Tamil Nadu by M/s TAMIN - For amendment in Environmental Clearance issued. (SIA/TN/MIN/275516/2022 Dt: 30.5.2022)

Earlier, the proposal was placed in 291<sup>st</sup> SEAC meeting held on 02.07.2022. The details of the minutes are given in the website (parivesh.nic.in).

SEAC noted the following:

- In the Mineral Concession Rules, 1960, (hereinafter referred to as the principal rules), in rule 2, in sub rule (1), after clause (vii), the following clause is inserted, namely:-

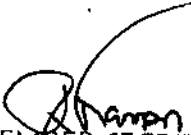
*'(vii a) "run-of-mine" means the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area;'*

- The PP was issued with Environmental Clearance vide Lr.No.SEIAA-TN/F.No.6900/1(a)/EC.No:4615/2020 dated:27.03.2021 for the production in ROM: 90011 M<sup>3</sup>, 9002 m<sup>3</sup> of black granite and Granite Waste: 81009 m<sup>3</sup> Black Granite for the period of 5 Years from the date of Execution of mining lease.
- Now, the PP has applied for an amendment in the existing EC issued for the following.

Production qty as per EC	Amendment Sought
RoM: 90011 M <sup>3</sup> , 9002 M <sup>3</sup> of black granite and Granite Waste: 81009 m <sup>3</sup> Black Granite for the period of 5 Years	18,015 M <sup>3</sup> of RoM per annum.

The PP also furnished the following

- The TAMIN production targets are conservative and follow the government mining rules and regulations to quarry the Black granite, Dolerite at this location and sold to international and domestic markets.
- The PP is also demarcated a dedicated area within the leasehold area for dumping of the non-saleable granite waste.


  
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- The waste rock (or) overburden rock (or) other rejects excavated in the quarry is also dumped within the leasehold area and it is proposed to backfill the worked out granite quarry faces using the aforesaid material during the final closure plan, with a view to restore the land to its original use (or) desired alternate use.
- In case of non-feasibility of backfilling, the waste dumps will suitably terraced and stabilised by planting adequate vegetation as indicated by the SEAC, as a part of progressive mine closure plan in line with statutory provisions of the Granite Conservation & Development Rules, 1999 and MMR 1961.
- Long term & shorter ecological and environmental impacts such as air pollution due to dust, exhaust emissions or fumes, the discharge of toxic and objectionable effluents, noise arising out during the mining operations of granite and related activities are adequately mitigated in the EMP.
- TAMIN intends to mine Geologically called as Dolerite and commercially known as "G 15"
- It is submitted that the environmental impact is directly linked to ROM being mined out from the mineralised zone of quarry and not restricted to saleable production quantity (recovery alone).
- Since the EC limits saleable production quantity (recovery only), it is observed that the quarry managers tend to extricate a very miniscule quantity of absolutely defect free material.
- In many quarries the recovery even falls down to very low value as 2% of RoM. This is neither in the interest of revenue generation for TAMIN (or) the State Government and also it is also not helping to protect the environment.
- Mining recoverable reserves may vary subject to the quality of Granite rock, Mining method and Geological features such as structural, textural formations and the market demand for the Granite being mined.
- It is well known that without extracting the Run of Mine (ROM) the recoverable production (recovery) is not possible.

SEAC carefully considered the request of the PP based on the presentation made and the details furnished by the PP. SEAC noted the following.

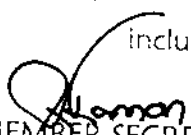
1. PP has requested the following amendment.

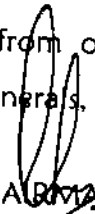
  
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Production qty as per EC	Amendment sought
RoM: 90011 M <sup>3</sup> , 9002 M <sup>3</sup> of black granite; and Granite Waste: 81009 M <sup>3</sup> Black Granite for the period of 5 Years	18,015 M <sup>3</sup> of RoM per Annum

2. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
3. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geo-mechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
4. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
5. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
6. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
7. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).

  
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8. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
9. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
10. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.
11. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.

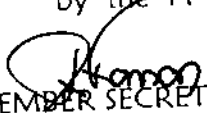
Considering all the above, the Committee recommended the following amendment to the EC subject to the conditions stated therein.

Production qty as per EC	Amendment Recommended
RoM: 90011 M <sup>3</sup> , 9002 M <sup>3</sup> of black granite and Granite Waste: 81009 M <sup>3</sup> Black Granite for the period of 5 Years	18,015 M <sup>3</sup> of per annum peak RoM.

Subsequently, the subject was placed in 536<sup>th</sup> SEIAA meeting held on 26.07.2022.

The Authority after detailed discussion decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- i) EC has been issued & mentioned with the quantity of ROM, Products & Waste etc., as per the mining plan. If any revision is required, the PP shall obtain necessary revision/amendment in the approved mining plan from the competent authority.
- ii) The PP shall furnish the revised/detailed mine closure plan by considering ROM/total excavation from the competent authority.
- iii) The point (xiv) of the mining plan approval letter dated: 18.05.2019 submitted by the PP states that, "Tvl.TAMIN Ltd shall produce current mining dues

  
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*clearance certificate as per the affidavit filed along with the application, on grant of mining lease for this area before the execution of lease deed".*


- iv) In this regard, PP shall furnish document proof for the same.
- v) The proponent shall submit the details of utilization of total quantity of granite Waste of the quarry period for beneficial purpose.
- vi) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- vii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed for the quarry pits.
- viii) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- ix) AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- x) Can waste and such tailings be used for land backfills.
- xi) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- xii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- xiii) On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

In this regard, the proposal was reappraised in this 304<sup>th</sup> SEAC meeting held on 20.08.2022. The project proponent gave a presentation incorporating the details requested by SEIAA. Based on the presentation and the details furnished by the project proponent, the SEAC **decided to reiterate the recommendation already made** in 291<sup>st</sup> SEAC Meeting and other conditions remaining unaltered. **Further, the other conditions shall remain unaltered.**

Agenda No: 304-03

(File No: 4415/2022)

Existing Black Granite quarry lease over an extent of 16.72.0 Ha S.F.Nos. Palamalai RF Yellikaradu (Bit-II) Village, Mettur Range & Taluk, Salem District, Tamil Nadu by

  
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M/s TAMIN - For amendment in Environmental Clearance issued.  
(SIA/TN/MIN/275815/2022 Dt: 31.5.2022)

Earlier, the proposal was placed in 291<sup>st</sup> SEAC meeting held on 02.07.2022.  
The details of the minutes are given in the website (parivesh.nic.in).

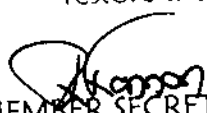
**SEAC noted the following:**


- In the Mineral Concession Rules, 1960, (hereinafter referred to as the principal rules), in rule 2, in sub rule (1), after clause (vii), the following clause is inserted, namely:-  
*'(vii a) "run-of-mine" means the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.'*
- The PP has issued with Environmental Clearance vide Lr.No.SEIAA-TN/F.No.441511(a)/ EC.No: 3889/2016 dated:14.11.2016 for the production in 2419 m<sup>3</sup> / Annum of black granite and Granite Waste: 113881 m<sup>3</sup> /Annum for the period of 20 Years from the date of Execution of mining lease.
- Now, the PP has applied for amendment in the existing EC issued for the following.

Production qty as per EC	Amendment Sought
2419 M <sup>3</sup> / Annum of black granite and Granite Waste: 113881 M <sup>3</sup> /Annum for the period of 20 Years from the date of Execution of mining lease.	48375 M <sup>3</sup> of RoM per Annum

The PP also furnished the following

- The TAMIN production targets are conservative and follow the government mining rules and regulations to quarry the Black granite, Dolerite at this location and sold to international and domestic markets.
- The PP is also demarcated a dedicated area within the leasehold area for dumping of the non-saleable granite waste.
- The waste rock (or) overburden rock (or) other rejects excavated in the quarry is also dumped within the leasehold area and it will be backfilled into the worked out granite quarry faces during the final closure plan, with a view to restore the land to its original use (or) desired alternate use.

  
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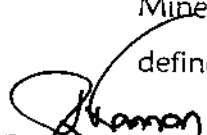
- In case of non-feasibility of backfilling, the waste dumps will suitably terraced and stabilised by planting adequate vegetation as indicated by the SEAC, as a part of progressive mine closure plan.
- Long term & shorter ecological and environmental impacts such as air pollution due to dust, exhaust emissions or fumes, the discharge of toxic and objectionable effluents noise arising out during the mining operations of granite and related activities are adequately mitigated in the EMP.
- It is submitted that the environmental impact is directly linked to ROM being mined out from the mineralised zone of quarry and not restricted to saleable production quantity (recovery alone).
- Since the EC limits saleable production quantity (recovery only), it is observed that our quarry managers tend to extricate a very miniscule quantity of absolutely defect free material.
- In many quarries the recovery falls down to very low value as 2% of RoM. This is neither in the interest of revenue generation for TAMIN (or) the State Government and also it is also not helping to protect the environment.
- Mining recoverable reserves may vary subject to the quality of Granite mining method and Geological features such as structural, textural formations and the market demand for the Granite being mined.
- It is well known that without extracting the Run of Mine (ROM) the recoverable production (recovery) is not possible.

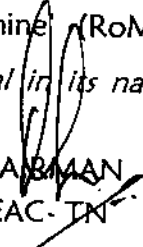
SEAC carefully considered the request of the PP based on the presentation made and the details furnished by the PP. SEAC noted the following.

1. PP has requested the following amendment.

Production qty as per EC	Amendment Sought
2419 M <sup>3</sup> / Annum of black granite and Granite Waste: 113881 M <sup>3</sup> /Annum for the period of 20 Years from the date of Execution of mining lease.	48375 M <sup>3</sup> of RoM per Annum

2. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural*

  
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*state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.*

3. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
4. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
5. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
6. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
7. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
8. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
9. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
10. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.
11. By allowing the mineral rejects to be moved out from the leasehold area.


the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade


Considering all the above, the **Committee recommended** the following amendment to the EC subject to the following conditions.

Production qty as per EC	Amendment Recommended
2419 M <sup>3</sup> / Annum of black granite and Granite Waste: 113881 M <sup>3</sup> /Annum for the period of 20 Years from the date of Execution of mining lease.	48375 M <sup>3</sup> of peak annual RoM production.

Subsequently, the subject was placed in 536<sup>th</sup> SEIAA meeting held on 26.07.2022.

- i) The Authority after detailed discussion decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.
- ii) EC has been issued & mentioned with the quantity of Products & rejects as per the mining plan. If any revision is required, the PP shall obtain necessary revision/amendment in the approved mining plan from the competent authority.
- iii) The PP shall furnish the revised/detailed mine closure plan by considering ROM/total excavation from the competent authority.
- iv) The proponent shall furnish details of quantity that has been mined since the issue of Environmental Clearance vide letter dated.14.11.2016.
- v) As specified in the condition(s) of Environmental Clearance issued vide letter dated.14.11.2016, the project proponent shall furnish details/document proof for the following:
  - a. advertisement given in two or more local newspapers before commencing mining operation as specified in EC.
  - b. Land use classification document obtained from competent authority

  
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- c. NOC obtained from CGWA
  - d. NOC obtained from NBWL
  - e. CTE obtained from TNPCB
- vi) The proponent shall submit the details of utilization of total quantity of granite Waste of the quarry period for beneficial purpose.
- vii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- viii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed for the quarry pits.
- ix) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- x) AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- xi) Can waste and such tailings be used for land backfills.
- xii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- xiii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- xiv) On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

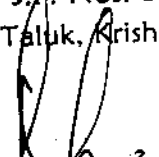
In this regard, the proposal was reappraised in this 304<sup>th</sup> SEAC meeting held on 20.08.2022. The project proponent gave a presentation incorporating the details requested by SEIAA. Based on the presentation and the details furnished by the project proponent, the SEAC **decided to reiterate the recommendation already made** in 291<sup>st</sup> SEAC Meeting and other conditions remaining unaltered.

**Agenda No: 304 -04**

**(File No: 4878/2015)**

**Proposed Grey Granite quarry lease over an extent of 3.90.0 Ha in S.F. Nos. 378/3, 379/7 & 379/8, Chendarapalli Village, Bargur (Formerly Krishnagiri) Taluk, Krishnagiri**

  
MEMBER SECRETARY  
SEAC -TN

  
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SEAC -TN

District by Tmt. M. Mariam Banu - For Environmental Clearance Amendment. (SIA/TN/MIN/ 193703 /2021, dated: 20.01.2021).

Earlier, the proposal was placed for appraisal in this 285<sup>th</sup> meeting of SEAC held on 16.06.2022. 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. M. Mariam Banu has applied for amendment in the Environmental Clearance issued for the grey granite quarry lease area over an extent of 3.90.0 Ha at S.F.No 378/3, 379/7 & 379/8, Chendarapalli Village, Krishnagiri 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. Tmt. M. Mariam Banu, had obtained Environmental Clearance vide Lr. No. SEIAATN/F.No.4878/EC/1(a)/2812/2015 Dated: 08.02.2016 – Grey Granite Quarry over an extent of 3.90.0 ha in SF No. 378/3, 379/7 and 379/8 at Chendarapalli Village of Krishnagiri Taluk, Krishnagiri District and Tamil Nadu State, with Validity of Environmental Clearance coterminous with the mine lease period or limited to a maximum of 5 years from the date of issue whichever is earlier.
4. The project proponent has obtained certified compliance report from MoEF & CC, Chennai Region vide letter No. E.P.12.1/2021-22/SEIAA/21/TN/1180 Dated 01.12.2021.
5. Now, as per the Mineral Concession Rules, 1960 & Granite Conservation and Development Rules, 1999, a Scheme of Mining was submitted for a five-year period (2021-22 to 2025-26) and the Scheme of Mining was approved by the Director of Geology and Mining, Guindy, Chennai vide Rc. No. 6256/MM4/2020, dated 27.11.2020.
6. The Scheme of Quarrying was prepared and approved for quantity not exceeding the quantity in previous Mining Plan and there shall be no modification in quantity or area of the proposal.

  
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7. Now the project proponent has submitted online application system for extension of validity of the Environmental Clearance for the remaining Lease Period.
8. As per the mining plan, the lease period is for 20 years. The production for 5 years (as per approved scheme mining 2021-22 to 2025-26) not to exceed – ROM – 48,365 m<sup>3</sup> (Recovery @25% =12,091 m<sup>3</sup> & Waste@ 75% = 36,274 m<sup>3</sup> grey granite). The Annual peak production as per scheme is 2468 m<sup>3</sup> of grey granite with proposed depth of 13m (BGL).

Based on the presentation and document furnished by the project proponent, SEAC decided to **recommend the proposal for the grant of Environmental Clearance amendment**, subject to the standard conditions and normal conditions stipulated by MOEF&CC, in addition to the specific conditions:

Subsequently, it was placed in 530th SEIAA meeting held on 11.7.2022 and decided to refer back to SEAC for the following reasons.

**The Authority noted the following**

- i) Environmental clearance was issued Lr. No.SEIAA-TN/F.No.4878/EC/1(a)/2812/2015dt:08.02.2016 under B2 Category to the Tmt. M. Mariam Banu for the Grey Granite Quarry lease over an extent of 3.90.0 Ha located at S.F. No. 378/3, 379/7 & 379/8, Chendarapalli Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu for the production of 12106 cu.m of Grey Granite at a depth of 13m (10m Grey Granite & 3m Gravelly soil) for the period of 5 years.
- ii) Now, the project proponent has submitted proposal seeking extension of validity for the said Environmental Clearance issued for their 2nd scheme of mining (from 2021 to 2026) with valid lease period up to 28.02.2036.
- iii) Further, it was noticed that AD Mines vide Lr. RoC. No.1217/2020/mines Dt:24.12.2020 furnished 500 m radius cluster certificate which reveals that the proposed mine lease cluster area is > 5 ha as per MoEF&CC EIA notification Dt:01.07.2016 which requires TOR, Public hearing & EIA report for appraisal.

  
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Also, the Authority noted that as per the approved scheme of review of mining plan/mine closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999

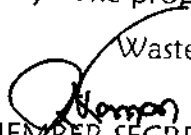
- i) The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- ii) Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- iii) Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussion decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity and clarification regarding the recommendation for "Environmental Clearance Amendment" after the receipt of following details from the project proponent.

- i) The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.

  
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- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- v) AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land backfills.
- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- ix) On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

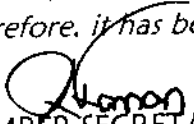
Now, the proposal placed for appraisal in this 304<sup>th</sup> meeting of SEAC held on 20.08.2022. The Project proponent made a presentation along with the clarifications for the above shortcomings observed by the SEIAA.

Further, the SEAC have noted the following six clarifications presented by the PP:

- (1) Legal provisions, namely,

**MoEF CC OM No. Z-11013/55/2016-IA.II (M), Dated. 20.04.2017:**

*"...the EC is appraised in background of approved mining plan and mining scheme which are 30 years and 5 years respectively. It has been decided that 30 years period is long enough for EC as many technological changes can come up between, which have impact on mining and efficient management associated with mining operation. Therefore, it has been decided to keep the validity of EC only 30 years..."*

  
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MoEF CC S.O No. 674 (E), Dated. 13.03.2013"

*"no fresh environmental clearance is required for a mining project or activity at the time of renewal of mining lease, which has already obtained environmental clearance under EIA Notification, 2006."*

MoEF CC OM No. Z-11011/15/2012-IA.II (M) (Pt.), Dated. 02.06.2014:

*"...that the requirement of environmental clearance shall not be applicable at the time of renewal of mining lease for all cases including pending cases if the environmental clearance has already been obtained under the notification of 2006".*

MoEF CC OM No. J-11011/15/2012-IA.II (M), Dated. 20.03.2015 -Valid & subsisting EC

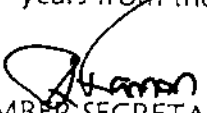
*"The Ministry has received reference on the applicability of the provision of requirement of Environment Clearance (EC) at the time of renewal of lease, even if a valid and subsisting environment clearance is held by a PP, at the point of time the PP seeks renewal of the mining lease.*

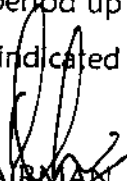
*After due consideration and examination of relevant judicial pronouncements and the OM's issued in this regard, it is clarified that the PP which has a valid and subsisting EC for their mining project either under EIA Notification 1994 or EIA Notification 2006, will not be required to obtain fresh EC at the time of renewal of the lease. This is subject to the maximum period of validity of the EC being for mining lease for 30 years."*

MoEF CC S.O No. 1141 (E), Dated. 29.04.2015"

*" the validity may be extended by the regulatory authority concerned by a maximum period if an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form I.....  
.....Provided further that the regulatory authority may also consult the Expert Appraisal Committee or State Level Expert Appraisal Committee, as the case may be, for grant of such extension."*

- (2) The PP have applied for extension of validity of Environment Clearance (EC) when the lease period is alive and having the validity for 20 years as per the approved mining plan. Further, it is informed that as per the Rule 18 of Granite Conservation and Development Rules, 1999, every mining plan duly approved under these Rules shall be valid for the entire duration of the lease.
- (3) Under these, circumstances the PP would like to extend the EC period up to 20 years from the date of grant of original EC period as it has been indicated in the

  
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approved Mining Plan and also there is no modification or increase in production quantity/extent.

- (4) During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
- (5) The project proponent has also obtained certified compliance report from MoEF & CC, Chennai Region vide letter No. E.P.12.1/2021-22/SEIAA/21/TN/1180 Dated 01.12.2021.
- (6) The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

Based on the aforesaid clarifications presented by the PP, the committee **decided to reiterate the recommendation already made** in 285<sup>th</sup> Meeting of SEAC held on 16.06.2022, following the directions in MoEF&CC Notification S.O. 1807(E) dated 12.04.2022, namely, *"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"*. Further, the other conditions shall remain unaltered.


**Agenda No: 304-05**

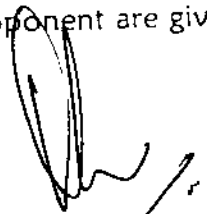
**(File No: 6817/2021)**

Existing grey granite quarry lease area over an extent of 1.21.0 Ha at S.F.No. 116/1 (P), Ikondamkothapalli Village, Bargur Taluk, Krishnagiri District by Thiru. T.Ekambavanan- For Environmental Clearance Amendment. (SIA/TN/MIN/180384/2020, dated: 23.10.2020).

Earlier, the proposal was placed for appraisal in 266<sup>th</sup> meeting of SEAC held on 27.4.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).


**The SEAC noted the following:**

  
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1. The project proponent, Thiru. T.Ekambavanan has applied for amendment in the Environmental Clearance issued for the existing grey granite quarry lease area over an extent of 1.21.0 Ha at S.F.No 116/1 (P), Ikondamkothapalli Village, Bargur 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 PP was issued with Environmental Clearance vide Lr No. SEIAA-TN/F.No. 6817/1(a)/EC.No. 4073/2019 Dt. 19.11.2019.
  4. The project proponent has furnished Certified Compliance Report from MoEF & CC, Regional office, Chennai vide Lr. No. E.P./12.1/2021-22/SEIAA/38/TN/085 Dated: 21.01.2022.
  5. The PP has furnished the revised scheme of mining for the period 2021-22 to 2025-26 not to exceed -ROM - 30336 m<sup>3</sup> & 9100m<sup>3</sup> grey granite. The annual peak production as per scheme is 1961 m<sup>3</sup> of grey granite (2<sup>nd</sup> year) with ultimate depth of 31<sup>3</sup> (BGL) and requesting for Extension of validity Environmental clearance.
  6. As per the Mineral Concession Rules, 1960 & Granite Conservation and Development Rules, 1999, a Scheme of Mining was submitted for a five-year period (2021-22 to 2025-26) and the Scheme of Mining was approved by the Director of Geology and Mining, Guindy, Chennai vide Rc. No. 6734/MM4/2020, dated 06.01.2021.
  7. The Scheme of Quarrying was prepared and approved for quantity not exceeding the quantity in previous Mining Plan and there shall be no modification in quantity or area of the proposal.
  8. The project proponent has submitted online application system for extension of validity of the Environmental Clearance for the remaining Lease Period.
  9. The project proponent has submitted online application system for extension of validity of the Environmental Clearance for the remaining Lease Period.
- Based on the presentation and document furnished by the project proponent, 266<sup>th</sup> SEAC decided to call for the following additional details from the PP.

  
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1. The project proponent shall furnish a letter from DFO indicating the details of nearest Reserve Forest (Thogarappalli) and its distance with respect to the project site.

The project proponent has furnished the reply vide letter dated 11.05.2022, stating that the Thogarappalli RF is at a distance of 1.10 km from the proposed site.

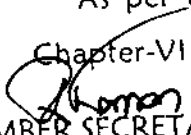
Now, the proposal was placed for appraisal in this 285<sup>th</sup> meeting of SEAC held on 16.06.2022. The Project proponent made a presentation along with clarification for the above shortcomings observed by the SEAC.

Based on the presentation and document furnished by the project proponent, SEAC decided to **recommend the proposal for the grant of Environmental Clearance amendment**, subject to the standard conditions and normal conditions stipulated by MOEF&CC, in addition to the specific conditions.

Subsequently, it was placed in 503<sup>th</sup> SEIAA meeting held on 11.7.2022 decided to refer back this proposal to SEAC for the following reasons.

1. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999,
2. The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
3. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
4. Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999.

  
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"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussions, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity and clarification regarding the recommendation for "Environmental Clearance Amendment" after the receipt of following details from the project proponent.

1. The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
2. The proponent shall submit revised progressive mine closure & rehabilitation plan.
3. To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
4. Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise
5. AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
6. Can waste and such tailings be used for land back fills?
7. Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition?
8. Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
9. On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

Now, the proposal was placed for appraisal in this 304<sup>th</sup> meeting of SEAC held on

  
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20.08.2022. The Project proponent made a presentation along with clarifications for the above shortcomings observed by the SEIAA. Further the PP had presented the following clarifications:

1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geo-mechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration from the view point of economic viability of project during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.



8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
9. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.
10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
11. The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 266<sup>th</sup> Meeting of SEAC held on 27.04.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

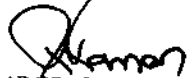
Agenda No: 304 -06

(File No: 7392/2019)

Proposed Multi - Colour Granite quarry lease over an extent of 2.20.5 Ha at S.F.Nos. 489/3B, 489/4B and 489/5A2 of Sithampoondi Village, Paramathi-Velur Taluk, Namakkal District, Tamil Nadu by M/s. Mahasen Exports - For Environmental Clearance. (SI/TN/MIN/ 48153/2019 Dt. 24.11.2021)

Earlier, this proposal was placed in 256<sup>th</sup> SEAC meeting held on 24.03.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

  
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CHAIRMAN  
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1. The Project Proponent, M/s. Mahasen Exports has applied for Environmental Clearance for the proposed Multi - Colour Granite quarry lease over an extent of 2.20.5 Ha at S.F.Nos. 489/3B, 489/4B and 489/5A2 of Sithampoondi Village, Paramathi-Velur Taluk, Namakkal District, Tamil Nadu .
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The Production for the five years states that total quantity should not exceed 55,170 m<sup>3</sup> of ROM with an ultimate depth of mining is 15m(2m Top soil + 3m weathered rock + 10m Multi-Colour Granite) below ground level.
4. ToR issued vide Lr.No.SEIAA-TN/F.No.7392/SEAC/ToR-730/2020 Dated: 30.06.2020.
5. Public hearing was conducted on 23.09.2021.

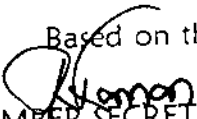
After examining the documents & project proposals furnished by the project proponent and based on the presentations & detailed deliberations, **SEAC recommended the proposal for the grant of Environmental Clearance** for the total Production for the period of five years states that total quantity should not exceed 31,990m<sup>3</sup> of ROM with an ultimate depth of 30m below ground level, subject to the standard conditions stipulated by MOEF &CC, in addition to specific conditions.

Subsequently, the subject was placed before the Authority in its 500<sup>th</sup> meeting held on 19.04.2022. After detailed discussions the Authority decided to request the Member Secretary, SEIAA TN to refer back the proposal to SEAC TN stating the following reasons.


On perusal of the mining plan, it was noticed that the maximum depth of the mining proposed is 15m for a period of 5 years and ROM is 55170 m<sup>3</sup>. Recovery of Granite is 65% i.e., 35862 m<sup>3</sup> and the waste is 19308 m<sup>3</sup>. The said facts may be ascertained.

The proposal placed for appraisal in the 285<sup>th</sup> meeting of SEAC held on 16.06.2022. The Project proponent made a presentation along with clarification for the above shortcomings observed by the SEIAA.

Based on the presentation and document furnished by the project proponent,

  
MEMBER SECRETARY  
SEAC -TN

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CHAIRMAN  
SEAC - TN

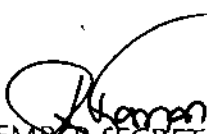
SEAC decided to recommend the proposal for the grant of Environmental Clearance, for the total Production for the period of five years states that total quantity should not exceed of 35862m<sup>3</sup> of ROM, Recovery of Granite @ 65% is 35,862m<sup>3</sup> and the Granite waste @ 35% is 19308m<sup>3</sup> with an ultimate depth of 15m below ground level. All other conditions stated in 256<sup>th</sup> SEAC meeting held on 24.03.2022 remain unaltered.

The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

- i) The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- ii) Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- iii) Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

  
MEMBER SECRETARY  
SEAC -TN

  
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SEAC -TN

The Authority after detailed discussion decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- i) The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- v) AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land back fills.
- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- ix) On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

Now, the proposal is placed for appraisal in the 304<sup>th</sup> meeting of SEAC held on 20.08.2022. The Project proponent made a presentation sought by the SEIAA covering the above points. Further the PP had presented the following clarifications:

As per the Minerals (Other than Atomic and Hydro Carbons Energy

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Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.

2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geo-mechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity. Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration from the view point of economic viability of project during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
9. SEAC noted that the PP has not asked for any change in the area, or in

RoM, or in the peak annual RoM.

10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
11. The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

Based on the presentation made, the committee **decided to reiterate the recommendation** already made in 285<sup>th</sup> Meeting of SEAC held on 16.06.2022. All the conditions prescribed will remain unaltered.

**Agenda No: 304-07**

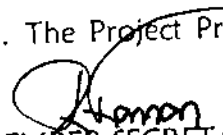
**(File No: 8960/2022)**

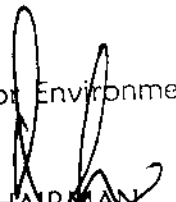
**Proposed Rough Stone and Gravel quarry lease over an extent of 3.80.85 Ha in S.F.Nos. 175/11,12,13,14,15(P),20(P), 21(P) & 556/1A(P) of Koothiparai Village, Aruppukkottai Taluk, Virudhunagar District, Tamil Nadu by Thiru S. Srinivasa Raghul for Environmental Clearance.(SIA/TN/MIN/253042/2022 Dated 29.01.2022)**

Earlier, this proposal was placed in the 279<sup>th</sup> Meeting of SEAC held on 28.05.2022. The project proponent gave detailed presentation. 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 S. Srinivasa Raghul has applied for Environmental

  
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Clearance for the proposed Rough Stone and Gravel quarry lease over an extent of 3.80.85 Ha in S.F.Nos. 175/11,12,13,14,15(P),20(P), 21(P) & 556/1A(P) of Koothiparai Village, Aruppukkottai Taluk, Virudhunagar District, Tamil Nadu

2. The proposed quarry/activity would fall under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per the mining plan, the lease period is 10 years and the mining plan for the period is 10 years. The quantum of mining for the entire 10 year period should not exceed - 7,35,000 cu.m. of Rough Stone, 1,29,360 Cu.m of Gravel and 20,068 cu.m. of Earth . The Annual peak production is 93275 Cu.m of Rough stone (9<sup>th</sup> year), 35280 Cu.m of Gravel (1<sup>st</sup> year) & 20068 Cu.m of Earth (1<sup>st</sup> year). The ultimate depth of mining- 48 metres below GL

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 standard conditions & normal conditions stipulated by MOEF &CC, in addition to the specific conditions:

Subsequently, it was placed in 525<sup>th</sup> SEIAA meeting and refer back the proposal to SEAC for following reasons

- i. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area from reputed research institutions on the following
  - a) Soil health & bio-diversity.
  - b) Climate change leading to Droughts, Floods etc.
  - c) Pollution leading to release of Greenhouse gases (GHG), rise in Temperature, & Livelihood of the local people.
  - d) Possibilities of water contamination and impact on aquatic ecosystem health.
  - e) Agriculture, Forestry & Traditional practices.
  - f) Hydrothermal/Geothermal effect due to destruction in the Environment.
  - g) Bio-geochemical processes and its foot prints including environmental stress.
  - h) Sediment geochemistry in the surface streams.

  
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- ii. Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby water bodies 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, covering the project life (or) subject to a maximum of thirty years, whichever is earlier.
- iii. To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/unfavorable accidents in & around the proposed mine lease area due to the proposed method of mining activity & its related activities.
- iv. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.
- v. Detailed Mine Closure Plan covering the project life (or) subject to a maximum of thirty years, whichever is earlier.

Detailed Environment Management Plan includes adaptation, mitigation & remedial strategies covering the project life (or) subject to a maximum of thirty years, whichever is earlier.

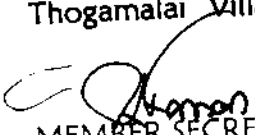
Now, the proposal was placed for appraisal in this 304<sup>th</sup> meeting of SEAC held on 20.08.2022. The Project proponent made a presentation along with the following clarifications for the above shortcomings observed by the SEIAA.

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 279<sup>th</sup> Meeting of SEAC held on 28.05.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

**Agenda No: 304 -08**

**(File No: 4039/2022)**

Existing Colour Granite quarry lease over an extent of 3.47.5 Ha S.F.Nos.276/2(P) Thogamalai Village, Kulithalai Taluk, Karur District, Tamil Nadu by M/s TAMIL -

  
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For amendment in Environmental Clearance issued.(SIA/TN/MIN/ 276238/2022 Dt: 2.6.2022)

Earlier, this proposal was placed in 291<sup>st</sup> SEAC meeting held on 2.7.2022. The project proponent has given a detailed presentation. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).


SEAC noted the following:

- In the Mineral Concession Rules, 1960, (hereinafter referred to as the principal rules), in rule 2, in sub rule (1), after clause (vii), the following clause is inserted, namely:-  
*'(vii a) "run-of-mine" means the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.'*
- The PP has issued with Environmental Clearance vide Lr.No.SEIAA-TN/F.No. 4039/1(a)/EC No.3885/2016 Dt. 14.11.2016 for the production of Colour granite 1225 m<sup>3</sup>/Annum & 11025 m<sup>3</sup>/Annum of Granite rejects for the mine lease period of 20 Years from the date of Execution of mining lease.
- Now, the PP has applied for amendment in the existing EC issued for the following.

Production qty as per EC	Amendment Sought
Colour granite 1225 M <sup>3</sup> /Annum & 11025 m <sup>3</sup> /Annum of Granite rejects	4897 M <sup>3</sup> of RoM per Annum

The PP also furnished the following

- The TAMIN production targets are conservative and follow the government mining rules and regulations to quarry the Black granite, Dolerite at this location and sold to international and domestic markets.
- The PP is also demarcated a dedicated area within the leasehold area for dumping of the non-saleable granite waste.
- The waste rock (or) overburden rock (or) other rejects excavated in the quarry is also dumped within the leasehold area and it will be backfilled into the worked out granite quarry faces during the final closure plan, with a view to restore the land to its original use (or) desired alternate use.

  
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- In case of non-feasibility of backfilling, the waste dumps will suitably terraced and stabilised by planting adequate vegetation as indicated by the SEAC, as a part of progressive mine closure plan.
- Long term & shorter ecological and environmental impacts such as air pollution due to dust, exhaust emissions or fumes, the discharge of toxic and objectionable effluents, noise arising out during the mining operations of granite and related activities are adequately mitigated in the EMP.
- It is submitted that the environmental impact is directly linked to ROM being mined out from the mineralised zone of quarry and not restricted to saleable production quantity (recovery alone).
- Since the EC limits saleable production quantity (recovery only), it is observed that our quarry managers tend to extricate a very miniscule quantity of absolutely defect free material.
- In many quarries the recovery falls down to very low value as 2% of RoM. This is neither in the interest of revenue generation for TAMIL (or) the State Government and also it is also not helping to protect the environment.
- Mining recoverable reserves may vary subject to the quality of Granite mining method and Geological features such as structural, textural formations and the market demand for the Granite being mined.
- It is well known that without extracting the Run of Mine (ROM) the recoverable production (recovery) is not possible.

SEAC carefully considered the request of the PP based on the presentation made and the details furnished by the PP. SEAC noted the following.

1. PP has requested the following amendment.

Production qty as per EC	Amendment sought
Colour granite 1225 M <sup>3</sup> /Annum & 11025 m <sup>3</sup> /Annum of Granite rejects	4897 M <sup>3</sup> of RoM per Annum

2. The term RoM includes raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.
3. The quantity of 'saleable mineral' depends on many factors such as the geology of the site, technology, workmanship, etc, and, therefore, is difficult to estimate accurately, while RoM can easily be estimated at the time of preparation of mining plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM, mineral and

mineral waste were mentioned.

5. EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'saleable mineral.'
6. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.

Considering all the above, the Committee recommends the following amendment to the EC subject to the certain conditions.

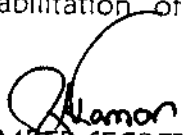
Production qty as per EC	Amendment Recommended
Colour granite 1225 M <sup>3</sup> /Annum & 11025 m <sup>3</sup> /Annum of Granite rejects	4897 M <sup>3</sup> of peak RoM per Annum

The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

- i) The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- ii) Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- iii) Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall

  
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complete this work before the conclusion of such operations and the abandonment of the granite quarry”.

The Authority after detailed discussion decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- i) The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits.
- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- v) AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land back fills.
- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- ix) impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

  
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- x) Industries (MME.2) department has issued G.O.(3D) No.22 dated 19.07.2002 in the para 3 states that

*"The Government have examined the quarry lease application of TAMIN based on the recommendations of District Collector of Karur and Director of Geology and Mining carefully and decided to accept the recommendations of the District Collector of Karur and to grant quarry lease to TAMIN for 20 years for the above subject area and subject to conditions specified by the Director of Geology and Mining."*

*Para 6 states that*

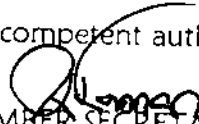
*"Under Rule 8c of the Tamil Nadu Minor mineral Concession Rules, 1959, the Governor of Tamil Nadu hereby sanction the grant of lease to Tamil Nadu Minerals Limited, Chennai an undertaking of the Government of Tamil Nadu to quarry other types of granite (multi-color granite) over an extent of 3.47.50 hectares of poramboke land in S.F.No.276/2 of Thogamalai Village, Kullthali Taluk, Karur District for a period of 20 (twenty) years with the usual terms and conditions specified in the Annexure I"*

Lease period almost over based on Industries (MME.2) department has issued G.O.(3D) No.22 dated 19.07.2002

xi) The project proponent has submitted unapproved scheme of mining –IV for the period from 01.04.2022 to 25.08.2022. The unapproved scheme of mining from 01.04.2022 to 25.08.2022 has RoM of 4,897 Cu.m (recovery – 1224 Cu.m & granite rejects – 3673 Cu.m). The project proponent shall submit the approved scheme of mining.

xii) The project proponent have not submitted the details with respect to the quantity of the minerals mined from the date of issuance of EC and depth achieved from the department of Geology and Mining.

xiii) EC has been issued & mentioned with the quantity of annual production of multicolour Granite & Granites reject as per mining plan. If any revision is required, the PP shall obtain necessary revision/ Amendment in the approved mining plan from the competent authority.

  
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xiv) The PP shall furnish the revised/ detailed mine closure plan by considering ROM/total excavation from the competent Authority.

Now, the proposal was placed for appraisal in this 304<sup>th</sup> meeting of SEAC held on 20.08.2022. The Project proponent informed that the mining lease issued vide G.O.(3D) No.22 dated 19.07.2002 by Industries (MME.2) department will expire by the end of this month and hence, requested to withdraw the proposals. SEAC, therefore, decided to recommend to SEIAA that the PP may be allowed to withdraw the proposal as desired by the PP.

**Agenda No: 304-09**

**(File No: 6741/2022)**

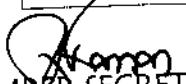
**Existing Black Granite quarry lease over an extent of 7.80.0 Ha S.F.Nos.324/1 . Samanur Village, Palacode Taluk, Dharmapuri District, Tamil Nadu by M/s TAMIN - For amendment in Environmental Clearance issued. (SIA/TN/MIN/275746/2022 Dt: 31.5.2022)**

Earlier, this proposal was placed in 291<sup>st</sup> SEAC meeting held on 2.7.2022. The project proponent has given a detailed presentation. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

**SEAC noted the following:**

- In the Mineral Concession Rules, 1960, (hereinafter referred to as the principal rules), in rule 2, in sub rule (1), after clause (vii), the following clause is inserted, namely:-  
*'(vii a) "run-of-mine" means the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.'*
- The PP has issued with Environmental Clearance vide Lr.No.SEIAA-TN/ F.No.6741/1(a)/EC.No: 4679/2021 dated: 29.07.2021 for the production in RoM: 119987M<sup>3</sup> and Black Granite : 5999 M<sup>3</sup> (5% Recovery) & Granite waste: 113988 m<sup>3</sup> the period of 5 Years from the date of Execution of mining lease.
- Now, the PP has applied for amendment in the existing EC issued for the following.

Production quantity as per EC	Amendment Sought
RoM: 119987 M <sup>3</sup> of Black Granite, Black Granite: 5999 M <sup>3</sup> (5% Recovery) & Granite waste: 113988 M <sup>3</sup> the period of 5	24017 M <sup>3</sup> of RoM per Annum

  
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Years.


The PP also furnished the following

- The TAMIN production targets are conservative and follow the government mining rules and regulations to quarry the Black granite, Dolerite at this location and sold to international and domestic markets.
- The PP is also demarcated a dedicated area within the leasehold area for dumping of the non-saleable granite waste.
- The waste rock (or) overburden rock (or) other rejects excavated in the quarry is also dumped within the leasehold area and it will be backfilled into the worked out granite quarry faces during the final closure plan, with a view to restore the land to its original use (or) desired alternate use.
- In case of non-feasibility of backfilling, the waste dumps will suitably terraced and stabilised by planting adequate vegetation as indicated by the SEAC, as a part of progressive mine closure plan.
- Long term & shorter ecological and environmental impacts such as air pollution due to dust, exhaust emissions or fumes, the discharge of toxic and objectionable effluents, noise arising out during the mining operations of granite and related activities are adequately mitigated in the EMP.
- It is submitted that the environmental impact is directly linked to ROM being mined out from the mineralised zone of quarry and not restricted to saleable production quantity (recovery alone).
- Since the EC limits saleable production quantity (recovery only), it is observed that our quarry managers tend to extricate a very miniscule quantity of absolutely defect free material.
- In many quarries the recovery falls down to very low value as 2% of RoM. This is neither in the interest of revenue generation for TAMIN (or) the State Government and also it is also not helping to protect the environment.
- Mining recoverable reserves may vary subject to the quality of Granite mining method and Geological features such as structural, textural formations and the market demand for the Granite being mined.
- It is well known that without extracting the Run of Mine (ROM) the recoverable production (recovery) is not possible.

SEAC carefully considered the request of the PP based on the presentation made and the details furnished by the PP. SEAC noted the following.

1. PP has requested the following amendment.

Production qty as per EC	Amendment Sought
RoM: 119987 M <sup>3</sup> of Black Granite, Black Granite: 5999 M <sup>3</sup> (5% Recovery) & Granite waste: 113988 M <sup>3</sup> the period of 5 Years.	24017 M <sup>3</sup> of RoM per Annum

  
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2. The term RoM includes raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.
3. The quantity of 'saleable mineral' depends on many factors such as the geology of the site, technology, workmanship, etc, and, therefore, is difficult to estimate accurately, while RoM can easily be estimated at the time of preparation of mining plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM, mineral and mineral waste were mentioned.
5. EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'saleable mineral.'
6. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.

Considering all the above, the Committee recommends the following amendment to the EC subject to the certain conditions.

Production qty as per EC	Amendment Recommended
RoM: 119987 M <sup>3</sup> of Black Granite, Black Granite: 5999 M <sup>3</sup> (5% Recovery) & Granite waste: 113988 M <sup>3</sup> the period of 5 Years.	24017 M <sup>3</sup> of peak RoM per Annum

The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

- i) The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- ii) Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- iii) Wherever possible, such waste rock or overburden or other rejects shall be backfilled into the worked out granite quarry, where granite has been

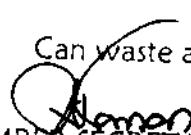


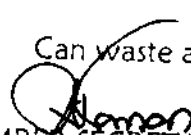
recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussion decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- i) The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits.
- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- v) /Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land back fills.

  
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- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- ix) Impact due to transportation of the granite waste on the access road and the equipments, and social impacts.
- x) The project proponent have not submitted the details with respect to the quantity of the minerals mined from the date of issuance of EC and depth achieved from the department of Geology and Mining.
- xi) EC has been issued & mentioned with the quantity of ROM, Products & Waste etc., as per mining plan. If any revision is required, the PP shall obtain necessary revision/ Amendment in the approved mining plan from the competent authority.
- xii) The PP shall furnish the revised/ detailed mine closure plan by considering ROM/total excavation from the competent Authority.
- xiii) The PP has issued with Environmental Clearance vide Lr.No. SEIAA-TN/ F.No.6741/1(a)/EC.No: 4679/2021 dated: 29.07.2021 for the production in RoM: 119987M3 and Black Granite : 5999 M3 (5% Recovery) & Granite waste: 113988 m3 the period of 5 Years from the date of Execution of mining lease subject to one of the conditions among others that
- The fugitive emission measures should be carried out during the mining operation and the report on the same may be submitted to SEIAA once in six months.

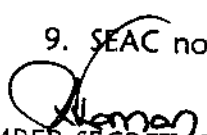
Lease was executed on 08.10.2021; Hence, PP is requested to submit the detail as per the EC conditions stated above.

Now, the proposal was placed for appraisal in this 304<sup>th</sup> meeting of SEAC held on 20.08.2022. The Project proponent made a presentation along with the following clarifications for the above shortcomings observed by the SEIAA.

  
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1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geo-mechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
9. SEAC noted that the PP has not asked for any change in the area, or in

  
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RoM, or in the peak annual RoM.

10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 291<sup>st</sup> SEAC meeting held on 02.07.202. All other conditions stipulated in the earlier minutes will remain unaltered.

Agenda No: 304-10

(File No: 4389/2022)

Existing Colour Granite quarry lease over an extent of 15.23.5 Ha S.F.Nos.176/1 (P) Chendrapalli Village, Bargur Taluk, Krishnagiri District, Tamil Nadu by M/s TAMIN - For amendment in Environmental Clearance issued. (SIA/TN/MIN/ 275880/2022 Dt: 1.6.2022)


Earlier, this proposal was placed in 291<sup>st</sup> SEAC meeting held on 2.7.2022. The project proponent has given a detailed presentation. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

The SEAC noted the following:

- In the Mineral Concession Rules, 1960, (hereinafter referred to as the principal rules), in rule 2, in sub rule (1), after clause (vii), the following clause is inserted, namely:-

*'(vii a) "run-of-mine" means the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area;'*

- The PP has issued with Environmental Clearance vide Lr.No.SEIAA-TN/F.No. 4389/EC/1(a).3975/2018 Dt. 30.4.2018 for the production of Colour granite 12068 m<sup>3</sup> for the period of 5 Years from the date of Execution of mining lease.

  
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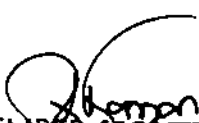
  
CHAIRMAN  
SEAC -TN

- Now, the PP has applied for amendment in the existing EC issued for the following.

Production qty as per EC	Amendment Sought
Production of Colour granite 12068 M <sup>3</sup> for period of 5 years from the date of execution of mining lease.	24,230 M <sup>3</sup> of RoM per Annum

The PP also furnished the following

- The TAMIN production targets are conservative and follow the government mining rules and regulations to quarry the Black granite, Dolerite at this location and sold to international and domestic markets.
- The PP is also demarcated a dedicated area within the leasehold area for dumping of the non-saleable granite waste.
- The waste rock (or) overburden rock (or) other rejects excavated in the quarry is also dumped within the leasehold area and it will be backfilled into the worked out granite quarry faces during the final closure plan, with a view to restore the land to its original use (or) desired alternate use.
- In case of non-feasibility of backfilling, the waste dumps will suitably terraced and stabilised by planting adequate vegetation as indicated by the SEAC, as a part of progressive mine closure plan.
- Long term & shorter ecological and environmental impacts such as air pollution due to dust, exhaust emissions or fumes, the discharge of toxic and objectionable effluents, noise arising out during the mining operations of granite and related activities are adequately mitigated in the EMP.
- It is submitted that the environmental impact is directly linked to ROM being mined out from the mineralised zone of quarry and not restricted to saleable production quantity (recovery alone).

  
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- Since the EC limits saleable production quantity (recovery only), it is observed that our quarry managers tend to extricate a very miniscule quantity of absolutely defect free material.
- In many quarries the recovery falls down to very low value as 2% of RoM. This is neither in the interest of revenue generation for TAMILNADU (or) the State Government and also it is also not helping to protect the environment.
- Mining recoverable reserves may vary subject to the quality of Granite mining method and Geological features such as structural, textural formations and the market demand for the Granite being mined.
- It is well known that without extracting the Run of Mine (ROM) the recoverable production (recovery) is not possible.

SEAC carefully considered the request of the PP based on the presentation made and the details furnished by the PP. SEAC noted the following.

1. PP has requested the following amendment.

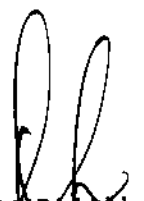
Production qty as per EC	Amendment Sought
Production of Colour granite 12068 M <sup>3</sup>	24230 M <sup>3</sup> of RoM per Annum

2. The term RoM includes raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.

3. The quantity of 'saleable mineral' depends on many factors such as the geology of the site, technology, workmanship, etc, and, therefore, is difficult to estimate accurately, while RoM can easily be estimated at the time of preparation of mining plan.

4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM, mineral and mineral waste were mentioned.

  
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5. EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'saleable mineral.'

6. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.

Considering all the above, the Committee recommends the following amendment to the EC subject to the certain conditions.


Production qty as per EC	Amendment Recommended
production of Colour granite 12068 M <sup>3</sup>	24230 M <sup>3</sup> of peak RoM per Annum

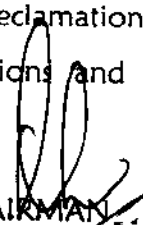
The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

- i) The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- ii) Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- iii) Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall

  
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complete this work before the conclusion of such operations and the abandonment of the granite quarry”.

The Authority after detailed discussion decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- i) The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits.
- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- v) AQ/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land back fills.
- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- ix) Impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

  
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- x) The project proponent have not submitted the details with respect to the quantity of the minerals mined from the date of issuance of EC and depth achieved from the department of Geology and Mining.
- xi) EC has been issued & mentioned with the quantity of colour Granite for the period of 5 years, as per mining plan. If any revision is required, the PP shall obtain necessary revision/ Amendment in the approved mining plan from the competent authority.

The PP shall furnish the revised/ detailed mine closure plan by considering ROM/total excavation from the competent Authority.

Now, the proposal placed for appraisal in this 304<sup>th</sup> meeting of SEAC held on 20.08.2022. The Project proponent made a presentation along with the following clarifications for the above shortcomings observed by the SEIAA.

1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM

which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.

5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
9. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.
10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.


The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 291<sup>st</sup> SEAC meeting held on 02.07.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

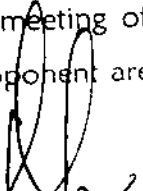
**Agenda No: 304-11.**

**(File No: 9122/2022)**

**Proposed gravel quarry lease over an extent of 1.44.0 Ha in S.F.Nos. 201/4, Keelaparuthiyur Village, Paramakudi Taluk, Ramanathapuram District, Tamil Nadu by Thiru. K.Kumaresan - For Environmental Clearance (SIA/ TN/MIN/ 262855/ 2022 Dt.22.03.2022)**

Earlier, the proposal was placed for appraisal in this 289<sup>th</sup> meeting of SEAC held on 24.06.2022. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

  
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The SEAC noted the following:

1. The project/activity is covered under Category "B2" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006.

Sl. No	Details of the proposal	
1	Name of the Owner/Firm	: Thiru.K.Kumaresan S/o. Kathirvel, Sub Contractor No.1/58,3rd Street, Gandhi Nagar Sengundram Chennai - 600052
2	Type of quarrying (Savudu/Rough Stone/Sand/Granite)	: Gravel
3	S.F No. Of the quarry site with area break-up	: 201/4
4	Village in which situated	: Keelaparuthiyur
5	Taluk in which situated	: Paramakudi
6	District in which situated	: Ramanathapuram
7	Extent of quarry (in ha.)	: 1.44.0Ha
8	Latitude & Longitude of all corners of the quarry site	: 09°33'00.36"N to 09°33'04.35"N 78°24'19.01"E to 78°24'27.20"E
9	Topo Sheet No.	: 58 - K/06
10	Type of mining	: Opencast Semi Mechanized Mining
11	Period of quarrying proposed	: 1 years
12	Production (Quantity in m <sup>3</sup> )	: As per the mining plan, the lease period is for 1 year. The mining plan is for the period of 1 year. The total production for 1 year not to exceed 16470 m <sup>3</sup> of Gravel with ultimate depth of 2m.
13	Depth of quarrying	: 2m
14	Depth of water table	: 35m BGL
15	Man Power requirement per day:	: 7 Nos.
16	Source of Water Requirement	: water vendors
17	Water requirement:	: 1.5KLD
	1. Drinking & domestic purposes (in KLD)	: 0.5KLD
	2. Dust suppression .	: 0.5 KLD
	Green Belt &Wet	: 0.5 KLD

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	Drilling (in KLD)	
18	Power requirement	TNEB
19	Whether any habitation within 300m distance	: No
20	Precise area communication approved by the, District Collector, with date	: Rc.No.G&M.2/30/2021, Dated: 24.01.2022
21	Mining Plan approved by Assistant Director (i/c), Department of Geology and Mining with date	: Rc.No.30/G&M.2/2021, Dated: 16.02.2022
22	Assistant Director (i/c), Department of Geology and Mining 500m cluster letter	: Rc.No.30/G&M.2/2021, Dated: 16.02.2022
23	VAO certificate regarding 300m radius cluster	: Letter Furnished
24	Project Cost (excluding EMP cost)	: Rs.8.33Lakh
25	EMP cost	: Capital Cost - Rs.1.60Lakhs Recurring Cost - Rs.2.10Lakhs
26	CER cost	: Rs. 1.50 Lakhs

Based on the documents furnished & the presentation made by the proponent, the SEAC recommended for grant of Environmental Clearance subject to the standard conditions & normal conditions stipulated by MOEF &CC, in addition to the specific conditions:

Subsequently this proposal was placed in the 534<sup>th</sup> Authority meeting held on 18.07.2022. The Authority after detailed discussion decided to refer back the proposal to SEAC for reappraisal on the receipt of following details from the project proponent.

- Details of quantity of Topsoil & Gravel in the total ROM of the proposed mine lease area.

The proposal was again placed for re-appraisal in this 304<sup>th</sup> meeting of SEAC held on 20.08. 2022. PP has stated that no overburden is involved and this has also been stated in the approved Mining Plan. The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 289<sup>th</sup> meeting of SEAC held on 24.06.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

  
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Agenda No: 304-12

(File No: 7842/2020)

Proposed Multi Coloured Granite quarry lease over an extent of 2.44.0Ha at S.F.Nos. 828 (part) & 830 of Kannanallur Village, Radhapuram Taluk, Tirunelveli District, Tamil Nadu by M/s.Chendhur Rocks - For Environmental Clearance. (SIA/TN/MIN/172156/2020, dated: 09.09.2020).


The proposal was placed for appraisal in 304<sup>th</sup> meeting of SEAC held on 20.08.2021. 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.Chendhur Rocks, has applied for Environmental Clearance for the proposed Multi coloured Granite quarry lease over an extent of 2.44.0Ha at S.F.Nos. 828 (part) & 830 Kannanallur Village, Radhapuram Taluk, Tirunelveli 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. As per mining plan the lease period is for 20 years. The production for the five years states that the total quantity of recoverable as 40,375m<sup>3</sup> (ROM)[Granite Reserves @ 30% 12,113m<sup>3</sup> and Granite waste @70% 28,262m<sup>3</sup>] and an ultimate depth of mining is 11m below ground level. The Annual peak production as per mining plan is 8,250cu.m ROM)[Granite Reserves @ 30% 2,475m<sup>3</sup> and Granite waste @70% 5,775m<sup>3</sup>].

Earlier, this proposal was placed for appraisal in the 229<sup>th</sup> meeting of SEAC held on 27.08.2021. Based on the presentation and documents furnished by the project proponent, SEAC noted that in Google image (9° 37' 33.52" N, 78° 5' 19, 18" E) shows the existence of this quarry and it appears that it is in operation and there is no evidence of stopping the activity before 15.01.2016. Hence the committee decided that, SEIAA office may check the same by writing a letter to proponent and clarify the issue on hearing from the proponent.

This proposal again placed for reappraisal in 259<sup>th</sup> meeting of SEAC held on 31.03.2022. Based on the presentation and document furnished by the project proponent, SEAC recommended the proposal for the grant of Environmental

  
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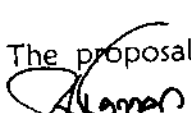
  
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**Clearance** subject to the certain conditions.

Subsequently, the subject was placed before the Authority in its 505<sup>th</sup> meeting held on 09.05.2022. After detailed discussion, the Authority decided to **refer back the proposal to SEAC**, after the receipt of following additional particulars with reference to project life (or) subject to a maximum of thirty years, whichever is earlier.

- i. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area on the following
  - a) Soil health & bio-diversity.
  - b) Climate change leading to Droughts, Floods etc.
  - c) Pollution leading to release of Greenhouse gases (GHG), rise in Temperature & Livelihood of the local people.
  - d) Possibilities of water contamination and impact on aquatic ecosystem health.
  - e) Agriculture, Forestry & Traditional practices.
- ii. Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby waterbodies 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, covering the project life (or) subject to a maximum of thirty years, whichever is earlier.
- iii. To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/untoward accidents in & around the proposed mine lease area due to the proposed method of mining activity & its related activities.
- iv. Detailed Mine Closure Plan covering the project life (or) subject to a maximum of thirty years, whichever is earlier.
- v. Detailed Environment Management Plan covering the project life (or) subject to a maximum of thirty years, whichever is earlier.

The proposal again placed for reappraisal in 285<sup>th</sup> meeting of SEAC held on

  
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16.06.2022. The EIA Coordinators/Functional Area Experts (FAEs) representing the PP, have responded to all the above queries raised by the SEIAA by providing adequate mitigation measures in their Revised Environmental Management Plan (EMP).

Therefore, the **SEAC has decided to recommend the proposal** based on the revised EMP incorporating the above points for issue of Environmental Clearance. All other conditions stated in 259<sup>th</sup> SEAC meeting held on 31.03.2022 remain unaltered.


Subsequently, the subject was placed before the Authority in its 530<sup>th</sup> meeting held on 11.07.2022. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

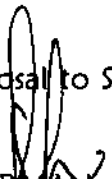
- i) The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- ii) Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- iii) Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussion, decided to refer back the proposal to SEAC

  
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for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- i) The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- v) AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land back fills.
- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- ix) On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

Now, the proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 20.08.2022. The PP has furnished a detailed clarifications covering the points raised by SEIAA as given below:

1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.



2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geo-mechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
9. **SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.**
10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral

depending on its grade.

11. The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 259<sup>th</sup> SEAC meeting held on 31.03.2022. All other conditions stipulated in the earlier minutes will remain unaltered.


**Agenda No: 304-13**  
**(File No: 8052/2020)**

**Proposed Multi-Colour Granite Quarry over an extent of 3.55.5 Ha in SF.No. 278/1, 278/2, 278/3, 278/4 & 278/5, Chinnakollapatti Village, Sattur Taluk, Virudhunagar District by Dr.C.Kalaichelvi- For Environmental Clearance. (SIA/TN/MIN/183759/2020 Dt. 16.2.2021)**

The proposal was placed in the 304<sup>th</sup> SEAC Meeting held on 20.08.2022. 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, Dr.C.Kalaichelvi has applied for Environmental Clearance for the Proposed Multi-Colour Granite Quarry over an extent of 3.55.5 Ha in SF.No. 278/1, 278/2, 278/3, 278/4 & 278/5, Chinnakollapatti Village, Sattur Taluk, Virudhunagar 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. As per mining plan the lease period is 20 years. The scheme of mining plan is for the period of 5 years. The total production for 5 years not to exceed ROM- 43,905 m<sup>3</sup>, Recovery(30%) 13172m<sup>3</sup> of granite & 30733 m<sup>3</sup> of Granite waste. The annual peak production ROM- 9540 m<sup>3</sup> (5"

  
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year)and Recovery 2862 m<sup>3</sup> of granite (5<sup>th</sup> year) with proposed pit dimension 26m BGL.


Earlier, this proposal was placed before 253<sup>rd</sup> SEAC Meeting held on 11.3.2022. 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 certain condition stated therein.

Subsequently this proposal has placed before 497<sup>th</sup> SEIAA meeting held on 7.4.2022. After detailed discussions, the Authority noted the following and decided to refer back the proposal to SEAC.

- I. In the minutes of the 253<sup>rd</sup> SEAC Meeting held on 11.3.2022. SEAC decided to recommend the proposal for the grant of Environmental Clearance for production for 5 years not exceed ROM- 43,905 m<sup>3</sup> and Recovery 13172m<sup>3</sup> of granite with proposed pit dimension 26m BGL, subject to certain conditions, one among others:
- II. The proponent shall furnish certified EC compliance report to TNPCB before obtaining CTO and copy furnished to SEIAA-TN.

In view of above conditions stated by SEAC, SEIAA noted MoEF&CC, GoI has issued Office Memorandum vide F.No.J-11011/618/2010-IA-II (I) dated: 30.05.2012 has stated that

"...2. It has been now decided that while submitting the application for consideration for grant of environmental clearance of all expansion projects under the EIA Notification, 2006, the project proponent shall henceforth submit a certified report of the status of compliance of the conditions stipulated in the environmental clearance for the ongoing / existing operation of the project by the Regional Offices of the Ministry of Environment and Forests.

  
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- III. The status of compliance of the conditions stipulated in the environmental clearance as highlighted in the report(s) will be subsequently discussed by the respective Expert Appraisal Committees during the appraisal of the expansion proposal and duly recorded in the minutes of the meeting. Applications for expansion project received without the compliance status as mentioned in para no.2 above shall not be accepted and placed for consideration before the Expert Appraisal Committees.”

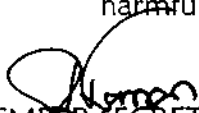
MoEF&CC, GoI has issued Office Memorandum vide F.No.J-11013/6/2010-IA-II Part dated: 07.09.2017 has stated that

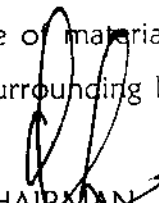
“...3. Regional Offices of the Ministry are requested to submit certified compliance report within one month of receipt of such requests from the Member Secretary of the sectoral EAC. In case the inspection is not carried out within one month, the certified compliance report from the concerned Regional Offices of Central Pollution Control Board (CPCB) or the Member Secretaries of the respective State Pollution Control Boards shall also be accepted for deliberations by the sectoral EAC.

This proposal has again been placed before 286<sup>th</sup> SEAC meeting held on 17.6.2022. The PP has since submitted the certified EC compliance report. Based on the presentation and documents furnished by the project proponent, SEAC decided to confirm the recommendation already made in 253<sup>rd</sup> SEAC Meeting held on 11.3.2022.

Subsequently, the subject was placed before the Authority in its 531<sup>st</sup> meeting held on 09.05.2022. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

- i) The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- ii) Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land

  
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or silting of water courses.


- iii) Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussion, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- i) The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- v) AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land back fills.

  
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- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- ix) On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

Now, the proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 20.08.2022. The PP has furnished a detailed clarifications covering the points raised by SEIAA as given below:

11. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
12. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
13. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
14. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
15. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.


16. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
17. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
18. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
19. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.
20. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
21. The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

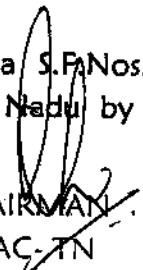
The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in **253<sup>rd</sup> SEAC Meeting held on 11.3.2022**. All other conditions stipulated in the earlier minutes will remain unaltered.

**Agenda No: 304-14**

**(File No: 715/2022)**

**Existing Black Granite quarry lease over an extent of 4.19.5 Ha S.F.Nos.196, Nekkunthi Village, Dharmapuri Taluk, Dharmapuri District, Tamil Nadu by M/s**

  
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**TAMIN - For amendment to Environmental Clearance . (SIA/TN/MIN/275846/2022  
Dt: 31.05.2022)**

The proposal was earlier placed in 291<sup>st</sup> meeting of SEAC held on 02.07.2022. The project proponent gave a detailed presentation. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).


**SEAC noted the following:**

- In the Mineral Concession Rules, 1960, (hereinafter referred to as the principal rules), in rule 2, in sub rule (1), after clause (vii), the following clause is inserted, namely:-  
*'(vii a) "run-of-mine" means the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area;'*
- The project proponent has issued with Environmental Clearance vide Lr.No.05/DEIAA-DPI/EC.No.05/2018 dated:14.8.2018 for the production of black granite 1824 m<sup>3</sup> Black Granite for the period of 5 Years from the date of Execution of mining lease.
- Now, the project proponent has applied for the following amendment to the existing Environmental Clearance:

Production quantity as per EC	Amendment Sought
1824 m <sup>3</sup> Black Granite for the period of 5 Years	3690 m <sup>3</sup> of RoM per Annum

The project proponent also furnished the following

- The TAMIN production targets are conservative and follow the government mining rules and regulations to quarry the Black granite, Dolerite at this location and sold to international and domestic markets.
- The project proponent is also demarcated a dedicated area within the leasehold area for dumping of the non-saleable granite waste.
- The waste rock (or) overburden rock (or) other rejects excavated in the quarry is also dumped within the leasehold area and it will be backfilled into the worked out granite quarry faces during the final closure plan, with a view to restore the land to its original use (or) desired alternate use.

  
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- In case of non-feasibility of backfilling, the waste dumps will suitably terraced and stabilised by planting adequate vegetation as indicated by the SEAC, as a part of progressive mine closure plan.
- Long term & shorter ecological and environmental impacts such as air pollution due to dust, exhaust emissions or fumes, the discharge of toxic and objectionable effluents, noise arising out during the mining operations of granite and related activities are adequately mitigated in the EMP.
- It is submitted that the environmental impact is directly linked to ROM being mined out from the mineralised zone of quarry and not restricted to saleable production quantity (recovery alone).
- Since the EC limits saleable production quantity (recovery only), it is observed that our quarry managers tend to extricate a very miniscule quantity of absolutely defect free material.
- In many quarries the recovery falls down to very low value as 2% of RoM. This is neither in the interest of revenue generation for TAMILNADU (or) the State Government and also it is also not helping to protect the environment.
- Mining recoverable reserves may vary subject to the quality of Granite mining method and Geological features such as structural, textural formations and the market demand for the Granite being mined.
- It is well known that without extracting the Run of Mine (ROM) the recoverable production (recovery) is not possible.

SEAC carefully considered the request of the project proponent based on the presentation made and the details furnished by the project proponent. SEAC noted the following.

1. project proponent has requested the following amendment.

Production qty as per EC	Amendment sought
1824 m <sup>3</sup> Black Granite for the period of 5 Years	3690m <sup>3</sup> of RoM per Annum

2. The term RoM includes raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.
3. The quantity of 'saleable mineral' depends on many factors such as the geology of the site, technology, workmanship, etc. and, therefore, is difficult to estimate accurately, while RoM can easily be estimated at the

  
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time of preparation of mining plan.

4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM, mineral and mineral waste were mentioned.
5. EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'saleable mineral.'
6. SEAC noted that the project proponent has not asked for any change in the area, or in RoM, or in the peak annual RoM.


Considering all the above, the Committee recommends the following amendment to the EC subject to the certain conditions.

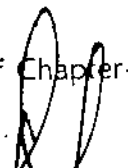
Production qty as per EC	Amendment Recommended
1824 m <sup>3</sup> Black Granite for the period of 5 Years	3690 m <sup>3</sup> of peak RoM per Annum

Subsequently the subject was placed before SEIAA in its 536<sup>th</sup> meeting held on 26.07.2022. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999,

- I. The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- II. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- III. Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999,

  
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"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

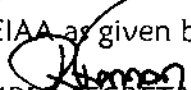
The Authority after detailed discussions, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- I. The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- II. The proponent shall submit revised progressive mine closure & rehabilitation plan.
- III. To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- IV. Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- V. AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- VI. Can waste and such tailings be used for land back fills?
- VII. Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition?
- VIII. Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- IX. On impact due to transportation of the granite waste on the access road and the equipment, and social impacts.

Further the Proponent shall furnish the following additional particulars:

1. Certified compliance report for the existing quarry.
2. Valid scheme of mining stating the required product.

Hence the proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 21.08.2022. The Project proponent furnished the clarifications for the points raised by SEIAA as given below:

  
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1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
9. ~~SEAC~~ noted that the PP has not asked for any change in the area, or in

**RoM, or in the peak annual RoM.**

10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
11. The PP has informed the entire quarrying operation will be carried out in accordance with the provisions of the Granite Conservation & Development Rules, 1999.

However, based on the additional particulars furnished by the Project proponent, SEAC have noted that the PP has not furnished certified compliance report issued by MoEF&CC (or) TNPCB for its existing EC issued. Hence it is decided to call for the following details from the PP.

1. The PP shall furnish the certified compliance report issued by MoEF&CC/TNPCB for its existing EC issued

**Agenda No. 304-15**

**F.No. 4945/2015**

**Proposed Grey Granite quarry lease over an extent of 1.26.0 Ha in S.F. Nos. 110/3A(P), 110/3B1 & 116/2A2(P), Kondappanayanapalli Village, Bargur (Formerly Krishnagiri) Taluk, Krishnagiri District by M/s. S.M. Exports - For amendment to Environmental Clearance. (SIA/TN/MIN/196684/2021, dated: 05.02.2021).**

The proposal was earlier placed for appraisal in the 285<sup>th</sup> meeting of SEAC held on 16.06.2022. 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. S.M. Exports has applied for amendment in the Environmental Clearance issued for the grey granite quarry lease area over an extent of 1.26.0 Ha in S.F. Nos. 116/2A2(P), 110/3A(P) & 110/3B1, Kondappanayanapalli Village, Krishnagiri 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.


  
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3. The proponent Tvl. S.M. Exports, Prop. K. Madhaiyan, has obtained Environmental Clearance vide Lr. No. SEIAA-TN/F.No.4945/EC/1(a)/2833/2015 Dated: 08.02.2016 Grey Granite Quarry over an extent of 1.26.0 ha in SF Nos. 110/3A (P), 110/3B1 and 116/2A2 (P) at Kondappanayanapalli Village of Bargur Taluk, Krishnagiri District and Tamil Nadu State, with validity of Environmental Clearance coterminous with the mine lease period or limited to a maximum of 5 years from the date of issue whichever is earlier.
4. The project proponent has obtained certified compliance report from MoEF & CC, Chennai Region vide letter No. E.P.12.1/2021-22/SEIAA/20/TN/1178 Dated 01.12.2021.
5. Now, as per the Mineral Concession Rules, 1960 & Granite Conservation and Development Rules, 1999, a Scheme of Mining was submitted for a five-year period (2021-22 to 2025-26) and the Scheme of Mining was approved by the Director of Geology and Mining, Guindy, Chennai vide Rc. No. 6734/MM4/2020, dated 06.01.2021.
6. The Scheme of Quarrying was prepared and approved for quantity not exceeding the quantity in previous Mining Plan and there shall be no modification in quantity or area of the proposal.
7. Now the project proponent has submitted online application system for extension of validity of the Environmental Clearance for the remaining Lease Period.
8. As per the mining plan, the lease period is for 20 years. The production for 5 years (as per approved scheme mining 2021-22 to 2025-26) not to exceed – ROM – 31,021m<sup>3</sup> (Recovery @30% =9,306 m<sup>3</sup> & Waste@ 70% = 21,715 m<sup>3</sup> grey granite). The annual peak production as per scheme is 1967 m<sup>3</sup> of grey granite with proposed depth of 6m(BGL).

Based on the presentation and document furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance amendment, subject to the standard conditions and normal conditions stipulated by MOEF&CC, in addition to the certain conditions.

Subsequently the subject was placed before SEIAA in its 530<sup>th</sup> meeting held on 11.07.2022. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999.

  
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- I. The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- II. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- III. Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked-out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

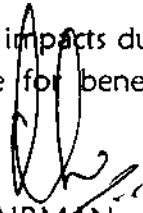
As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999.

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussions, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity **and clarification regarding the recommendation for "Environmental Clearance Amendment"** after the receipt of following details from the project proponent.

- I. The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- II. The proponent shall submit revised progressive mine closure & rehabilitation plan.
- III. To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- IV. Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.

  
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- V. AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- VI. Can waste and such tailings be used for land back fills?
- VII. Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition?
- VIII. Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- IX. On impact due to transportation of the granite waste on the access road and the equipment, and social impacts.

Hence the proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 21.08.2022. The Project proponent furnished reply for the points raised by SEIAA. Besides, the SEAC have noted the following six clarifications presented by the PP:

(1) Legal provisions, namely,

**MoEF CC OM No. Z-11013/55/2016-IA.II (M), Dated. 20.04.2017:**

*"...the EC is appraised in background of approved mining plan and mining scheme which are 30 years and 5 years respectively. It has been decided that 30 years period is long enough for EC as many technological changes can come up between, which have impact on mining and efficient management associated with mining operation. Therefore, it has been decided to keep the validity of EC only 30 years...."*

**MoEF CC S.O No. 674 (E), Dated. 13.03.2013"**

*"no fresh environmental clearance is required for a mining project or activity at the time of renewal of mining lease, which has already obtained environmental clearance under EIA Notification, 2006."*

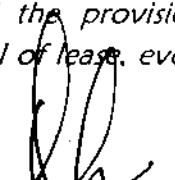
**MoEF CC OM No. Z-11011/15/2012-IA.II (M) (Pt.), Dated. 02.06.2014:**

*"...that the requirement of environmental clearance shall not be applicable at the time of renewal of mining lease for all cases including pending cases if the environmental clearance has already been obtained under the notification of 2006".*

**MoEF CC OM No. J-11011/15/2012-IA.II (M), Dated. 20.03.2015 -Valid & subsisting EC**

*"The Ministry has received reference on the applicability of the provision of requirement of Environment Clearance (EC) at the time of renewal of lease, even if a*

  
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*valid and subsisting environment clearance is held by a PP, at the point of time the PP seeks renewal of the mining lease.*

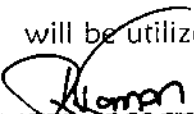
*After due consideration and examination of relevant judicial pronouncements and the OMs issued in this regard, it is clarified that the PP which has a valid and subsisting EC for their mining project either under EIA Notification 1994 or EIA Notification 2006, will not be required to obtain fresh EC at the time of renewal of the lease. This is subject to the maximum period of validity of the EC being for mining lease for 30 years."*

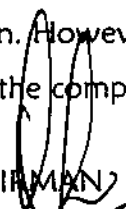
**MoEF CC S.O No. 1141 (E), Dated. 29.04.2015"**

*" the validity may be extended by the regulatory authority concerned by a maximum period if an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form I.....*

*.....Provided further that the regulatory authority may also consult the Expert Appraisal Committee or State Level Expert Appraisal Committee, as the case may be, for grant of such extension."*

- (2) The PP have applied for extension of validity of Environment Clearance (EC) when the lease period is alive and having the validity for 20 years as per the approved mining plan. Further, it is informed that as per the Rule 18 of Granite Conservation and Development Rules, 1999, every mining plan duly approved under these Rules shall be valid for the entire duration of the lease.
- (3) Under these, circumstances the PP would like to extend the EC period up to 20 years from the date of grant of original EC period as it has been indicated in the approved Mining Plan and also there is no modification or increase in production quantity/extent.
- (4) During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
- (5) The project proponent has also obtained certified compliance report from MoEF & CC, Chennai Region vide letter No. E.P.12.1/2021-22/SEIAA/21/TN/1180 Dated 01.12.2021.
- (6) The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent

  
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authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 285<sup>th</sup> Meeting of SEAC held on 16.06.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

**Agenda No: 304- 16**

**(File No: 6898/2019)**

**Proposed Multi Colour Granite quarry over an Extent of 1.93.5 Ha in S.F.Nos. 1127/4 & 1127/5 of Irudhukottai Village, Denkanikottai Taluk, Krishnagiri District, TamilNadu by M/s. Anbura Minerals Pvt Ltd - For Environmental Clearance. (SIA/TN/MIN/48038/2019 dated:29/06/2019)**

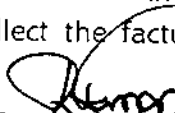
Earlier, the proposal was earlier placed for appraisal in 244<sup>th</sup> meeting of SEAC held on 09.02.2022. The details of the project furnished by the proponent are given in the website (parivesh. nic.in).

**The SEAC noted the following:**

1. The project proponent, M/s. Anbura Minerals Pvt Ltd has applied for Environmental Clearance for the proposed Multi Colour Granite quarry an Extent of 1.93.5 Ha in S.F.Nos. 1127/4 & 1127/5 of Irudhukottai 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. The production for the five years states that the total quantity of recoverable as 24,000m<sup>3</sup> of ROM and the ultimate depth of mining is 10m below ground level.
4. ToR Issued vide letter No. SEIAA-TN/F.No.6898/SEAC/ToR-683/2020 dated: 22.01.2020.
5. Public hearing was conducted on 10.08.2021.

After examining the documents & project proposals furnished by the project proponent and based on the presentations & detailed deliberations, SEAC decided to make an on- site - spot inspection to assess the status of the site by the sub-committee constituted by the SEAC.

The Sub-Committee of SEAC visited the project site on 19.03.2022 (Saturday) to collect the factual information and salient features of the site to get the first-hand

  
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information of the site. The Sub-Committee inspection report was placed in 259<sup>th</sup> meeting of SEAC held on 31.03.2022. Based on the inspection report and documents furnished by the project proponent, SEAC decided that the project proponent shall furnish the following details as raised by the sub-committee during site inspection,

1. A letter from the Village Administrative Officer stating that there are no inhabited sites/approved houses & crematory sites located within a radius of 300 m from the proposed quarry site.
2. A letter from the concerned District Forest Officer showing that the Gullatty R.F is at a distance of 2.00 km from the proposed quarry site.

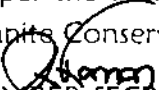
The project proponent has furnished the reply vide letter dated 27.05.2022, and therefore, the proposal placed for appraisal in this 285<sup>th</sup> meeting of SEAC held on 16.06.2022. The Project proponent made a presentation along with clarification for the above shortcomings observed by the SEAC.

Based on the presentation and document furnished by the project proponent, SEAC decided to **recommend the proposal for the grant of Environmental Clearance**, subject to the standard conditions and normal conditions stipulated by MOEF&CC, in addition to the specific conditions,

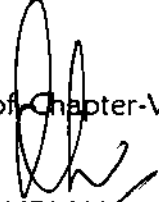
Subsequently the subject was placed before SEIAA in its 530<sup>th</sup> meeting held on 11.07.2022. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999,

- I. The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- II. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- III. Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999,

  
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"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussions, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- I. The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- II. The proponent shall submit revised progressive mine closure & rehabilitation plan.
- III. To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- IV. Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- V. AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- VI. Can waste and such tailings be used for land back fills?
- VII. Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition?
- VIII. Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- IX. On impact due to transportation of the granite waste on the access road and the equipment, and social impacts.

Hence the proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 21.08.2022. The PP has furnished a detailed clarifications covering the points raised by SEIAA as given below:

1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.

2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
9. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.
10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral

depending on its grade.

11. The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 285<sup>th</sup> meeting of SEAC held on 16.06.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

**Agenda No: 304-17**

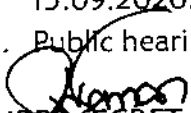
**(File No: 7199/2019)**

**Proposed Grey Granite quarry lease over an extent of 3.70.0 Ha at S.F.No. 131/11 of Kondappanayanapalli Village, Bargur Taluk, Krishnagiri District, Tamil Nadu by Tmt. Mariambanu - For Environmental Clearance. (SIA/TN/MIN/ 47477/2019 Dt. 21.10.2021)**

Earlier, this proposal was earlier placed in 256<sup>th</sup> SEAC meeting held on 24.03.2022. 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.Mariambanu has applied for Environmental Clearance for the proposed Grey Granite quarry lease over an extent of 3.70.0 Ha at S.F.No. 131/11 of Kondappanayanapalli Village, Bargur Taluk, Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The Production for the five years states that total quantity should not exceed 34,749 m<sup>3</sup> of ROM with an ultimate depth of mining is 22m below ground level.
4. ToR issued vide Lr.No.SEIAA-TN/F.No.7199/SEAC/ToR-754/2020, Dated 15.09.2020.
5. Public hearing was conducted on 10.08.2021.

  
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After examining the documents & project proposals furnished by the project proponent and based on the presentations & detailed deliberations, SEAC recommended the proposal for the grant of Environmental Clearance subject to the standard conditions stipulated by MOEF &CC. in addition to the specific conditions.

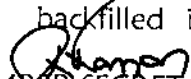
Subsequently, the subject was placed before the Authority in its 500<sup>th</sup> meeting held on 19.04.2022. After detailed discussions the Authority decided to request the Member Secretary, SEIAA TN to refer back the proposal to SEAC TN stating the following reasons,

In the EIA report submitted by the Proponent, it is stated that no mountain/hill is located within 10km radius from the proposed mine lease area. However on perusal of the KML file, it was noticed that Nagamalai Fortress, an archeological site is located at a distance of about 200m from the proposed quarry site. Hence, the impact of mining on the Fortress and the land around the said Fortress need to be ascertained.

Subsequently the subject was placed for appraisal in the 285<sup>th</sup> meeting of SEAC held on 16.06.2022. The Project proponent made a presentation along with clarification for the above shortcomings observed by the SEIAA. The project proponent furnished the letter obtained from Thasildar, Bargur Taluk stating that there are no Archeological Sites or Archaeological Monuments around a radius of 500 m distance of the proposed site and SF. No. 86 over an extent of 157.84.0 Ha, adjacent to the proposed site is classified as Government Land – Naga Hill. Based on the presentation and documents furnished by the project proponent, SEAC decided to confirm the recommendation already made in 256<sup>th</sup> SEAC meeting held on 24.03.2022.

The subject was then placed before SEIAA in its 530<sup>th</sup> meeting held on 11.07.2022. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999,

- I. The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- II. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- III. Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been

  
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recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

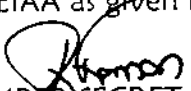
As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999,

“Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry”.

The Authority after detailed discussions, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- I. The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- II. The proponent shall submit revised progressive mine closure & rehabilitation plan.
- III. To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- IV. Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- V. AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- VI. Can waste and such tailings be used for land back fills?
- VII. Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition?
- VIII. Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- IX. On impact due to transportation of the granite waste on the access road and the equipment, and social impacts.

Hence the proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 21.08.2022. The PP has furnished a detailed clarifications covering the points raised by SEIAA as given below:

  
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1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
9. SEAC noted that the PP has not asked for any change in the area, or in

**RoM, or in the peak annual RoM.**

10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
11. The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 256<sup>th</sup> meeting of SEAC held on 24.03.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

**Agenda No: 304-18**

**(File No: 8704/2021)**

**Proposed Rough Stone and Gravel quarry lease over an extent of 4.20.0 Ha at S.F.No. 79 (P) of 10 of Muthur Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu by Thiru. E.Yoganantham - For Environmental Clearance. (SIA/TN/MIN/223858/2021 dated 09.08.2021)**

Earlier, this proposal was earlier placed in the 288<sup>th</sup> Meeting of SEAC held on 23.06.2022. 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.E.Yoganantham has applied for Environmental Clearance for the proposed Rough stone and Gravel quarry lease over an extent of 4.20.0 Ha at S.F.No. 79 (P) of 10 of Muthur Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu.

  
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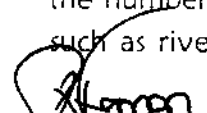
  
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2. The project/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. As per mining plan, the lease period is for 5 years, the total quantity of recoverable should not exceed 4,31,900 cu.m of Rough Stone and 6,678 cu.m of Gravel with an ultimate depth of mining is 42m (2m Gravel + 40m Rough stone) below ground level. The Annual peak production as per mining plan is 91,040cu.m of rough stone & 2,268cu.m of gravel.

Based on the presentation and document furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance for an Annual peak production of 91,040cu.m of rough stone & 2,268cu.m of gravel by maintaining ultimate depth of 42m, subject to the standard conditions & normal conditions stipulated by MOEF&CC, in addition to the specific conditions:

Subsequently the subject was then placed before SEIAA in its 533<sup>rd</sup> meeting held on 18.07.2022. The Authority noted that the subject was placed in the 288<sup>th</sup> meeting of SEAC held on 23.06.2022. SEAC has furnished its recommendations to the Authority for granting Environmental Clearance to the Project subject to the conditions stated therein. After detailed deliberation, the Authority decided to request the Member Secretary SEIAA-TN to refer back the proposal to SEAC for appraisal after the receipt of following additional particulars from the project proponent with reference to project life (or) subject to a maximum of thirty years, whichever is earlier.

1. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area from reputed research institutions on the following
  - a) Soil health & bio-diversity.
  - b) Climate change leading to Droughts, Floods etc.
  - c) Pollution leading to release of Greenhouse gases (GHG), rise in Temperature, & Livelihood of the local people.
  - d) Possibilities of water contamination and impact on aquatic ecosystem health.
  - e) Agriculture, Forestry & Traditional practices.
  - f) Hydrothermal/Geothermal effect due to destruction in the Environment.
  - g) Bio-geochemical processes and its foot prints including environmental stress.
  - h) Sediment geochemistry in the surface streams.
2. Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the

  
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impacts on the nearby water bodies 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, covering the project life (or) subject to a maximum of thirty years, whichever is earlier.

3. To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/untoward accidents in & around the proposed mine lease area due to the proposed method of mining activity & its related activities.
4. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.
5. Detailed Mine Closure Plan covering the project life (or) subject to a maximum of thirty years, whichever is earlier.
6. Detailed Environment Management Plan shall include adaptation, mitigation & remedial strategies covering the project life (or) subject to a maximum of thirty years, whichever is earlier.
7. Impact of proposed mining on the coconut grove located adjacent to the proposed mining lease area and other plantations nearby.
8. Study report on impact of blasting on the nearby habitation.

Hence the proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 21.08.2022. The Project proponent furnished reply for the points raised by SEIAA.

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 288<sup>th</sup> meeting of SEAC held on 23.06.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

**Agenda No. 304-19**

**(File No: 9117/2022)**

**Proposed Multi colour Granite quarry lease over an extent of 1.66.0 Ha in S.F.No 71/2, Alampatti Village, Sattur Taluk, Virudhunagar District Tamil Nadu by Tvl.Amman Granites - For Environmental Clearance. (SIA/TN/MIN/261782/2022 Dt.16.03.2022)**

  
MEMBER SECRETARY  
SEAC -TN

  
CHAIRMAN  
SEAC - TN

The proposal was earlier placed for appraisal in the 289<sup>th</sup> meeting of SEAC held on 24.06.2022. 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, Tvl.Amman Granites has applied for Environmental Clearance for the proposed Multi colour Granite quarry lease over an extent of 1.66.0 Ha in S.F.No 71/2, Alampatti Village, Sattur Taluk, Virudhunagar District Tamil Nadu, 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. As per the mining plan, the lease period is for 20 years. The mining plan is for the period of 5 years. The total production for 5 years not to exceed ROM - 13910 m<sup>3</sup> & 4713 m<sup>3</sup> of Granite. The annual peak production ROM - 2830m<sup>3</sup> (2<sup>nd</sup> year) & 849 m<sup>3</sup> of Granite (2<sup>nd</sup>year) with ultimate depth of 36m.

Based on the presentation made by the proponent, SEAC decided to recommend for grant of Environmental Clearance, subject to the standard conditions & normal conditions stipulated by MOEF &CC, in addition to the specific conditions:

Subsequently the subject was then placed before SEIAA in its 534<sup>th</sup> meeting held on 20.07.2022. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999,

1. The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
2. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
3. Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999,

  
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“Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry”.

The Authority after detailed discussions, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral interms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

1. The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
2. The proponent shall submit revised progressive mine closure & rehabilitation plan.
3. To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
4. Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
5. AD/Competent authority of Geology & Mining Dept. justification for according permission interms of ROM quantity instead of production quantity.
6. Can waste and such tailings be used as land backfills?
7. Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition?
8. Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
9. On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

Further the proponent shall furnish the following additional details/particulars:

1. VAO letter stating the details of habitation within the radius of 300m from the periphery of mine lease area.
2. Original notarized affidavit in the prescribed format.

  
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CHAIRMAN  
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3. Documents/details pertaining to Sl.No. 2, 20 listed under specific conditions and Sl. No. 7 and 15 of general conditions reported in MoEF&CC Lr. No. F.No. EP/12.1/2021-22/SEIAA/01/TN/623 dated 12.07.2021 shall be furnished

Hence the proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 21.08.2022. The Project proponent furnished reply for the points raised by SEIAA. Based on the additional particulars furnished by the Project proponent, SEAC decided to confirm the recommendations already made in the 289<sup>th</sup> meeting of SEAC held on 24.06.2022 with other conditions remaining unaltered.

**Agenda No: 304-20**  
**(File No: 9215/2022)**

**Proposed Black Granite quarry lease over an extent of 1.44.5 Ha at S.F.No. 6/4A, Hanumanthapuram Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu by M/s. Globle Enterprises for Terms of Reference (SIA/TN/MIN/76134/2022 Dt. 25.04.2022)**

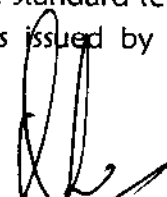
The proposal was earlier placed in the 287<sup>th</sup> Meeting of SEAC held on 22.06.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

1. The Project Proponent, M/s. Global Enterprises has applied for Terms of Reference for the Black Granite quarry lease over an extent of 1.44.5 Ha at S.F.No. 6/4A, Hanumanthapuram Village, Denkanikottai Taluk, Krishnagiri 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. As per the mining plan the lease period is 20 years. The mining plan is for the period of five years & production should not exceed ROM- 17100cu.m, 5130 Cu.m of Granite & 14592 Cu.m of Weathered Rock. The annual peak production is ROM- 3600cu.m (3<sup>rd</sup> year), 1080 Cu.m of Granite (3<sup>rd</sup> year) & 7488 Cu.m of Weathered Rock (2<sup>nd</sup> year). The ultimate depth is 30 m BGL.

Based on the presentation made by the proponent and considering safety point of view, SEAC recommended to remove the last bench in XY-CD. Accordingly grant of Terms of Reference (TOR) with Public Hearing is issued for the production of ROM- 17080u.m, 5124 Cu.m of Granite & 14592 Cu.m of Weathered Rock in 5 years with ultimate depth 25m, subject to the following TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF & CC to be included in EIA/EMP Report:

  
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Subsequently the subject was placed before SEIAA in its 532<sup>nd</sup> meeting held on 14.07.2022. The Authority noted that this proposal was placed for appraisal in the 287<sup>th</sup> meeting of SEAC held on 22.06.2022 and the SEAC had recommended for grant of Terms of Reference.

1. The Authority noted that, the minutes of SEAC states that

- I. *"As per the mining plan the lease period is 20 years. The mining plan is for the period of five years & production should not exceed ROM- 17100cu.m, 5130 Cu.m of Granite & 14592 Cu.m of Weathered Rock. The annual peak production is ROM- 3600cu.m (3<sup>rd</sup> year), 1080 Cu.m of Granite (3<sup>rd</sup> year) & 7488 Cu.m of Weathered Rock (2<sup>nd</sup> year). The ultimate depth is 30 m BGL.*
  - I. *Based on the presentation made by the proponent and considering safety point of view, SEAC recommended to remove the last bench in XY-CD. Accordingly grant of Terms of Reference (TOR) with Public Hearing is issued for the production of ROM- 17080u.m, 5124 Cu.m of Granite & 14592 Cu.m of Weathered Rock in 5 years with ultimate depth 25m".*
  - II. Subsequently, in the mining plan, as per the "YEARWISE DEVELOPMENT AND PRODUCTION PLAN AND SECTIONS", it was ascertained the plan consists of two sections namely AB and CD.
  - III. The Cross Sections along A-B and C-D as provided in the mining plan, it was ascertained that in the section AB the proponent has proposed to remove top soil (2m) and weathered rock (3m) upto a depth of 5m in the third year but in the section CD the depth proposed is only 30m. Further SEAC has recommended removing the last bench in XY-CD and the depth would be further reduced to 25m.
  - IV. As per the minutes of SEAC, if the last bench of XY-CD is removed then the depth in section XY-CD will be further reduced to 25m. Hence, the recommended depth and quantity pertaining to the individual sections namely AB & CD may be mentioned specific to the sections for issue of grant of Terms of Reference.
2. As per the KML file uploaded in the Parivesh portal, it is ascertained that the proposed site exists at 880 metres from the eco sensitive zone of Cauvery (North) Wildlife Sanctuary. The DFO letter dated 14.06.2022 states that "the proposed site is 1km away from the Eco-Sensitive Zone of Cauvery North Wildlife Sanctuary".
3. Further, as per the 500m radius letter vide Roc.No.993/2019/Mines dated: 30.03.2022, it is observed that the same proponent had proposed quarry in the adjacent area S.F.No. 7/1B (P) etc., 3.93.5 Ha and 7/1A2 etc., 2.27.5 Ha which is



observed to be further closer to the Eco – Sensitive Zone of Cauvery (North) Wildlife Sanctuary.

Hence, the proposal may be referred back to SEAC and the above-mentioned points may be examined and recommendation for grant of Terms of Reference may be furnished to SEIAA.


The proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 21.08.2022. The PP has furnished a detailed clarifications covering the points raised by SEIAA as given below:

1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of

- view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
  8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
  9. **SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.**
  10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
  11. The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 287<sup>th</sup> meeting of SEAC held on 22.06.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

Agenda No: 304-21  
(File No: 4049/2022)

  
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CHAIRMAN  
SEAC - TN

Existing Colour Granite quarry lease over an extent of 10.12.0 Ha S.F.Nos.120(P) Naganur Village, Kulithalai Taluk, Karur District, Tamil Nadu by M/s TAMIN - For amendment to Environmental Clearance .(SIA/TN/MIN/ 276355/2022 Dt: 3.6.2022)

The proposal was earlier placed in 291<sup>st</sup> SEAC meeting held on 02.07.2022. The project proponent has given a detailed presentation. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).


**SEAC noted the following:**


- In the Mineral Concession Rules, 1960, (hereinafter referred to as the principal rules), in rule 2, in sub rule (1), after clause (vii), the following clause is inserted, namely:-  
*'(vii a) "run-of-mine" means the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.'*
- The project proponent has issued with Environmental Clearance vide Lr.No.SEIAA-TN/F.No. 4049/1(a)/EC. No.3886/2016 Dt. 14.11.2016 for the production of 1211 m<sup>3</sup>/annum of Multi Coloured Granite & 10901 m<sup>3</sup>/annum of Granite rejects for the period of 20 Years from the date of Execution of mining lease.
- Now, the project proponent has applied for amendment in the existing EC issued for the following.

Production quantity as per EC	Amendment Sought
1211 m <sup>3</sup> /annum of Multi Coloured Granite & 10901 m <sup>3</sup> /annum of Granite rejects for the period of 20 Years from the date of Execution of mining lease.	121913m <sup>3</sup> of RoM per Annum

**The PP also furnished the following**

- The TAMIN production targets are conservative and follow the government mining rules and regulations to quarry the Black granite, Dolerite at this location and sold to international and domestic markets.
- The PP is also demarcated a dedicated area within the leasehold area for dumping of the non-saleable granite waste.
- The waste rock (or) overburden rock (or) other rejects excavated in the quarry is also dumped within the leasehold area and it will be backfilled into the worked out granite quarry faces during the final closure plan, with a view to restore the land to its original use (or) desired alternate use.

  
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- In case of non-feasibility of backfilling, the waste dumps will suitably terraced and stabilised by planting adequate vegetation as indicated by the SEAC, as a part of progressive mine closure plan.
- Long term & shorter ecological and environmental impacts such as air pollution due to dust, exhaust emissions or fumes, the discharge of toxic and objectionable effluents, noise arising out during the mining operations of granite and related activities are adequately mitigated in the EMP.
- It is submitted that the environmental impact is directly linked to ROM being mined out from the mineralised zone of quarry and not restricted to saleable production quantity (recovery alone).
- Since the EC limits saleable production quantity (recovery only), it is observed that our quarry managers tend to extricate a very miniscule quantity of absolutely defect free material.
- In many quarries the recovery falls down to very low value as 2% of RoM. This is neither in the interest of revenue generation for TAMILNADU (or) the State Government and also it is also not helping to protect the environment.
- Mining recoverable reserves may vary subject to the quality of Granite mining method and Geological features such as structural, textural formations and the market demand for the Granite being mined.
- It is well known that without extracting the Run of Mine (ROM) the recoverable production (recovery) is not possible.

SEAC carefully considered the request of the PP based on the presentation made and the details furnished by the project proponent. SEAC noted the following.

1. Project proponent has requested the following amendment.

Production qty as per EC	Amendment Sought
1211 m <sup>3</sup> /annum of Multi Coloured Granite & 10901 m <sup>3</sup> /annum of Granite rejects for the period of 20 Years from the date of Execution of mining lease.	12191m <sup>3</sup> of RoM per Annum

2. The term RoM includes raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.

3. The quantity of 'saleable mineral' depends on many factors such as the geology of the site, technology, workmanship, etc, and, therefore, is

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difficult to estimate accurately, while RoM can easily be estimated at the time of preparation of mining plan.


4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM, mineral and mineral waste were mentioned.
5. EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'saleable mineral.'
6. SEAC noted that the project proponent has not asked for any change in the area, or in RoM, or in the peak annual RoM.

Considering all the above, the Committee recommends the following amendment to the EC subject to the certain conditions.

Production qty as per EC	Amendment Recommended
1211 m <sup>3</sup> /annum of Multi Coloured Granite & 10901 m <sup>3</sup> /annum of Granite rejects for the period of 20 Years from the date of Execution of mining lease.	12113m <sup>3</sup> of peak RoM per Annum

Subsequently the subject was placed before SEIAA in its 536<sup>th</sup> meeting held on 26.07.2022. The Authority noted that as per the approved mining plan/progressive closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999,

- I. The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- II. Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- III. Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

  
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As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999.


"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussions, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

- I. The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- II. The proponent shall submit revised progressive mine closure & rehabilitation plan.
- III. To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- IV. Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- V. AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- VI. Can waste and such tailings be used for land back fills?
- VII. Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition?
- VIII. Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- IX. On impact due to transportation of the granite waste on the access road and the equipment, and social impacts.

Further the Proponent shall furnish the following additional particulars:

1. Certified compliance report for the existing quarry.


  
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2. Valid scheme of mining stating the required product.

Hence the proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 21.08.2022. The Project proponent furnished the clarifications for the points raised by SEIAA as given below:

1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM

  
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- ore from which saleable fraction is produced are taken into consideration.
8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
  9. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.
  10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
  11. The PP has informed the entire quarrying operation will be carried out in accordance with the provisions of the Granite Conservation & Development Rules, 1999.

However, based on the additional particulars furnished by the Project proponent, SEAC have noted that the PP has not furnished certified compliance report issued by MoEF&CC (or) TNPCB for its existing EC issued. Hence it is decided to call for the following details from the PP.

1. The PP shall furnish the certified compliance report issued by MoEF&CC (or) TNPCB for its existing EC issued.

**Agenda No: 304-22**

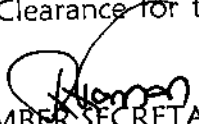
**(File No: 7263/2019)**

**Proposed Grey Granite quarry lease over an extent of 2.35.0 Ha at S.F.No. 133/2A (P), 133/5 (P), 133/7 (P), 133/8 (P), 133/10 (P) & 133/1 of Kondappanayanapalli Village, Bargur Taluk, Krishnagiri District, Tamil Nadu by Tmt. M. Sadhana - For Environmental Clearance. (SIA/TN/MIN/ 44653/2019 Dt. 28.10.2021)**

The proposal was placed in 304<sup>th</sup> SEAC meeting held on 20.08.2022. 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. M. Sadhana has applied for Environmental Clearance for the proposed Grey Granite quarry lease over an extent of 2.35.0

  
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- Ha at S.F.No. 133/2A (P), 133/5 (P), 133/7 (P), 133/8 (P), 133/10 (P) & 133/1 of Kondappanayanapalli Village, Bargur Taluk, Krishnagiri District, Tamil Nadu .
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
  3. The Production for the five years states that total quantity should not exceed 45,525m<sup>3</sup> of ROM with an ultimate depth of mining is 30m below ground level.
  4. ToR issued vide Lr.No.SEIAA-TN/T.No.7263/SEAC/ToR-815/2020 Dated: 11.11.2020.
  5. Public hearing was conducted on 10.08.2021.

After examining the documents & project proposals furnished by the project proponent and based on the presentations & detailed deliberations, SEAC recommended the proposal for the grant of Environmental Clearance subject to the standard conditions stipulated by MOEF &CC, in addition to the specific conditions.

Subsequently, the subject was placed before the Authority in its 500<sup>th</sup> meeting held on 19.04.2022. After detailed discussions the Authority decided to request the Member Secretary, SEIAA TN to refer back the proposal to SEAC TN stating the following reasons:

In the EIA report submitted by the Proponent, it is stated that no mountain/hill is located within 10km radius from the proposed mine lease area. However on perusal of the KML file, it was noticed that Nagamalai Fortress, an archaeological site is located at a distance of about 200m from the proposed quarry site. Hence, the impact of mining on the Fortress and the land around the said Fortress need to be ascertained. We may get no objection from the carpological department about impact and the farmers.

Now, the proposal placed for appraisal in this 285<sup>th</sup> meeting of SEAC held on 16.06.2022. The Project proponent made a presentation along with clarification for the above shortcomings observed by the SEIAA.

The project proponent has obtained a letter from VAO and Thasildar stating that, there are no archeological monuments (fortress) situated within the radius of 500m from the proposed project site and the projects site is situated 600m away from the Nagamalai survey field boundary.

  
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Based on the presentation and documents furnished by the project proponent, SEAC decided to confirm the recommendation already made in 256<sup>th</sup> SEAC meeting held on 24.03.2022.

Subsequently, the proposal was placed in 530<sup>th</sup> Authority meeting held on 11.07.2022. The Authority noted that as per the approved mining plan/mine closure plan submitted & as per the Point no. 31 (Storage of overburden, waste rock etc) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that


- i) The overburden, waste rock and non-saleable granite generated during prospecting or mining operations for granite shall be stored separately in properly formed dumps on grounds earmarked.
- ii) Such dumps shall be properly secured to prevent the escape of material in harmful quantities which may cause degradation of the surrounding land or silting of water courses.
- iii) Wherever possible, such waste rock or overburden or other rejects, shall be backfilled into the worked out granite quarry, where granite has been recovered upto the optimum depth, with a view to restore the land to its original use or desired alternate use, as far as possible and where the backfilling is not feasible, the waste dumps shall be suitable terraced and stabilised by planting vegetation or otherwise.

As per the Point no. 32 (Reclamation and Rehabilitation of lands) of Chapter-VI of Granite Conservation & Development Rules, 1999 states that

"Every lease holder shall undertake in a phased manner restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of the granite quarry".

The Authority after detailed discussion decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent

  
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- i) The proponent shall submit the details of utilization of total quantity of granite Waste till the life of the quarry period for beneficial purpose.
- ii) The proponent shall submit revised progressive mine closure & rehabilitation plan.
- iii) To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
- iv) Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
- v) AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
- vi) Can waste and such tailings be used for land back fills.
- vii) Mine closure plans and EMP in detail. How can the granite mine site be reclaimed to near natural and pre-mining condition.
- viii) Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
- ix) On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

The proposal was placed for considering SEIAA's remarks in this 304<sup>th</sup> meeting of SEAC held on 20.08.2022. The Project proponent furnished the clarifications for the points raised by SEIAA as given below:

1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is

  
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difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.

3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration **from the view point of economic viability of project** during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
9. **SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.**
10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
11. The PP have also informed that the waste produced from the quarrying including the granite rejects will be stacked temporarily in the mineralized

zone within the lease hold area at present by maintaining adequate stability and suitable plantation as indicated in the progressive mine closure plan. However, it will be utilized as per the final mine closure plan as approved by the competent authority one year before the final closure of the mine under the provisions of the Granite Conservation and Development Rules, 1999.

12. The PP has informed the entire quarrying operation will be carried out in accordance with the provisions of the Granite Conservation & Development Rules, 1999,

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 256<sup>th</sup> SEAC meeting held on 24.03.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

**Agenda No: 304-23**

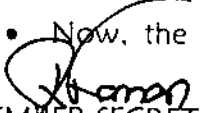
**(File No: 716/2022)**

**Existing Black Granite quarry lease over an extent of 4.00.0 Ha S.F.Nos.3(Part) Kaveripuram Village, Mettur Taluk, Salem District, Tamil Nadu by M/s TAMIN - For amendment in Environmental Clearance issued. (SIA/TN/MIN/276049/2022 Dt: 1.6.2022)**

The proposal was placed in 304<sup>th</sup> SEAC meeting held on 20.08.2022. The project proponent has given a detailed presentation. The details of the project furnished by the proponent are given in the website (parivesh.nic.in).

**SEAC noted the following:**

- In the Mineral Concession Rules, 1960, (hereinafter referred to as the principal rules), in rule 2, in sub rule (1), after clause (vii), the following clause is inserted, namely:-  
*‘(vii a) “run-of-mine” means the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area;’*
- The PP has issued with Environmental Clearance vide Lr.No.DEIAA-DIA/TN/MIN/10878/2017-SLM-ECN).13/2017 Dt. 17.5.2018 for the production of Black Granite: 8880 m<sup>3</sup> in the period of 5 Years from the date of Execution of mining lease.
- Now, the PP has applied for amendment in the existing EC issued for the

  
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following.


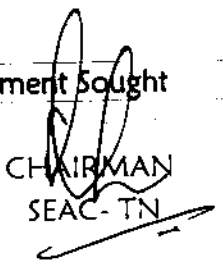
Production qty as per EC	Amendment Sought
Black Granite: 8880 M <sup>3</sup> in the period of 5 Years	17763 M <sup>3</sup> of RoM per Annum

The PP also furnished the following

- The TAMIN production targets are conservative and follow the government mining rules and regulations to quarry the Black granite, Dolerite at this location and sold to international and domestic markets.
- The PP is also demarcated a dedicated area within the leasehold area for dumping of the non-saleable granite waste.
- The waste rock (or) overburden rock (or) other rejects excavated in the quarry is also dumped within the leasehold area and it will be backfilled into the worked out granite quarry faces during the final closure plan, with a view to restore the land to its original use (or) desired alternate use.
- In case of non-feasibility of backfilling, the waste dumps will suitably terraced and stabilised by planting adequate vegetation as indicated by the SEAC, as a part of progressive mine closure plan.
- Long term & shorter ecological and environmental impacts such as air pollution due to dust, exhaust emissions or fumes, the discharge of toxic and objectionable effluents, noise arising out during the mining operations of granite and related activities are adequately mitigated in the EMP.
- It is submitted that the environmental impact is directly linked to ROM being mined out from the mineralised zone of quarry and not restricted to saleable production quantity (recovery alone).
- Since the EC limits saleable production quantity (recovery only), it is observed that our quarry managers tend to extricate a very miniscule quantity of absolutely defect free material.
- In many quarries the recovery falls down to very low value as 2% of RoM. This is neither in the interest of revenue generation for TAMIN (or) the State Government and also it is also not helping to protect the environment.
- Mining recoverable reserves may vary subject to the quality of Granite mining method and Geological features such as structural, textural formations and the market demand for the Granite being mined.
- It is well known that without extracting the Run of Mine (ROM) the recoverable production (recovery) is not possible.

SEAC carefully considered the request of the PP based on the presentation made and the details furnished by the PP. SEAC noted the following.

1. PP has requested the following amendment.

 <b>MEMBER SECRETARY</b> <b>SEAC -TN</b>	102	 <b>CHAIRMAN</b> <b>SEAC - TN</b>
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Black Granite: 8880 M <sup>3</sup> in the period of 5 Years	17763 M <sup>3</sup> of RoM per Annum
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2. The term RoM includes raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.
3. The quantity of 'saleable mineral' depends on many factors such as the geology of the site, technology, workmanship, etc, and, therefore, is difficult to estimate accurately, while RoM can easily be estimated at the time of preparation of mining plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM, mineral and mineral waste were mentioned.
5. EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'saleable mineral.'
6. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.

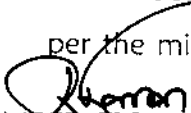
Considering all the above, the Committee recommends the following amendment to the EC subject to the certain conditions.

Production qty as per EC	Amendment Recommended
Black Granite: 8880 M <sup>3</sup> in the period of 5 Years	17763 M <sup>3</sup> of peak RoM per Annum

Subsequently, the subject was placed in 536<sup>th</sup> Authority meeting held on 26.07.2022. The Authority noted that the proposal was appraised in 291<sup>st</sup> SEAC meeting held on 01.07.2022. SEAC has furnished its recommendations for granting the requested amendment.

The Authority after detailed discussion decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

1. EC has been issued & mentioned for production quantity of Black Granite as per the mining plan. If any revision is required, the PP shall obtain necessary

  
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revision/amendment in the approved mining plan from the competent authority.

2. The PP shall furnish the revised/detailed mine closure plan by considering ROM/total excavation from the competent authority.
3. In the Scheme of Mining – III submitted for the period from 2022-2023 to 2026-2027, as per the Government grant for renewal of quarry lease to TAMIN a special condition has been laid which states that “The applicant firm should obtain consent from the Executive Engineer, PWD, Mettur Dam Stanley Reservoir before execution of lease deed. They should follow all conditions imposed by the The Executive Engineer, PWD, Mettur Dam Stanley Reservoir”. Further, it is mentioned that “All the conditions mentioned in the lease granted order have been incorporated in the mining plan and incorporated in the subsequent Scheme of Mining”. Hence, the proponent is requested to submit the consent obtained from the Competent Authority as mentioned in the lease granted order and the subsequent incorporation of the conditions imposed in the scheme of mining, if any, shall be furnished.
4. The proponent shall submit the details of utilization of total quantity of granite waste of the quarry period for beneficial purpose.
5. The proponent shall submit revised progressive mine closure & rehabilitation plan.
6. To furnish approval obtained from the competent authority details of utilization of quantity of granite Waste for beneficial purpose as per market trend and revised progressive mine closure & rehabilitation plan proposed quarry pits till the life of the quarry period.
7. Long term and short term ecological and environmental impacts due to storage, handling, and transportation of granite waste for beneficial purpose (or) otherwise.
8. AD/Competent authority of Geology & Mining Dept. justification for according permission in terms of ROM quantity instead of production quantity.
9. Can waste and such tailings be used for land backfills.
10. Mine closure plans and EMP in detail. How can the granite mine site be



reclaimed to near natural and pre-mining condition.

11. Action plan for protection of open and abandoned open spots as they are Hotspot for toxic water accumulation, contamination and accidents.
12. On impact due to transportation of the granite waste on the access road and the equipments, and social impacts.

This proposal has again been placed in 304<sup>th</sup> SEAC meeting held on 20.8.2022. The Project proponent furnished the clarifications for the points raised by SEIAA as given below:

1. As per the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the term 'run-of-mine' (RoM) is defined as "*the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area*", this includes the saleable ore mined after the processing, intercalated waste and mineral rejects/subgrade mineral.
2. The quantity of 'recovered saleable ore' depends on many factors such as the geology of the site, physical & geomechanical properties of the rock, quarrying technology, market demand etc. Further, the 'Recovery' is difficult to be estimated always precisely due to poor density & thickness of the granite, poor porosity, Visual appearance where it is being observed with dings, dents, scratches or uneven surfaces and however the RoM can easily be quantified at the time of preparation of mining plan.
3. The PP have informed that the 'Total Excavation' including ROM ore from which saleable fraction is produced are taken into consideration from the view point of economic viability of project during the approval of Mining Plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM which includes the Recovery (Ore), and mineral waste, and the overburden/side burden waste were mentioned.
5. The EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'meagre quantity of saleable ore'.
6. Further it is pragmatic to consider total rock excavation from the point of

- view of Environmental Clearance, rather than production of saleable fraction of ore (or) the RoM (the extracted material from ore zone inclusive of mineral reject, intercalated waste or gangue minerals, if any).
7. During the approval of Mining Plan, the total excavation including RoM ore from which saleable fraction is produced are taken into consideration.
  8. It is also clarified that total rock excavation may differ to generate same amount of RoM on year to year basis.
  9. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.
  10. By allowing the mineral rejects to be moved out from the leasehold area, the pollution caused due to excessive storage of mineral rejects (Granite rejects obtained from ROM) is reduced considerably. Besides, as per Rule 64B (2), if the Run-of-Mine is removed from the leased area, then royalty shall be payable on the unprocessed Run-of-Mine (ROM) mineral depending on its grade.
  11. The PP has informed the entire quarrying operation will be carried out in accordance with the provisions of the Granite Conservation & Development Rules, 1999,

The Committee carefully examined the points raised by SEIAA and the replies given by the PP and decided to reiterate its recommendation already made in 291<sup>st</sup> SEAC meeting held on 02.07.2022. All other conditions stipulated in the earlier minutes will remain unaltered.

**Agenda No: 304-24**


**(File No: 4393/2022)**

**Proposed Black granite quarry lease over an extent of 47.88.0Ha at S.F.No. 466 (Part) in Rendadi Village, Wallajah Taluk, Vellore District, Tamil Nadu by M/S. Tamil Nadu Minerals Limited – For Environmental Clearance Amendment – Extension of EC. (SIA/TN/MIN/263094/2022, dated: 23.03.2022)**

The proposal was placed in this 304<sup>th</sup> meeting of SEAC held on 20.08.2022. 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 applied for

  
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Environmental Clearance for the proposed Black granite quarry lease over an extent of 47.88.0 Ha at S.F.No. 466 (Part) in Rendadi Village, Wallajah Taluk, Vellore District, Tamil Nadu.

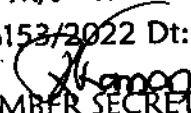
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of Mineral Projects" of the Schedule to the EIA Notification, 2006.
3. EC obtained vide SEIAA-TN/F.No.4393/2015/1(a)/EC – 4555/2021 dated 24.02.2021.
4. As per mining plan the lease period is for 20 years. The production for the five years states that the total quantity of recoverable reserves should not exceed 3,59,005 cu.m RoM with an ultimate depth of mining is 30m from the top of the hillock. The Annual peak production as per mining plan is 1750cu.m.
5. The scheme of mining –III has been approved by Director of Geology and mining, Chennai vide letter Rc.No.7613/MM4/2021 dated 25.02.2022.
6. Earlier this proposal was placed in 259th meeting of SEAC held on 31.03.2022 and the SEAC had recommended for grant of Extension of Environmental Clearance. Subsequently, the proposal was placed before SEIAA in 521st meeting held on 17.06.2022. The Authority after detailed discussions accepted the recommendation of SEAC and decided to grant extension of EC issued for a period of 5 Years subject to the conditions stipulated in EC obtained vide Lr.No.SEIAA-TN/F.No.4393/2015/1(a)/EC-4555/2021 dated 24.02.2021.
7. An application was received from Tvl.TAMIN Ltd., in Form-10 for corrigendum in earlier issued Environmental Clearance uploaded in Parivesh portal.

Based on the presentation made by the proponent, SEAC decided to recommend for grant of Amendment in Environmental Clearance for the annual peak production quantity of 7199 m<sup>3</sup> of Black Granite Instead of 1750 m<sup>3</sup> of Black Granite subject to the standard & normal conditions as stipulated by the MoEF & CC.

Agenda No: 304-25

(File No: 6793/2022)

Existing Quartz & Feldspar quarry lease over an extent of 4.07.0 Ha S.F.Nos.103, 104A & 112 Punganthurai Village, Dharapuram Taluk, Tiruppur District, Tamil Nadu by M/s TAMIN - Amendment to Environmental Clearance. (SIA/TN/MIN/276153/2022 Dt: 02.06.2022)

  
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The proposal was earlier placed in 291<sup>st</sup> SEAC meeting held on 2.7.2022. The project proponent has given a detailed presentation. The details of the project furnished by the proponent are available on the PARIVESH web portal (parivesh.nic.in).

SEAC noted the following:

- In the Mineral Concession Rules, 1960, (hereinafter referred to as the principal rules), in rule 2, in sub rule (1), after clause (vii), the following clause is inserted, namely:-  
*'(vii a) "run-of-mine" means the raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area;'*
- The project proponent has issued with Environmental Clearance vide Lr.No.SEIAA-TN/F.No. 6793/1(a)/EC No.4068/2019 Dt. 31.10.2019 for the production of 3007 T of Quartz for the period of 5 Years from the date of Execution of mining lease.
- Now, the project proponent has applied for amendment in the existing EC issued for the following.

Production qty as per EC	Amendment Sought
Quartz 3007 T for the period of 5 years from the date of execution of mining lease	52,434 T of RoM per Annum

The project proponent also furnished the following

- The TAMIN production targets are conservative and follow the government mining rules and regulations to quarry the Black granite, Dolerite at this location and sold to international and domestic markets.
- The project proponent is also demarcated a dedicated area within the leasehold area for dumping of the non-saleable granite waste.
- The waste rock (or) overburden rock (or) other rejects excavated in the quarry is also dumped within the leasehold area and it will be backfilled into the worked out granite quarry faces during the final closure plan, with a view to restore the land to its original use (or) desired alternate use.
- In case of non-feasibility of backfilling, the waste dumps will suitably terraced and stabilised by planting adequate vegetation as indicated by the SEAC, as a part of progressive mine closure plan.

  
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- Long term & shorter ecological and environmental impacts such as air pollution due to dust, exhaust emissions or fumes, the discharge of toxic and objectionable effluents, noise arising out during the mining operations of granite and related activities are adequately mitigated in the EMP.
- It is submitted that the environmental impact is directly linked to ROM being mined out from the mineralised zone of quarry and not restricted to saleable production quantity (recovery alone).
- Since the EC limits saleable production quantity (recovery only), it is observed that our quarry managers tend to extricate a very miniscule quantity of absolutely defect free material.
- In many quarries the recovery falls down to very low value as 2% of RoM. This is neither in the interest of revenue generation for TAMIN (or) the State Government and also it is also not helping to protect the environment.
- Mining recoverable reserves may vary subject to the quality of Granite mining method and Geological features such as structural, textural formations and the market demand for the Granite being mined.
- It is well known that without extracting the Run of Mine (ROM) the recoverable production (recovery) is not possible.

SEAC carefully considered the request of the project proponent based on the presentation made and the details furnished by the project proponent. SEAC noted the following.

1. Project proponent has requested the following amendment.

Production qty as per EC	Amendment sought
Quartz 3007 T for the period of 5 years	52,434 T of RoM per Annum

2. The term RoM includes raw, unprocessed or uncrushed material in its natural state obtained after blasting, digging, cutting or scraping from the mineralized zone of a lease area.
3. The quantity of 'saleable mineral' depends on many factors such as the geology of the site, technology, workmanship, etc, and, therefore, is difficult to estimate accurately, while RoM can easily be estimated at the time of preparation of mining plan.
4. SEAC recommended EC for the project based on the EIA/PFR/EMP report and approved mining plan wherein the details of production of RoM mineral and

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SEAC -TN

mineral waste were mentioned.

5. EMP for the project has been finalised based on total RoM & peak annual RoM and not based on 'saleable mineral.'

6. SEAC noted that the PP has not asked for any change in the area, or in RoM, or in the peak annual RoM.

Considering all the above, the Committee recommends the following amendment to the EC subject to the certain conditions.

Production qty as per EC	Amendment Recommended
Quartz 3007 T for the period of 5 years	52,434 T of peak RoM per Annum

Subsequently the subject was placed before SEIAA in its 536<sup>th</sup> meeting held on 26.07.2022. The Authority after detailed discussions, decided to refer back the proposal to SEAC for specific recommendation with justification for grant of Environmental clearance on the quantity of mineable mineral in terms of ROM quantity instead of Production quantity after the receipt of following details from the project proponent.

Further the Proponent shall furnish the following additional particulars:


1. Certified compliance report for the existing quarry.
2. Valid scheme of mining stating the required product.

Hence the proposal was placed for reappraisal in this 304<sup>th</sup> meeting of SEAC held on 21.08.2022. The Project proponent furnished reply for the points raised by SEIAA. Based on the additional particulars furnished by the Project proponent, SEAC noted that the PP has not furnished certified compliance report issued by MoEF&CC/TNPCB for its existing EC. Hence SEAC decided to call for the following details from the PP.

1. The PP shall furnish the Certified compliance report issued by MoEF&CC/TNPCB for its existing EC issued

**Agenda No: 304 – TA-1**  
**(File No: 9400/2022)**

**Proposed Sand quarry lease over an extent of 04.80.0 Ha at S.F.No. 1/1(P) in Gadilam River of Vanamadevi Village, Cuddalore Taluk, Cuddalore District, Tamil Nadu by The Executive Engineer, Public Works Department, Water Resource Department, Sand Mining & Monitoring Division, Villupuram District for Environmental Clearance (SIA/TN/MIN/284025/2022, Dt.18.07.2022).**

  
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SEAC -TN

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CHAIRMAN  
SEAC - TN

Earlier, this proposal was placed in this 301<sup>th</sup> Meeting of SEAC held on 06.08.2022. The details of the project furnished by the proponent are available in the website (parivesh.nic.in).

The SEAC noted the following

1. The Executive Engineer, Public Works Department, Water Resource Department, Sand Mining & Monitoring Division, Villupuram District has applied for Environmental Clearance for the proposed sand quarry lease over an extent of 04.80.0 Ha at S.F.No.1/1(P) in Gadilam River of Vanamadevi Village, Cuddalore Taluk, Cuddalore District, Tamil Nadu.
2. The proposed quarry/activity is covered under Category "B2" of Item 1(a) "Mining Projects" of the Schedule to the EIA Notification, 2006.
3. The precise area communication is issued for the period of 1 year. The approved mining plan is for the period of 1 years & production should not exceed 48360 Cu.m of Sand. The ultimate pit depth is 1m.

Based on the presentation and documents furnished by the project proponent, SEAC decided to make an on - the - spot inspection to assess the present status of the site by the sub-committee constituted by the SEAC.

The Sub-Committee of SEAC visited the project site on 13.08.2022 to collect the factual information and took photographs of the salient features of the site to get the first-hand information of the site. The Sub-Committee inspection report was placed in this 304<sup>th</sup> Meeting of SEAC held on 20.08.2022 and the observations of the Sub-committee are as follows,

**Vanamadevi Sand Quarry:**

Sl.No	Description	Details
1	Proposal number	SIA/TN/MIN/284025/2022, DT.18.07.2022
2	File number	9400/2022
3	Proponent	Executive Engineer, WRD., Mining and Monitoring Division, Villupuram
4	Major Project Activity	1 a. Mining of minerals
5	Category	B2

  
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CHAIRMAN  
SEAC, TN

6	Project Type	Fresh EC
7	River	Gedilam
8	Location	SF No.1/1of Vanamadevi Village
9	Area	4.80.00 Hectare
10	Quantity& Duration	48360 m <sup>3</sup> / 1 year
11	Depth	1m below bed level
12	Method & Mining	Open cast - mechanised
<b>Location</b>		
	N11° 44'17.0374"	E79° 40'10.7729"
	N11° 44'20.2519"	E79° 40' 10.8664"
	N11° 44'19.8133"	E79° 40' 26.7121"
	N11° 44'16.5544"	E79° 40'26.6052"

**Observations made by the Sub-Committee:**

- Proposed sand quarry is located on the northern side of the Vanamadevi Village in SF No.1/1 in the river bed of Gedilam. It is close to the right bank of Gedilam river.
- The dimension of the proposed sand quarry is 480m in length and 100m in width.
- It is located on the downstream of Vilangalpattu checkdam (Distance 1.13m, Sill +9.285m) Vanamadevi - Keezh Arungunam road bridge (Distance 560m, Sill +9.200 m).
- The proposed quarry site is located on the upstream of Thirumanikuzhi Road bridge (Distance 1.60km Sill level 8.860m).
- Gedilam River confluences in Bay of Bengal sea at Thevanampattinam Village lies 16km East of proposed sand quarry site.
- The sand at the proposed site is replenished well and sand is deposited above the bed level (Theoretical bed level +9.07m).
- It was informed by the PWD officials that a temporary road with bio-degradable material will be formed along the banks of river to transport the sand to the yard.



- Paddy fields are seen enroute Cuddalore to Vanamadevi village.
- Now, water is flowing on the right bank edge of Gedilam river. The proposed site is replenished above the bed level.
- There is no water supply scheme in 5km radius.

**Recommendations made by the Sub-Committee:**

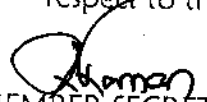
- The following condition of the Enforcement & Monitoring Guidelines for Sand Mining, 2020 of the MoEFCC, Government of India (Annexure VIII Salient provision for sand mining in the state of Tamil Nadu) can be implemented.

*"To monitor the groundwater level during sand quarrying operations, a network of existing wells may be established around the sand quarrying area and new piezometers must be installed at all sand quarry sites. Monitoring of Ground Water Quality in the vicinity (one Km radius from the sand quarrying site) shall be carried out once in two months".*

- In this endeavour, Groundwater Wing of the Water Resources Department of the PWD may be engaged.
- As per Rule 36 of the Tamil Nadu Minor Mineral Concession Rules 1956, no sand quarry should be allowed within 500m radial distance from the location of any bridge, water supply system, infiltration well or pumping installation. Within 500m on either side no such structures or installation are available, the mining of sand at the proposed sand quarry in SF No.1/1 of Vanamadevi Village, Cuddalore Taluk, Cuddalore District and hence Environmental Clearance is recommended as per mining plan.

Based on the Inspection report, presentation and documents furnished by the project proponent, SEAC decided to **recommend the proposal for the grant of Environmental Clearance for 48360 Cu.m of Sand for period of 1 Year**, subject to the following specific conditions, in addition to normal conditions stipulated by MOEF &CC:

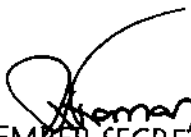
1. The proponent shall fix flag posts at boundaries for the proposed mining area covering an extent of 4.80.0 Ha. There should be no deviation/ violation with respect to the area demarcated for quarrying.

  
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2. The depth of sand quarrying shall be restricted to 1 m from the theoretical bed level.
3. A study shall be carried out on sustainable sand mining in regard to how sustainable is the proposed sand mining along with continuous collection of replenishment data for all the seasons of every year as per Enforcement & Monitoring Guidelines for Sand Mining, 2020 considering impact of sand mining on replenishment of sand and impact of sand mining on ground water table/infiltration wells around the proposed mining lease area by the reputed academic institutions like Anna University, Chennai and IIT, Madras.
4. The project proponent shall monitor the groundwater level during sand quarrying operations, a network of existing wells may be established around the sand quarrying area and new piezometers must be installed at all sand quarry sites. Monitoring of Ground Water Quality in the vicinity (one Km radius from the sand quarrying site) shall be carried out once in two months by engaging Groundwater Wing of the Water Resources Department.
5. To prevent dust pollution, suitable working methodology needs to be adopted taking wind direction into consideration.
6. At no cost the impact of sand mining should interfere with the habitation and cultivation in the nearby area along the river bed.
7. The mining area must be demarcated leaving at least 50m from the river embankment on either side.
8. Contouring of the river bed has to be taken to ascertain the relative levels of sand in the river and also to suggest the depth of sand mining.
9. To ensure safety measures along the boundary of the quarry site, security guards are to be engaged during the entire period of mining operation.
10. Wherever irrigation channels take off from the river within the boundary of the mining project, the mining operation should not affect the flow of water in the irrigation channels.
11. The entire sand mining operation should be as per the guidelines for sustainable sand mining issued in 2016 by the MoEF & CC, GOI, New Delhi.

12. If the agricultural activities (or) thick greeneries are being carried out around all the sand mining projects, the mining operation should not affect the greeneries (or) agricultural activities as well as it should not lead to depletion of water in the open wells located nearby.
13. The approach road and loading of the sand in the vehicles, movement of the vehicle should be planned and implemented in such a way that there is no noise and dust pollution in the nearby habitation. We recommend that PWD should maintain at least a safe distance of 300m from the habitations while planning the approach road and the loading operation. Wherever necessary and near the habitation in particular dust suppression measures to be adopted. While the loaded vehicle move on the road that should be fully covered with tarpaulin.
14. The pathway used by all machineries should be properly constructed and maintained by the PWD in order to avoid pollution.
15. The mining operation should be above the ground water table.
16. Adequate statutory manpower to be deployed for complying with the provisions to use heavy machineries as per Mines Safety Regulations (MCDR, 2017 & MMR, 1961).
17. The Proponent shall provide Provision of bio-toilet to be ensured and confirmed.
18. During the sand mining work, appropriate progressive mine closure activities must be implemented to restore the river bed to its original status for ensuring the free flow.

  
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