### MINUTES

## 643rd MEETING

## STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY-TAMIL NADU

Date: 01.08.2023

# MINUTES OF THE 643<sup>rd</sup> MEETING OF THE STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY HELD ON 01.08.2023.

Agenda No	Description	File No.	Minutes
a)	Confirmation of the minutes of the 642 <sup>nd</sup> meeting of the Authority held on 31.07.2023.		The minutes of the 642 <sup>nd</sup> meeting of the Authority held on 31.07.2023 was confirmed.
b)	The Action taken on the decisions of the 642 <sup>nd</sup> meeting of the Authority held on 31.07.2023.		The Member Secretary informed that 642 <sup>rd</sup> Minutes uploaded in Parivesh website and action taken report will be putup ensuing meeting.
1.	Proposed Rough stone Quarry over an extent of 3.70.0 Ha at SF. No. 457 (part-2) of Hosappuram Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu by Thiru. P. Venkata Reddy - For Terms of Reference. (SIA/TN/MIN/431072/2023, Dt. 27.05.2023)		The authority noted that this proposal was placed for appraisal in 393 <sup>rd</sup> meeting of SEAC held on 20.07.2023, the committee has furnished its recommendations for granting ToR with Public hearing subject to the conditions stated therein. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Terms of Reference (ToR) along with Public Hearing under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions in addition to the conditions in 'Annexure B' of this minute.
2.	Proposed Rough stone quarry lease over an extent of 3.35.0Ha at SF.No. 588(Part) of Alur Village, Hosur Taluk, Krishnagiri District, Tamil Nadu by Thiru, S. Prasanth Kumar - for Environmental		The authority noted that this proposal was placed for appraisal in 393 <sup>rd</sup> meeting of SEAC held on 20.07.2023. Based on the presentation made by the proponent, SEAC noted that there are considerable number of poultry farm houses / structures and few habitations/dwellings within 300 m. Besides, the

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	Clearance, (SIA/TN/MIN/431139/2023, Dated: 27.05.2023)		proposed quarrying site is also an elevated mound with agricultural activities all around. Hence, the Committee noted that the proposed rough stone quarrying operation in this area will also affect the waterflow direction & volume coming from such elevated places. Hence the Committee decided not to recommend the proposal.  In view of the above, SEIAA accepts the decision of SEAC and decided to request the Member Secretary to grant rejection letter to the proponent as per the 393 <sup>rd</sup> Meeting of SEAC held on 20.07.2023. Hence, this file may be closed and
3.	Proposed Fireclay quarry over an extent of 3.21.5 Ha at S. F. Nos. 336/4 (Part), 336/5, 336/8 & 336/9 (Part) of Therani Village, Alathur Taluk, Perambalur District, Tamil Nadu by Thiru. C. Senthil Kumar - For Terms of Reference. (SIA/TN/MIN/430996/2023 dt. 27.05.2023)	10084	recorded.  The authority noted that this proposal was placed for appraisal in 393rd SEAC meeting held on 20.07.2023. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Terms of Reference (ToR) along with Public Hearing under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions in addition to the conditions in 'Annexure B' of this minutes.
4.	Proposed Pebbles quarry lease area over an extent of 1.22.68 Ha at S.F.Nos. 16/1C3A, 16/1C3B, 16/3A2 & 16/3B of Sorapattu Village, Marakkanam Taluk, Viluppuram District, Tamil Nadu by Thiru. S. Panneerselvam - For	10098	The authority noted that the subject was appraised in 393 <sup>rd</sup> SEAC meeting held on 20.07.2023. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.  After detailed discussions, the Authority taking into account the recommendations of SEAC and

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Environmental Clearance, (SIA/TN/MIN/431453/2023,

Dated: 30.05.2023)

also the safety aspects and to ensure sustainable, scientific and systematic mining, decided to grant Environmental Clearance for the quantity of 12,056 m³ of Pebbles with an ultimate depth of mining upto 2m below ground level as per the mine plan approved by the Department of Geology & Mining. This is also subject to the standard conditions as per Annexure - (I) of SEAC minutes, other normal conditions stipulated by MOEF&CC & all other specific conditions as recommended by SEAC in addition to the following conditions and the conditions in Annexure 'A' of this minutes.

- Keeping in view of MoEF&CC's notification S.O.1533(E) dated.14.09.2006 and S.O. 1807(E) dated 12.04.2022, this Environmental Clearance is valid as per the approved mine plan period.
- The EC granted is subject to review by District Collector, Mines Dept. and TNPCB on completion of every 2 years till the project life. They should also review the EC conditions to ensure that they have all been adhered to and implemented.
- The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC while seeking a renewal of the mining plan to cover the project life.
- The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP.

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			<ol> <li>As per the OM vide F. No. IA3-22/1/2022-IA-III [E- 172624] Dated: 14.06.2022, the Project Proponents are directed to submit the sixmonthly compliance on the environmental conditions prescribed in the prior environmental clearance letter(s) through newly developed compliance module in the PARIVESH Portal from the respective login.</li> <li>The amount allocated for EMP should be kept in a separate account and both the capital and recurring expenditures should be done year wise for the works identified, approved and as committed. The work &amp; expenditure made under EMP should be elaborated in the biannual compliance report submitted and also should be brought to the notice of concerned authorities during inspections.</li> </ol>
5.	Existing Grey Granite Quarry lease over an extent of 3.19.5 Ha at S.F.Nos. 347/1, 347/2, 347/4, 347/5, 348/4, 348/5, 348/6B1, 348/6C & 348/6D1 of Jagadevipalayam Village, Bargur Taluk, Krishnagiri District, Tamil Nadu by M/s. Everking Granites - For Terms of Reference. (SIA/TN/MIN/404966/2022 Dt: 04.11.2022)	9549	The authority noted that this proposal was placed for appraisal in 393 <sup>rd</sup> SEAC meeting held on 20.07.2023. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Terms of Reference (ToR) along with Public Hearing under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions in addition to the conditions in "Annexure B* of this minutes."
6.	Existing Fire Clay Quarry lease over an extent of 4.13.5Ha S.F. Nos:434/1, 434/3(Part) & 435/1	10085	The authority noted that the subject was appraised in 393 <sup>rd</sup> meeting of SEAC held on 20.07.2023. SEAC has furnished its recommendations for

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Therani Village, Alathur Taluk, Perambalur District by Tvl. S.S. Minerals - For Terms of Reference, (SIA/TN/MIN/430948/2023, dt:27/05/2023)

granting Terms of Reference (ToR) along with Public Hearing subject to the one of the condition that

 The proponent shall give an Affidavit before the issuance of ToR from SEIAA-TN stating that the mining operations will remain suspended till they obtain the EC granted by the SEIAA after the reappraisal process as per MoEF &CC OM F.No. IA3-22/11/2023-IA.III (E-208230), dated. 28.04.2023.

In view of the above, the Authority noted that the PP is yet to furnish said affidavit as stated in SEAC minutes in regard to as per MoEF &CC OM F.No. 1A3-22/11/2023-1A.III (E-208230), dated. 28.04.2023.

After detailed discussion, the authority decided to defer the proposal seeking ToR for want off Affidavit stating that the mining operations will remain suspended till they obtain the EC granted by the SEIAA after the reappraisal process as per MoEF &CC OM F.No. IA3-22/11/2023-IA.III (E-208230), dated. 28.04.2023.

existing Rough Stone Quarry lease over an extent of 2.19.5Ha S.F.No.1/22A, 1/23A, 1/24A, 1/25A & 1/26A, Ragimanapalli, SF.No.270/2A2B, 270/2C1A(P) & 270/2C1B, Kurubarapalli Village, Krishnagiri Taluk, Krishnagiri District by Thiru. S.K. Nawab - For Environmental Clearance.

The authority noted that the subject was appraised in 393<sup>rd</sup> meeting of SEAC held on 20.07.2023 and SEAC directed the PP to provide the additional particulars as stated therein. On receipt of the same, further deliberations will be done.

In view of the above, the authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 20:07:2023.

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	(SIA/TN/MIN/431146/2023, dt:27/05/2023)		Hence, the proponent is advice to submit the additional documents / information as sought above within a period of 30 days failing which your proposal will automatically delisted from the PARIVESH portal.
8.	Existing Rough Stone & Gravel Quarry lease over an extent of 4.62.0Ha S.F.No.407/2A & 407/2B, Pachapalayam Village, Sulur Taluk, Coimbatore District by N. Thangavelu - For Terms of Reference, (SIA/TN/MIN/429152/2023, dt:13/05/2023)	10099	The authority noted that the subject was appraised in 393 <sup>rd</sup> meeting of SEAC held on 20.07.2023. SEAC has furnished its recommendations for granting Terms of Reference (ToR) along with Public Hearing subject to the conditions stated therein.  After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Terms of Reference (ToR) along with Public Hearing under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions in addition to the conditions in 'Annexure B' of this minute.  1. The project proponent shall prepare mine closure plan considering quantity of Topsoil & Weathered rock. If any.  2. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
9,	Existing Grey Granite Quarry lease over an extent 1.56.5 Ha at S.F.Nos. 353/2A1B, 2A7, 2B, 2C1 & 2E1A, Jagadevipalayam Village Bargur Taluk, Krishnagiri District, Tamil	9550	The authority noted that the subject was appraised in 393 <sup>rd</sup> meeting of SEAC held on 20.07.2023. SEAC has furnished its recommendations for granting Terms of Reference (ToR) along with

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	Nadu by Thriu E. Jagadeesan - For Terms of Reference. (SIA/TN/MIN/404965/2022 Dt:04.11.2022)	Public Hearing subject to the conditions stated therein.  After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Terms of Reference (ToR) along with Public Hearing under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions in addition to the conditions in 'Annexure B' of this minute.  1. The project proponent shall prepare mine closure plan considering quantity of Topsoil & Weathered rock. If any.  2. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
10.	Existing Limestone mine over an extent of 21.66.5 Ha at S.F. No. 631/9, Devannagoundanur Village, Sankari Taluk, Salem District, Tamil Nadu by M/s. Super Mines and Minerals -for Environmental Clearance  (SIA/TN/MIN/37038/2018 Dt: 31.05.2019).	The authority noted that the subject was appraised in 393rd meeting of SEAC held on 20.07.2023 and SEAC decided to defer and to call for additional details as follows.  i) The PP & EIA coordinator shall submit Chapter 13 on assessment of ecological damage, remediation plan and natural and community resource augmentation plan.  ii) Also, the PP & EIA coordinator shall furnish said chapter 13 as per CPCB guidelines.  iii) Revised EMP cost for the life of the mine including cost evolved for said Chapter 13 (Assessment of ecological damage, Remediation plan and Natural and Community

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resource augmentation plan) along with progressive mine closure plan.

Based on the submission of the aforesaid details, the SEAC will decide the future course of action including the inspection by the Sub-Committee for assessing the ground realities.

In view of the above, the authority decided to call for certain additional particulars as follows

- Copy of scheme of mining plan approval letter from IBM.
- ii) Copy of approved scheme of mining plan. Hence, the proponent is advice to submit the additional documents / information as sought above within a period of 30 days failing which your proposal will automatically delisted from the PARIVESH portal.

#### 11. File No: 10086

Expansion of Existing Billets manufacturing facility from 26,000 Tons per Annum to 2 Lakhs Tons per Annum at Plot No: B 13/N, B 13/S & B8/W2 of SIPCOT Industrial Complex & S.F. No. 336/13(Pt), 15(Pt), 12 (Pt), 14(Pt), 14B(Pt), 339/2A(Pt) and 347/1(Pt), 2(Pt) of Pappankuppam Village, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu by M/s. M Nellaiyah Rolling Mill Private Limited- For Terms of Reference. (SIA/TN/IND1/430030/2023, Dated: 29.05.2023)

The Authority noted that the subject was appraised in the 393<sup>rd</sup> Meeting of SEAC held on 20.07.2023.

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

 The Committee noted that the data furnished by the Proponent is not consistent. For example,

S.No	Particulars	Existing	Proposed
1.	Production Capacity(T/A)	Billets-26,000	Billets-1,74,000
2,	Power Requirement(kVA)	4990	4800
3.	Furnace Capacity & Quantity	6T Induction furnace with 2 No's of	8T Induction furnace with 2 No's of crucibles

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crucibles and Coal
fired reheating
furnace

- 2. PP/EIA coordinator shall check the correctness of data and revise the data accordingly.
- As per MoEF&CC OM FC-11/119/2020-FC Dated: 17.05.2022, the proposed site attracts NBWL clearance as per the provision contained in para 5 of the above mentioned OM. Hence, the proponent shall submit the acknowledgment of the application submitted in Parivesh Portal for NBWL clearance.
- In addition to that, the Proponent shall submit the details regarding the number of Induction furnace to be used for this expansion and its capacity/Production.
- The PP shall submit Efficiency study/report of the existing and proposed Induction furnace through reputed institution.
- The Proponent shall submit the details about source of Raw materials to be used. If it is imported, shall furnish the details of its screening mechanism to avoid toxic materials & storage.
- The PP shall furnish action plan for harnessing 50% solar energy or shall purchase 50% renewable green energy to meet the energy requirement.
- The PP shall obtain fresh water supply commitment letter from the Competent authority.

On receipt of the above details, the SEAC would further deliberate on this project and decide the further course of action.

In addition to the above, After detailed discussions, the Authority decided to obtain the following

- The proponent shall submit the green technologies deployed in the production to reduce carbon footprint, Green House Gas (GHG), CO<sub>2</sub> and rise in temperature.
- Details regarding strategies adopted for occupational health safety and energy efficiency standards shall be submitted.
- The proponent shall submit detailed report regarding temperature rise and climate change impacts due to the proposed project and control measures.
- The PP shall study fugitive emissions and regular emission monitoring strategies to prevent their escape into the environment.
- Details regarding the transparency and accountability system in place during the operation period of the project.
- Details regarding the In-House environmental performance and evolution tools to evaluate the impacts of the project on the environment.
- 7. Detailed study is to be made on material flow analysis and Life Cycle Assessment (LCA) in

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- the process of production and the report shall be submitted.
- Through a chart Illustration, clarify the cradle-to-grave approach for anticipated emissions
  and environmental threats in every stage, and the mitigation strategy at every stage shall be
  submitted.
- If the project activity includes disposal of waste/rejects into landfill, the proponent shall furnish details on the strategies adopted to manage the same.
- 10. The proponent shall study the ways of improving recycling efficiency.
- The proponent shall furnish the details about the radioactive contaminations related to the project.
- 12. The proponent shall furnish details about the management of quenching water.
- Project Proponent shall submit the action plan to study the impacts on human health viz respiratory impacts, toxicity impacts and radiation impacts.
- 14. The proponent shall submit a detailed study report regarding the chemical exposures and risks anticipated to environment and human health.
- 15. The proponent shall strictly adhere to the mitigation measures as committed regarding the emission of Green House Gas (GHG) and other gas emissions.
- 16. The proponent shall submit a detailed study report regarding the terrestrial and aquatic toxicity due to the proposed project.
- 17. The green belt area should be not less than 15% of the total land area of the project.
- 18. The proponent shall furnish details on the green practices adopted so as to support the circular economy.
- 19. The proponent shall conduct a study and furnish details on the impact of the project on the communities in and around the project area.
- The proponent shall furnish details on the impact on employee health due to the project activities.

Hence, the Proponent is advised to submit the additional documents/information as sought above within the period of 30 days failing which your proposal will automatically get delisted from the PARIVRESH portal.

In view of the above, the Authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 20.07.2023.

12. Proposed Construction of Data 10093 The Authority noted that the subject was appraised Centre with Supportive GIS in the 393<sup>rd</sup> Meeting of SEAC held on 20.07.2023.

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Substation at Ward B, Block 37. T.S.No. 19/2. 20/2 (Old S.F.Nos.158(pt), 159(pt), 160(pt), 174/1(pt), 174/2(pt)) of Ambattur Village, Ambattur Taluk, Chennai District, Tamil Nadu by M/s. Minerva Veritas Data Centre Private Limited-For Environmental Clearance. (SIA/TN/INFRA2/431276/2023, Dated:29/05/2023)

Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance subject to the conditions stated therein. After detailed discussions, the Authority decided to request the Member Secretary, SEIAA-TN to obtain the following details and place before the Authority for further course of action.

- The PP shall obtain fresh water supply commitment letter and disposal of excess treated water from the local body /Metro Water/TWAD.
- The Proponent shall furnish the detailed report on emission, noise and vibration due to the operations of DG sets as proposed.
- The company shall have a well laid down environmental policy duly approved by the Board of Directors before obtaining EC.
- The PP shall furnish NOC of Airport authority for Height Clearance (59.1m).
- The proponent is requested to furnish the details regarding the recreation room, gym facility & canteen waste disposal facility
- Since the data centre is in cloud computing, the following impacts may be studied in detail
  - The proponent must submit details regarding the fire suppression strategies that will be deployed during Fire break out.
  - The impact on Global Warming, Climate Change, Energy consumption, Cooling mechanisms

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			to reduce temperature maintain building.  iii. Impacts on the surrounding environment and the inhabitants within the facility due to Toxic waste shall be studied and reported., including that monitoring to activities  iv. The proponent shall submit impacts regarding the anticipated E-Waste generation and its mitigation measures.  v. The proponent shall furnish the details regarding whether adequate parking area provided and traffic impact.  In view of the above, Authority decided to request the Member Secretary, SEIAA to communicate the minutes to the project proponent.
13.	Proposed Rough Stone and Gravel Quarry over an extent of 0.61.50 Ha at S.F.No. 14/1 of Sirukalambur Village, Vellore Taluk, Vellore District, Tamil Nadu by Tvl. Sri Murugan Traders, (Partner Thiru. P. Prabakaran) -For Environmental Clearance. (SIA/TN/MIN/430552/2023, Dated: 26/05/2023).		The Authority noted that the subject was appraised in the 393rd Meeting of SEAC held on 20.07.2023. During the meeting the Committee noted that the project proponent is absent during the meeting. Hence the subject was not taken up for discussion and the project proponent shall furnish the reason for his absence.  In view of the above, the Authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent held on 20.07.2023.
14.	Proposed Fireclay lease over an extent of 2.21.5 Ha at S.F.Nos, S.F.	10080	The Authority noted that the subject was placed in the 393° meeting of SEAC held on 20.07.2023 and

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Nos: 361/2(Part) & 361/3 Therani Village, Alathur Taluk, Perambalur District, Tamil Nadu by Thiru. C. Senthil Kumar, — For Terms of Reference.

(SIA/TN/MIN/431156/2023 dated: 27.05.2023) the SEAC has furnished its recommendation for the grant of Terms of Reference (ToR) with Public Hearing for the EIA study subject to the conditions stated therein.

After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Terms of Reference (ToR) along with Public Hearing under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions in addition to the conditions in 'Annexure B' of this minute.

- The project proponent shall prepare mine closure plan considering quantity of Topsoil & Weathered rock. If any.
- The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.

Proposed Ordinary Earth Quarry 10087 lease over an extent of 3.33.3 Ha at S.F.Nos.1374/1 (Part) PWD Tank, Vayaloor 2 Village, Ponneri Taluk, Thiruvallur District, Tamil Nadu by Thiru. E. Karnal - For Environment Clearance.
 (SIA/TN/MIN/431184/2023 dt: 27.05.2023)

The Authority noted that the subject was placed in the 393<sup>rd</sup> meeting of SEAC held on 20.07.2023 and the SEAC has furnished its recommendation for the grant of Environmental Clearance subject to the conditions stated therein.

After detailed discussions, the Authority taking into account the recommendations of SEAC and also the safety aspects and to ensure sustainable, scientific and systematic mining, decided to grant Environmental Clearance for the production quantity of 29997 m<sup>3</sup> of Ordinary Earth to the

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proposed depth of 0.9m BGL in 55 days as per the approved mining plan. This is also subject to the standard conditions as per Annexure - (1) of SEAC minutes, other normal conditions stipulated by MOEF&CC & all other specific conditions as recommended by SEAC in addition to the following conditions and the conditions in Annexure 'A' of this minutes.

- The quarrying shall be done only in the area of 3.33.3 Ha (measuring 303m length and 110m breadth) as approved in the mining plan.
- Keeping in view of MoEF&CC's notification S.O.1533(E) dated.14.09.2006 and S.O. 1807(E) dated 12.04.2022, this Environmental Clearance is valid as per the approved mine plan period.
- The EC granted is subject to review by District Collector, Mines Dept. and TNPCB on completion of mine plan period till the project life. They should also review the EC conditions to ensure that they have all been adhered to and implemented.
- The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC while seeking a renewal of the mining plan to cover the project life.
- The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP.
- As per the OM vide F. No. IA3-22/1/2022-IA-III [E- 172624] Dated: 14.06.2022, the Project

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			Proponents are directed to submit the six- monthly compliance on the environmental conditions prescribed in the prior environmental clearance letter(s) through newly developed compliance module in the PARIVESH Portal from the respective login.  7. The amount allocated for EMP should be kept in a separate account and both the capital and recurring expenditures should be done year wise for the works identified, approved and as committed. The work & expenditure made under EMP should be elaborated in the bi- annual compliance report submitted and also should be brought to the notice of concerned authorities during inspections.  8. The project proponent shall store/dump Top soil, Weathered Rock & Granite Waste generated within the earmarked area of the project site and the utilize the same for mine closure as per the approved mine closure plan.
16.	Proposed Gravel & Pebbles lease over an extent of 1.69.0 Ha at S.F.No. 97/1 Nadiyapattu Village, Vridhachalam Taluk, Cuddalore District, Tamil Nadu by Thiru. C. Chinnathambi, - For Environment Clearance. (SIA/TN/MIN/431227/2023 dt: 28.05.2023)	10094	The Authority noted that the subject was placed in the 393 <sup>rd</sup> meeting of SEAC held on 20.07.2023 and the SEAC has furnished its recommendation for the grant of Environmental Clearance subject to inter alia the following condition:  The Project Proponent shall furnish an affidavit stating that the existing pits at the mine lease area are principally trial pits to assess the suitability of the soil for agricultural purpose.

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			The Authority noted that the PP is yet to submit the aforesaid affidavit. Hence the Authority decided to defer the subject to a later date.
17.	Proposed Rough Stone & Gravel quarry lease area over an extent of Extent 1.00.10 Ha at S.F.No. 1054/1A, 1059 (Part) & 1060/2 (Part) of Kodanthur North Village, Aravakurichi Taluk, Karur District, Tamil Nadu by Tvl. Sri Raam Blue Metals - For Environmental Clearance. (SIA/TN/MIN/431022/2023, Dated: 27.05.2023)	a secretary	The authority noted that the subject was appraised in 393rd SEAC meeting held on 20.07.2023.  Based on the presentation & documents furnished, SEAC decided to recommend the proposal for the grant of Environmental Clearance.  After detailed discussions, the Authority taking into account the recommendations of SEAC and to ensure sustainable, scientific and systematic mining, decided to grant Environmental Clearance for a quantity of 54,409m³ of Rough Stone & 20,481m³ of Gravel for the depth of mining up to 20 m (below ground level) as per the mine plan approved by the Department of Geology & Mining. This is also subject to the standard conditions as per Annexure - (I) of SEAC minutes, other normal conditions stipulated by MOEF&CC & all other specific conditions in Annexure 'A' of this minutes.  1. Keeping in view of MoEF&CC notification S.O.1533(E) dated.14.09.2006 and S.O. 1807(E) dated 12.04.2022, this Environmental Clearance is valid as per the approved mine plan period.  2. The EC granted is subject to review by District Collector, Mines Dept. and TNPCB on completion of every 5 years till the project life, They should also review the EC

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18.	Proposed Construction of	10088	adhered to and implemented.  3. The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC while seeking a renewal of the mining plan to cover the project life.  4. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP.  5. As per the OM vide F. No. IA3-22/1/2022-IA-III [E- 172624] Dated: 14.06.2022, the Project Proponents are directed to submit the six-monthly compliance on the environmental conditions prescribed in the prior environmental clearance letter(s) through newly developed compliance module in the PARIVESH Portal from the respective login.  6. The amount allocated for EMP should be kept in a separate account and both the capital and recurring expenditures should be done year wise for the works identified, approved and as committed. The work & expenditure made under EMP should be elaborated in the bi-annual compliance report submitted and also should be brought to the notice of concerned authorities during inspections.  The authority noted that the subject was appraised
10.	residential Building by M/s.  Casagrand Zingo Private Limited at	10000	in 393 <sup>rd</sup> SEAC meeting held on 20.07.2023.

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T.S.No. 156/1 of Perambur Village. The Committee discussed the matter Perambur Taluk, Chennai District recommended a grant of environmental clearance Tamil Nadu - For Environmental for the project proposal as above and subject to the Clearance. standard conditions as per the Annexure II of (SIA/TN/INFRA2/429382/2023, this minutes & normal conditions stipulated by Dated: 16.05.2023) MOEF &CC, in addition to the following specific conditions: 1. PP shall submit the commitment letter from the local body for supply of fresh water to SEIAA before issue of EC. 2. The PP shall frame Environmental policy and Environmental management team and the same shall submitted to SEIAA before issue of EC. In the view of the above, Authority decided that upon the receipt of above-mentioned documents as stipulated by SEAC, further deliberation shall be done. 19. Proposed Rough Stone quarry lease 10095 The authority noted that the subject was appraised in 393rd SEAC meeting held on 20.07.2023. area over an extent of Extent 1.00.0 Ha at S.F.No. 105/1 (PART-3) of Based on the presentation & documents furnished, Periyakolapadi Village, Chengam SEAC decided to recommend the proposal for the Taluk, Tirtivannamalai District, grant of Environmental Clearance. Tamil Nadu by Thiru. R. Kalidasan After detailed discussions, the Authority taking For Environmental Clearance. into account the recommendations of SEAC and to ensure sustainable, scientific and systematic (SIA/TN/MIN/431484/2023, mining, decided to grant Environmental Dated: 01.06.2023) Clearance for a quantity of 58,040m3 of Rough Stone for the depth of mining up to 20.5 m (below ground level) as per the mine plan approved by the Department of Geology & Mining. This is also subject to the standard conditions as per

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Annexure - (I) of SEAC minutes, other normal conditions stipulated by MOEF&CC & all other specific conditions as recommended by SEAC in addition to the following conditions and the conditions in Annexure 'A' of this minutes.

- Keeping in view of MoEF&CC notification S.O.1533(E) dated.14.09.2006 and S.O. 1807(E) dated 12.04.2022, this Environmental Clearance is valid as per the approved mine plan period.
- The EC granted is subject to review by District Collector, Mines Dept. and TNPCB on completion of every 5 years till the project life. They should also review the EC conditions to ensure that they have all been adhered to and implemented.
- The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC while seeking a renewal of the mining plan to cover the project life.
- The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP.
- 5. As per the OM vide F. No. IA3-22/1/2022-IA-III [E- 172624] Dated: 14.06.2022, the Project Proponents are directed to submit the six-monthly compliance on the environmental conditions prescribed in the prior environmental clearance letter(s) through newly developed compliance module in the PARIVESH Portal from the respective login.

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			6. The amount allocated for EMP should be kept in a separate account and both the capital and recurring expenditures should be done year wise for the works identified, approved and as committed. The work & expenditure made under EMP should be elaborated in the bi-annual compliance report submitted and also should be brought to the notice of concerned authorities during inspections.
20.	Proposed Rough Stone Quarry lease over an extent of 1.00.0 Ha (Govt. Poramboke Land) in S.F.No. 399/1 (Part-B) of Kallukkurukki Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu by Thiru. V. Rajesh, – For Terms of Reference. (SIA/TN/MIN/431128/2023, dated:27.05.2023)	10082	The authority noted that the subject was appraised in the 393 <sup>rd</sup> SEAC meeting held on 20.07.2023. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Terms of Reference (ToR) along with Public Hearing under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions in addition to the following conditions and the conditions mentioned in 'Annexure B' of this minutes.
21.	Proposed Rough Stone Quarry lease over an extent of 3.00.0 Ha (Government Poramboke Land) in S.F.No. 271 (Part) of B.R.G. Madhepalli Village, Bargur Taluk, Krishnagiri District, Tamil Nadu by Tmt. K. Valliyammal – For Terms of Reference.	10089	The authority noted that the subject was appraised in the 393 <sup>rd</sup> SEAC meeting held on 20.07.2023. Based on the presentation and documents furnished by the proponent, SEAC noted that:  i. Poultry farms are located within 100m from the proposed project site.  ii. The proponent has not maintained any safety zone/barrier and benches during the mining operations carried out in the earlier EC period.

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	(SIA/TN/MIN/431020/2023, dated:26.05.2023)	iii. The PP had carried out the mining operation without obtaining necessary permission from the Director of Mines Safety, Chennai for maintaining the bench height of 7 m under the provisions of MMR 1961.  iv. The PP had carried out the mining operation in an unsystematic and unscientific manner during the previous EC period.  v. Varatanapalli Reserve Forest is located within 250m from the proposed lease area.  vi. Some structures/habitations are located within 300m from the proposed project site.  In view of the above facts, the SEAC decided not to recommend the proposal.  In this regard, the authority after deliberations, accepted the decision of SEAC and decided to request Member Secretary, SEIAA-TN to grant rejection letter to proponent as per the 393rd SEAC minutes. Further, Authority decided to close and record this proposal.
22.	Proposed Rough Stone and Gravel Quarry lease over an extent of 2.49.0 Ha in S.F.No. 1542/1, 1543/2, and 1544/1A of Shanmugasundrapuram Village, Andipatti Taluk, Theni District, Tamil Nadu by Thiru. B. Shellapandi – For Environmental clearance, (SIA/TN/MIN/429107/2023, dated:02.06.2023)	The authority noted that the subject was appraised in the 393 <sup>rd</sup> SEAC meeting held on 20.07.2023. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.  After detailed discussions, the Authority taking into account the recommendations of SEAC and also the safety aspects and to ensure sustainable, scientific and systematic mining, decided to grant Environmental Clearance for the quantity of 90,775m³ of rough stone and 20,646m³ of gravel upto the maximum depth of 27m below ground

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level as per the mine plan approved by the Department of Geology & Mining. This is also subject to the standard conditions as per Annexure - (1) of SEAC minutes, other normal conditions stipulated by MOEF&CC & all other specific conditions as recommended by SEAC in addition to the following conditions and the conditions in Annexure 'A' of this minutes.

- Keeping in view of MoEF&CC's notification S.O.1533(E) dated.14.09.2006 and S.O. 1807(E) dated 12.04.2022, this Environmental Clearance is valid as per the approved mine plan period.
- The EC granted is subject to review by District Collector, Mines Dept. and TNPCB on completion of every 5 years till the project life. They should also review the EC conditions to ensure that they have all been adhered to and implemented.
- The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC while seeking a renewal of the mining plan to cover the project life.
- The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP.
- As per the OM vide F. No. IA3-22/1/2022-IA-III [E- 172624] Dated: 14.06.2022, the Project Proponents are directed to submit the sixmonthly compliance on the environmental conditions prescribed in the prior environmental clearance letter(s) through newly developed

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		from the respective login.  6. The amount allocated for EMP should be kept in a separate account and both the capital and recurring expenditures should be done year wise for the works identified, approved and as committed. The work & expenditure made under EMP should be elaborated in the biannual compliance report submitted and also should be brought to the notice of concerned authorities during inspections.
23.	Proposed Rough Stone quarry lease over an extent of 1.20.0 Ha at S.F.No. 113/1 (Part-1) of Kondepalli Village, Krishnagiri Taluk, Krishnagiri District, Tamil Nadu by Thiru. M. R. Venkatesan – For Terms of Reference. (SIA/TN/MIN/422870/2023 dated 21.03.2023)	The authority noted that the subject was appraised in the 393 <sup>rd</sup> SEAC meeting held on 20.07.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to grant of Terms of Reference (TOR) under Violation category, subject to the TORs mentioned in the minutes, in addition to the standard terms of reference for EIA study for non-coal mining projects and ToR given in Annexure-I, the EIA/EMP report along with assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter by the accredited consultants. Terms of Reference issued are subject to the outcome of the final orders of the Hon'ble High Court of Madras in the matter of W.P.(MD) No. 11757 of 2021.  After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Terms of Reference (ToR) under violation

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category for undertaking EIA study followed by the

EMP report along with assessment of ecological damage, remediation plan and natural and community resource augmentation plan and it shall be prepared as an independent chapter by the accredited consultants subject to the conditions as recommended by SEAC & normal / Standard conditions in addition to the following conditions and conditions stated therein vide Annexure 'B'.

- The PP shall furnish Copy of valid mining lease approval obtained from the competent Authority.
- The PP shall furnish Copy of mining plan approved by the competent authority of the Dept of Geology and Mining.
- The PP shall furnish EMP for the project life including progressive mine closure plan and final mine closure plan with detailed budget plan.
- The PP shall study in detail about the CO<sub>2</sub> release and temperature rise and the project activities that add to micro climate alternations and the same shall be included in the final EIA report.
- The PP shall study in detail about impact of the proposed mining activity on the water bodies and natural flow of surface and ground water and the same shall be included in the final EIA report.
- The PP shall study in detail about Possibilities of water contamination and impact on aquatic ecosystem health.
- The PP shall study the impact on Invasive Alien Species (IAP).

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Expansion of Existing construction | 6807 of IT buildings at MEPZ (Madras Export Processing Zone) campus at Plot No. A-15, 16, 17(Part), B20, C-1 & C-10 and D-2 in Kadaperi Village. Tambaram. Taluk: Kancheepuram District, Tamil Nadu Congnizant by M/s. Technology Solutions India Private Limited - For Environmental Clearance Under Violation. (SIA/TN/MIS/22790/2018, dated

15.07.2022)

24.

The Authority noted that the subject was placed in the 393rd meeting of SEAC held on 20.07.2023 and the SEAC has furnished its recommendation for the grant of Environmental Clearance to M/s. Cognizant Technology Solutions India Private Limited for the expansion of Existing construction of IT buildings at MEPZ (Madras Export Processing Zone) campus at Plot No.A-15, 16, 17(Part), B20, C-1 & C-10 and D-2 in Kadaperi Village, Tambaram Taluk, Kancheepuram District, Tamil Nadu under violation category comes under the "high level ecological damage category". The Committee decided to recommend the proposal to SEIAA for grant of EC subject to the following specific conditions in addition to the normal conditions stipulated by MOEF&.CC:

- 1. As per the MoEF&CC Notification. S.O.1030 (E) dated:08.03.2018, "The project proponent shall submit a bank guarantee equivalent to the amount of remediation plan and Natural and Community Resource Augmentation Plan with the State Pollution Control Board and the quantification will be recommended by the Expert Appraisal Committee for category A projects or by the State or Union territory level Expert Appraisal Committee for category B projects, as the case may be. and finalized by the concerned Regulatory Authority, and the bank guarantee shall be deposited.
- 2. Accordingly, the amount prescribed for Ecological remediation, natural resource

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augmentation & community resource augmentation is Rs. 479.25 Lakh. Hence the SEAC decided to direct the project proponent to remit the amount of Rs.479.25 Lakh in the form of bank guarantee to Tamil Nadu Pollution Control Board and submit the acknowledgement of the same to SEIAA-TN. The funds shall be utilized for the ecological damage remediation plan, Natural resource augmentation plan & Community resource augmentation plan as indicated in the EIA/EMP report.

- The project proponent shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a period of six months. If not, the bank guarantee will be forfeited to TNPCB without further notice.
- 4. The amount committed by the Project proponent for CER (Rs.70.00 Lakh) shall be remitted in the form of DD to the beneficiary for the activities committed by the proponent. A copy of receipt from the beneficiary shall be submitted to SEIAA-TN.
- As per the MoEF&CC Office Memorandum
   F. No. 22-65/2017-IA.III dated: 30.09.2020
   and 20.10.2020 the proponent shall furnish the detailed EMP mentioning all the activities of proposed CER for entire project other than the CER amount of Rs.70.00

   Lakh to be remitted before the issue of

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Environmental clearance.

- 6. The project proponent shall submit the proof of action taken by the State Government/TNPCB against project proponent under the provisions of Section 19 of the Environment (Protection) Act, 1986 as per the EIA Notification dated: 14.03.2017 and amended 08.03.2018.
- The proponent is directed to provide the acoustic enclosure for the blowers in the existing STP before obtaining EC.
- The proponent shall obtain the necessary permission for disposal of excess storm water to the tank situated nearby from the competent authority.

The Authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent requesting to furnish the additional details/documents sought by SEAC and place the proposal in the ensuing Authority meeting after receipt of the details.

#### Annexure-'A'

#### **EC** Compliance

- The Environmental Clearance is accorded based on the assurance from the project proponent that there will be full and effective implementation of all the undertakings given in the Application Form, Pre-feasibilty Report, mitigation measures as assured in the Environmental Impact Assessment/ Environment Management Plan and the mining features including Progressive Mine Closure Plan as submitted with the application.
- All the conditions as presented by the proponent in the PPT during SEAC appraisal should be addressed in Full.
- The proponent shall submit Compliance Reports on the status of compliance of the stipulated EC conditions including results of monitored data. It shall be sent to the respective Regional Office of Ministry of Environment, Forests and Climate Change,

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- Govt. of India and also to the Office of State Environment Impact Assessment Authority (SEIAA).
- Concealing the factual data or submission of false/fabricated data and failure to comply
  with any of the conditions mentioned above may result in withdrawal of this clearance and
  attract action under the provisions of Environment (Protection) Act, 1986.

#### Applicable Regulatory Frameworks

5. The project proponent shall strictly adhere to the provisions of Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991, along with their amendments, Minor Mineral Conservation & Development Rules, 2010 framed under MMDR Act 1957, National Commission for protection of Child Right Rules, 2006, Wildlife Protection Act, 1972, Forest Conservation Act, 1980, Biodiversity Conservation Act, 2016, the Biological Diversity Act, 2002 and Biological diversity Rules, 2004 and Rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/Hon'ble High Court of Madras and any other Courts of Law relating to the subject matter

#### Safe mining Practices

- The AD/DD, Dept. of Geology & Mining shall ensure operation of the proposed quarry after the submission slope stability study conducted through the reputed research & Academic Institutions such as NIRM, IITs, NITS Anna University, and any CSIR Laboratories etc.
- 7. The AD/DD, Dept. of Geology &Mining & Director General of Mine safety shall ensure strict compliance and implementation of bench wise recommendations/action plans as recommended in the scientific slope stability study of the reputed research & Academic Institutions as a safety precautionary measure to avoid untoward accidents during mining operation.
- 8. A minimum buffer distance specified as per existing rules and statutory orders shall be maintained from the boundary of the quarry to the nearest dwelling unit or other structures, and from forest boundaries or any other ecologically sensitive and archeologically important areas or the specific distance specified by SEIAA in EC as per the recommendations of SEAC depending on specific local conditions.

Water Environment - Protection and mitigation measures

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- The proponent shall ensure that the activity does not disturb the water bodies and natural flow of surface and groundwater, nor cause any pollution, to water sources in the area.
- 10. The proponent shall ensure that the activities do not impact the water bodies/wells in the neighboring open wells and bore wells. The proponent shall ensure that the activities do not in any way affect the water quantity and quality in the open wells and bore wells in the vicinity or impact the water table and levels. The proponent shall ensure that the activities do not disturb the river flow, nor affect the Odai, Water bodies, Dams in the vicinity.
- 11. Water level in the nearest dug well in the downstream side of the quarry should be monitored regularly and included in the Compliance Report.
- Quality of water discharged from the quarry should be monitored regularly as per the norms of State Pollution Control Board and included in the Compliance Report.
- 13. Rain Water Harvesting facility should be installed as per the prevailing provisions of TNMBR/TNCDBR, unless otherwise specified. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
- 14. Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the compliance reports to SEIAA.
- 15. Regular monitoring of ground water level and water quality shall be carried out around the mine area during mining operation. At any stage, if it is observed that ground water table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.
- 16. Garland drains and silt traps are to be provided in the slopes around the core area to channelize storm water. De-silting of Garland canal and silt traps have to be attended on a daily basis. A labour has to be specifically assigned for the purpose. The proponent shall ensure the quality of the discharging storm water as per the General Effluent Discharge Standards of CPCB.

#### Air Environment - Protection and mitigation measures

- The activity should not result in CO<sub>2</sub> release and temperature rise and add to micro climate alternations.
- 18. The proponent shall ensure that the activities undertaken do not result in carbon emission, and temperature rise, in the area.

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19. The proponent shall ensure that Monitoring is carried out with reference to the quantum of particulate matter during excavation; blasting; material transport and also from cutting waste dumps and haul roads.

#### Soil Environment - Protection and mitigation measures

- The proponent shall ensure that the operations do not result in loss of soil biological properties and nutrients.
- 21. The proponent shall ensure that activity does not deplete the indigenous soil seed bank and disturb the mycorrizal fungi, soil organism, soil community nor result in eutrophication of soil and water.
- 22. The activities should not disturb the soil properties and seed and plant growth. Soil amendments as required to be carried out, to improve soil health.
- Bio remediation using microorganisms should be carried out to restore the soil environment to enable carbon sequestration.
- 24. The proponent shall ensure that the mine restoration is done using mycorrizal VAM, vermin-composting, Biofertilizers to ensure soil health and biodiversity conservation.
- The proponent shall ensure that the topsoil is protected and used in planting activities in the area.
- 26. The proponent shall ensure that topsoil to be utilized for site restoration and Green belt alone within the proposed area.
- 27. The top soil shall be temporarily stored at earmarked place (s) and used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. At critical points, use of geotextile shall be undertaken for stabilization of the dump. Protective wall or gabions should be made around the dump to prevent erosion / flow of sediments during rains. The entire excavated area shall be backfilled.

#### Noise Environment - Protection and mitigation measures

- 28. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- 29. The sound at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Hence, the PP shall ensure that the biological clock of the villages are not disturbed because of the mining activity.

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#### Biodiversity - Protection and mitigation measures

- 30. The proponent should ensure that there is no disturbance to the agriculture plantations, social forestry plantations, waste lands, forests, sanctuary or national parks. There should be no impact on the land, water, soil and biological environment and other natural resources due to the mining activities.
- 31. No trees in the area should be removed and all the trees numbered and protected. In case trees fall within the proposed quarry site the trees may be transplanted in the Greenbelt zone. The proponent shall ensure that the activities in no way result in disturbance to forest and trees in vicinity. The proponent shall ensure that the activity does not disturb the movement of grazing animals and free ranging wildlife. The proponent shall ensure that the activity does not disturb the biodiversity, the flora & fauna in the ecosystem. The proponent shall ensure that the activity does not result in invasion by invasive alien species. The proponent shall ensure that the activities do not disturb the resident and migratory birds. The proponent shall ensure that the activities do not disturb the vegetation and wildlife in the adjoining reserve forests and areas around.
- 32. The proponent shall ensure that the activities do not disturb the agro biodiversity and agro farms. Actions to be taken to promote agroforestry, mixed plants to support biodiversity conservation in the mine restoration effort.
- 33. The proponent shall ensure that all mitigation measures listed in the EIA/EMP are taken to protect the biodiversity and natural resources in the area.
- 34. The proponent shall ensure that the activities do not impact green lands/grazing fields of all types surrounding the mine lease area which are food source for the grazing cattle.

#### Climate Change

- 35. The project activity should not in any way impact the climate and lead to a rise in temperature.
- 36. There should be least disturbance to landscape resulting in land use change, contamination and alteration of soil profiles leading to Climate Change.
- 37. Intensive mining activity should not add to temperature rise and global warming.
- Operations should not result in GHG releases and extra power consumption leading to Climate Change.
- 39. Mining through operational efficiency, better electrification, energy use, solar usage, use of renewable energy should try to decarbonize the operations.

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- Mining Operation should not result in droughts, floods and water stress, and shortages, affecting water security both on site and in the vicinity.
- 41. Mining should not result in water loss from evaporation, leaks and wastage and should support to improve the ground water.
- 42. Mining activity should be flood proof with designs and the drainage, pumping techniques shall ensure climate-proofing and socio-economic wellbeing in the area and vicinity.

#### Reserve Forests & Protected Areas

- 43. The activities should provide nature based support and solutions for forest protection and wildlife conservation.
- 44. The project activities should not result in forest fires, encroachments or create forest fragmentation and disruption of forest corridors.
- 45. There should be no disturbance to the freshwater flow from the forest impacting the water table and wetlands.
- 46. The project proponent should support all activities of the forest department in creating awareness to local communities on forest conservation.
- 47. The project activities should not alter the geodiversity and geological heritage of the area.
- 48. The activities should not result in temperature rise due to increased fossil fuels usage disrupting the behaviour of wildlife and flora.
- 49. The activities should support and recognise the rights and roles of indigenous people and local communities and also support sustainable development.
- 50. The project activities should support the use of renewables for carbon capture and carbon storage in the project site and forest surrounds.
- The project activities should not result in changes in forest structure, habitats and genetic diversity within forests.

#### Green Belt Development

- 52. The proponent shall ensure that in the green belt development more indigenous trees species (Appendix as per the SEAC Minutes) are planted.
- 53. The proponent shall ensure the area is restored and rehabilitated with native trees as recommended in SEAC Minutes (in Appendix).

#### Workers and their protection

54. The project proponent is responsible for implementing all the provisions of labour laws applicable from time to time to quarrying /Mining operations. The workers on the site

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- should be provided with on-site accommodation or facilities at a suitable boarding place, protective equipment such as ear muffs, helmet, etc.
- 55. The proponent has to provide insurance protection to the workers in the case of existing mining or provide the affidavit in case of fresh lease before execution of mining lease.
- 56. The workers shall be employed for working in the mines and the working hours and the wages shall be implemented/enforced as per the Mines Act, 1952.

#### Transportation

- 57. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a bypass road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department, Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
- 58. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

#### Storage of wastes

59. The project proponent shall store/dump the granite waste generated within the earmarked area of the project site for mine closure as per the approved mining plan.

CER/EMP

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- 60. The CER Should be fully Implemented and fact reflected in the Half-yearly compliance report.
- The EMP Shall also be implemented in consultation with local self-government institutions.
- The follow-up action on the implementation of CER Shall be included in the compliance report.

#### Directions for Reclamation of mine sites

- 63. The mining closure plan should strictly adhere to appropriate soil rehabilitation measures to ensure ecological stability of the area. Reclamation/Restoration of the mine site should ensure that the Geotechnical, physical, chemical properties are sustainable that the soil structure composition is buildup, during the process of restoration.
- 64. The proponent shall ensure that the mine closure plan is followed as per the mining plan and the mine restoration should be done with native species, and site restored to near original status. The proponent shall ensure that the area is ecologically restored to conserve the ecosystems and ensure flow of goods and services.
- 65. A crucial factor for success of reclamation site is to select sustainable species to enable develop a self-sustaining eco system. Species selected should easily establish, grow rapidly, and possess good crown and preferably be native species. Species to be planted in the boundary of project site should be un palatable for cattle's/ goats and should have proven capacity to add leaf-litter to soil and decompose. The species planted should be adaptable to the site conditions. Should be preferably pioneer species, deciduous in nature to allow maximum leaf-litter, have deep root system, fix atmospheric nitrogen and improve soil productivity. Species selected should have the ability to tolerate altered pit and toxicity of and site. They should be capable of meeting requirement of local people in regard to fuel fodder and should be able to attract bird, bees and butterflies. The species should be planted in mixed association.
- For mining area reclamation plot culture experiments to be done to identify/ determine suitable species for the site.
- 67. Top soil with a mix of beneficial microbes (Bacteria/Fungi) to be used for reclamation of mine spoils. AM Fungi (Arbuscular mycorrhizal fungi), plant growth promoting Rhizo Bacteria and nitrogen fixing bacteria to be utilized.
- 68. Soil and moisture conservation and water harvesting structures to be used where ever possible for early amelioration and restoration of site.

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- 69. Top soil is most important for successful rehabilitation of mined sites. Topsoil contains majority of seeds and plant propagation, soil microorganism, Organic matter and plant nutrients. Wherever possible the topsoil should be immediately used in the area of the for land form reconstruction, to pre mining conditions.
- 70. Over burdens may be analyzed and tested for soil characteristics and used in the site for revegetation. Wherever possible seeds, rhizome, bulbs, etc of pioneering spices should be collected, preserved and used in restoring the site.
- 71. Native grasses seeds may be used as colonizers and soil binders, to prevent erosion and allow diverse self- sustaining plant communities to establish. Grasses may offer superior tolerance to drought, and climatic stresses.
- 72. Reclamation involves planned topographical reconstruction of site. Care to be taken to minimize erosion and runoff. Topsoils should have necessary physical, chemicals, ecological, properties and therefore should be stored with precautions and utilized for reclamation process. Stocked topsoil should be stabilized using grasses to protect from wind. Seeds of various indigenous and local species may be broad casted after topsoil and treated overburden are spread.
- 73. Alkaline soils, acidic soils, Saline soils should be suitably treated/amended using green manure, mulches, farmyard manure to increase organic carbon. The efforts should be taken to landscape and use the land post mining. The EMP and mine closure plan should provide adequate budget for re-establishing the site to pre-mining conditions. Effective steps should be taken for utilization of over burden. Mine waste to be used for backfilling, reclamation, restoration, and rehabilitation of the terrain without affecting the drainage and water regimes. The rate of rehabilitation should be similar to rate of mining. The land disturbed should be reshaped for long term use. Mining should be as far as possible be eco-friendly. Integration of rehabilitation strategies with mining plan will enable speedy restoration.
- 74. Efforts should to taken to aesthetically improve the mine site. Generally, there are two approaches to restoration i.e Ecological approach which allows tolerant species to establish following the succession process allowing pioneer species to establish. The other approach i.e plantation approach is with selected native species are planted. A blend of both methods may be used to restore the site by adding soil humus and mycorrhiza.
- 75. Action taken for restoration of the site should be specifically mentioned in the EC compliances.

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#### Annexure 'B'

#### Cluster Management Committee

- Cluster Management Committee shall be framed which must include all the proponents in the cluster as members including the existing as well as proposed quarry.
- The members must coordinate among themselves for the effective implementation of EMP as committed including Green Belt Development, Water sprinkling, tree plantation, blasting etc.,
- The List of members of the committee formed shall be submitted to AD/Mines before the execution of mining lease and the same shall be updated every year to the AD/Mines.
- Detailed Operational Plan must be submitted which must include the blasting frequency with respect to the nearby quarry situated in the cluster, the usage of haul roads by the individual quarry in the form of route map and network.
- The committee shall deliberate on risk management plan pertaining to the cluster in a holistic manner especially during natural calamities like intense rain and the mitigation measures considering the inundation of the cluster and evacuation plan.
- The Cluster Management Committee shall form Environmental Policy to practice sustainable mining in a scientific and systematic manner in accordance with the law. The role played by the committee in implementing the environmental policy devised shall be given in detail.
- The committee shall furnish action plan regarding the restoration strategy with respect to the individual quarry falling under the cluster in a holistic manner.
- 8. The committee shall furnish the Emergency Management plan within the cluster.
- The committee shall deliberate on the health of the workers/staff involved in the mining as well as the health of the public.
- The committee shall furnish an action plan to achieve sustainable development goals with reference to water, sanitation & safety.
- 11. The committee shall furnish the fire safety and evacuation plan in the case of fire accidents.

#### Impact study of mining

- 12. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area covering the entire mine lease period as per precise area communication order issued from reputed research institutions on the following
  - a) Soil health & soil biological, physical land chemical features.
  - 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.

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- 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.

#### Agriculture & Agro-Biodiversity

- 13. Impact on surrounding agricultural fields around the proposed mining Area.
- 14. Impact on soil flora & vegetation around the project site.
- 15. Details of type of vegetations including no. of trees & shrubs within the proposed mining area and. If so, transplantation of such vegetations all along the boundary of the proposed mining area shall committed mentioned in EMP.
- 16. The Environmental Impact Assessment should study the biodiversity, the natural ecosystem, the soil micro flora, fauna and soil seed banks and suggest measures to maintain the natural Ecosystem.
- 17. Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.
- 18. The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock.

#### Forests

- The project proponent shall detailed study on impact of mining on Reserve forests free ranging wildlife.
- The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna.
- 21. The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection.
- The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site.

#### Water Environment

23. 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

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will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the entire mine lease period.

- 24. Erosion Control measures.
- Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area on the nearby Villages, Water-bodies/ Rivers, & any ecological fragile areas.
- The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir.
- 27. The project proponent shall study and furnish the details on potential fragmentation impact on natural environment, by the activities.
- 28. The project proponent shall study and furnish the impact on aquatic plants and animals in water bodies and possible scars on the landscape, damages to nearby caves, heritage site, and archaeological sites possible land form changes visual and aesthetic impacts.
- The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components.
- The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites.

#### Energy

 The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished.

#### Climate Change

- 32. The Environmental Impact Assessment shall study in detail the carbon emission and also suggest the measures to mitigate carbon emission including development of carbon sinks and temperature reduction including control of other emission and climate mitigation activities.
- 33. The Environmental Impact Assessment should study impact on climate change, temperature rise, pollution and above soil & below soil carbon stock.

#### Mine Closure Plan

 Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued.

#### **EMP**

35. Detailed Environment Management Plan along with adaptation, mitigation & remedial strategies covering the entire mine lease period as per precise area communication order issued.

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36. The Environmental Impact Assessment should hold detailed study on EMP with budget for Green belt development and mine closure plan including disaster management plan.

#### Risk Assessment

 To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.

#### Disaster Management Plan

38. 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 covering the entire mine lease period as per precise area communication order issued.

#### Others

- 39. The project proponent shall furnish VAO certificate with reference to 300m radius regard to approved habitations, schools, Archaeological sites, Structures, railway lines, roads, water bodies such as streams, odai, vaari, canal, channel, river, lake pond, tank etc.
- 40. As per the MoEF& CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall address the concerns raised during the public consultation and all the activities proposed shall be part of the Environment Management Plan.
- 41. The project proponent shall study and furnish the possible pollution due to plastic and microplastic on the environment. The ecological risks and impacts of plastic & microplastics on aquatic environment and fresh water systems due to activities, contemplated during mining may be investigated and reported.

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