

**MINUTES**

**592<sup>nd</sup> MEETING**

**STATE LEVEL ENVIRONMENT IMPACT  
ASSESSMENT AUTHORITY-TAMIL NADU**

**Date: 16.02.2023**



**MINUTES OF THE 592<sup>nd</sup> MEETING OF THE STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY HELD ON 16.02.2023.**

<b>Agenda No</b>	<b>Description</b>	<b>File No.</b>	<b>Minutes</b>
a)	Confirmation of the minutes of the 591 <sup>st</sup> meeting of the Authority held on 10.02.2023.		The minutes of the 591 <sup>st</sup> meeting of the Authority held on 10.02.2023 was confirmed.
b)	The Action taken on the decisions of the 591 <sup>st</sup> meeting of the Authority held on 10.02.2023.		The Member Secretary informed that 591 <sup>st</sup> Minutes uploaded in Parivesh wesbsite and action taken report will be putup ensuing meeting.
1.	Proposed Construction of Residential Building Complex at T.S. No. 9/20A, 9/20B, 10/5, 10/6, 10/7-1, 10/7-2, 10/7-3, 11/4, 11/5, 11/6, 11/7A, 11/7B, 11/8, 11/10, 11/11, 12/9, 12/11, 12/12, 12/14, 13/1, 13/2A, 13/3A, 13/4A1, 13/4B1, 13/4C1, 13/5A, 15/1B, 15/2A, 15/2B1, 15/4A, 15/4C, 15/5 and 16/1 of Block No.25 Ward C, Zamin Pallavaram and T.S.No.4/1, 4/3, 5/1, 5/2, 5/3, 5/4A1, 5/4A2, 5/4B, 5/5/2, 5/6, 5/7, 5/8, 5/9, 5/10-2, 6/1, 6/2, 6/3, 6/4/1, 6/11A1, & 6/12 of Block No. 19 Ward G, Nemilichery Village of Pallavaram Town, Pallavaram Taluk, Chengalpattu District, Tamil Nadu by M/s. Prestige	6676	<p>The authority noted that the subject was appraised in 347<sup>th</sup> SEAC meeting held on 13.01.2023. After detailed discussion, the Authority accepted the recommendation of SEAC and decided to grant of Terms of Reference as recommended by SEAC for undertaking the Environment Impact Assessment Study and preparation of Environment Management Plan subject to the conditions as recommended by SEAC in addition to the following conditions:</p> <ol style="list-style-type: none"> <li>1. As per the MoEF&amp; 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 CER activities as committed with the action plan.</li> <li>2. The proponent shall furnish details on the measures taken to make the Buildings energy efficient and confirm to the green building norms.</li> <li>3. The proponent shall provide details on the adequate parking facility provided including vehicles of all the workers &amp; visitors including clean traffic plan.</li> </ol>

  
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Pallavaram Ventures - For Terms of Reference.

4. The proponent shall ensure that no treated or untreated trade effluent/sewage discharged outside the premises under any circumstances.
5. The disaster management and disaster mitigation plan shall be furnished and should be seriously adhered to avoid of calamities.
6. The project proponent shall furnish the action taken to improve water usage efficiency in the building.
7. The project proponent shall conduct detailed study of biodiversity flora & fauna including invasives /endemic vulnerable species.
8. The project proponent shall furnish NOC obtained from competent authority that there is no encroachment of water bodies (including canals).
9. The project proponent shall furnish impact of Green House Gases emissions and climate change likely due to activities.
10. The project proponent shall conduct detailed soil investigation including microflora /fauna.
11. The project proponent shall study impact on livelihoods of locals.
12. The project proponent shall furnish List of trees available in the area.
13. The project proponent shall study impact of activities on water bodies/wetlands.
14. The project proponent shall conduct studies on invasive and alien species and the measures taken to prevent the spread of these.
15. The proponent shall furnish details on the actions taken to reduce anthropogenic GHGs such as CO<sub>2</sub>, CH<sub>4</sub>, nitrous oxide, etc., resulting from human activities.

  
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		<p>16. The proponent shall furnish details on the strategies adopted to decarbonize the building.</p> <p>17. The proponent shall furnish measures taken to mitigate the impact on critically endangered species, biodiversity, etc, due to the modification of the habitat.</p> <p>18. The proponent shall develop emergency response plan in addition to the disaster management plan.</p> <p>19. The proponent shall furnish details on building-friendly pest control strategies developed using non chemical measures so as to control the pest population thereby not losing beneficial organisms.</p> <p>20. The proponent furnish detailed plan adopted to reduce carbon footprints and also strategies for climate proofing and climate mitigation.</p> <p>21. The proponent shall furnish details on strategies developed to ensure the buildings in blocks don't trap heat and become local urban heat islands.</p> <p>22. The proponent shall furnish details on the sustainability criteria adopted to protect the micro environment from wind turbulences and change in aerodynamics since high rise buildings may stagnate air movements.</p> <p>23. The proponent shall furnish details on the strategies developed to prevent bird hits.</p> <p>24. The proponent shall furnish details on the provisions made to ensure that the building does not create artificial wind tunnels creating cold water and uncomfortable living conditions resulting in health issues.</p>
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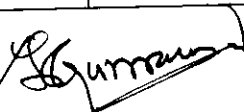
  
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			<p>25. The proponent shall develop detailed evacuation plan for disabled people and safety evacuation plan during emergencies.</p> <p>26. The proponent shall furnish details on the strategies adopted to maintain the health of the inhabitants in high rise buildings.</p> <p>27. The proponent shall explain the methodology adopted to control thermal environment and other shocks in the building.</p> <p>28. The proponent shall provide details on the provisions for controlled ventilation and lighting systems.</p>
2.	Proposed Rough stone and Gravel quarry lease over an extent of 1.25.0 Ha in S.F.No. 531/1A2 (Part) of Ponmanai A Village, Thiruvattar Taluk, Kanniyakumari District, Tamil Nadu by Thiru. V.S.Raju- For Terms of Reference.	9644	<p>The Authority noted that the proposal was placed in the 347<sup>th</sup> meeting of SEAC held on 13.01.2023. The SEAC decided that a sub-committee will be formed to carry out on the spot -inspection of the project site to assess the anticipated impacts of mining activity on the surrounding environmental settings and to submit report. Further the SEAC directed the PP to furnish the copy of necessary approvals (mandatory documents) detailing the new Survey number of the mine lease area. On receipt of the same, SEAC would further deliberate on this project.</p> <p>The Authority decided to request the Member Secretary, SEIAA TN to communicate the aforesaid SEAC minutes to the Proponent.</p>
3.	Proposed Black granite quarry lease over an extent of 8.46.0 Ha in SF.No. 315, 316 and 317/1 of Sathanur Village, Thandaramapttu Taluk, Thiruvannamalai District, Tamil	9647	<p>The authority noted that this proposal was placed for appraisal in this 347<sup>th</sup> meeting of SEAC held on 13.01.2023. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant <b>Terms of Reference (ToR) along with Public Hearing</b> under cluster for undertaking the combined</p>

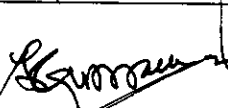
  
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	<p>Nadu by M/s. Tamil Nadu Minerals Limited - For Terms of Reference.</p>		<p>Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC &amp; normal conditions in addition to the conditions in 'Annexure B' of this minute.</p> <ol style="list-style-type: none"> <li>1. The activity should not result in CO<sub>2</sub> release and temperature rise and add to micro climate alternations.</li> <li>2. The proponent shall ensure that the activity does not disturb the water bodies and natural flow of surface and ground water, nor cause any pollution, to water sources in the area.</li> <li>3. The proponent shall ensure that the activity does not disturb Soil health &amp; bio-diversity, Climate change leading to Droughts, Floods etc.</li> <li>4. The proponent shall ensure that the activity does not Pollute leading to release of Greenhouse gases (GHG), rise in Temperature, &amp; Livelihood of the local people.</li> <li>5. The proponent shall ensure that the activity does not make the Possibilities of water contamination and impact on aquatic ecosystem health.</li> <li>6. The trees present in the site shall be protected, replanted elsewhere.</li> <li>7. The PP shall study the impact on Invasive Alien Species (IAP).</li> </ol>
<p>4.</p>	<p>Proposed Black granite quarry over an extent of 20.95.5 Ha at S.F.Nos. 1193/1 (Part 5 &amp; 16), Kodakkal Village, Sholinghur Taluk, Ranipet District, Tamil Nadu by M/s. Tamil Nadu</p>	<p>9648</p>	<p>The Authority noted that the subject was appraised in 347<sup>th</sup> SEAC meeting held on 13.01.2023. 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</p>

  
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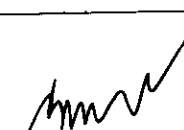
  
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Minerals Limited- Terms of Reference.	and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions in addition to the conditions in 'Annexure B' of this minute.
	<ol style="list-style-type: none"> <li>1. <b>The total quantity of 1,10,265 cu.m of RoM does not exceed with 11,027cu.m of Black Granite(10% Recovery) &amp; 99238cu.m of Granite waste/rejects, are permitted with ultimate depth up to 40m GL considering the safety aspects for a period of 5 years.</b></li> <li>2. The project proponent shall prepare mine closure plan considering mineable quantity of Topsoil, Weathered rock &amp; mineral reject/waste. If any.</li> <li>3. Copy of valid mining lease approval obtained from the competent Authority.</li> <li>4. Copy of approved review of scheme of mining plan by the competent authority (Dept. of Geology and Mining / IBM).</li> <li>5. Details of habitations around the proposed mining area and latest VAO certificate regarding the location of habitations within 300m radius from the periphery of the site.</li> <li>6. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.</li> </ol>
5. Proposed Rough Stone and Gravel quarry over an extent of 4.54.0 Ha in S.F.No. 80/2, 80/7, 80/8, 80/9, 80/10, 80/11, 80/12, 80/13, 80/14, 80/15, 80/16,	9650 The authority noted that this proposal was placed for appraisal in this 347 <sup>th</sup> meeting of SEAC held on 13.01.2023. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant <b>Terms of Reference (ToR) along with Public</b>

  
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80/23, 206/36 & 207/6 in Melur Village, Kulathur Taluk, Pudukkottai District, Tamil Nadu by Thiru. T. Tamilselvan - for Terms of Reference.

**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. Since the SVS International college of Architecture is located at a distance of 164m from the proposed mining lease area, **the proponent is requested to submit status of license and NoC from the All India Council for Technical Education (AICTE).**
2. As per Tamil Nadu Minor Mineral Concession Rules, 1959 under section V – Miscellaneous in para 36. General restrictions in respect of quarrying operations; (1-A) (a) ***"No lease shall be granted for quarrying stone within 300 metres (three hundred metres) from any inhabited site: Provided that the exiting quarries which are subsisting under current leases shall be entitled for continuance till the expiry of the lease period. The lessees whose quarries lie within a radius of 300 metres from the inhabited site shall undertake blasting operations only after getting permission of the Director of Mines Safety, Chennai."***

Since the SVS International college of Architecture is located at a distance of 164m from the proposed mining lease area, **The PP is requested to obtain permission from the Director of Mines Safety, Chennai.**

  
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			<p>3. <b>The proponent is requested to submit NoC from PWD</b> as the proposed lease area is located between two water bodies.</p> <p>4. <b>The proponent is requested to submit NoC from DFO</b> since the Birds that visit nearby water bodies are likely to be affected by the operation of mining.</p>
6.	Proposed Rough stone & gravel over an extent of 3.21.5 Ha at S.F.Nos. 220/1A, 1C & 223/2F of Ichipatti Village, Palladam Taluk, Tiruppur District, Tamil Nadu by Thiru. S.A. Ramachandran - For Terms of Reference	9652	<p>The proposal is placed in this 347<sup>th</sup> SEAC Meeting held on 13.01.2023.</p> <p>Based on the presentation made by the proponent, SEAC decided to call for the following additional details.</p> <ol style="list-style-type: none"> <li>1. The proponent shall submit Certified Compliance Report.</li> <li>2. The proponent shall submit Slope Stability Action Plan for the existing quarry.</li> <li>3. The proponent shall complete the Fencing activities and carry out the Green Belt development activities around the boundary of the lease and shall submit Photo and video of the same.</li> </ol> <p>On receipt of the aforesaid details, the proposal will be considered for further deliberations.</p> <p>In the view of the above, SEIAA accepts the decision of SEAC and decided to request Member Secretary to communicate the minutes of 347<sup>th</sup> SEAC held on 13.01.2023 to the project proponent.</p>
7.	Proposed Rough Stone and Gravel quarry lease over an extent 2.27.5 Ha at S.F.No.104/1, 104/2A (Part), 104/2B1 (Part), 105/1A (Part) & 105/2 of Kuppam Village, Pugalur Taluk,	9653	<p>The authority noted that the subject was appraised in 347<sup>th</sup> SEAC meeting held on 13.01.2023. Based on the presentation and details furnished by the project proponent, the Committee decided to obtain the following details from the project proponent to consider the proposal for appraisal:</p>


  
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	<p>Karur District, Tamil Nadu by Thiru.P.Devaraj - For Terms of Reference.</p>		<ol style="list-style-type: none"> <li>1. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees &amp; safety distance between the adjacent quarries &amp; water bodies nearby provided as per the approved mining plan.</li> <li>2. The proponent shall also furnish details/photographs of the garland drains provided.</li> </ol> <p>Hence, after detailed discussions and deliberations, the committee decided to consider the proposal after the submission of aforesaid details by the Proponent/consultant.</p> <p>In view of this, the authority after discussions decided to request Member Secretary, SEIAA to communicate the minutes of the 347<sup>th</sup> SEAC meeting to the proponent.</p>
<p>8.</p>	<p>Proposed Multi-colour Granite quarry lease over an extent of 2.65.0 Ha in SF. No. 417/2, 454/2, 417/5, 417/7(P) of K.Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu by M/s. Dahlia Granites Private Limited - For Terms of Reference.</p>	<p>9654</p>	<p>The authority noted that this proposal was placed for appraisal in this 347<sup>th</sup> meeting of SEAC held on 13.01.2023. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant <b>Terms of Reference (ToR) along with Public Hearing</b> 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 &amp; normal conditions in addition to the conditions in 'Annexure B' of this minute.</p> <ol style="list-style-type: none"> <li>1. The activity should not result in CO<sub>2</sub> release and temperature rise and add to micro climate alternations.</li> <li>2. The proponent shall ensure that the activity does not disturb the water bodies and natural flow of</li> </ol>

  
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			<p>surface and ground water, nor cause any pollution, to water sources in the area.</p> <ol style="list-style-type: none"> <li>3. The proponent shall ensure that the activity does not disturb Soil health &amp; bio-diversity, Climate change leading to Droughts, Floods etc.</li> <li>4. The proponent shall ensure that the activity does not Pollute leading to release of Greenhouse gases (GHG), rise in Temperature, &amp; Livelihood of the local people.</li> <li>5. The proponent shall ensure that the activity does not make the Possibilities of water contamination and impact on aquatic ecosystem health.</li> <li>6. The trees present in the site shall be protected, replanted elsewhere.</li> <li>8. The PP shall study the impacton Invasive Alien Species (IAP).</li> <li>9. The PP shall revise EMP.</li> </ol>
9.	Existing Limestone mine lease over an extent of 138.78.5 Ha in, S. F. Nos. 5/1, 7/7, 7/8, 7/9, 7/10 etc., Patta & Poramboke lands of Dholipatti, Palayam & Karikkali Village, Guziliamparai Taluk, Dindigul District, Tamil Nadu by M/s. Chettinad Cement Corporation Private Limited - For Terms of Reference.	9661	<p>The authority noted that this proposal was placed for appraisal in 347<sup>th</sup> meeting of SEAC held on 13.01.2023 and the PP was asked to respond to the decision of EAC extracted above and the details of OMs based on which the PP is seeking examination of their proposal. PP requested time to discuss with their legal team. Hence SEAC decided to defer the proposal. Further SEAC also noted that the PP has not included the survey numbers in online application and in PPT and hence the PP is requested to include all the survey numbers in the application and in the PPT and the PP shall furnish ownership details of all survey numbers.</p> <p>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 13.01.2023.</p>

  
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10.	Proposed sand quarry lease over an extent of 14.00.0 Ha at S.F.No. 146/10 (Part) of Alagiyamanavalan Village, Ariyalur Taluk, Ariyalur District - Tamil Nadu by M/s. The Executive Engineer, Water Resources Department, Mining and Monitoring Division, Tiruchirapalli for Terms of Reference	9666	<p>The Authority noted that the proposal was placed in the 347<sup>th</sup> meeting of SEAC held on 13.01.2023. SEAC has furnished its recommendations to the Authority for granting Terms of Reference (ToR) along with Public Hearing for the project.</p> <p>After detailed discussions, the Authority accepted the recommendation of SEAC and decided to <b>grant Terms of Reference (ToR) along with Public Hearing</b> under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the ToR as recommended by SEAC &amp; subject specific standard ToR stipulated by MoEF&amp; CC in addition to the following ToR:</p> <ol style="list-style-type: none"> <li>1. As per the MoEF&amp; 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.</li> <li>2. The Project Proponent shall study and report in detail the following, as provided in Sustainable Sand Mining Management Guidelines, 2016 and Enforcement and Monitoring Guidelines for Sand Mining, 2020.</li> <li>3. Furnish the Details with route map and the transportation route.</li> <li>4. The details of maximum production from the mines.</li> <li>5. Demarcation of mining area with pillars and geo-referencing shall be made by furnishing photographs taken on site prior to the start of mining.</li> </ol>
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			<p>6. 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.</p> <p>7. 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.</p> <p>8. Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.</p> <p>9. The project proponent shall study impact on indigenous flora and fauna.</p> <p>10. The project proponent shall study impact on fish habitats and the web food web/ food chain in the water body and Reservoir.</p>
11.	Proposed Rough stone & Gravel quarry lease over an extent of 8.00.05 Ha in SF.Nos. 2/1B, 2/2, 2/3 (P), 2/5, 3, 4/1 & 4/2 of Enthoor Village, Marakkanam Taluk, Viluppuram District, Tamil Nadu by M/s. Thirupathi Blue Metal & M.Sand - For Terms of Reference.	9668	The authority noted that this proposal was placed for appraisal in this 347 <sup>th</sup> meeting of SEAC held on 13.01.2023. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant <b>Terms of Reference (ToR) along with Public Hearing</b> under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan and considering sustainable and safe mining SEIAA decided to grant <b>Terms of Reference (ToR) along with Public Hearing</b> for the period of 5 Years confining to the ultimate depth of mining up to 45m Below ground level and the quantity of 11,55,048m <sup>3</sup> of Rough stone and

  
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			1,40,744m <sup>3</sup> of Gravel as per approved mining plan issued by the Department of Geology & Mining subject to the conditions as recommended by SEAC & normal conditions in addition to the conditions in 'Annexure B' of this minute.
12.	Recommendations for releasing the Bank guarantee for the value of Rs 114.62 Lacs (0.5% of the Project cost ) remitted towards Ecological remediation, Natural resources Augmentation and Community resources Augmentation under EIA Notifications dated 14.3.2017 & 08.03.2018 (violation category) for the Construction of additional buildings for Engineering College, Hostel and Bank in its existing campus by M/s. KGISL Trust at S.F. Nos. 353/1, 2, 354/1, 356/3A, 357/1D pt, 358/2A, 2C, 2D, 359/1A, 1B, 360/1C, 1Dpt, 361/3A, 362/1Bpt, 1C,2A, 2B, 363/1B, 2, 3, 365/1A, 2, 366/1A, 1A1A2, 366/1A2, 1B & 372/2, of Saravanampatti Village, Coimbatore North Taluk, Coimbatore District, Tamil Nadu without obtaining prior Environmental Clearance	371	The Authority noted that the proposal was placed in the 347 <sup>th</sup> meeting of SEAC held on 13.01.2023. The Committee after detailed discussions decided to recommend to SEIAA to accept the request of the Proponent to release the Bank Guarantee submitted to TNPCB, as the Project Proponent has fulfilled all conditions.  The Authority decided to accept the recommendation of SEAC for release of the bank guarantee. Further, the Authority decided to request the Member Secretary, SEIAA to communicate the same to TNPCB.
13.	Proposed Charnockite Blue Metal quarry lease over an extent	3985	The Authority noted that this proposal was placed for appraisal in this 347 <sup>th</sup> meeting of SEAC held on

  
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	of 0.70.96 Ha in S.F. Nos. 133/2A, 2B, 3A, 3B, 4 & 142/5C2, 6B, 7A, 7B, Keezhmidalam-A Village, Vilavancode Taluk, Kaniyakumari District, Tamil Nadu by Thiru.C.Climond - For Extension of Environmental Clearance.		13.01.2023 and during the meeting the Committee noted that the project proponent has not attended the meeting. Hence the subject was not taken up for discussion and the project proponent shall furnish the reason for his absence. 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 13.01.2023.
14.	Existing Rough stone quarry over an extent of 2.02.5 Ha at S.F.No 2(P) of Ellupudayampatty Village, Harur Taluk, Dharmapuri District, Tamil Nadu by Thiru. I D Alavudeen basha - For Terms of Reference under the Violation category	4722	<p>The authority noted that the subject was appraised in 347<sup>th</sup> SEAC meeting held on 13.01.2023.</p> <p>Based on the presentation and documents furnished by the project proponent, SEAC observed that, (1) the land is Government land – tender quarry, (2) the lease period has expired and currently there is no valid lease and the question of issuing ToR for preparation of EIA report for EC does not arise (3) PP may have neither the access to the site nor the inclination to prepare damage assessment for the violation committed and (4) it is vital to enforce the principle of ‘polluter pays’ in such cases, SEAC decided to recommend the following course of action.</p> <ol style="list-style-type: none"> <li>i. SEIAA may direct TNPCB to work out the damage assessment by following the guidelines of CPCB in this regard, after getting the relevant details from the concerned AD G&amp;M, and take action to recover the cost.</li> <li>ii. The SEIAA may direct the Directorate of Mining and Geology(DMG) to ascertain as to whether the PP had complied with the mine closure plan as per mining plan and if the PP had not complied with the same, take</li> </ol>

  
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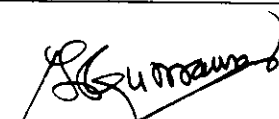
  
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			<p>appropriate action for enforcing the mining closure plan, including recovery of cost, if any.</p> <p>iii. The SEIAA may direct the TNPCB/DMG to file the action taken report on the basis of the above direction within a period of six months, after providing the necessary opportunity to the PP in this regard in accordance with law.</p> <p>iv. SEIAA may initiate action under Sec.19 of EP Act against the PP.</p> <p>The Authority after detailed deliberation accepts the decision of SEAC. Further, SEIAA decided to direct MS-SEIAA the following</p> <ol style="list-style-type: none"> <li>1. A letter may be addressed to the Government to take action against the PP under the provision of section 19 of the Environment (Protection) Act, 1986</li> <li>2. Further AD/Mines shall submit the present ground status which shall include <ol style="list-style-type: none"> <li>i. Whether the land was utilized for the intended purpose.</li> <li>ii. If there is any change in the landscape.</li> <li>iii. The Year wise bulk transport permit (as per appendix XII – TNMMCR, 1959) issued to the lessee.</li> </ol> </li> </ol>
15.	Existing Limestone Mine from over an Extent of 4.49.0Ha in S.F.Nos. 13/1A, 13/1B, 13/1C, 13/1D, 13/1E, 13/2, 14/1, 14/2, 14/11, 14/12, 14/13A, 14/13B, 14/14A, 14/14B, 14/16, 14/17A,	6366	The Authority noted that the subject was placed in the 347th Meeting of SEAC held on 13.01.2023. The SEAC after detailed discussions decided to confirm that the ToR issued is valid up to 31.07.2023 as per the aforesaid MoEF Notification dated 18.01.2021.

  
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<p>14/17B at Alanthuraiyarkattalai (A.Panangur) Village of Ariyalur Taluk, Ariyalur District by Thiru. K. Ganesan, K. Subramanian &amp; K. Jegathesan For Extension of validity of the Terms of Reference issued under "Violation Category"</p>	<p>Hence, the project proponent is requested to submit the following:</p> <ol style="list-style-type: none"> <li>a) Public hearing minutes, EIA/EMP report along with details of aspects of violation, Ecological Damage assessment, Remediation Plan, Natural Resource Augmentation Plan, Community Resource Augmentation plan.</li> <li>b) Proof for the 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 on 08.03.2018.</li> </ol> <p>The Authority, after detailed deliberations accepted the aforesaid recommendations of the SEAC and decided to grant extension of ToR under violation category for the period up to 31.07.2023. subject to the ToR as recommended by the SEAC in addition to the following ToR:</p> <ol style="list-style-type: none"> <li>1. The proponent shall furnish the DFO letter stating the proximity distance of nearest RF, WLS &amp; Tiger reserve etc.</li> <li>2. The project proponent shall submit valid mining lease and scheme of mining plan obtained from the competent authority.</li> <li>3. The project proponent shall submit excess mined out quantity during the violation period after 15.01.2016 along with details of existing pit within the proposed mining area and the copy of remittance of fine levied for the same from the concerned AD/DD, Geology &amp; Mining Dept.</li> </ol>
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		<ol style="list-style-type: none"> <li>4. The project proponent shall submit details of case filed against the project proponent under Section 19 of the Environment (Protection) Act, 1986.</li> <li>5. The limestone quarry involves raw material extraction, transportation and comminution. Therefore, large quantity of diesel and electricity are supposed to be consumed in the production. The diesel fuel and electricity to be consumed to be furnished.</li> <li>6. What are the green mining technologies to be adopted for reducing GHG/CO<sub>2</sub> emissions and lowering the carbon footprint in the limestone mining.</li> <li>7. Strategies adopted for safety and healthy mining operations.</li> <li>8. What are the transparency and accountability system in place during the operation and post-operation period of the project.</li> <li>9. What are the In-House environmental performance and evaluation tools to understand negative impacts of mining.</li> <li>10. Detailed study to be made on material flow analysis and Life Cycle Assessment (LCA) in the process of production.</li> <li>11. Through a chart Illustration, clarify the cradle to grave approach for extraction of limestone and anticipated emissions, environmental threats in every stage and mitigation strategy at every stage.</li> <li>12. Project Proponent to study impacts on human health viz respiratory impacts, toxicity impacts and radiation impacts.</li> <li>13. Study to be made on aquatic, terrestrial toxicity, aquatic eutrophication including detailed</li> </ol>
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			<p>terrestrial toxicity and their impacts of wildlife and biodiversity.</p> <p>14. What is the total water withdrawal consumption, likely temperature rises and climate change impacts.</p> <p>15. What are the chemical exposures in the limestone mining and risks anticipated to environmental and human health.</p> <p>All other conditions imposed in ToR Letter Lr No. SEIAA-TN/F.No.6366/TOR- 516/2018 Dated: 01.08.2018 remains unaltered.</p>										
16.	Existing Black Granite quarry lease over an extent of 24.30.0 Ha S.F.Nos.1193/1 (Part), Kodakkal Village, Sholingur Taluk, Ranipet District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited - For Amendment in Environmental Clearance issued	6573	<p>The Authority noted that the subject was appraised in 347<sup>th</sup> SEAC meeting held on 13.01.2023. The Authority after detailed discussion accepts the recommendation of SEAC and the Authority has decided to grant Amendment for Environmental Clearance as follows subject to grant the existing conditions as mentioned in the EC vide Lr. No. SEIAA-TN/F. No. 6573/2018/1(a)/EC. No.4557/2021 Dt. 24.02.2021 and the remains unaltered and additional conditions as recommended by SEAC in addition to the following condition recommended by SEAC.</p> <table border="1"> <thead> <tr> <th>Production qty as per EC issued Dt. 24.02.2021</th> <th>Amendment Recommended</th> </tr> </thead> <tbody> <tr> <td>RoM: 219560 M<sup>3</sup></td> <td>RoM: 146083 M<sup>3</sup></td> </tr> <tr> <td>Black Granite: 21596 M<sup>3</sup> for the period of 24.02.2021 to 31.03.2023</td> <td>Black Granite Annual peak production: 14490 M<sup>3</sup></td> </tr> <tr> <td></td> <td>Black Granite: 29216 M<sup>3</sup> (20% of Recovery)</td> </tr> <tr> <td></td> <td>Granite waste/Rejects: 116867 M<sup>3</sup></td> </tr> </tbody> </table>	Production qty as per EC issued Dt. 24.02.2021	Amendment Recommended	RoM: 219560 M <sup>3</sup>	RoM: 146083 M <sup>3</sup>	Black Granite: 21596 M <sup>3</sup> for the period of 24.02.2021 to 31.03.2023	Black Granite Annual peak production: 14490 M <sup>3</sup>		Black Granite: 29216 M <sup>3</sup> (20% of Recovery)		Granite waste/Rejects: 116867 M <sup>3</sup>
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Validity as per MoEF & CC notification dated: 13.12.2022							
17.	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 Tamil Nadu Minerals Limited - For Amendment in Environmental Clearance issued	6741	<p>The Authority noted that the subject was appraised in 347<sup>th</sup> SEAC meeting held on 13.01.2023. The Authority after detailed discussion accepts the recommendation of SEAC and the Authority has decided to grant Amendment for Environmental Clearance as follows subject to grant the existing conditions as mentioned in the EC vide Lr. No. SEIAA-TN/F. No. 6741/1(a)/EC. No.4679/2021 Dt. 29.07.2021 and the remains unaltered and additional conditions as recommended by SEAC in addition to the following condition recommended by SEAC.</p> <table border="1"> <thead> <tr> <th>Production qty as per EC issued Dt. 29.07.2021</th> <th>Amendment Recommended</th> </tr> </thead> <tbody> <tr> <td>RoM: 119987 M<sup>3</sup> Black Granite: 5999 M<sup>3</sup> for the period of Five years</td> <td>RoM: 95987 M<sup>3</sup> (Remaining four years) Black Granite Annual peak production: 4803 M<sup>3</sup> Black Granite: 19197 M<sup>3</sup> (20% of Recovery) Granite waste/Rejects: 76790 M<sup>3</sup> Validity as per MoEF &amp; CC notification dated: 13.12.2022</td> </tr> </tbody> </table>	Production qty as per EC issued Dt. 29.07.2021	Amendment Recommended	RoM: 119987 M <sup>3</sup> Black Granite: 5999 M <sup>3</sup> for the period of Five years	RoM: 95987 M <sup>3</sup> (Remaining four years) Black Granite Annual peak production: 4803 M <sup>3</sup> Black Granite: 19197 M <sup>3</sup> (20% of Recovery) Granite waste/Rejects: 76790 M <sup>3</sup> Validity as per MoEF & CC notification dated: 13.12.2022
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			1. The project proponent shall store/dump the and Top soil/Weathered Rock generated within the earmarked area of the project site and the utilize the same for mine closure as per the approved mining plan.
18.	Amendment of Environmental Clearance for the proposed Black Granite Quarry over an extent of 30.10.5 Ha at SF.No.1, Sudanur village, Palacode Taluk, Dharmapuri District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited— Environmental Clearance.	6742	The authority noted that a public complaint was received from Thiru. A.Murugan Dt:06.01.2023 received by this office Dt: 11.01.2023. In view of the above, the authority after detailed discussion decided refer back the proposal to SEAC for remarks & recommendation.
19.	Existing Black Granite quarry lease over an extent of 35.99.0 Ha at S.F.No: 412 (P) at Sinjalanatham Village, Pennagaram Taluk, Dharmapuri District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited- For Environmental Clearance	1107	The authority noted that this proposal was placed for appraisal in the 347 <sup>th</sup> meeting of SEAC held on 13.01.2023 and the SEAC decided to defer the proposal since the project proponent has again requested additional time to furnish certain details sought by the Committee vide minutes of 291 <sup>st</sup> SEAC meeting held on 1.7.2022 & the vide minutes of 536 <sup>th</sup> Authority meeting held on 21.10.2020 & 22.10.2020. 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 13.01.2023.
20.	Existing Black Granite Quarry lease over an extent of 2.53.50 Ha at S.F. No. 184/1B(P) of Thatchampattu Village, Gingee Taluk, Villupuram District, Tamil Nadu by M/s. Tamil Nadu	1192	The Authority noted that this proposal was placed for appraisal in this 347 <sup>th</sup> meeting of SEAC held on 13.01.2023 and based on the presentation and document furnished by the project proponent, SEAC decided to call for the following details from the project proponent:

  
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	Minerals Limited - For Extension of Environmental Clearance.		<p>1. The PP shall furnish a 2<sup>nd</sup> scheme of approved mining plan and approval letter obtained from Director/ Asst. Director, Department of Geology. On the receipt of the same further deliberation will be done.</p> <p>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 13.01.2023.</p>
21.	Proposed Black granite quarry over an extent of 46.07.0 Ha at S.F.No. 311 Old No 311/1 Rajakkal Village, Gudiyatham Taluk, Vellore District, Tamil Nadu by M/s. TamilNadu Minerals Limited- Terms of Reference	1652	<p>The Authority noted that the subject was appraised in 347<sup>th</sup> SEAC meeting held on 13.01.2023. After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant <b>Terms of Reference (ToR) with Public Hearing under violation category</b> for the period 3 years 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 &amp; normal/ Standard conditions in addition to the following conditions and conditions stated therein vide Annexure 'B'.</p> <ol style="list-style-type: none"> <li>1. The project proponent shall prepare mine closure plan considering mineable quantity of Topsoil, Weathered rock &amp; mineral reject/waste. If any.</li> <li>2. Copy of valid mining lease approval obtained from the competent Authority.</li> <li>3. Letter stating that the quarry lease deed has not been cancelled or terminated and is subsisting as on date.</li> <li>4. Copy of request letter submitted to the competent authority (Dept. of Geology and Mining / IBM)</li> </ol>

  
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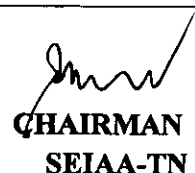
  
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			<p>for renewal of review of scheme of mining plan.</p> <p>5. Copy of approved review of scheme of mining plan by the competent authority (Dept. of Geology and Mining / IBM).</p> <p>6. The project proponent shall submit excess mined out quantity during the violation period after 15.01.2016 along with details of existing pit within the proposed mining area and copy of total penalty levied by the AD/DD, Dept of Geology and Mining and copy of remittance of total penalty by PP.</p> <p>7. Details of habitations around the proposed mining area and latest VAO certificate regarding the location of habitations within 300m radius from the periphery of the site.</p> <p>8. 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.</p>
22.	Existing Black granite quarry over an extent of 6.73.0 Ha at S.F.No. 4/2 & 4/37 Thandrampattu Village, Chengum Taluk, Tiruvannamalai District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited- Terms of Reference.	1827	<p>The authority after detailed discussion decided that the automatic extension of validity of prior Environmental Clearance should be based on approval mining plan. Also, the project proponent has filed application seeking Terms of Reference(ToR) online proposal only and not for Extension validity of Environmental Clearance.</p> <p>In view of the above, SEAC has decided to refer back the proposal to SEAC and SEAC is requested consider approved mining plan and to recommended approval of ToR.</p>
23.	Existing Limestone Quarry over an extent of 7.330 Ha by M/s. India Cements Limited at S.F.No.	6688	<p>The Authority noted that the proposal was placed in the 347<sup>th</sup> meeting of SEAC held on 13.01.2023. The Committee noticed that the project proponent,</p>

  
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	382/1 & 3, 387/1 & 3, 512/1 & 3 in Ramayanpatti Village, Manur Taluk, Tirunelveli District, Tamil Nadu by M/s. India Cements Limited - For Extension of validity of the Terms of Reference issued under "Violation Category"		meanwhile, has filed application seeking Environmental Clearance along with final EIA report and other supporting documents. Hence the SEAC decided to appraise the project proposal for Environmental Clearance in the ensuing meeting. The Authority decided to consider the withdrawal of ToR extension application after processing the application filed for EC and to request the Member Secretary, SEIAA to communicate the SEAC & SEIAA minutes to the Proponent.
24.	Existing Limestone Quarry over an extent of 28.430 Ha. S.F.No.380, 381, 383-386, 388/1 & 3, 389-392, 510, 511, 513 & 514 in Ramayanpatti Village, Manur Taluk, Tirunelveli District, Tamil Nadu by M/s. The India Cements Limited for extension of validity for the Terms of References "Under Violation".	6689	The proposal is placed in this 347 <sup>th</sup> SEAC Meeting held on 13.01.2023. During the meeting, the Proponent informed that he has already submitted the final EIA Report at the office of SEIAA in the month of January. Hence, the Committee after detailed discussion decided to consider the proposal in the ensuing meeting. In the view of the above, SEIAA accepts the decision of SEAC and decided to request Member Secretary to communicate the minutes of 347 <sup>th</sup> SEAC held on 13.01.2023 to the project proponent.
25.	Existing Limestone quarry over an extent of 29.895 Ha at S.F.No.110, 172/1 & 174 of Sethurayanpudur Village, Manur Taluk, Tirunelveli District, Tamil Nadu by M/s. The India Cements Limited for Extension of validity for the Terms of References "Under Violation".	6690	The authority noted that the subject was appraised in 347 <sup>th</sup> SEAC meeting held on 13.01.2023. During the meeting, the Proponent informed that he has already submitted the final EIA Report at the office of SEIAA in the month of January. Hence, the Committee after detailed discussion decided to consider the proposal in the ensuing meeting. In view of this, the authority after discussions decided to request Member Secretary, SEIAA to communicate the minutes of the 347 <sup>th</sup> SEAC meeting to the proponent.

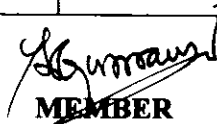
  
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26.	Existing Black granite and Granitic Gneiss quarry lease over an extent of 16.54.0 Ha at Survey No:287 (Panchappalli) & 19 (Namandahalli) Panchapalli & Namandahalli Village, Palacode Taluk, Dharmapuri District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited- For Terms of Reference	6709	<p>The Authority noted that the proposal was placed in the 347th meeting of SEAC held on 13.01.2023. The SEAC <b>decided to recommend the proposal for the grant of Terms of Reference (TOR)</b>, subject to the TORs, in addition to the standard terms of reference for EIA study for non-coal mining projects and details issued by the MOEF &amp; CC to be included in EIA/EMP Report. After detailed discussion, the Authority accepts the recommendation of SEAC and decided to grant <b>Terms of Reference (ToR) along with Public Hearing</b> 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 &amp; normal conditions in addition to the following conditions.</p> <ol style="list-style-type: none"> <li>1. Proponent shall comply with all the conditions imposed in the Precise area communication letter before applying for EC.</li> <li>2. The members must coordinate among themselves for the effective implementation of EMP as committed including Green Belt Development, Water sprinkling, tree plantation, blasting etc.,</li> <li>3. 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.</li> <li>4. 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.</li> <li>5. The committee shall deliberate on risk management plan pertaining to the cluster in a</li> </ol>
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		<p>holistic manner especially during natural calamities like intense rain and the mitigation measures considering the inundation of the cluster and evacuation plan.</p> <ol style="list-style-type: none"> <li>6. 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.</li> <li>7. The committee shall furnish action plan regarding the restoration strategy with respect to the individual quarry falling under the cluster in a holistic manner.</li> <li>8. The committee shall furnish the Emergency Management plan within the cluster.</li> <li>9. The committee shall deliberate on the health of the workers/staff involved in the mining as well as the health of the public.</li> <li>10. 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             <ol style="list-style-type: none"> <li>a) Soil health &amp; bio-diversity.</li> <li>b) Climate change leading to Droughts, Floods etc.</li> <li>c) Pollution leading to release of Greenhouse gases (GHG), rise in Temperature, &amp; Livelihood of the local people.</li> <li>d) Possibilities of water contamination and impact on aquatic ecosystem health.</li> </ol> </li> </ol>
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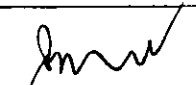
  
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		<p>e) Agriculture, Forestry &amp; Traditional practices.</p> <p>f) Hydrothermal/Geothermal effect due to destruction in the Environment.</p> <p>g) Bio-geochemical processes and its foot prints including environmental stress.</p> <p>h) Sediment geochemistry in the surface streams.</p> <p>11. The committee shall furnish an action plan to achieve sustainable development goals with reference to water, sanitation &amp; safety.</p> <p>12. The committee shall furnish the fire safety and evacuation plan in the case of fire accidents.</p> <p>13. The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished.</p> <p>14. Details of type of vegetations including no. of trees &amp; 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.</p> <p>15. Impact on surrounding agricultural fields around the proposed mining Area.</p> <p>16. Erosion Control measures.</p> <p>17. Impact on soil flora &amp; vegetation around the project site.</p> <p>18. 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, &amp; any ecological fragile areas.</p> <p>19. The project proponent shall furnish VAO certificate with reference to 300m radius regard to approved habitations, schools, Archaeological</p>
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		<p>sites, Structures, railway lines, roads, water bodies such as streams, odai, vaari, canal, channel, river, lake pond, tank etc.</p> <p>20. As per the MoEF&amp; 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.</p> <p>21. 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.</p> <p>22. 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.</p> <p>23. Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.</p> <p>24. The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir.</p> <p>25. The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components.</p> <p>26. The Environmental Impact Assessment should study impact on forest, vegetation, endemic,</p>
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		<p>vulnerable and endangered indigenous flora and fauna.</p> <p>27. The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection.</p> <p>28. The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites.</p> <p>29. The Environmental Impact Assessment should hold detailed study on EMP with budget for Green belt development and mine closure plan including disaster management plan.</p> <p>30. The Environmental Impact Assessment should study impact on climate change, temperature rise, pollution and above soil &amp; below soil carbon stock.</p> <p>31. The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site.</p> <p>32. The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock.</p> <p>33. The project proponent shall study and furnish the details on potential fragmentation impact of natural environment, by the activities.</p> <p>34. 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.</p>
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35. 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.
36. The project proponent shall detailed study on impact of mining on Reserve forests free ranging wildlife.
37. 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 entire mine lease period.
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.
39. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.

  
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			<p>40. Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued.</p> <p>41. Detailed Environment Management Plan along with adaptation, mitigation &amp; remedial strategies covering the entire mine lease period as per precise area communication order issued.</p>
27.	<p>Proposed Existing Educational Institution under Violation Category at S.F. No. 49 to 59, 60/1B, 60/1C, 62/1, 62/2, 62/4A, 63/1, 64/1A, 64/1B, 64/3A, 64/3B, 64/4, 65, 66, 67, 68 to 77, 79 to 82, 83/2, 84/1A, 84/1B, 84/2A, 84/2B, 85, 86/1, 86/2, 87/1, 87/2, 118/1A, 118/1B1, 118/2A, 118/2B, 119, 120, 121/1, 121/2, 121/3, 121/4A, 121/4B, 122/1A, 122/1B, 122/2, 123/1, 123/2, 128/1A1, 128/1A2, 128/2, 128/3, 129/2A, 129/2B, 130/1, 130/2, 131 to 151, 153 to 158, 159/1, 159/2A, 161/1, 161/2, 162, 169/2, 169/3A, 169/3B, 170/1, 197/1A, 198/2B1, 198/3, 198/4A &amp; 198/4B of Kalavakkam Village and Survey Nos. 1034, 1035, 1036, 1037, 1038, 1039, 1040/1B, 1040/2B, 1041, 1046, 1047, 1048, 1226, 1227/2A, 1227/2B, 1228, 1234, 1236, 1237, 1238, 1239, 1240,</p>	513	<p>The Authority noted that the proposal was appraised in 347<sup>th</sup> meeting of SEAC held on 13.01.2023. The Committee carefully examined the request of PP in the light of MoEF &amp; CC Notification S.O.3252 (E) dated.22.12.20214 and O.Ms dated 09.06.2015 &amp; 19.05.2022 and has furnished its remarks as stated in the minutes.</p> <p>The Authority during discussions, carefully reviewed the following references:</p> <ol style="list-style-type: none"> <li>1. The minutes of 220<sup>th</sup> SEAC meeting held on 20.07.2021.</li> <li>2. Proponent's reply dated.07.09.2021.</li> <li>3. The minutes of 247<sup>th</sup> SEAC meeting held on 18.02.2022.</li> <li>4. The minutes of 491<sup>st</sup> Authority meeting held on 08.03.2022</li> <li>5. The minutes of 261<sup>st</sup> SEAC meeting held on 07.04.2022.</li> <li>6. The minutes of 506<sup>th</sup> Authority meeting held on 10.05.2022.</li> <li>7. ToR under violation issued vide Lr.No.SEIAA-TN/F.No.513/Violation/ToR-1146/2022 dated.10.05.2022.</li> <li>8. Proponent's request for an amendment vide letter dated.25.10.2022.</li> </ol>

  
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1241, 1242, 1243, 1244, 1245, 1246, 1247/1C, 1247/2, 1248/1C, 1248/2, 1395C/1A1, 1395C/2A, 1395C/4B, 1415 of Thaiyur B Village, Tiruporur Taluk, Chengalpattu District, Tamil Nadu by M/s. SSN Trust – Clarification Sought – Reg

9. Proponent's request dated. 10.01.2023 to exempt the proposed built-up area.
10. The minutes of 347<sup>th</sup> SEAC meeting held on 13.01.2023.
11. MoEF&CC notification S.O. 3252 (E), dated the 22.12.2014.
12. MoEF&CC Office Memorandums dated O.Ms dated 09.06.2015 & 19.05.2022.

The authority noted the following:

- i) The Committee vide ref. 3<sup>rd</sup> & 5<sup>th</sup> cited has recommended the proposal for Terms of Reference under violation category for the total built-up area of 2,72,483.60 Sq.m.
- ii) The Authority in its 506<sup>th</sup> meeting has granted Terms of Reference under violation category for the existing built up area of 2,18,630.6 Sq.m.
- iii) The proponent vide ref. 8 cited has requested to include the proposed built-up area of 53853 Sq.m in the ToR issued under violation dated.10.05.2022.
- iv) Also, the proponent vide ref. 9 cited has requested to exempt the proposed built-up area of 53583 sq.m in the light of MoEF&CC notification S.O. 3252 (E), dated the 22.12.2014.
- v) The Committee also reviewed the request of the proponent vide ref.10<sup>th</sup> cited.
- vi) As per the ref. 11<sup>th</sup> cited, the educational institutions falling under the category of 8(a) to the Schedule of EIA notification, 2006 i.e, with built-up area less than 1,50,000 Sq.m are given exemption from obtaining EC.

After carefully reviewing the above mentioned details, the authority decided that the Terms of reference under

  
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			violation category issued vide letter dated.10.05.2022 shall be for the total built-up area of 2,72,483.60 Sq.m as per the recommendations of 247 <sup>th</sup> & 261 <sup>st</sup> SEAC meeting. All other conditions mentioned in the ToR issued under violation vide Lr.No.SEIAA-TN/F.No.513/Violation/ToR-1146/2022 dated.10.05.2022 shall remain unchanged and unaltered.
28.	Proposal seeking Environmental Clearance for the Proposed Fire Clay quarry over an extent of 17.945 Ha located at S.F. No, 24/3B, 24/3H, 26/1, 26/2, 26/3, 27/1, etc., & Jaderi - 122/1, 122/2B, 122/2C, 122/2D1, etc., PeriyaKoil and Jader Village, Cheyyar Taluk, Tiruvannamalai District by M/s. Wienerberger India Private Limited.	6896	<p>The authority noted that the subject was appraised in 347<sup>th</sup> meeting held on 13.01.2023. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p><b>After detailed discussions, the Authority taking into account the safety aspects and to ensure sustainable, scientific and systematic mining, decided to grant Environmental Clearance for the quantity of 8,72,025 Tonnes of Fire Clay by restricting the depth of mining upto 9m BGL as per the mine plan approved by the Department of Geology &amp; Mining. This is also subject to the standard conditions as per Annexure - (I) of SEAC minutes, other normal conditions stipulated by MOEF&amp;CC &amp; all other specific conditions as recommended by SEAC in addition to the following conditions and the conditions in Annexure 'A' of this minutes.</b></p> <p>i) Keeping in view of MoEF&amp;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.</p> <p>ii) 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.</p>

  
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			<p>iii) The project proponent shall furnish a Certified Compliance Report obtained from MoEF&amp;CC while seeking a renewal of the mining plan to cover the project life.</p> <p>iv) The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP.</p> <p>v) The PP shall utilize Topsoil for restoring site/mine closure as per mine closure plan.</p> <p>vi) The PP shall provide adequate storm water / garland drain and the storm water shall be routed to the nearby waterbody after obtaining necessary prior permission from competent authority before obtaining CTO from TNPCB.</p> <p>vii) As per the MoEF&amp; CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 accepted by the Project proponent, the revised CER cost is Rs. 20 lakhs and the amount shall be spent for the activities detailed in the SEAC minutes before obtaining CTO from TNPCB</p>
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**Annexure-'A'**

**EC Compliance**

1. 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-feasibility 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.
2. All the conditions as presented by the proponent in the PPT during SEAC appraisal should be addressed in Full.
3. 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, Govt. of India and also to the Office of State Environment Impact Assessment Authority (SEIAA).
4. 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

  
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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**

6. 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**

9. 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.
12. 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.

  
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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**

17. 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.
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**

20. 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 mycorrhizal 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.
23. 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 mycorrhizal VAM, vermin-composting, Biofertilizers to ensure soil health and biodiversity conservation.
25. 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.

  
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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.

**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.

  
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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.
38. 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.
40. 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.

**Green Belt Development**

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

**Workers and their protection**

45. 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 should be provided with on-site accommodation or facilities at a suitable boarding place, protective equipment such as ear muffs, helmet, etc.
46. 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.
47. 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.

  
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### Transportation

48. 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.
49. 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

50. 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

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

  
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**Directions for Reclamation of mine sites**

54. 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.
55. 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.
56. 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.
57. For mining area reclamation plot culture experiments to be done to identify/ determine suitable species for the site.
58. 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.
59. Soil and moisture conservation and water harvesting structures to be used where ever possible for early amelioration and restoration of site.
60. 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.

  
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61. 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 species should be collected, preserved and used in restoring the site.
62. 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.
63. Reclamation involves planned topographical reconstruction of site. Care to be taken to minimize erosion and runoff. Topsoils should have necessary physical, chemical, 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 broadcasted after topsoil and treated overburden are spread.
64. 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 ecofriendly. Integration of rehabilitation strategies with mining plan will enable speedy restoration.
65. 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 resorted to restore the site by adding soil humus and mycorrhiza.
66. Action taken for restoration of the site should be specifically mentioned in the EC compliances.

**Annexure 'B'**

**Cluster Management Committee**

1. 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.

  
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2. The members must coordinate among themselves for the effective implementation of EMP as committed including Green Belt Development, Water sprinkling, tree plantation, blasting etc.,
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
9. The committee shall deliberate on the health of the workers/staff involved in the mining as well as the health of the public.
10. 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.
  - 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.

  
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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**

19. The project proponent shall detailed study on impact of mining on Reserve forests free ranging wildlife.
20. 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.
22. 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 will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the entire mine lease period.
24. Erosion Control measures.
25. 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.

  
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26. 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.
29. The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components.
30. The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites.

#### **Energy**

31. 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**

34. 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.
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**

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

#### **Disaster Management Plan**

  
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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.

  
MEMBER SECRETARY

  
MEMBER

  
CHAIRMAN  
SEIAA-TN