

MINUTES

600th MEETING

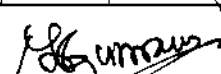
**STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY-TAMIL NADU**

Date: 07.03.2023

**MINUTES OF THE 600th MEETING OF THE STATE LEVEL ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY HELD ON 07.03.2023.**

Agenda No	Description	File No.	Minutes
a)	Confirmation of the minutes of the 599 th meeting of the Authority held on 06.03.2023.		The minutes of the 599 th meeting of the Authority held on 06.03.2023 was confirmed.
b)	The Action taken on the decisions of the 598 th meeting of the Authority held on 06.03.2023.		The Member Secretary informed that 599 th Minutes uploaded in Parivesh wesbsite and action taken report will be putup ensuing meeting.
1.	Proposed Gravel quarry lease over an extent of 1.85.5Ha at S.F.No.35/3A, 35/3B, 35/4 and 35/5 of Melachokkanathapuram Village, Bodinayakanur Taluk, Theni District, Tamil Nadu by Thiru.S.Radhakrishnan - For Environmental Clearance	9318	<p>The authority noted that the subject was appraised in 354th SEAC meeting held on 10.02.2023. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p>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 16008 of Gravel and the annual peak production shall not exceed 5336 Cu.m of Gravel by restricting the depth of mining upto 2m 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.</p> <p>1. The project proponent shall spend EMP cost of Rs. 12.80 Lakhs as committed for the period of 3 Years.</p>


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			<p>2. As per the MoEF& 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. 1.5 Lakhs and the amount shall be spent for the committed activities for the Panchayat Union Middle School, Karattupatti Village as committed, before obtaining CTO from TNPCB.</p>
2.	<p>proposed Rough stone quarry lease area over an extent of 1.00.0Ha at S.F. No:83 (Part-9) (Govt. land), Kodayampatti Village, Vadipatti Taluk, Madurai District, Tamil Nadu by Thiru.R.Vijaykumar- For Environmental Clearance</p>	9671	<p>The Authority noted that the subject was appraised in the 354thSEAC meeting held on 10.02.2022. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p>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 1,14,095 cu.mof rough stone by restricting the depth of mining upto 45m (40m AGL + 5m BGL) 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.</p> <p>3. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject</p>


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			<p>to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.</p> <p>4. The EC granted is subject to review by District Collector, AD mines 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> <p>5. The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC as per the O.M of MoEFCC dated 08.06.2022 while executing a review of the mining plan every 5 years to District Collector, AD mines and TNPCB. If any violation/ non-compliance is observed, the concerned authority shall take necessary action against the project proponent and it shall also be brought to the notice of SEIAA for taking appropriate actions according to the Acts, Regulations, Notifications and Judgements in force. A copy of the review shall be sent to SEIAA/SEAC.</p> <p>6. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and this should be reviewed by the District Collector, AD mines, & TNPCB every 5 years till the project life to ensure environmental sustainability.</p>
3.	Proposed Rough stone quarry lease area over an extent of 1.00.0Ha at SF. No:83 (Part-8) of	9672	The Authority noted that the subject was appraised in 354 th meeting of SEAC held on 10.02.2023. SEAC has furnished its recommendations for granting


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	Kondayampatti Village, Vadipatti Taluk, Madurai District, Tamil Nadu by Thiru G. Valliappan- For Environmental Clearance		Environmental Clearance restricting the production quantity subject to the conditions stated therein. Hence the Project Proponent shall furnish the hard copy of the duly approved revised mining quantity for the restricted production recommended by SEAC.
4.	Proposed Rough stone and Gravel quarry lease area over an extent of 0.75.50 Ha at S.F.Nos. 302/4 (Patta land) of Palamathi Village, Vellore Taluk, Vellore District, Tamil Nadu by Thiru. E. Elampoopathy - For Environmental Clearance.	9678	<p>The Authority noted that the subject was appraised in the 354thSEAC meeting held on 10.02.2022. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p>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 1,13,229cu.m of rough stone and 7616 cu.m of Gravel by restricting the depth of mining upto 40m (15m AGL + 25m BGL) 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.</p> <p>1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.</p>


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			<p>2. The EC granted is subject to review by District Collector, AD mines 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> <p>3. The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CCas per the O.M of MoEFCC dated 08.06.2022 while executing a review of the mining plan every 5 years to District Collector, AD mines and TNPCB. If any violation/ non-compliance is observed, the concerned authority shall take necessary action against the project proponent and it shall also be brought to the notice of SEIAA for taking appropriate actions according to the Acts, Regulations, Notifications and Judgements in force. A copy of the review shall be sent to SEIAA/SEAC.</p> <p>4. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and this should be reviewed by the District Collector, AD mines, & TNPCB every 5 years till the project life to ensure environmental sustainability.</p>
5.	Proposed Rough Stone quarry lease over an extent of 1.62.0Ha at S.F.No. 770/1 & 770/2 of Nathathahalli Village, Nallampalli Taluk, Dharmapuri District, Tamil	9679	The Authority noted that the subject was appraised in 354 th meeting of SEAC held on 10.02.2023. the SEAC decided to confirm that the proposal is entitled for 'automatic extension to the respective increased validity' as per the aforesaid OM issued by the MoEF


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	Nadu by Thiru.G.Murugesan- For Environmental Clearance		<p>& CC subject to the following commitment made by the PP.</p> <p>As accepted by the Project Proponent the CER cost is Rs. 5 Lakh and the amount shall be spent for the committed activities before obtaining CTO from TNPCB.</p> <p>The Authority further noticed that the Project Proponent has furnished only the first page of the Certified Compliance Report (CCR) in the PPT and not submitted copy of CCR along with the application. Hence the Project Proponent is hereby directed to furnish the CCR in full at the earliest.</p>
6.	Proposed Rough stone quarry lease area over an extent of 1.56.0Ha at SF. No. 15/1 (part-7) Elumichanahalli Village, Karimanagalam Taluk, Dharmapuri District Tamil Nadu by Thiru P.R Pandurangan- For Environmental Clearance	9680	<p>The proposal is placed in this 354th SEAC Meeting held on 10.02.2023.</p> <p>Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance</p> <p>The Authority after detailed deliberation, noted that</p> <ol style="list-style-type: none"> 1. From the KML file uploaded by the proponent, it is ascertained that there exists a structure at a distance of 212m approximately from the proposed mine lease area which appears to be a Dog Kennel. 2. There is a shed located within 150m radius from the proposed mine lease area. <p>In the view of the above, Authority decided to call for additional details</p> <ol style="list-style-type: none"> 1. <u>As per Tamil Nadu Minor Mineral Concession Rules, 1959 under section V – Miscellaneous in para 36. General restrictions in respect of quarrying operations; (c)</u> <p>“No new layout, building plans falling within 300 metres from any quarry should</p>


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			<p><i>be given approval by any agency unless prior clearance of the Director of Geology and Mining is obtained. On receipt of proposals for according clearance, the Director of Geology and Mining shall decide upon the continuance or closure, as the case may be of any quarry which is situated within 300 metres from the now layout, building sought for such "clearance".</i></p> <p>Hence, the proponent is requested to obtain NOC from the Director of Geology and Mining.</p> <p>In the view of the above, Authority decided that, upon receipt of the above-mentioned details, further deliberation will be done.</p> <p>In view of the above, Authority decided to request the Member Secretary, SEIAA to communicate the minutes to the project proponent.</p>
7.	Proposed Rough Stone & Gravel quarry lease over an extent of 1.21.5 Ha at S.F. Nos.766/4 of Nathathahalli Village, Nallampalli Taluk, Dharmapuri District, TamilNadu by Thiru.M.Sakthi - For Environmental Clearance	9681	<p>The authority noted that the subject was appraised in 354th SEAC meeting held on 10.02.2023. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p>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 87,425 of rough stone and 27,360 of gravel by restricting the depth of mining upto 21m (6m above ground level + 15m Below Ground Level) as per the mine plan approved by the Department of Geology & Mining. This is also</p>


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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.

1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.
2. The EC granted is subject to review by District Collector, AD mines 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.
3. The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC as per the O.M of MoEF&CC dated 08.06.2022 while executing a review of the mining plan every 5 years to District Collector, AD mines and TNPCB. If any violation/ non-compliance is observed, the concerned authority shall take necessary action against the project proponent and it shall also be brought to the notice of SEIAA for taking appropriate actions according to the Acts, Regulations, Notifications and Judgements in force. A copy of the review shall be sent to SEIAA/SEAC.


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			<p>4. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and this should be reviewed by the District Collector, AD mines, & TNPCB every 5 years till the project life to ensure environmental sustainability.</p>
8.	Proposed Rough Stone & Gravel quarry over an extent of 1.68.5 Ha in S.F.Nos. 193/2B & 197 of Nagarkoodal Village, Nallampalli Taluk, Dharmapuri District, Tamil Nadu by Thiru. G. Seenivasan for Environmental Clearance	9682	<p>The authority noted that the subject was appraised in 354th SEAC meeting held on 10.02.23. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p>After detailed discussions, the Authority decided to grant Environmental Clearance for the quantity of 67,498m³ of rough stone and 66,792m³ of gravel up to the depth of mining 27m (15m AGL + 12m BGL) 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.</p> <p>1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.</p>


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			<p>2. The EC granted is subject to review by District Collector, AD mines 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> <p>3. The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC as per the O.M of MoEFCC dated 08.06.2022 while executing a review of the mining plan every 5 years to District Collector, AD mines and TNPCB. If any violation/ non-compliance is observed, the concerned authority shall take necessary action against the project proponent and it shall also be brought to the notice of SEIAA for taking appropriate actions according to the Acts, Regulations, Notifications and Judgements in force. A copy of the review shall be sent to SEIAA/SEAC.</p> <p>4. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and this should be reviewed by the District Collector, AD mines, & TNPCB every 5 years till the project life to ensure environmental sustainability.</p>
9.	Proposed Rough stone and gravel quarry lease area over an extent of 0.80.0Ha at S.F.No. 248/1A, Sempalli Village, Gudiyattam Taluk, Vellore District by	9686	<p>The Authority noted that the subject was appraised in 353rd meeting of SEAC held on 09.02.2023. The SEAC decided to call for the following additional particulars:</p> <p>1. The proponent shall enumerate on the details of the structures located within 100m, 200m, 300m radius</p>


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	<p>Thiru.S.Dhanasekaran– For Environmental Clearance.</p>		<p>from the proposed mine lease area indicating the type of structure/building, usage/purposes of such building – commercial/industrial/residential/farm house/Govt. building such as Sub-station, occupants of such buildings/structures, ownership of the buildings/structures-whether it belongs to the PP (or) not, etc.</p> <p>2. The Project Proponent shall include the letter received from DFO concerned stating the proximity details of Reserve Forests (Athimugam I RF & other RF), Protected Areas, Sanctuaries, Tiger reserve etc., upto a radius of 25 km from the proposed site.</p> <p>3. The proponent shall submit the details regarding the poultry farm located near the mine lease area.</p> <p>4. The PP shall provide the methodology of carrying out the quarrying operation in the proposed site that is near the Reserve Forest.</p> <p>On receipt of the aforesaid details, the Committee will take up the subject for further deliberations.</p> <p>The Authority decided to request the Member Secretary, SEIAA TN to communicate the aforesaid SEAC minutes to the Proponent.</p>
<p>10.</p>	<p>Proposed rough stone quarry lease over an extent of 1.00.0 Ha in S.F.No 279 (Part-2) of Chennasandiram Village, Krishnagiri Taluk, Krishnagiri District, Tamilnadu by Thiru.N.Chakravarthy - For Environmental Clearance</p>	<p>9688</p>	<p>The authority noted that the subject was appraised in 354th SEAC meeting held on 10.02.2023. Based on the presentation made by the proponent, the SEAC decided to confirm that the proposal is entitled for 'automatic extension to the respective increased validity' as per the aforesaid OM issued by the MoEF & CC subject to the following commitment made by the PP.</p>


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			<p>The authority after detailed deliberations, decided to consider the proposal after obtaining the following details from the project proponent:</p> <p>i) The project proponent shall submit a certified compliance report for the EC obtained earlier vide Lr.No. SEIAA-TN/F.No.5243/1(a)/EC.No.3223/2016 dated 06.07.2016.</p>
11.	<p>Proposed Rough Stone and Gravel Quarrylease over an extent of 3.35.5 Ha at S.F.No. 275/1B, 275/2A,238/1A, 238/1B, 238/1C & 238/1D of Siruthamur Village, Uthiramerur Taluk, Kancheepuram District,Tamil Nadu by Thiru.S.Rajendiran For Terms of Reference.</p>	9689	<p>The authority noted that this proposal was placed for appraisal in this 354th meeting of SEAC held on 10.02.2023. 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 minute.</p> <ol style="list-style-type: none"> 1. The activity should not result in CO₂ release and temperature rise and add to micro climate alternations. 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. 3. The proponent shall ensure that the activity does not disturb Soil health & bio-diversity, Climate change leading to Droughts, Floods etc. 4. The proponent shall ensure that the activity does not Pollute leading to release of

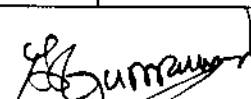

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			<p>Greenhouse gases (GHG), rise in Temperature, & Livelihood of the local people.</p> <p>5. The proponent shall ensure that the activity does not make the Possibilities of water contamination and impact on aquatic ecosystem health.</p> <p>6. The trees present in the site shall be protected, replanted elsewhere.</p> <p>7. The PP shall study the impact on Invasive Alien Species (IAP).</p>
12.	Proposed Rough stone & gravel quarry lease over an extent of 2.16.50 Ha (Patta Land) in S.F.Nos. 12/2A, 12/2B, 12/3A, 12/3B, 12/3C and 12/3D of Pazhaveri Village, Uthiramerur Taluk, Kancheepuram District, Tamil Nadu by Thiru R. Vinothsaravanan- For Environmental Clearance.	9690	<p>The authority noted that this proposal was placed for appraisal in 354th meeting of SEAC held on 10.02.2023. Based on the presentation & documents furnished by the PP, the SEAC noted that the PP and the EIA Coordinator have not disclosed the complete history of this case with particular reference to the earlier file no. 7643 and the decision taken by SEIAA in that case and decided to call for the explanation of the PP and the EIA Coordinator for this serious lapse. In view of the above, the authority decided to request the Member Secretary, SEIAA to communicate the SEAC minutes to the project proponent.</p>
13.	Proposed Rough Stone, Jelly and Gravel quarry lease over an extent of 1.58.0 Ha (Patta Land) in S.F.Nos. 183/3, 194/7 & 194/1 of Viruveedu Village, Nilakottai Taluk, Dindigul District, Tamil Nadu by Tmt. N. Susila- For Environmental Clearance.	9704	<p>The Authority noted that the subject was appraised in 354th SEAC meeting held on 10.02.2023. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p>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 77,680 m³ of rough stone and 20,422 m³</p>


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		<p>of gravel with ultimate depth of mining upto 13m bgl 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.</p> <ol style="list-style-type: none"> 1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022. 2. The EC granted is subject to review by District Collector, AD mines 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. 3. The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC as per the O.M of MoEF&CC dated 08.06.2022 while executing a review of the mining plan every 5 years to District Collector, AD mines and TNPCB. If any violation/ non-compliance is observed, the concerned authority shall take necessary action against the project proponent and it shall also be brought to the notice of SEIAA for taking appropriate actions
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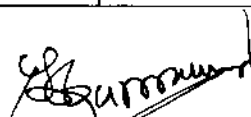

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			<p>according to the Acts, Regulations, Notifications and Judgements in force. A copy of the review shall be sent to SEIAA/SEAC.</p> <p>4. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and this should be reviewed by the District Collector, AD mines, & TNPCB every 5 years till the project life to ensure environmental sustainability.</p> <p>5. 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.</p> <p>6. As per the MoEF& CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 as accepted by the Project proponent the revised CER cost is Rs. 5 Lakhs and the amount shall be spent towards the Government Kallar Primary School, Dharmathupatti Village, Dindigul District for the activities as committed, before obtaining CTO from TNPCB.</p>
14.	Proposed Rough Stone & Gravel Quarry lease over an extent of 3.38.0Ha S.F.No.384(P), 387/3 & 387/4, Amayapuram Village, Manapparai Taluk, Tiruchirappalli District by Thiru.T.Rengarasu - For Environmental Clearance.	9712	<p>The authority noted that the subject was appraised in 354th SEAC meeting held on 10.02.2023 and the SEAC decided to call for additional particulars as follows</p> <p>1. Details of approved layout/Structures/buildings, reservoir, Canal, High ways, Railway lines, Water Bodies, Reserve Forest, Village Road, Cart track,</p>


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			<p>Stream Courses within /outside the radius of 50m, 100m, 150m,200m, 250m, & 300m of the proposed mining area.</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 10.02.2023.</p>
15.	Proposed Rough Stone & Gravel Quarry lease over an extent of 1.34.5Ha S.F.No.17/4 and 17/5, Varagur Village, Thandrampattu Taluk, Tiruvannamalai District by Thiru.M.Vinothkannan - For Environmental Clearance	9719	<p>The authority noted that the subject was appraised in 354th SEAC meeting held on 10.02.2023. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p>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 33220m³ of Rough Stone & 12456m³ of Gravel and the annual peak production shall not exceed 6890m³ of Rough Stone & 5306m³ of Gravel by restricting the depth of mining upto 12m BGL 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.</p> <p>1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by</p>


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		<p>competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022.</p> <ol style="list-style-type: none">2. The EC granted is subject to review by District Collector, AD mines 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.3. The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC as per the O.M of MoEF&CC dated 08.06.2022 while executing a review of the mining plan every 5 years to District Collector, AD mines and TNPCB. If any violation/ non-compliance is observed, the concerned authority shall take necessary action against the project proponent and it shall also be brought to the notice of SEIAA for taking appropriate actions according to the Acts, Regulations, Notifications and Judgements in force. A copy of the review shall be sent to SEIAA/SEAC.4. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and this should be reviewed by the District Collector, AD mines, & TNPCB every 5 years till the project life to ensure environmental sustainability.5. The project proponent shall store/dump topsoil generated within the earmarked area of the
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			<p>project site and the utilize the same for mine closure as per the approved mine closure plan.</p> <p>6. The project proponent shall spend EMP cost of Rs. 169 Lakhs as committed for the period of 10 Years.</p> <p>7. As per the MoEF& 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. 5 Lakhs and the amount shall be spent for the committed activities for the Government High School, Kamtchiyanthal Village as committed, before obtaining CTO from TNPCB.</p>
16.	<p>proposed Rough stone quarry lease area over an extent of 4.30.0Ha at SF.No. 49/2(Part-1) (Govt. Poramboke land) of Adaiyur Village, Tiruvannamalai Taluk, Tiruvannamalai District, Tamil Nadu by Thiru. M.Ayyakannu- For Environmental Clearance.</p>	9720	<p>The Authority noted that the subject was appraised in the 354thSEAC meeting held on 10.02.2022. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p>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 9,27,260 cu.mof rough stone by restricting the depth of mining upto 45m (15m AGL + 30m BGL) 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.</p>


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		<ol style="list-style-type: none"> 1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022. 2. The EC granted is subject to review by District Collector, AD mines 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. 3. The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC as per the O.M of MoEFCC dated 08.06.2022 while executing a review of the mining plan every 5 years to District Collector, AD mines and TNPCB. If any violation/ non-compliance is observed, the concerned authority shall take necessary action against the project proponent and it shall also be brought to the notice of SEIAA for taking appropriate actions according to the Acts, Regulations, Notifications and Judgements in force. A copy of the review shall be sent to SEIAA/SEAC. 4. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and this should be reviewed by the District Collector, AD mines,
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			& TNPCB every 5 years till the project life to ensure environmental sustainability
17.	Proposed Rough Stone quarry lease over an extent of 2.00.0 Ha at S.F.No. 1(Part-3) of Kolamanjanur Village, Thandrapattu Taluk, Tiruvannamalai District, Tamil Nadu by Thiru.R.Balachandar - for Environmental Clearance.	9724	<p>The authority noted that the subject was appraised in 354th SEAC meeting held on 10.02.23. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.</p> <p>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 3,62,950m³ of rough stone by restricting the depth of mining upto 40m (20m AGL + 20m BGL) 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.</p> <ol style="list-style-type: none"> 1. The prior Environmental Clearance granted for this mining project shall be valid for the project life including production value as laid down in the mining plan approved and renewed by competent authority, from time to time, subject to a maximum of thirty years, whichever is earlier vide MoEF&CC Notification S.O. 1807(E) dated 12.04.2022. 2. The EC granted is subject to review by District Collector, AD mines and TNPCB on completion of every 5 years till the project life.


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			<p>They should also review the EC conditions to ensure that they have all been adhered to and implemented.</p> <p>3. The project proponent shall furnish a Certified Compliance Report obtained from MoEF&CC as per the O.M of MoEFCC dated 08.06.2022 while executing a review of the mining plan every 5 years to District Collector, AD mines and TNPCB. If any violation/ non-compliance is observed, the concerned authority shall take necessary action against the project proponent and it shall also be brought to the notice of SEIAA for taking appropriate actions according to the Acts, Regulations, Notifications and Judgements in force. A copy of the review shall be sent to SEIAA/SEAC.</p> <p>4. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and this should be reviewed by the District Collector, AD mines, & TNPCB every 5 years till the project life to ensure environmental sustainability.</p>
18.	Proposed Rough Stone & Gravel quarry lease for the extent of 0.51.0 Ha of S.F.No. 263(Part) Alamelumangapuram Village, Vellore Taluk, Vellore District by Thiru.K. Devendiran - For Environmental Clearance.	9729	<p>The proposal is placed in this 354th SEAC Meeting held on 10.02.2023.</p> <p>Based on the presentation and document furnished by the proponent, SEAC noted that a School/Orphanage with approximately 40 inmates is located at a distance of about 140m from the proposed site. Hence, in the view of the above, the Committee decided not to recommend the proposal.</p>


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			In the view of the above, SEIAA accepts the decision of SEAC and decided to request Member Secretary, SEIAA-TN to grant rejection letter to proponent as per the 354 th SEAC minutes.
19.	Proposed Modernization and Upgradation of Chennai Fishing Harbour, Kasimedu at SF.No. 3483, 3482, 3514, 3515, 3522, 3524, 4321, 4342, 4343, 3457, 3485, 3464, 3527, 3518 Kasimedu Village Chennai Taluk Chennai District Tamil Nadu by M/s Chennai Port Authority—for Terms of Reference	9798	<p>The Authority noted that the subject was appraised in 354th meeting of SEAC held on 10.02.2023. SEAC has furnished its recommendations for granting Terms of Reference for the preparation of EIA report subject to the conditions stated therein.</p> <p>The Authority after detailed discussions accepted the recommendations of the SEAC and decided to grant Terms of Reference for the preparation of EIA report along with the following additional ToR:</p> <ol style="list-style-type: none"> 1. Enlist all the species of fish handled/to be handled in the port. 2. The study proposal shall include impact due to toxic compounds like paints, packaging material, shredded ice etc 3. To elaborate the impact of proposed construction on the population of sea crustaceans such as crabs, molluscs and other life forms. 4. Impact on fresh water quality, underground water and soil environment. 5. To detail the strategy to be adopted for waste reduction at the port. 6. The study proposal shall address the impact of the construction activity on the food cycle/food chain. 7. The study proposal shall include impacts such as sea warming and acidification including deoxygenation due to the proposed and post construction activity.


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		<ol style="list-style-type: none"> 8. Steps taken to combat pollution caused by plastics, pesticide etc 9. To detail the safety measures taken to prevent over fishing 10. Impact on invasive species shall be detailed. 11. Study shall include impact on the rights of the local community living near the coastal area. 12. Study shall include impact on the terrestrial, coastal and marine biodiversity, flora and fauna. 13. To detail how the proposed project will influence the blue economy. 14. Strategy to be adopted for raising conservation awareness among local community. 15. To study the impact due to increase in the footfall (fish vendors, public and employees). 16. To detail the method adopted for disposal of biological waste, blood waste, etc 17. To elaborate the measures taken to safeguard the safety standard and the health of people working in the area.
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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


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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 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


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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.
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 CO₂ 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


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.
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.
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.


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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.

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.
51. 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.
61. The EMP Shall also be implemented in consultation with local self-government institutions.
62. 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.
66. 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 be 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

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.
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.


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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

- 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


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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.
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.
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.


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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

37. 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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