MINUTES

679th MEETING

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY-TAMIL NADU

Date: 13.12.2023

MINUTES OF THE 679th MEETING OF THE STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY HELD ON 13.12.2023.

Agenda	Description	File No.	Minutes
Agenda No a)	Confirmation of the minutes of the 678th meeting of the Authority held on 11.12.2023 & 12.12.2023. The Action taken on the decisions of the 678th meeting of the Authority held on 11.12.2023 & 12.12.2023. Note on issue of Extension of Validity of Environmental Clearance for the proposed construction of IT Park-Phase II at S.F.No.240(P) of Siruseri Village and S.F.No.117 (p) of Kazhipattur Village, Thiruporur Taluk (Previsouly Chengalpattu District (previsouly Kancheepuram District), Tamil Nadu by M/s. Syntel	494	The minutes of the 678th meeting of the Authority held on 11.12.2023 & 12.12.2023 was confirmed. The Member Secretary informed that 678th Minutes uploaded in Parivesh website and action taken report will be putup ensuing meeting. After detailed discussion, the authority noted as follows: 1. The proponent M/s. Syntel International Pvt. Ltd. has obtained Environmental Clearance vide Letter No. SEIAA/TN/F.494/EC/8(b)/243/2012 dt: 06.02.2014 for the Proposed construction of IT Park-Phase II at S.F.No. 240 (p) of Siruseri Village and S.F.No. 117 (p) of
	District), Tamil Nadu by M/s. Syntel International Private Limited. (SIA/TN/MIS/306525/2023)		Kazhipattur Village, Thiruporur Taluk (Previously Chengalpattu Taluk), Chengalpattu District (Previously Kancheepuram District), Tamil Nadu for the total built up area of 206739 Sq.m. Further, Extension of validity of EC was issued vide Letter No. SEIAA-TN/F.494/EC/8(b)/243/EC-Ext/2014 dated: 23.01.2021 and EC Amendment was issued vide Letter No. SEIAA-TN/F.494/EC/8(b)/243/Amendment/2014 dated: 28.07.2023.

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	 Now, the proponent has applied for extension of validity of earlier issued EC in Form-6 vide SIA/TN/MIS/306525/2023, dated: 18.11.2023. The project proponent has not furnished the EC Compliance Report. The project proponent has not mentioned the present status of construction and PP has not disclosed the construction activities carried out after the expiry of the validity of EC. In view of the above, the authority has decided to forward the proposal to SEAC for remarks and recommendations.
2. Proposed construction of residential development at S.F. No. 78A/3, 78A/2A, 78A/2B, 78A/2C, 78A/2D, 78A/2E, 78A/2F, 78A/2G1, 78A/2G2, 78A/2H1, 78A/2H2, 78A/2I, 78A/2J, 78A/2J, 78A/2J, 78A/2D, 78A/4A, 78A/4B1, 78A/4B2, 78A/4C, 78A/4D, 78A/4E, 78A/4F, 79B/1F, 79B/1G, 79B/1H, 80/7, 80/8, 80/6B, 80/9B, 98, 99/1, 99/2, 100/1, 100/2 & 101/1 of Paranur Village, Chengalpattu Taluk, Kancheepuram District, Tamil Nadu by M/s. Mahindra Integrated Township Limited (SIA/TN/MIS/306627/2023)	After detailed discussions, The Authority noted the following, 1. Earlier, EC was accorded to the proponent M/s. Mahindra Integrated Township Limited vide Lr.No.SEIAA-TN/F.No.6701/EC/8(a)/717/2020 dated.30.09.2020 for the Proposed construction of residential development at S.F. No. 78A/3, 78A/2A, 78A/2B, 78A/2C, 78A/2D, 78A/2E, 78A/2F, 78A/2G1, 78A/2G2, 78A/2H1, 78A/2H2, 78A/2I, 78A/2J, 78A/2J, 78A/2K, 78A/2L, 78A/2H2, 78A/2N, 78A/2D, 78A/4A, 78A/4B1, 78A/4B2, 78A/4C, 78A/4D, 78A/4E, 78A/4F, 79B/1F, 79B/1G, 79B/1H, 80/7, 80/8, 80/6B, 80/9B, 98, 99/1, 99/2, 100/1, 100/2 & 101/1 of Paranur Village, Chengalpattu Taluk, Kancheepuram District, Tamil Nadu. 2. Now, the proponent has applied for Amendment in earlier issued EC in Form-4 vide SIA/TN/MIS/306627/2023, dated: 22.11.2023.

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			In view of the above, the authority has decided to
i			forward the proposal to SEAC for obtaining remarks and recommendations.
3.	Proposed reconstruction of 240 residential flats by M/s. Tamil Nadu Housing Board located at Block no.08, TS No. 6pt, 7pt, 8pt, 9pt and 10pt of Shenoy nagar Aminjikarai Village, Perambur- Purasaivakkam Taluk, Chennai District Tamil Nadu by M/s. Tamil Nadu Housing Board. – Amendment of Environmental Clearance.	7437	The Authority noted that the PP has applied for amendment to the Environmental Clearance for change in the mode of disposal of sewage. Hence the Authority decided to refer the subject to SEAC for furnishing remarks on the request made by the PP.
4.	Proposed Construction of Residential group development building by M/s. Lokaa Housing Private Limited at S.F.Nos. 64, 65/1A, 65/1B, 65/1C, 65/1D, 65/1E, 65/1F, 65/1G, 65/1H, 65/1I, 65/1I, 65/1K, 65/1L of Chettiyaragaram Village, S.F.Nos. 347/1B, 347/2B2, 348/2B2 of Vanagaram Village, Ambattur Taluk, Thiruvallu District Tamil Nadu by M/s. Kochar Hosuing Private limited—Transfer of Environmental Clearance.	7815	The Authority noted that M/s. Kochar Homes Private Limited has applied seeking transfer of EC dated 05.07.2021 issued to M/s. Lokaa Housing Private Limited as there is change of management. In this regard the PP is directed to furnish NOC from the PP, M/s. Lokaa Housing Private Limited along with details of environmental liability, if any for transfer of EC, the copy of CCR.
5.	Residential Complex "Bollineni Zion" S.F. Nos. 443/2, 444/1, 444/2 of Perumbakkam village & 93 to 97, 100 to 102, 103/1A2, 116/1B, 117/2A1, 117/2A2, 117/2B, 118/2B12, 118/2B13, 131/23, 131/4	8102	The Authority noted that the PP has applied for amendment to the Environmental Clearance for change of name of and increase in built-up area. Hence the Authority decided to refer the subject to SEAC for furnishing remarks on the request made by the PP.

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6.	of Arasankalani village, Sholinganallur Taluk, Kanchipuram District, Tamil Nadu by M/s. Krishnaiah Projects Private limited — Transfer of Environmental Clearance Proposed Gravel quarry lease over an extent of 2.50.0 Ha at S.F.No. 202/3 (Part) of Jeyamkondanilai Village, Singampunari Taluk, Sivagangai District, Tamil Nadu by Thiru.D. Ragupandiyan (SIA/TN/MIN/306482/2023)		After detailed discussions, The Authority noted the following, 1. Earlier, EC was accorded to the proponent Thiru.D. Ragupandiyan vide Lr.No.SEIAA-TN/F.No.9088/EC/1(a)/5303/2020 dated.20.09.2022 for the Proposed Gravel quarry lease over an extent of 2.50.0 Ha at S.F.No. 202/3 (Part) of Jeyamkondanilai Village, Singampunari Taluk, Sivagangai District, Tamil Nadu. 2. Now, the proponent has applied for extension for earlier issued EC in Form-6 vide SIA/TN/MIN/306482/2023, dated: 16.11.2023. In view of the above, the authority has decided to
			forward the proposal to SEAC for obtaining remarks and recommendations.
7.	Proposed Gravel Quarry lease over an Extent of 4.21.00 Ha Patta land in S.F.Nos.101 at Thirumalaipuram Village, Aruppukottai Taluk, Virudhunagar District, Tamil Nadu by Thiru. P. Pothiraj – Amendment of Environmental Clearance.		The Authority noted that the PP has applied for amendment to the Environmental Clearance to change the quantity of the mineral restricted by the Authority to that mentioned in the mining plan and that recommended by the SEAC. The Authority decided to reject the above request of the PP stating that the Authority has restricted the quantity of the mineral to be mined to ensure sustainable, scientific and systematic mining.
8.	File No: 9393	1	<u> </u>

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Proposed Rough Stone and Gravel quarry lease over an extent of 4.26.72Ha at S.F.No.149/2B, 149/3A, 149/3B, 149/3C, 149/4A, 149/4B & 149/4C of Arasampalayam Village, Pollachi Taluk, Coimbatore District, Tamil Nadu by Tvl. Sree Mahalakshmi Blue Metals - For Environmental Clearance Corrigendum.

The authority noted that the proponent, Tvl. Sree Mahalakshmi Blue Metals has obtained Environmental Clearance for the Proposed Rough Stone and Gravel quarry lease over an extent of 4.26.72 Ha at S.F.Nos. 149/2B, 149/3A, 149/3B, 149/3C, 149/4A, 149/4B and 149/4C of Arasampalayam Village, Kinathukadavu Taluk, Coimbatore District, Tamil Nadu vide Lr.No. SEIAA-TN/F.No.9393/1(a)/EC.No:6173/2023, dated:17.11.2023.

Now, the proponent has applied for Corrigendum in Environmental Clearance as follows,

S. No	Description	As per EC issued dated 17.11.2023	Corrigendum requested
1.	Page No. 2 of 34, in Subject	under project category – "B2"	under project category - "B1"
2.	Page No. 2 of 34, in Subject	Pollachi Taluk	Kinathukadavu Taluk
3.	Page No. 3 of 34, at point no. 5	Pollachi	Kinathukadavu
4.	Page No. 3 of 34, at point no. 11	2 years	5 years
5.	Page No. 3 of 34, at point no. 12	16632m ³ of Ordinary Earth	682850 m ³ of Rough Stone and 61836 m ³ of Gravel
6.	Page No. 3 of 34, at point no. 13	2m BGL	32m BGL

After detailed deliberation, the Authority decided to issue the above Corrigendum to the Environmental Clearance issued vide Lr.No. SEIAA-TN/F.No.9393/1(a)/EC.No:6173/2023, dated:17.11.2023 subject to the conditions mentioned below.

Conditions:

All other conditions and validity mentioned in the EC dated 17.11.2023 will remain unchanged and unaltered.

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9.	Proposed Rough stone and Gravel	9617	The authority noted that the subject was appraised in
	quarry lease over an extent of 4.13.5		364th meeting of SEAC held on 23.03.2023. SEAC

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Ha in S.F.Nos. 147/4A, 147/4B (P), 148, 150/1, 150/4, 204/2, 204/6 & 204/7 of Akkinampattu Village, Cheyyur Taluk, Chengalpattu District, by M/s. Pallava Mines - For Environmental Clearance.

has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein.

After detailed discussions, The KML imagery reveals that the mine lease area is a vast fertile agricultural land. Hence the Proponent shall furnish the following details/documents within ten working days:

- 1. Details of agricultural yield in the past 5 years and the nature of crops grown at the project site.
- PP shall furnish the reason for shifting from agriculture to mining.
- Report on loss of landcover and change in land use pattern due to the proposed activity.
- 4. Impact of mining on agriculture and allied activities.
- 5. Letter from the Director, Department of Agriculture stating that the proposed mine lease area is unproductive.
- Remarks from local panchayat on the proposed mining activity.

On receipt of the aforesaid details/documents the subject will be taken up for further deliberation and to decide on future course of action. The PP furnished the details sought and hence the subject was taken up for discussion in this 679th meeting of Authority held on 13.12.2023.

After detailed discussions, the Authority taking into account the recommendations of SEAC and also the safety aspects and to ensure sustainable, scientific and systematic mining, decided to grant Environmental Clearance for the quantity of grant Environmental Clearance for the quantity of Rought stone - 300745 m³ in the 1st five years and 394875

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m³ in the 2nd five years and 65558 m³ of Gravel upto the depth of 40m BGL and the annual peak production should not exceed 81705 m³ of Rough stone as per the approved mining plan. This is also subject to the standard conditions as per Annexure - (I) of SEAC minutes, other normal conditions stipulated by MOEF&CC & all other specific conditions as recommended by SEAC in addition to the following conditions and the conditions in Annexure 'A' of this minutes.

- Keeping in view of MoEF&CC's notification S.O.1533(E) dated.14.09.2006 and S.O. 1807(E) dated 12.04.2022, this Environmental Clearance is valid as per the approved mine plan period.
- 2. The EC granted is subject to review by District Collector, Mines Dept. and TNPCB on completion of every 5 years and also during the mine plan period, till the project life so as to review the EC conditions and to ensure that they have all been adhered to and implemented.
- 3. The project proponent shall submit a Certified Compliance Report obtained from IRO of MoEF & CC to the monitoring, regulatory and other concerned authorities including SEIAA, while seeking a renewal of the mining plan to cover the project life.
- 4. There should be regular monitoring of air quality, water quality, ground water level and noise quality and reports regarding the same should be submitted to TNPCB, SEIAA & IRO of MoEF & CC once in every 6 months.
- 5. The proponent shall strictly adhere to the mining plan and half yearly and annual returns shall be

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- submitted to the Director of Geology and Mining Department with copy marked to TNPCB, SEIAA & IRO of MoEF & CC.
- Biodiversity in and around the project area should be monitored frequently and detailed biodiversity report should be submitted every year to SEIAA & IRO of MoEF & CC.
- 7. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and as per the amount committed and approved in EC for EMP. Status of progressive mine closure and green belt implementation should be included in the half yearly compliance report submitted to TNPCB, SEIAA & IRO of MoEF&CC.
- 8. As per the OM vide F. No. IA3-22/1/2022-IA-III [E- 172624] Dated: 14.06.2022, the Project Proponents are directed to submit the sixmonthly compliance on the environmental conditions prescribed in the prior environmental clearance letter(s) through newly developed compliance module in the PARIVESH Portal from the respective login.
- 9. The amount allocated for EMP should be kept in a separate account and both the capital and recurring expenditures should be done year wise for the works identified, approved and as committed. The work & expenditure made under EMP should be elaborated in the bi-annual compliance report submitted and also should be brought to the notice of concerned authorities during inspections.

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10. Proposed Rough stone quarry lease over an extent of 1.00.0 Ha at S.F.No. 97/1A1 (Part-1), Vasur Village, Polur Taluk, Tiruvannamalai District, Tamil Nadu by Thriu.S. Rajkumar, - Environment Clearance

10052

The Authority noted that the subject was placed in the 391st meeting of SEAC held on 13.07.2023 and the SEAC has furnished its recommendation for the grant of Environmental Clearance to the project subject to the conditions stated therein.

Considering the proximity of the Polur lake which is located at a distance of 0.82km from the mine lease area, the Authority, after detailed discussions, decided to call the following details from the Project Proponent:

- Study report on impact of mining on drainage pattern, agriculture, biodiversity, ground water, surface water, temperature, carbon-dioxide and greenhouse gases.
- The PP shall furnish the letter obtained from the Director, Department of Agriculture stating that the proposed mine lease area/ about the productivity status and productive potential of the land.
- The PP shall furnish the remarks obtained from local panchayat on the proposed mining activity.

The PP furnished the details sought and hence the subject was taken up for discussion in this 679th meeting of Authority held on 13.12.2023.

After detailed discussions, the Authority taking into account the recommendations of SEAC and also the safety aspects and to ensure sustainable, scientific and systematic mining, decided to grant Environmental Clearance for the quantity of grant Environmental Clearance for the quantity of 52535 m³ of Rough stone upto the depth of 20m AGL and the annual peak production should not

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exceed 10620 of Rough stone as per the approved mining plan. This is also subject to the standard conditions as per Annexure - (I) of SEAC minutes, other normal conditions stipulated by MOEF&CC & all other specific conditions as recommended by SEAC in addition to the following conditions and the conditions in Annexure 'A' of this minutes.

- Keeping in view of MoEF&CC's notification S.O.1533(E) dated.14.09.2006 and S.O. 1807(E) dated 12.04.2022, this Environmental Clearance is valid as per the approved mine plan period.
- 2. The EC granted is subject to review by District Collector, Mines Dept. and TNPCB on completion of every 5 years and also during the mine plan period, till the project life so as to review the EC conditions and to ensure that they have all been adhered to and implemented.
- 3. The project proponent shall submit a Certified Compliance Report obtained from IRO of MoEF&CC to the monitoring, regulatory and other concerned authorities including SEIAA, while seeking a renewal of the mining plan to cover the project life.
- 4. There should be regular monitoring of air quality, water quality, ground water level and noise quality and reports regarding the same should be submitted to TNPCB, SEIAA & IRO of MoEF&CC once in every 6 months.
- 5. The proponent shall strictly adhere to the mining plan and half yearly and annual returns shall be submitted to the Director of Geology and Mining Department with copy marked to TNPCB, SEIAA & IRO of MoEF&CC.

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11. Proposed Rough stone & Gravel quarry lease over an extent of 0.82.0	 6. Biodiversity in and around the project area should be monitored frequently and detailed biodiversity report should be submitted every year to SEIAA & IRO of MoEF&CC. 7. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and as per the amount committed and approved in EC for EMP. Status of progressive mine closure and green belt implementation should be included in the half yearly compliance report submitted to TNPCB, SEIAA & IRO of MoEF&CC. 8. As per the OM vide F. No. IA3-22/1/2022-IA-III [E- 172624] Dated: 14.06.2022, the Project Proponents are directed to submit the sixmonthly compliance on the environmental conditions prescribed in the prior environmental clearance letter(s) through newly developed compliance module in the PARIVESH Portal from the respective login. 9. The amount allocated for EMP should be kept in a separate account and both the capital and recurring expenditures should be done year wise for the works identified, approved and as committed. The work & expenditure made under EMP should be elaborated in the bi-annual compliance report submitted and also should be brought to the notice of concerned authorities during inspections. The authority noted that the subject was appraised in the 411th SEAC meeting held on 27.09.2023.
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Ha in S.F.Nos. 425/29 of Lembalakudi Village, Thirumayam Taluk, Pudukkottai District, Tamil Nadu by Thiru.M.Radakrishnan-For Environmental Clearance (SIA/TN/MIN/ 438460/2023)

SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein. Subsequently, this subject was placed in the 663rd Authority meeting held on 18.10.2023. After detailed discussions, the Authority decided to obtain additional details stated therein for further course of action. Now, the PP has submitted a reply vide letter dated:01.12.2023. The reply was placed in the 679th authority meeting held on 13.12.2023.

After detailed discussions, the Authority taking into account the recommendations of SEAC and also the safety aspects and to ensure sustainable, scientific and systematic mining, decided to grant Environmental Clearance for the quantity of 38,690m³ of rough stone & 16,206 m³ of Gravel up to the depth of 13m and the annual peak production should not exceed 9120m³ of rough stone & 8103 m³ of Gravel. This is also subject to the conditions imposed by SEAC, normal conditions stipulated by MOEF&CC in addition to the following conditions and the conditions in Annexure 'A' of this minutes.

- Keeping in view of MoEF&CC's notification S.O.1533(E) dated.14.09.2006 and S.O. 1807(E) dated 12.04.2022, this Environmental Clearance is valid as per the approved mine plan period.
- 2. The EC granted is subject to review by District Collector, Mines Dept. and TNPCB on completion of every 5 years and also during the mine plan period, till the project life so as to review the EC conditions and to ensure that they have all been adhered to and implemented.

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- 3. The project proponent shall submit a Certified Compliance Report obtained from IRO of MoEF&CC to the monitoring, regulatory and other concerned authorities including SEIAA, while seeking a renewal of the mining plan to cover the project life.
- 4. There should be regular monitoring of air quality, water quality, ground water level and noise quality and reports regarding the same should be submitted to TNPCB, SEIAA & IRO of MoEF&CC once in every 6 months.
- The proponent shall strictly adhere to the mining plan and half yearly and annual returns shall be submitted to the Director of Geology and Mining Department with copy marked to TNPCB, SEIAA & IRO of MoEF&CC.
- Biodiversity in and around the project area should be monitored frequently and detailed biodiversity report should be submitted every year to SEIAA & IRO of MoEF&CC.
- 7. The progressive and final mine closure plan including the green belt implementation and environmental norms should be strictly followed as per the EMP and as per the amount committed and approved in EC for EMP. Status of progressive mine closure and green belt implementation should be included in the half yearly compliance report submitted to TNPCB, SEIAA & IRO of MoEF&CC.
- As per the OM vide F. No. IA3-22/1/2022-IA-III
 [E- 172624] Dated: 14.06.2022, the Project
 Proponents are directed to submit the sixmonthly compliance on the environmental

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12. Proposed Rough Stone Quarry lease over an extent of 4.44.0 Ha at S.F.No. 449(P) & 450 in Keeranur Village, Kangayam Taluk, Tiruppur District, Tamilnadu by Thiru.P.Sasikumar- For Terms of Reference	conditions prescribed in the prior environmental clearance letter(s) through newly developed compliance module in the PARIVESH Portal from the respective login. 9. The amount allocated for EMP should be kept in a separate account and both the capital and recurring expenditures should be done year wise for the works identified, approved and as committed. The work & expenditure made under EMP should be elaborated in the bi-annual compliance report submitted and also should be brought to the notice of concerned authorities during inspections. 9456 Earlier, the subject was placed in the 565th authority meeting held on 31.10.2023. The authority noted that the subject was appraised in 319th SEAC meeting held on 12.10.2022. The authority after detailed deliberations, decided to consider the proposal after obtaining the following from the project proponent: i) The proponent shall submit a Certified Compliance Report for the EC obtained earlier dated.10.08.2016. The proponent, vide letter dated.23.11.2023 furnished a reply for the query requested in the 565th authority meeting. The reply was placed in this 679th authority meeting. The authority noted that the proponent has not obtained a Certified Compliance Report as requested in the 565th authority meeting held on 31.10.2023, even after a period of 1 year. Hence, the authority decided that the proponent shall furnish a proper
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			reason with justification for not obtaining a Certified
		<u> </u>	Compliance Report till date.
		<u> </u> {	Upon receipt of the same, further deliberations shall
			be done.
13.	Proposed construction of residential	9064	The Authority noted that the subject was appraised in
	apartment and inclusion of existing		the 411th meeting of SEAC held on 27.09.2023.
	building in T. S Nos. 23/1A1 &		Based on the presentation and documents furnished
	23/1B1, 24 & 25 (Old S.Nos. 531/1,		by the project proponent, SEAC noted that the total
•	532 & 533), Ward No. 44 & Block		extent in the Agreement for Joint Development
	No. 30 Komarapalayam Village,		doesn't tally with EC given. Hence SEAC decided to
	Coimbatore South Taluk,		recommend name transfer only for built-up area
	Coimbatore District, Tamil Nadu by		(29,643.11 sq.m) covering an extend of 1.45 acres
:	M/s. V.Ravichandran & Co - For		issued in earlier EC. All other SEAC conditions
	Environmental Clearance Name	 	stated in EC remains unchanged and unaltered. If
	Transfer.		necessary, PP may apply under expansion category
			for any increase in the land area.
			After detailed discussions, the Authority raised ADS.
			The PP has now replied for SEIAA ADS. The reply
			was placed in 679th Authority meeting held on
			13.12.2023. After detailed discussions, the Authority
			accepted the recommendation of SEAC and decided
		!	to recommend name transfer only from
			M/s.Ravichandran & Co to M/s.Wetech Homefinders
			Private Limited for built-up area (29,643.11 sq.m)
			covering an extend of 1.45 acres issued in earlier EC
			vide Lr.No.SEIAA-
			TN/F.No.9064/EC/8(a)/844/2022 dated 14.06.2022
			and the same shall be amended and substituted
		}	subject to all the other conditions stipulated vide EC
			Lr.No.SEIAA-TN/F.No.9064/EC/8(a)/844/2022
			dated 14.06.2022 remains unchanged and unaltered.

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14. Proposed Fireclay quarry over an extent of 3.21.5 Ha at S. F. Nos. 336/4 (Part), 336/5, 336/8 & 336/9 (Part) of Therani Village, Alathur Taluk, Perambalur District, Tamil Nadu by Thiru. C. Senthil Kumar - For Terms of Reference. (SIA/TN/MIN/430996/2023)

10084 After detailed discussions, the authority noted as follows:

The subject was placed in the 671st authority meeting held on 07.11.2023. The authority noted that the subject was appraised in the 417th SEAC meeting held on 18.10.2023. SEAC has furnished its recommendations for granting Terms of Reference with Public Hearing subject to the conditions stated therein.

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

- (i) The PP shall furnish the approved mining plan along with revised quantity and alignment of bench height and width.
- Now, the proponent vide e-mail dated 01.12.2023 has submitted the revised quantity and the alignment of bench height and width and requested to submit the approved modified mining plan along with final EIA report.

In view of the above, the Authority after considering the request of PP and also taking into account the recommendations of SEAC, 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

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following conditions and the conditions in

'Annexure B' of this minutes.

1. The project proponent shall submit the approved modified mining plan along with final EIA report.

15. | File No: 9575

Proposed Rough stone & gravel over an extent of 1.48.0 Ha at S.F.Nos. 25/5, 25/8, 274/3A and 274/4(P) of Painkinar Village, Cheyyar Taluk, Tiruvannamalai District, Tamil Nadu by Thiru I. Prakash - For Environmental Clearance.

The authority noted that the subject was earlier appraised in 363rd SEAC meeting held on 14.03.2023. Based on the presentation and documents furnished by the project proponent, SEAC decided to recommend the proposal for the grant of Environmental Clearance.

Subsequently, the proposal was placed in 609th SEIAA meeting held on 10.04.2023. Authority after detailed deliberation, decided to call for additional details as follows

1. The proponent has submitted details of quarries located within 500m from the proposed mine lease area vide Rc.No.135/Kanimam/2022, Dated: 19.09.2022

B. Briting quacries

St. No.		Village & S.F. Hea.	in Sect.	Lease Period	Remeriu
1	Thiru.I.Prakash 8/o. Inbasekaran, Senthamangalam village & Post, Sriperumpathur Takuk, Kanchipuram District	25/3, 25/4, 25/6, 25/7B, 25/18 & 25/1	2.54.5	22.11.2019 to 21.11.2024	Existing lease

Further, in the affidavit submitted to SEIAA,

3. Details of quarry within 500m radius from the applied area:

8.No	Name and address of the	8.F.No.	Extent in	Lease Period
	leseae	Taluk & Village	Hectare	
فكرة	rting Creamies		 	
1	Thicu. L.Prakach,	26/3,26/4,25/6,25/7B,	2.54.5	22.11.2019
	S/c.inbesekaran,	25/18825/1		to
	No.42, Bangalore National			21.11,2014
	Highway, Senthamangalum,			
	Sriperumbudur Taluk,			
	Kenchipurem District.	İ		

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 Further, in the Environmental Clearance obtained for the above-mentioned existing quarry by SEIAA-TN vide Lr. No. SEIAA-TN/F.No.6909/1(a)/EC. No: 4063/2019 dated: 31.10.2019 has been issued for SF No.25/3, 25/4, 25/6, 25/7B, 25/18 & 25/19 as per the data entered by the proponent in Parivesh Portal.

On the perusal of above documents, it is ascertained that there is a mismatch between the SF no. mentioned in the earlier issued Environmental Clearance, DD/Mines and the affidavit submitted by the proponent.

Hence, the above ambiguity shall be clarified by the proponent.

On receipt of above details, further deliberation shall be done.

Subsequently, the proponent submitted reply vide letter received at O/o SEIAA on 21.08.2023.

Based on the reply submitted by the PP, the proposal was again placed in 653rd SEIAA meeting held on 11.09.2023.

The Authority noted the following

S. No.	Query	Reply
		Due to typo error in the 500m Radius
		letter and Affidavit, mismatch in the
	It is ascertained that there is a mismatch	S.F. Nos. has been occurred. I
	between the SF no. mentioned in the earlier	herewith apologize for the same and
	issued Environmental Clearance,	the revised 500m radius letter
	DD/Mines and the affidavit submitted by	obtained from the Department of
1.	the proponent.	Geology and Mining,
		Tiruvannamalai.
	Hence, the above ambiguity shall be	
	clarified by the proponent.	Note: Date of the Revised 500m
		radius letter and old 500m radius
		letter is same, i.e., 19.09.2022.

In the view of the above facts, authority after detailed deliberation decided to direct Member Secretary, SEIAA-TN shall write to Director, Geology and Mining to verify the genuinity of the letter enclosed by the proponent vide letter received by this office on 21.08.2023 claiming it to be the revised 500m letter issued by Department of Geology and Mining, Tiruvannamalai.

Upon the receipt of above clarification, further deliberation shall be done.

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Subsequently, the proponent has given a representation received by this office on 28.11.2023. Based on the representation, the proposal was placed before 679th SEIAA meeting held on 13.12.2023.

Based on the documents furnished by the PP, Authority noted that

 Deputy Director, Geology & Mining, Tiruvannamalai District vide letter Rc.No.135/Kanimam/2022, dated: 16.11.2023 has given a clarification based on Authority's 609th SEIAA meeting minutes held on 10.04.2023.

However, Authority had placed the proposal in its 653rd SEIAA meeting held on 11.09.2023 based on the reply furnished by the proponent for the additional details called for in its 609th SEIAA meeting held on 10.04.2023.

Further, Authority noted that based on the minutes of 653rd meeting, a letter had been addressed to The Commissioner, Geology and Mining vide letter dated: 03.10.2023.

Hence, in the light of the above, Authority after detailed deliberation decided that since a clarification sought from The Commissioner, Geology and Mining is awaiting, upon the receipt of clarification further deliberation shall be done.

Annexure 'A'

a) EC Compliance

- The Environmental Clearance is accorded based on the assurance from the project proponent
 that there will be full and effective implementation of all the undertakings given in the
 Application Form, Pre-feasibilty Report, mitigation measures as assured in the Environmental
 Impact Assessment/ Environment Management Plan and the mining features including
 Progressive Mine Closure Plan as submitted with the application.
- 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.

b) 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, Biological diversity Rules, 2004 & TN Forest Act, 1882 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

c) 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.

d) 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.

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- 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.

e) 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.
- 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.

f) 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 mycorrizal fungi, soil organism, soil community nor result in eutrophication of soil and water.
- 22. The activities should not disturb the soil properties and seed and plant growth. Soil amendments as required to be carried out, to improve soil health.
- 23. Bio remediation using microorganisms should be carried out to restore the soil environment to enable carbon sequestration.

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- 24. The proponent shall ensure that the mine restoration is done using mycorrizal VAM, vermincomposting, 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.
- 28. Activities should not result in invasion of site by exotic and alien plant and animal species and disturb the native biodiversity and soil micro flora and fauna.

g) Noise Environment - Protection and mitigation measures

- 29. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- 30. 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.

h) Biodiversity - Protection and mitigation measures

- 31. 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.
- 32. 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

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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.

- 33. 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.
- 34. 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.
- 35. 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.

i) Climate Change

- 36. The project activity should not in any way impact the climate and lead to a rise in temperature.
- 37. There should be least disturbance to landscape resulting in land use change, contamination and alteration of soil profiles leading to Climate Change.
- 38. Intensive mining activity should not add to temperature rise and global warming.
- Operations should not result in GHG releases and extra power consumption leading to Climate Change.
- 40. Mining through operational efficiency, better electrification, energy use, solar usage, use of renewable energy should try to decarbonize the operations.
- 41. Mining Operation should not result in droughts, floods and water stress, and shortages, affecting water security both on site and in the vicinity.
- 42. Mining should not result in water loss from evaporation, leaks and wastage and should support to improve the ground water.
- 43. 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.

j) Reserve Forests & Protected Areas

- 44. The activities should provide nature based support and solutions for forest protection and wildlife conservation.
- 45. The project activities should not result in forest fires, encroachments or create forest fragmentation and disruption of forest corridors.
- 46. There should be no disturbance to the freshwater flow from the forest impacting the water table and wetlands.

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- 47. The project proponent should support all activities of the forest department in creating awareness to local communities on forest conservation.
- 48. The project activities should not alter the geodiversity and geological heritage of the area.
- 49. The activities should not result in temperature rise due to increased fossil fuels usage disrupting the behaviour of wildlife and flora.
- 50. The activities should support and recognise the rights and roles of indigenous people and local communities and also support sustainable development.
- 51. The project activities should support the use of renewables for carbon capture and carbon storage in the project site and forest surrounds.
- 52. The project activities should not result in changes in forest structure, habitats and genetic diversity within forests.

k) Green Belt Development

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

l) Workers and their protection

- 55. 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.
- 56. 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.
- 57. 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.

m) Transportation

58. 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

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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.

59. 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.

n) Storage of wastes

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

o) CER/EMP

- 61. The CER should be fully Implemented and fact reflected in the Half-yearly compliance report.
- 62. The EMP shall also be implemented in consultation with local self-government institutions & Govt. departments.
- 63. The follow-up action on the implementation of CER Shall be included in the compliance report.

p) <u>Directions for Reclamation of mine sites</u>

- 64. 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.
- 65. 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.

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- 66. 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.
- 67. For mining area reclamation plot culture experiments to be done to identify/ determine suitable species for the site.
- 68. 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.
- 69. Soil and moisture conservation and water harvesting structures to be used where ever possible for early amelioration and restoration of site.
- 70. 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.
- 71. 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.
- 72. 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.
- 73. 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.

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- 74. 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.
- 75. Efforts should to taken to aesthetically improve the mine site. Generally, there are two approaches to restoration i.e Ecological approach which allows tolerant species to establish following the succession process allowing pioneer species to establish. The other approach i.e plantation approach is with selected native species are planted. A blend of both methods may be used to restore the site by adding soil humus and mycorrhiza.
- 76. 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.
- 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.

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- 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.
 - 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.

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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.
- 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

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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

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.

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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.

Annexure 'C'

Climate Change

- 1. The proponent shall adopt strategies to decarbonize the building.
- The proponent shall adopt strategies to reduce emissions during operation (operational phase and building materials).
- 3. The proponent shall adopt strategies to reduce temperature including the Building Façade.
- 4. The proponent shall adopt methodology to control thermal environment and other shocks in the building.
- 5. The proponent shall adopt detailed plan to reduce carbon footprints and also develop strategies for climate proofing and climate mitigation.
- 6. The proponent shall adopt strategies to ensure the buildings in blocks are not trapping heat to become local urban heat islands.
- 7. The proponent shall ensure that the building does not create artificial wind tunnels creating cold water and uncomfortable living conditions resulting in health issues.
- 8. The activities should in no way cause emission and build-up Green House Gases. All actions to be eco-friendly and support sustainable management of the natural resources within and outside the campus premises.
- 9. The proponent shall ensure that the buildings should not cause any damage to water environment, air quality and should be carbon neutral building.

Health

10. The proponent shall adopt strategies to maintain the health of the inhabitants.

Energy

- 11. The proponent shall adopt strategies to reduce electricity demand and consumption.
- 12. The proponent shall provide provisions for automated energy efficiency.
- 13. The proponent shall provide provisions for controlled ventilation and lighting systems.
- 14. The proponent shall provide solar panels and contribute to the grid from the solar panel as proposed.
- 15. All the construction of Buildings shall be energy efficient and conform to the green building norms. The PP shall ensure that carbon neutral building.

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16. The proponent shall provide adequate capacity of DG set (standby) for the proposed STP so as to ensure continuous and efficient operation.

Regulatory Frameworks

- 17. The proponent shall adopt methodologies to effectively implement the Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.
- 18. The project proponent shall ensure to provide adequate elevated closed area earmarked for collection, segregation, storage & disposal of wastes generated within the premises as per provisions of Solid Waste Management Rules, 2016, E-Waste (Management) Rules, 2016, Plastic Waste Management Rules, 2016 as amended, Bio-Medical Waste Management Rules, 2016 as amended, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.
- 19. The proponent shall provide elevator as per rules CMDA/DTCP.

Database maintenance & audits

- 20. The database record of environmental conditions of all the events from pre-construction, construction and post-construction should be maintained in digitized format.
- 21. The proponent should maintain environmental audits to measure and mitigate environmental concerns.

Biodiversity

- 22. There should not be any impact due to the modification of the habitat on critically endangered species, biodiversity, etc,.
- 23. The proponent shall ensure that the proposed activities in no way result in the spread of invasive species.
- 24. The proponent shall adopt sustainability criteria to protect the micro environment from wind turbulences and change in aerodynamics since high rise buildings may stagnate air movements.
- 25. The proponent shall ensure almost safety for the existing biodiversity, trees, flora & fauna shall not disturb under any circumstances.

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- 26. The proponent shall develop building-friendly pest control strategies by using non chemical measures so as to control the pest population thereby not losing beneficial organisms.
- 27. The proponent shall adopt strategies to prevent bird hits.

Safety measures

- 28. The proponent should develop an emergency response plan in addition to the disaster management plan.
- 29. The proponent shall develop detailed evacuation plan for disabled people and safety evacuation plan in emergencies.
- 30. All bio-safety standards, hygienic standards and safety norms of working staff and patients to be strictly followed as stipulated in EIA/EMP.
- 31. The disaster management and disaster mitigation standards to be seriously adhered to avoid any calamities.
- 32. The proponent shall provide the emergency exit in the buildings.
- 33. The proponent shall adhere to the provision and norms regard to fire safety prescribed by competent authority.

Water/Sewage

- 34. The proponent shall ensure that no treated or untreated sewage shall be let outside the project site & shall find access to nearby water-bodies under any circumstances other than the permitted mode of disposal.
- 35. The proponent shall provide STP of adequate capacity as committed and shall continuously & efficiently operate STP so as to satisfy the treated sewage discharge standards prescribed by the TNPCB time to time.
- 36. The proponent shall periodically test the treated sewage the through TNPCB lab /NABL accredited laboratory and submit report to the TNPCB.
- 37. The proponent shall periodically test the water sample for the general water quality core parameters including fecal coliform within the proposed project site through TNPCB lab /NABL accredited laboratory and submit report to the concerned authorities.
- 38. The proponent shall ensure that provision should be given for proper utilization of recycled water.
- 39. The project proponent shall adhere to storm water management plan as committed.

<u>Parking</u>

40. The project proponent shall adhere to provide adequate parking space for visitors of all inmates including clean/traffic plan as committed.

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Solid waste Management

- 41. The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time.
- 42. The proponent should strictly comply with, Tamil Nadu Government order regarding ban on one time use and throwaway plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986.

EMP

- 43. The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.
- 44. The proponent shall ensure that all activities of EMP shall be completed before obtaining CTO from TNPCB.
- 45. The proponent shall provide and ensure the green belt plan is implemented as indicated in EMP. Also, the proponent shall explore possibilities to provide sufficient grass lawns.

Others

- 46. As per the 'Polluter Pay Principle', the proponent will be held responsible for any environmental damage caused due to the proposed activity including withdrawal of EC and stoppage of work.
- 47. The project proponent shall adhere to height of the buildings as committed.

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