MINUTES

574th MEETING

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY-TAMIL NADU

Date: 29.11.2022



MINUTES OF THE 574th MEETING OF THE STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY HELD ON 29.11.2022.

Agenda No	Description	File No.	Minutes
a)	Confirmation of the minutes of the 573 rd meeting of the Authority held on 28.11.2022.	110.	The minutes of the 573 rd meeting of the Authority held on 28.11.2022 was confirmed.
b)	The Action taken on the decisions of the 573 rd meeting of the Authority held on 28.11.2022.		The Member Secretary informed that 573 rd Minutes uploaded in Parivesh wesbsite and action taken report will be putup ensuing meeting.
1.	Proposed Rough Stone quarry Lease over an extent of 0.81.35 Ha at S.F.No. 265/6D(Part), 265/7A(Part), 265/7B(Part), 265/7C(Part), 265/8A, 265/8B, 265/9A & 265/9B in Vellanur Village, Kulathur Taluk, Pudukottai District, Tamil Nadu by Thiru. M.Mani – For Environmental Clearance		The authority noted that the proposal was appraised in the 329th SEAC meeting held on 16.11.2022. SEAC has furnished its recommendations for granting Environmental Clearance subject to the conditions stated therein. After detailed discussion, the Authority with reference to specific condition (I) of SEAC, decided to grant Environmental Clearance for the quantity of 18,820m³ of rough stone with restricted depth upto 19 metres below ground level as per the revised mine plan approved by the Department of Geology & Mining for a period of 5 years 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.

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1. 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 activities detailed in the SEAC minutes before obtaining CTO from TNPCB. 2. Existing multicolor Granite mine | 5824 SEAC has furnished its recommendations to Lease over an extent of 4.32.5 Ha the Authority for granting Environmental at S.F.No.9/1A1, 9/2A2, 9/2A3, Clearance to the Project subject to the 9/2B, Thangayur Village, conditions stated therein. After detailed Edappadi Taluk, Salem District, discussion, SEIAA decided to get the Tamil Nadu by Thiru. following details from the PP. NavinladdhaExtension of validity 1. The earlier Environmental for the Environmental Clearance clearance vide Lr. No. SEIAAissued TN/F.No.5824/1(a)/ No:3862/2015 dated: 14.11.2016 issued the production quantity approved was 30340 cbm @ 40% recovery as per the mine plan. Further, it was noted that the proponent had achieved production quantity of only 3330.97 cbm @ 11% average. Hence, the proponent shall clarify the details regarding the difficulty in achieving 40% recovery as proposed in the previous Environmental Clearance.



amounts

2. When there is a balance quantity of

27009.023 m³ to be mined out of the

which

mineral

EC.

earlier quantity approved, what is need for the next scheme of mining.

- 3. What is the strategy proposed by the proponent to offset the variation in the recovery achieved against the proposed recovery. Since, it appears that the methodology of quarrying and the recovery achieved appears to be not sustainable.
- 4. The proponent shall submit the details regarding if any newer technology is going to be implemented in order to achieve 60% recovery. Since, the data regarding the previous quantity mined out from the proposed quarry indicates an inconsistency in the quantity achieved in each year. Hence, the target of achieving 60% recovery (next scheme of mining) seems to be not viable.
- 5. Such poor & delayed mining activity leads to extend excess carbon foot prints, prolonged ecological disturbance to vegetation, biodiversity. This disturbance to water table, soil etc., resisting in ecological balance and delayed mine closure & site recovery process. This may be justified.

3. File No: 6900

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Existing Black Granite quarry lease over an extent of 6.00.0 Ha S.F.Nos.1193/1 (Part-15) Kodakkal Village, Sholingur Taluk, Ranipet District, Tamil Nadu by M/s. Tamil Nadu Minerals Limited - For amendment in Environmental Clearance issued

The authority noted that the proposal was appraised in the 329th SEAC meeting held on 16.11.2022.

SEAC noted that the PP was issued with Environmental Clearance vide Lr.No.SEIAA-TN/F.No.6900/1(a)/EC.No:4615/2020 dated:27.03.2021. Now, the PP has applied for the following amendment in the existing EC issued:

As in EC issued oarlier.	Amendment Sought		
RoM: 90011 m ³	RoM: 72018 m ³		
Black Granite: 9002 m ³	Black Granite: 14403		
Granite Waste: 81009	m³Granite Waste:		
m ³ For the period of 5	57615 m ³		
Years	For the remaining period of EC		

SEAC decided to recommend the above mentioned amendment in the existing EC issued toPP subject to the condition(s) stated therein.

The Authority during discussions, noted the following:

- TN/F.No.6900/1(a)/EC.No:4615/2020 dated:27.03.2021 for a production quantity of 9002m³ of granite only at 10% recovery. Now, the PP had submitted a proposal seeking amendment in earlier issued EC for an increase in the recovery rate from 10% to 20%. Subsequently, the production quantity hasincreased from 9002 m³ to 14403m³. The earlier issued EC was accorded only for the production quantity of 9002m3 and not for ROM. Further, as per the letter issued by Commissioner, Dept. of Geology & Mining, Chennai dated.31.10.2022, the proponent has obtained permit for quantity of 703.514cu.m from April 2022 to August 2022 which amounts to production capacity only.
- ii) Further, in the EIA/EMP report submitted earlier, the measures proposed to mitigate the pollution load that would arise due to the transportation of

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material might be anticipated for 10% of the RoM only. But as per the current proposal, there would be increase in the number of transport loads as the recovery increased to 20%. Subsequently, pollution load may also increase.

iii) As per the MoEF&CC O.M dated 11.04.2022, Under para 4, point (v) and (vii) states as follows:

".... Predicted environmental quality parameters arising out of proposed expansion /modernisation shall be within the prescribed norms and the same shall be maintained as per prescribed norms..."

"....The project proponent should have satisfactorily complied the conditions stipulated in the existing EC(s) and satisfactorily fulfilled all the commitments made during the earlier public hearing/consultation proceedings and also the commitments given while granting previous expansion, as may be applicable. This shall be duly recorded in the certified compliance report issued by the IRO/CPCB/SPCB, which should not be more than one year old at the time of submission of application..."

In the view of the above, the current proposal may fall under modernization/expansion due to the change in the mining plan of the earlier accorded EC and further predicted environmental quality parameters are anticipated to change due to the proposed increase in the rate of recovery from 10% to 20%.

iv) Further, As per the MoEF&CC O.M dated 11.04,2022, Under para 5,

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Scenario	intended change through modernisption/ change of product miss/ expansion	Requirement of revised EIA/ EMP report	of Certified Compliance	Requirement of fresh Public Consultation	reference to Appraisal Committee
	Projects which involve modernization/change of product mix without increase in production capacity but with uncrease in publishments.		Yes	No	to required Yes
ii ii	load. Up to 20 percent based on environmental safeguards conditions.	Ven	Yca -	No	- Yes
111	Up to 40 percent based on successful compliance of previous environmental safeguard conditions related to expansion of 20 percent		Yes	No	Yes
	More than 40 percent but less then 50 Percent based on mecosate compliance of previous environmental sufeguard conditions, wisted to expansion of 40 percent;	Yeu	Ven	Yea	Yes

As per the above OM, it is ascertained that, though there is no enange in ROM but there will be a significant increase in the pollution load due to the increased truck loads. Hence, scenario 1 may be applicable to the current proposal. Hence, the proponent may have to produce a revised EIA report and a Certified Compliance Report for the EC issued dated 27.03.2021.

v) Also under para 2 (a),

".Projects seeking prior EC for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance was granted [with increase in lease area or production capacity in mining projects] shall be considered by the concerned Expert Appraisal Committee [or SEAC, as the case may be] to decide whether Environment Impact Assessment and public consultations need to be carried out for grant of EC.."

In view of the above, SEIAA decided to refer back the proposal to SEAC for remarks on the above-mentioned points.

4. Proposed Fireclay & Laterite 8778 SEAC has furnished its recommendations to quarry lease area over an extent of 1.21.5 Ha at S.F.Nos. 195/1(Part) Clearance to the Project subject to the

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	of Thalampattu Village, Panruti	-	conditions stated therein. After detailed
	Taluk, Cuddallore District, Tamil		discussion, SEIAA decided to grant
	Nadu by M/s. Tamil Nadu		Environmental Clearance for the total
	Minerals Limited - For		production quantity of 89021 T of
	Environmental Clearance		Fireclay & 74407 T of Laterite with depth of
			17m BGL subject to the conditions as
			recommended by SEAC in addition to the
			following condition & conditions stated vide
			Annexure A.
	D	1102	
5.	Proposed Environmental	1193	The Authority noted that SEAC decided to
	Clearance for the Existing Black		make on-the spot site-inspection by the Sub-
	Granite Quarry over an extent of		committee constituted by SEAC to assess the
	6.59.91 Ha. at S.F. Nos. 83 (Part)		present status of the project and environmental
	of Jamanahalli Village,		settings as the proposal falls under violation
	Pappireddipatti Taluk,		category. Further the sub- committee will
	Dharmapuri District, Tamil Nadu		assess the ecological damage and also to check
	by M/s. Tamil Nadu Minerals		the Remedial Plan & Community
	Limited - For Environmental		Augmentation Plan submitted by the Project
	Clearance under violation		Proponent during the inspection.
	category		The Authority, after detailed deliberations,
			decided to request the Member Secretary,
	!		SEIAA TN the communicate the SEAC
			minutes to the Proponent.
6.	Proposed Black Granite Quarry	6708	The Authority noted that the subject was
	over an extent of 14.53.0Ha at		appraised in 329th SEAC meeting held on
	S.F.No: 155/2of Karandapalli		16.11.2022. After detailed discussions, the
	Village, DenkanikottaiTaluk,		Authority accepts the recommendation of
	Krishnagiri District, Tamil Nadu		SEAC and decided to grant Terms of
	by M/s. Tamil Nadu Minerals		Reference (ToR) along with Public Hearing
	Limited – For Terms of Reference		for undertaking the combined Environment
	for Expansion of Production		Impact Assessment Study and preparation of
÷	under violation		separate Environment Management Plan
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subject to the conditions as recommended by SEAC & normal conditions in addition to the conditions in 'Annexure B' of this minute.

- The PP shall furnish certified compliance report obtained from the IRO/MoEF & CC, Chennai (or) the concerned DEE/TNPCB for the prior EC issued.
- 2. The PP shall furnish DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site before obtaining EC.

7. File No: 6831

Proposed expansion of Methyl Ethyl Ketone and Secondary Butyl Alcohol & Proposed production of Methyl Iso Butyl Carbinol, Phenyl Propyl Alcohol and Mixed Alcohols production capacity from 24050 TPA to 46050 TPA at S.F.No.268, 269, 270, 271, 272 & 273, S.F No. 67/7, 67/8, 67/9, 67/10, 74/1, 75/4, 75/5, 76/1, 76/2, 77/1, 77/2, 77/3, 77/4, 77/5, 77/6, 77/7, 77/8, 78/1, 78/2, 78/3, 79/1, 79/2, 79/3, 79/4, 79/5, 79/6, 79/7, 79/8, & 79/9 Sathangadu and Chinnasekkadu Village. Tiruvottiyur Taluk Thiruvallur District, Tamil Nadu by M/s Cetex petrochemicals Limited— For Corrigendum of Environmental Clearance

SEAC has furnished its recommendations to the Authority for granting Environmental Clearance Corrigendum to the Project. After detailed discussion, the Authority decided to grant for Corrigendum in the EC issued vide Lr. No.SEIAA-TN/F.No.6831/5(f)/EC-95/2019 dated:18.04.2022.

Hence, In page no.5 of 37 in SI. No.6- Production of EC obtained vide Lr.No.SEIAA-TN/F.No.6831/5(f)EC-95/2019 dated 18.04.2022 may be read as,

And Committee Countil Countil	Capacity After
(TPA))	(TPA)
Main Products	

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1.	Methyl Ethyl Ketone	10000	5000	15000
2.	Secondary Butyl Alcohol	12000	10000	22000
3.	Methyl ISO Butyl Carbinol	-	5000	5000
4.	Phenyi Propyl Alcohol	-	1000	1000
5.	Mixed Alcohol	-	1000	1000
6.	Cinnamic Alcohol	1080	-	1080
7.	Anisyl Alcohol	276	-	276
8.	Styrallyl Alcohol	228	-	228
9.	Styrallyl Acetate	150	-	150
10.	Oxinome	20	-	20
11.	Phenyl Ethyl Alcohol	96	-	96
12.	Tertiary Butyl Cyclohexyl	200	_	200
	Acetate			
	Total	24050	22000	46050
	By-Products			
1.	LPG	4987	3400	8387
2.	Secondary Butyl Ether	440	300	740
3.	Heavy Fraction	117	725	842
4.	Dimer Fraction	1173	800	1973
5.	Spent Sulfuric Acid	49867	34000	83867
6.	Light End		640	640
	Total	56584	39865	96449

All other conditions stipulated in the EC given vide Lr.No.SEIAA-TN/F.No.6831/5(f)EC-95/2019 dated 18.04.2022 will remain unaltered.

8. Proposed expansion of Existing 6415 hospital under violation category at S.F.Nos.1020, 1027& 1055/2, Krishnarayapuram Village, Coimbatore North Taluk, Coimbatore District, Tamil Nadu by M/s. G. Kuppuswamy Naidu Memorial Hospital For Environmental Clearance under violation

The Authority noted the following:

- In the minutes of the 212th Meeting of SEAC held on 04.05.2021, the committee recommend the proposal to SEIAA for grant of EC subject to the conditions stated therein.
- Subsequently the subject was placed in the 446th meeting of SEIAA held on 18.06.2021 & 19.06.2021. SEIAA directed to proponent to furnish the particulars as recommended by SEAC in the minutes of 212th meeting of SEAC held on 04.05.2021.
- The proponent furnished the details to SEIAA vide letter dated 26.07.2022 &

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- 27.09.2022 and the e-copy of affidavit was received from the proponent through mail dated: 10.10.2022.
- 4. The subject was placed before the Authority in this 556th meeting of SEIAA held on 03.10.2022. The Authority, after detailed discussions, decided to refer back the subject to SEAC stating the following:

The methodology of treatment and disposal details of sewage and trade effluent detailed in the power point presentation made before the then SEAC, in the application and that mentioned in the e-copy of affidavit submitted now by the proponent vastly differ. Hence the subject may be referred back to SEAC for furnishing its recommendation.

5. The proposal was placed in this 329th meeting of SEAC held on 16.11.2022. The SEAC carefully examined the replies given by the PP and accepted the said changes proposed by the Project Proponent and decided to reiterate the other recommendations made by the then Committee in its 212th meeting held on 04.05.2021.

The proposal was placed before the 574th meeting of Authority held on 29.11.2022. The Authority noted that the subject was placed in

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the 212th meeting held on 04.05.2021 and 329th meeting of SEAC held on 16.11.2022. SEAC decided to recommend the proposal for the grant of Environmental Clearance under violation category for the increase in the bed capacity from 600 Nos to 750 Nos subject to the specific conditions, in addition to standard conditions stipulated by MOEF &CC. After detailed discussions, the Authority accepted the recommendation of SEAC and decided to grant of Post Environmental Clearance under violation category subject to the conditions as recommended by SEAC & normal condition in addition to the following conditions:

- 1. The project Proponent shall carry out the works assigned under ecological damage, natural resource augmentation and community resource augmentation within a Period of one year as committed. If not, the bank guarantee will be forfeited to TNPCB without further notice.
- The proponent shall ensure that the treated/untreated sewage should not be disposed directly or indirectly to the nearby water bodies under any circumstances.
- As per the MoEF& CC office memorandum F.No.22-65/2017-IA.III dated; 30.09.2020 and 20.10.2020 the proponent has furnished the detailed

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- EMP, mentioning CER activities as committed and the CER activities shall be carried out before obtaining CTO from TNPCB.
- 4. All the construction of Buildings shall be energy efficient and confirm the green building norms.
- The proponent shall provide adequate parking facility for all the inhabitants
 visitors including clear traffic plan.
- The proponent shall ensure that no treated or untreated trade effluent/sewage shall be discharged outside the premises under any circumstances.
- The disaster management and disaster mitigation standards to be seriously adhered to avoid of calamities.
- The project proponent shall provide the green belt plan for the premises indicating the native trees planted and to be planted.
- The proponent shall provide the action taken for reduction of green house gas emissions to support the climatic action and to make it sustainable building.
- 10. The project proponent shall ensure that buildings have sufficient ventilation and space for light and air.
- 11. The project proponent shall furnish the action taken to improve water usage efficiency in the building.

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			 12. The proponent shall ensure that the building shall provide adequate security and hygiene in all the basements. 13. The proponent shall ensure that the building should be energy efficient, provide adequate sunlight, green space for sustainable use and be Ecofriendly. 14. The proponent shall furnish the copy of gap analysis report prepared by TNPCB before obtaining CTO from TNPCB, marking a copy to this office.
9.	Proposed construction of Group Development of Residential	9354	After detailed discussions, the Authority accepts the recommendation of SEAC and
	Building at S.F. Nos. 19/3,		decided to grant Environmental Clearance
	19/5A1, 19/5A2, 19/5A3, 20/1,		subject to the conditions as recommended by
	20/2, 20/3, 20/8, 20/9, 20/10,		SEAC & normal condition in addition to the
	21/2, 21/3, 21/4, 21/5A, 21/5B,		following conditions
	21/6, 22/1, 22/2, 22/3, 23/1, 23/2,	l	1. The proponent shall obtain NOC from
	23/3, 23/4, 24/1, 24/2, 24/3B,	<u> </u>	Wetland Authority for the construction
	24/6, 130/7B, 130/8, 130/9B,		activities nearer to the Pallikaranai
	136/1, 136/2B, 136/2D2, 136/2F,		marshland before obtaining CTE from
	136/2G, 136/2H, 138/2A, 138/2B,		TNPCB since it is one of the Ramsar
	139/3B, 140/1A, 140/1B, 140/2,		site in TN which is located less than
	140/3, 140/4, 140/5, 140/6, 141/1,		300m and also the study report
	141/2, 141/4A, 141/4B, 141/5,		submitted by the PP states that "the
	141/6, 141/7, 141/8, 141/9,		Pallikaranai marsh contains several
	141/10, 142/1, 142/2A1,		rare or endangered and threatened
	142/2A2, 142/2B, 142/3, 142/4,		species and acts as a forage and
	142/5, 143/1A2, 143/1B, 143/1C,		breeding ground for thousands of
	143/2, 144/1A1, 144/1A2,	ĺ	migratory birds from various places

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144/1B, 144/2, 145/1A, 145/1B, 145/2A3A, 145/2A3B, 145/4, 145/5, 146/1, 146/2B, 147/1, 147/2A, 147/2B, 147/2C, 147/3, 148/1A, 148/1B of Jaladiampettai Village and 420/1B2B, 421/2 of Pallikaranai Village, Sholinganallur Taluk, Chennai District, Tamil Nadu by M/s. Casagrand Horizons Private | Limited - For Environmental Clearance

- within and outside the country. This marshland is home-shelter for 200 types of birds(approx.). Latest conservation techniques will be planned intensively...."
- The PP shall furnish the commitment letter for discharging the wastewater into the Pallikaranai STP using tankers until CMWSSB UGSS connection becomes operational for disposal of excess treated wastewater before obtaining CTE from TNPCB.
- The PP shall furnish STP adequacy Report before obtaining CTE from TNPCB.
- 4. The PP shall furnish fire NOC before obtaining CTE from TNPCB.
- 5. 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.
- The proponent shall periodically test the treated sewage the through TNPCB lab /NABL accredited laboratory and submit report to the TNPCB.
- 7. The proponent shall periodically test the water sample for the general water quality core parameters including fecal coliform of the nullah within the proposed project site through TNPCB lab /NABL accredited laboratory and

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- submit report to the concerned authorities.
- All the construction of Buildings shall be energy efficient and conform to the green building norms.
- The project proponent shall adhere to provide adequate parking space for visitors of all inmates including clean traffic plan as committed.
- 10. The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time.
- 11. All bio-safety standards, hygienic standards and safety norms of working staff and patients to be strictly followed as stipulated in EIA/EMP.
- 12. The disaster management and disaster mitigation standards to be seriously adhered to avoid any calamities.
- 13. The project proponent shall adhere to height of the buildings as committed.
- 14. The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.
- 15. 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.

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- 16. 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.
- 17. The proponent shall ensure that provision should be given for proper utilization of recycled water.
- 18. The proponent shall ensure that all trees & biodiversity listed in EIA report to be protected within the premises.
- 19. The proponent shall ensure that the buildings should not cause any damage to water environment, air quality and should be carbon neutral building.
- 20. All the Buildings shall be energy efficient and confirm to the green building norms.
- 21. The proponent shall ensure almost safety for the existing biodiversity, trees, flora & fauna shall not disturb under any circumstances.
- 22. The proponent shall ensure that the all activities of EMP shall be completed before obtaining CTO from TNPCB.
- 23. The proponent shall ensure that the activities undertaken should not result in carbon emission, and temperature rise, in the area.

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- 24. The proponent shall ensure that the buildings and activities should not result in Environmental damages, nor result in temperature rise.
- 25. The proponent shall provide and ensure the green belt plan is implemented as proposed & indicated in EMP. Also, the proponent shall explore possibilities to provide sufficient grass lawns and play facilities for children.
- The project proponent shall ensure to provide adequate elevated closed area carmarked 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 and Other amended, Hazardous and Wastes (Management Transboundary Movement) Rules, 2016 as amended, Construction and Demolition Waste Management Rules, 2016, & Batteries (Management and Handling) Rules, 2001.
- 27. The proponent shall provide the emergency exit in the buildings.
- 28. The proponent shall provide elevator as per rules CMDA/DTCP.

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	29, Ward No:59, EVR Periyasalai, Vepery Village, Poonamalle High Road, Chennai, Tamil Nadu by M/s. Chennai Metro Rail Limited — For Environmental Clearance Proposed Expansion of Industrial Park at S.F. No: 17/2, 18/1B, 18/2B, 18/3B, 18/5, 18/6, 19/3B, 19/4, 19/5, 20/1, 20/2, 21/1, 21/2, 21/3, 21/4A, 21/4B, 21/5, 22/1, 22/4, 23/1, 23/2, 23/3PT, 24/1, 24/2, 24/3, 25/6, 26/1, 26/2, 26/3, 27/2, 27/3A, 27/3B, 28/1pt, 28/2, 29, 30, 32/1, 32/2, 32/3, 32/4.	request the Member Secretary, SEIAA to communicate the minutes of 329th SEAC meeting to the project proponent. 7994 SEAC has furnished its recommendations to the Authority for granting Environmental
10.	Proposed construction of "Centra Square-Multimoda! Integration and Development at Centra Station area" at T.S.No.40/i, 41, 42, 43/1, 43/2, 43/5, 1269/4, 1271/1, 1271/2 Block No.7, 23 &	provision and norms regard to fire safety prescribed by competent authority. 31. The project proponent shall adhere to storm water management plan as committed. 1 9315 The authority noted that the proposal was appraised in the 329th SEAC meeting held on 16.11.2022. During the meeting, neither the proponent nor the consultant was present for attending the meeting, and hence SEAC after
		 29. The proponent shall provide adequate capacity of DG set (standby) for the proposed STP so as ensure continue and efficient operation. 30. The proponent shall adhere to the

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32/5, 32/6, 34/1, 35/2, 45/1, 45/2A, 45/2B, 45/5, 45/6, 47, 59/2, 83/3B, 101/1B, 101/2B, 102/1, 102/3, 103/2, 113/1, 113/2, 114/1, 115/1, 115/2, 115/3, 115/4, 116/1A, 116/1B, 116/2, 116/3, 116/4, 116/5, 117, 118/1, 118/2, 119, 120/2, 233/2, 242/1, 242/2, 243, 244, 245/1A, 245/1B2, 245/2B, 247, 248/1A, 248/1B, 248/2, 249/1, 249/2, 250, 251, 253/1, 253/2, 254/1A, 254/1B, 254/1C, 254/2, 254/3, 254/4, 255, 256/1, 259/1, 260/1, 260/2, 261/1, 261/2, 262/1A2, 262/2A, 262/2B, 266/2B, 267/1B, 267/2, 268, 271/2, 272, 273, 274 in Panapakkam Village and 379/1, 379/2A, 380/2, 380/3, 380/3B, 391/1, 391/2, 391/2A, 391/2B, 391/3, 391/3A, 391/3B, 391/4, 391/5, 391/6A, 391/7, 382/2, 392, 392/1C, 392/1E, 392/1F, 392/1H, 392/1D, 392/1L, 392/1J, 392/1K, 392/2, 392/3, 392/3A, 392/3B, 392/4, 392/5A, 392/5B, 395/1A, 395/1B, 397/1, 397/2, 398/1A, 398/1B, 398/2, 383/1A, 383/1B, 383/2, 383/3, 384/1A, 384/1B, 384/3A, 384/3B, 384/4, 385/1B, 385/2B, 386/1A, 385/2A2, 386/2A2, 391/3B, 392/1F, 394/2, 395/2, 395/3, 396, 397/3, 397/4,

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399/1A, 399/1B, 403/1, 403/2A,
403/2B, 404/1A1, 404/1A2.
404/1B, 404/2, 404/3, 404/4,
404/5A in Maduravasal Village,
Uthukottai Taluk, Tiruvallur
District Tamil Nadu by
M/s. Vinplex India Pvt Ltd - For
Environmental Clearance.
Proposed Gravel quarry project
over an extent of 1.21.0Hain

12. Proposed Gravel quarry project over an extent of 1.21.0Hain S.F.No. 541/1B at Vennavalkudi Village, Alangudi Taluk, Pudukkottai District, Tamil Nadu by Thiru.R. Mahimairaj- For Environmental Clearance.

SEAC has furnished its recommendations to the Authority for granting Environmental Clearance to the Project subject to the conditions stated therein. After detailed discussion. SEIAA decided to grant Environmental Clearance for the quantity as per the mine plan for a period of 3 years approved by the Department of Geology & Mining subject to the conditions as recommended by SEAC in addition to the following condition & conditions stated vide

1. 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.2 lakhs and the amount shall be spent for the activities detailed in the SEAC minutes before obtaining CTO from TNPCB.

13. File No: 8082

Proposed Multicolour Granite quarry lease over an extent of 3.21.5Ha at S.F.No. 1158/8, 1158/9, 1160/3A, 1160/4, 1161/2(P), 1161/3(P), 1161/4A (P), 1161/5(Part), 1166/5(P) at

Annexure A.

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Irudhukottai Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu by Thiru.V.Jayaprakash – For Environmental Clearance

The authority noted that the subject was appraised in 329th SEAC meeting held on 16.11.2022.

Based on the presentation and the documents furnished by the Proponent, the SEAC decided to call for additional details

1. The PP shall submit Certified Compliance Report for the quarrying operation carried out earlier under the EC granted in 2015.

On receipt of the aforesaid details, the proposal will be considered for further deliberations. In addition to the above queries, the proponent shall submit the following details

As per the Scheme of mining submitted by the proponent in online through Parivesh Portal it is ascertained that

	Pr	oposed	Achieved			
Year	ROM (m³)	Production 20% (m³)	Productio Despatch		Period	
2015 – 2016	1000	200	184.50	Nil		
2016 - 2017	1000	200	226.62	Nil	Approved	
2017 - 2018	1000	200	220.23	Nil	Mining	
2018 – 2019	1000	200	246.91	873.141	Plan	
2019 – 2020	1000	200	118.44	Nil	-	
Total	5000	1000	996.7	873.141		

The proponent had carried out mining operation in the year 2015, 2016, 2017 and 2018 without obtaining NBWL clearance till 07.11.2018 and further had operated the mine without obtaining Consent to Operate (CTO) till 20.07.2020 from Tamil Nadu Pollution Control Board (TNPCB).

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- Hence, the proponent is requested to clarify and assess the ecological damage caused by mining during the period 2015 to 07.11.2018 without obtaining NBWL clearance and field restrictions.
- 2. Further, as per the approved quantity, at the end of 4th year, PP should have mined out and fransported only 800 Cbm. But PP had despatched 873Cbm which is 73Cbm excess than the approved quantity as per the approved scheme of mining submitted. Hence, the proponent is requested to clarify regarding the same.
- As per the Precise Area Communication letter issued vide Lr.No.1564/MME2/2013-1 Dated 2014,
 - iii. A safety distance of 10mts. Should be provided and maintained on either side of the "pathai" poramboke passing North-South direction on the central portion of the applied area situated in SF No. 1158/2 & 1160/2 and present status on ground should be maintained throughout the lease period.

Hence, from the above, it is ascertained that a path traverses inside the area and the path bifurcates the applied lease area into two separate portions. Hence, based on the condition imposed, the proposed mine lease area now becomes non-contiguous. Hence, the proponent is requested to clarify the above.

In view of the above, SEAC shall examine the above-mentioned queries in addition to the queries raised by SEAC. Hence, Authority decided to request the Member Secretary, SEIAA to communicate the minutes to the project proponent.

14. Proposed Rough Stone and 8141
Gravel quarry project over an extent of 0.84.0 Ha in S.F.No.
153/1A1, Velampalyam Village,
Palladam Taluk, Tiruppur
District, Tamil Nadu by Thiru. M.
Kanakarathinam- For
Environmental Clearance.

SEAC has furnished its recommendations to the Authority for granting Environmental Clearance to the Project subject to the conditions stated therein. After detailed discussion, SEIAA decided to grant Environmental Clearance for the total production quantity of 53095m3 of Rough stone & 10626 m3 of Gravel and not exceeding the annual peak production of 11500 m3 of Rough stone & 4488 m3 of Gravel with depth of 17m BGL subject to the conditions as recommended by SEAC in

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			addition to the following condition &
·			conditions stated vide Annexure A.
15.	Proposed Rough Stone and	8154	The authority noted that this proposal was
	Gravel quarry project over an	-	placed for appraisal in 329 th meeting of
٠.	extent of 0.82.70Hain S.F.No.		SEAC held on 16.11.2022 and the SEAC
	16/2A, 17/1 and 24/2B at		decided to remit back the proposal to SEIAA.
	Sirukalambur Village, Vellore		After detailed discussion the authority
	Taluk, Vellore District, Tamil	·	decided to obtain the following details from
	Nadu by Thiru. R.		the PP,
	Udayasrinivasan- For		(i) The PP shall submit reason for
	Environmental Clearance.		withdrawing the proposal.
16.	Proposed Rough Stone and	8161	The authority noted that this proposal was
	Gravel quarry project over an		placed for appraisal in 329th meeting of
	extent of 0.99.5Hain S.F.No. 88/8		SEAC held on 16.11.2022 and the SEAC
	at Mambakkam Village,		decided to remit back the proposal to SEIAA.
	Sriperumbudur Taluk,		After detailed discussion the authority
	Kancheepuram District, Tamil		decided to obtain the following details from
	Nadu by Thiru. K.Murugesan-		the PP,
	For Environmental Clearance		(ii) The PP shall submit reason for
			withdrawing the proposal.
17.	Proposed construction of Steel	9396	The Authority noted that, Terms of Reference
	rolling mill at S.F. Plot No. S2 &		was issued to M/s. Agni Steel Pvt Ltd vide Lr
	S2/1 in Ingur village, Perundurai		No. SEIAA-TN/F.No.9396/SEAC/3(a)/ToR-
	Taluk, Erode District - M/s Agni		1268/2022 dated: 03.10.2022.
	Steel Pvt Ltd - for Terms of		Subsequently, the proponent has requested for
	Reference in Amendment		amendment in online through Parivesh portal
			vide SIA/TN/IND/294168/2022 Dated:
			18.11.2022 in the village name which was
			inadvertently mentioned as "Ingur Village".
			Hence, based on the above, authority after
			detailed discussion decided to issue

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amendment to the village name which may be read as Perundurai Village.

18. File No: 6906

Proposal seeking Amendment in Environmental Clearance for the Proposed Lime Kankar over an extent of 22.81.5Ha located at S.F.No. 116/1, 2, 3, 4A, 4B, 5, 6, 7, 8, 9, 10, 11 & 12, etc., Ottakovil Village, Ariyalur Taluk, Ariyalur District by M/s. The Ramco Cements Limited

The authority noted that the project proponent, M/s. The Ramco Cements Limited has applied for EC Corrigendum for the proposed Lime stone mine over an Extent of 22.81.5 Ha located at S.F. Nos. 116/1, 116/2, 116/3, 116/4A, 116/4B, 116/5, 116/6, 116/7, 116/8, 116/9, 116/10, 116/11 & 116/12, 117/3, 117/4, 117/5, 117/6, 117/7A, 117/7B, 117/8A, 117/8B, 117/9A & 117/9B, 118/1, 118/2, 118/3, 118/4, 118/5A, 118/5B, 118/6A, 118/6B, 118/7, 118/8A, 118/8B, 118/9, 118/10A, 118/10B, 118/11, 118/12, 118/13, 118/14, 118/15, 118/16, 118/17A, 118/17B, 118/18A, 118/18B & 118/18C, 119/1C, 119/1D, 119/1E, 119/1F, 119/2, 119/3A, 119/3B, 119/4A, 119/4B1, 119/4B2, 119/5A, 119/5B, 119/5C, 119/6A, 119/6B & 119/6C (Part), 211/1A, 211/1B, 211/2A, 211/2B, 211/3A, 211/3B, 211/4, 211/5, 211/6, 211/7, 211/8A (Part), 211/8B & 211/9 and 212/1A, 212/1B, 212/1C, 212/2, 212/3 & 212/4 of Ottakovil Village, Ariyalur Taluk, Ariyalur District, Tamil Nadu.

Application Made for	SEAC Recommendation	SEIAA Approval	Discrepancy In awarded EC	Corrigendum Required
Production 1.20,000 TPA ROM (EIA Report Page No 50) Validity : Approved Mining Plan for 5 Years	should not exceed 1,20,000 TPA (ROM) For the Production of 1,20,000 TPA Lime Kanker (ROM) for a period of five years states	530-5 Total Production should not exceed 1,20,000 TPA (ROM) To grant EC for the period of 5 years and total production quantity should not exceed 1,20,000 TPA on ROM basis.	of Lime Kanker Page No. 5 The EC is granted	Page 4 -SI. No. 12 Production (Quantity in Tonnes/Annum) 1,20,000 Tonnes of Lime Kankar The EC is granted for the production in 1,20,000 TPA of Lime
EIA Report Pg. 42 Base is valid or 10 years	· :		Page 21 Part A Condition 2 Mining activity should be reviewed by the District Collector	Pan A Condition-2 may be paleted

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Application Made for	SEAC Recommendation	ŞEIAA Approvai	Discrepancy in awarded EC	Corrigendum Required
			after three years	2 2 . 7 . 174-11
			and decide further	
			extension	
2 Shift	•	-	Part A Condition-	
Operations	1		i 11	operations shall be
(EIA Report			The quarrying	restricted to 2 Shift
Page No. 48)			operations shall be restricted between	operations
1	<u>i</u>		7 AM and 5 PM	
No Orilling &		—	Part A Conditions-	Part A Conditions
Blasting is			15, 16, 17 & 18	15, 16, 17 & 18
involved	!		Drilling & Blasting	Drilling & Blastin
(EIA Report			Conditions	Conditions may b
Page No. 46)				deleted
1 14 go 1 10 1 10 1			Part A Condition-	Part A Condition-79
As shallow	•	-	79	may be deleted
quarrying is			Hydrogeological	indy be deleted
involved (upto			study of the area	
2.5 m BGL).			shall be reviewed	
no ground water	•		annually and report	
intersection	<u> </u>		submitted to the	<u> </u>
and thus no			Authority	
			Add Karly	
hydrogeologic	1			
al report is	4			
required.			i	
(EIA Report	•			
Page No.				<u> </u>
138)	i			<u> </u>

In view of the above, the authority after detailed discussion decided to send the proposal to SEAC for appraisal and recommendations.

19. File No: 6907

Proposal seeking Amendment in Environmental Clearance for the Proposed Lime stone over an extent of 63.60.0Ha located at S.F. Nos, 239, 243, 244, 249, 298, 299, 300, 301, 302, 303, 373, 374, 375, etc,. Reddipalayam and Nagamangalam Village, Ariyalur Taluk, Ariyalur District by M/s. The Ramco Cements Limited.

The authority noted that the project proponent, M/s.The Ramco Cements Limited has applied for EC Corrigendum for the proposed Lime stone mine over an Extent of 63.60.0Ha located at S.F. Nos. Parts of 298, 299, 300, 301, 302, 303, 373, 374, 375, 376, 380, 381, 382, 383, 384, 385, 401, 402, 403 & 404 of Reddipalayam village, Ariyalur Taluk, Ariyalur District, Tamil Nadu.

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	Application	SEAC	SEIAA	Discrepancy in	Corrigendum
	Made for	Recommendat	1	awarded EC	Required
		ion		aproca be	Required
	Limestone	256-7 & 285-	530-6	(Page 3 SI	(Page 2 C)
	Production of	06	Total	No. 12)	(Page 3 -Sl.
	3.00 MTPA	Total	Production	1	No. 12)
		Production	should not	Production	Production
-		should not	1		(Quantity in
		exceed 3.0	5.0	 -	MTPA)
		MTPA]	3.0 MTPA	1
		Limestone with	Limestone with	1	Limestone
		an ultimate	dicinitaco	!	
		!	.		<u> </u>
		depth of mining is 60 m BGL	is 60 m BGL		
	Water Source:	15 00 m BGL	·		
	Mine Pit	-	n ,	(Page No. 4; Sl.	(Page No. 4; Sl.
	Seepage Water			No. 16)	No. 16)
∷ `	occivage water			Water Vendors	Water Source:
					Mine Pit
-					Seepage Water
- ! !	Lease is valid	-	-	(Page 21	(Part A
- 11	ill 22.07.2054	i		Part A	Condition-2)
- 11	EIA Report	·		Condition-2)	may be deleted
ŢŢ	g. 45 & EC			Mining activity	·
	tn. Pg 23)			should be	
				reviewed by the	
				District	
			:	Collector after	
			Ì	three years and	.
				decide further	11
				extension	
E	C Pg 38	-		Part A	Quarrying
					perations shall

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	3 Shift Operations (EIA Report Page No. 47)	The quarrying be on 3 Shifts operations shall be restricted between 7 AM and 5 PM			
	In view of the above, the authority after detailed discussion decided to send the proposa to SEAC for appraisal and recommendations.				
20.	To consider the proposal for the grant of amendment in Environmental Clearance for the Gravel Quarry over an extent of 2.80.0 Ha in S.F.Nos. 33/2, 33/3 & 34/1 at Kilathari Village of Sivagangai Taluk, Sivagangai District Tamil Nadu by Thiru.V.	After detailed discussion, the Authority decided to grant for amendment in the EC issued vide Lr. No.SEIAA-TN/F.No.6962/1(a)/EC.No:4061/2019 dated:23.10.2019. Hence, earlier Environmental Clearance issued in Page number 2, under the Details of Mineral Activity S.No. 2 may be read as follows			

Earlier EC Amendmen Latitude Longitude of issued t Issued 09°55'06.27" 09°06'26.22" all corners of quarry the 09°06'29.34" 09°55'12.03" site 77°47'52.32 78°19'08.31 "E "E to 77°47'57.78 79°19'17.80 "E "E

All other conditions and the validity issued vide EC dated 23.10.2019 remains unaltered and unchanged.

Annexure-'A'

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- 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.
- 2. 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.
- 3. 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 adjoing reserve forests and areas around.
- 4. The proponent shall ensure that the operations do not result in loss of soil biological properties and nutrients.
- 5. The activity should not result in CO₂ release and temperature rise and add to micro climate alternations.
- 6. 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.
- 7. The proponent shall ensure that the activities undertaken do not result in carbon emission, and temperature rise, in the area.
- 8. 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.
- 9. The proponent shall ensure that the activities do not disturb the agro biodiversity and agro farms. Actions to be taken to promote agro forestry, mixed plants to support biodiversity conservation in the mine restoration effort.
- 10. 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.

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- 11. The activities should not disturb the soil properties and seed and plant growth. Soil amendments as required to be carried out, to improve soil heath
- 12. Bio remediation using microorganisms should be carried out to restore the soil environment to enable carbon sequestration.
- 13. 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.
- 14. 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.
- 15. The proponent shall ensure that in the green belt development more indigenous trees species (Appendix as per the SEAC Minutes) to be planted.
- 16. The proponent shall ensure the area is restored and rehabilitated with native trees as recommended in SEAC Minutes (in Appendix).
- 17. The proponent shall ensure that the mine restoration is done using mycorrizal VAM, vermincomposting, Biofertilizers to ensure soil health and biodiversity conservation.
- 18. The proponent shall ensure that the topsoil is protected and used in planting activities in the area.
- 19. 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.
- 20. The proponent shall ensure that topsoil to be utilized for site restoration and Green belt alone within the proposed area.
- 21. 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.
- 22. 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.

Directions for Reclamation of mine sites

1. 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.

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- 2. 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.
- 3. A crucial factor for success of reclamation site is to select sustainable species to enable develop a self-sustaining eco system. Species selected should easily establish, grow rapidly, and possess good crown and preferably be native species. Species to be planted in the boundary of project site should be un palatable for cattle's/ goats and should have proven capacity to add leaf-litter to soil and decompose. The species planted should be adaptable to the site conditions. Should be preferably pioneer species, deciduous in nature to allow maximum leaf-litter, have deep root system, fix atmospheric nitrogen and improve soil productivity. Species selected should have the ability to tolerate altered pit and toxicity of and site. They should be capable of meeting requirement of local people in regard to fuel fodder and should be able to attract bird, bees and butterflies. The species should be planted in mixed association.
- For mining area reclamation plot culture experiments to be done to identify/ determine suitable species for the site.
- 5. 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.
- Soil and moisture conservation and water harvesting structures to be used where ever possible for early amelioration and restoration of site.
- 7. 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.
- 8. 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.
- 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.
- 10. Reclamation involves planned topographical reconstruction of site. Care to be taken to minimize erosion and runoff. Topsoils should have necessary physical, chemicals, ecological,

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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.

- 11. 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 reestablishing the site to pre-mining conditions. Effective steps should be taken for utilization of over burden. Mine waste to be used for backfilling, reclamation, restoration, and rehabilitation of the terrain without affecting the drainage and water regimes. The rate of rehabilitation should be similar to rate of mining. The land disturbed should be reshaped for long term use. Mining should be as far as possible be ecofriendly. Integration of rehabilitation strategies with mining plan will enable speedy restoration.
- 12. 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 succession process allowing pioneer species to establish. The other approach i.e plantation approach is with selected native species are planted. A blend of both methods may be resorted to restore the site by adding soil humas and mycorrhiza.
- 13. Action taken for restoration of the site should be specifically mentioned in the EC compliances.

Annexure 'B'

- 1. Cluster Management Committee, which must include all the proponents in the cluster as members including the existing as well as proposed quarry.
- The members must coordinate among themselves for the effective implementation of EMP as committed including Green Belt Development, Water sprinkling, tree plantation, blasting etc.,
- 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.

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- 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. 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 & bio-diversity.
 - b) Climate change leading to Droughts, Floods etc.
 - c) Pollution leading to release of Greenhouse gases (GHG), rise in Temperature, & Livelihood of the local people.
 - d) Possibilities of water contamination and impact on aquatic ecosystem health.
 - e) Agriculture, Forestry & Traditional practices.
 - f) Hydrothermal/Geothermal effect due to destruction in the Environment.
 - g) Bio-geochemical processes and its foot prints including environmental stress.
 - h) Sediment geochemistry in the surface streams.
- 11. The committee shall furnish an action plan to achieve sustainable development goals with reference to water, sanitation & safety.
- 12. The committee shall furnish the fire safety and evacuation plan in the case of fire accidents.
- 13. The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished.
- 14. 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.
- 15. Impact on surrounding agricultural fields around the proposed mining Area.
- 16. Erosion Control measures.
- 17. Impact on soil flora & vegetation around the project site.
- 18. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area on the nearby Villages, Water-bodies/ Rivers, & any ecological fragile areas.

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- 19. 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.
- 20. 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.
- 21. The Environmental Impact Assessment shall study in detail the carbon emission and also suggest the measures to mitigate carbon emission including development of carbon sinks and temperature reduction including control of other emission and climate mitigation activities.
- 22. The Environmental Impact Assessment should study the biodiversity, the natural ecosystem, the soil micro flora, fauna and soil seed banks and suggest measures to maintain the natural Ecosystem.
- 23. Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.
- 24. The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir.
- 25. The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components.
- 26. The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna.
- 27. The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection.
- 28. The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites.
- 29. The Environmental Impact Assessment should hold detailed study on EMP with budget for Green belt development and mine closure plan including disaster management plan.
- 30. The Environmental Impact Assessment should study impact on climate change, temperature rise, pollution and above soil & below soil carbon stock.
- 31. The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site.
- 32. The project proponent shall study and furnish the impact of project on plantations in adjoing patta lands, Horticulture, Agriculture and livestock.

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- 33. The project proponent shall study and furnish the details on potential fragmentation impact of natural environment, by the activities.
- 34. The project proponent shall study and furnish the impact on aquatic plants and animals in water bodies and possible scars on the landscape, damages to nearby caves, heritage site, and archaeological sites possible land form changes visual and aesthetic impacts.
- 35. The project proponent shall study and furnish the possible pollution due to plastic and microplastic on the environment. The ecological risks and impacts of plastic & microplastics on aquatic environment and fresh water systems due to activities, contemplated during mining may be investigated and reported.
- 36. The project proponent shall detailed study on impact of mining on Reserve forests free ranging wildlife.
- 37. Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby waterbodies due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the entire mine lease period.
- 38. To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/untoward accidents in & around the proposed mine lease area due to the proposed method of mining activity & its related activities covering the entire mine lease period as per precise area communication order issued.
- 39. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.
- 40. Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued.
- 41. Detailed Environment Management Plan along with adaptation, mitigation & remedial strategies covering the entire mine lease period as per precise area communication order issued.

Annexure-'C'

1. 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.

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- 2. 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.
- 3. The proponent shall periodically test the treated sewage the through TNPCB lab /NABL accredited laboratory and submit report to the TNPCB.
- 4. 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.
- 5. All the construction of Buildings shall be energy efficient and conform to the green building norms. The PP shall ensure that carbon neutral building.
- 6. The project proponent shall adhere to provide adequate parking space for visitors of all inmates including clean traffic plan as committed.
- 7. The proponent shall ensure that no form of municipal solid waste shall be disposed outside the proposed project site at any time.
- 8. All bio-safety standards, hygienic standards and safety norms of working staff and patients to be strictly followed as stipulated in EIA/EMP.
- 9. The disaster management and disaster mitigation standards to be seriously adhered to avoid any calamities.
- 10. The project proponent shall adhere to height of the buildings as committed.
- 11. The proponent shall ensure that the EIA/EMP and disaster management plan should be adhered strictly.
- 12. 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.
- 13. 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.
- 14. The proponent shall ensure that provision should be given for proper utilization of recycled water.
- 15. The proponent shall ensure that the buildings should not cause any damage to water environment, air quality and should be carbon neutral building.
- 16. All the Buildings shall be energy efficient and confirm to the green building norms.

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- 17. The proponent shall ensure almost safety for the existing biodiversity, trees, flora & fauna shall not disturb under any circumstances.
- 18. The proponent shall ensure that the all activities of EMP shall be completed before obtaining CTO from TNPCB.
- 19. The proponent shall ensure that the activities undertaken should not result in carbon emission, and temperature rise, in the area.
- 20. The proponent shall ensure that the buildings and activities should not result in Environmental damages, nor result in temperature rise.
- 21. 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.
- 22. 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.
- 23. The proponent shall provide the emergency exit in the buildings.
- 24. The proponent shall provide elevator as per rules CMDA/DTCP.
- 25. The proponent shall provide adequate capacity of DG set (standby) for the proposed STP so as to ensure continuous and efficient operation.
- The proponent shall adhere to the provision and norms regard to fire safety prescribed by competent authority.
- 27. The project proponent shall adhere to storm water management plan as committed.

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